
Untangle the Web

Delivering Municipal Services Through the Internet

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Landing Your Government on the Web

The technological advances of the last decade have changed the way we live and work. The World Wide Web is a perfect illustration. The Web offers people and organizations a whole new way to interact and communicate.

Companies sell their products and services online. Universities offer distance learning classes and degrees through the Internet. Virtual banks provide teller-less savings and investment services. And for every one of these applications, there are customers at the other end. People are shopping, learning, and banking with the convenience of personal computers.

Governments are on board as well. Federal and state agencies, as well as many local and county governments, have realized the Internet can help them communicate with the public, with businesses, and with one another. The anytime, anywhere character of the Web allows government information and services to be more available to more people at greater convenience, and hopefully with increased satisfaction.

Untangle the Web is not designed to persuade you of the value of putting your government on the Web. Clearly there are both opportunities and challenges to embracing Internet technology. This report is designed instead to help government officials untangle the Web—to understand the new ways of doing business at the county and

local government level. *Untangle the Web* provides a set of guidelines that can help governments achieve the benefits and opportunities of getting online without being overwhelmed by the inherent challenges of developing, launching, and maintaining Web sites.

Last summer, the Center for Technology in Government (CTG) met with a group of town, city, and county government officials to gather insight into how they launched and currently manage

their Web sites. The group shared valuable insights, suggestions, and ideas about how they've moved their governments to the Web. This guide draws from those experiences.



Getting Started

While there's no single right way to get started, here are some general guidelines to follow.

Establish and maintain top-level support

When we asked county, city, and town Web site managers to identify some of the most important factors in the development and launch of their sites, all said that getting top-level support was critical to their success.

Some of their sites had top-level support at the beginning; others earned it along the way. In one instance, the city clerk was told by the city council to gather information and build a site. Completely redeveloping the town's site was a newly elected supervisor's first priority. Another municipal site was developed and launched out of the planning agency; top-level support came later.

Whether they are in it from the beginning or come in later in the process, top-level officials are necessary allies. They're critical in the effort to promote a vision that will get others to participate in the development, implementation, and management of the site.

Gather skilled contributors

Most Web projects require skills in project management, business planning, policy review and development, research, content creation, graphic arts, customer support services, user services, security, and marketing and promotion. While this seems like an exhaustive list, there are people within your municipality who have some or most of these skills. If you can't find people with the skills you need, then look for individuals who are comfortable learning new skills.

The individuals we worked with said the Web development groups in their governments were usually made up of employees from more than one agency. One team required the expertise of high-level staff in the supervisor's office, plus the legal input of the town attorney. Another municipality felt it was imperative to include citizens to get their perspective.

Many small county and local governments don't have the resources and staff to create a formal Web team. These governments tend to have one person responsible for Web design and maintenance. Typically, this employee works in, or is, the computer or information technology department and has some knowledge of Internet technology. But even in this situation, the content needs to come from others.

Encourage government-wide participation

A strong network of staff is essential for implementing a successful Web site. This network will be used to proceed with many of the steps outlined in this guidebook, including:

- Getting and maintaining support
- Gathering ideas
- Setting objectives
- Finding the necessary resources
- Identifying costs
- Designing the site
- Creating and maintaining content
- Implementing the plan
- Managing the site
- Evaluating its effectiveness

Tips from colleagues

"Get support from top elected officials from the start. It'll get everyone else on board."

"Educate officials and department staff about the amount of information and cooperation required from them. Also tell them about the potential uses and value of the site."

"Enlist the help of colleagues. Tap into their hidden talents and experience."

"Work together as a team, but don't get bogged down by committees."

Market the idea to staff

Effective marketing to staff is critical—from the beginning stages of gathering ideas and needs analysis until the Web site becomes part of the day-to-day business of your government. Market your project with the tools and support you have at your disposal. This may include getting supporters to talk about the project or creating a mock-up of the home page to show what it will look like.

The Web managers we spoke with said it helped to have elected officials—your top-level support—tout the Web project at meetings with staff to gain support and acceptance. This is especially useful at the beginning of the project. One town encouraged local non-profits and citizens to ask for online information. In another case, a city department gained community support by quickly launching a site to illustrate how it could help local groups and individuals.

Promote Internet awareness

Regardless of the roles employees may play in the development or management of the Web site, it's important they have a general awareness of the Internet. Producing a user-friendly Web site requires staff to understand what it's like to call up a site, wait for it to load, view it on their PCs, and then use it to answer a question or find information.

According to participants, many of their colleagues weren't familiar with the Web. Some municipal employees don't have Internet access. Other governments have internal rules that prohibit regular use of the Web. And some simply were uncomfortable with the technology. One city had difficulty designing its Web site because key members of the design team did not use the Internet very often. Because of these issues, participants encouraged staff to get comfortable using the Web. This includes getting accustomed to the way material is written for and presented on Web sites.

Find the infrastructure

Whether you outsource your design or do it yourself, your Web site needs to be connected to the Internet. If you have the technical infrastructure and skills in-house, it may make the most sense to host your own site. If not, it may make more sense to outsource hosting to avoid making expensive investments in technology and technical expertise.

Outsourcing requires someone from your government to manage not only the content and development of the site, but also the relationship with the Internet Service Provider (ISP).

www.saratoga-springs.org



The screenshot shows a web browser window displaying the City of Saratoga Springs website. The page features the city seal on the left and the following text: "The City of SARATOGA SPRINGS", "City Hall - 474 Broadway", "Saratoga Springs, NY 12866-2296", and "(518) 587-1159". Below this is the "Office of Community Development" section, listing Executive Director Bradley T. Stage and CD Coordinator Cheryl Phillips. There are two columns of text: "What's New" and "Background". The "Background" section states: "The Saratoga Springs Office of Community Development works to advance the City Council's goals of increasing access to affordable housing, improving the living environment, and expanding economic opportunities for persons of low and moderate income." It also mentions the office was created in 1973 to implement a program funded by the U.S. Department of Housing and Urban Development, and that since qualifying for "Tenant Choice" funds in 1994, the City has helped foster ideas to develop affordable housing, establish residential rehabilitation grant and loan programs, provide funding for public improvement projects, and more.

Saratoga Springs' Web site started as a result of the need to publicize community development information.

Gathering Ideas

The best way to get a handle on building and maintaining your Web site is to learn how others have done it. “How to” books, the Internet itself, and the experiences of colleagues all provide a wealth of ideas and know-how.

Review what others have done

There are countless sites from which to gather ideas. A number of portals (Web sites that serve as an entry point to related sites on the Web) link to a variety of different local and county sites. Visit and evaluate these sites. Look at a few sites of municipalities that are similar to yours in terms of size, population, and demographics. Also look at commercial and educational sites for innovative design and presentation ideas.

When you evaluate Web sites, ask these questions:

- Does this municipality seem to know who its audience is?
- Is it easy for people to contact the municipality or ask questions?
- Is the site easy to navigate?
- Does it waste visitors’ time?
- Is it providing a useful service?
- Are you glad you found the site? Would you visit again?

Balance your time

Unless your time is fully devoted to Web site development, the chances are good that there will be several demands on your time. Keep that in mind as you gather ideas. There are as many ideas as there are Web sites and people who have developed them. Spend the time you need to get comfortable with the ideas you’ve gathered, then put them to use.

It was important for participants to take seriously the need to balance time between their Web site work and their other responsibilities. One participant said he hears and finds lots of good ideas, but many of them simply require too much time to set up and maintain. Therefore, he sticks with implementing ideas that he has the time to manage.

Track best (and worst) practices

As you look at other sites, keep track of good (and bad) ideas you encounter. Does the site have a coherent or clear organization of information? Is it simply presented? Does it tell you what the sponsor can do for you and how? What type of e-government services and information does it provide?

Look for clarity, ease of access, attractiveness, efficiency, and effectiveness in each of these Web site components:

- Content—text, images/video, sound, data bases
- Graphics—main graphic, buttons, supporting images, image maps, background, bullets, pointers, text-only option
- Page presentation—titles, labels, indexes, highlighting, layouts
- Navigation—within pages, within site, links to external sites
- Tools—e-mail, searching, transaction processing, downloading forms

Listen to co-workers

Your colleagues will be a great source of ideas. Other than citizens themselves, they are in the best position to know what is most frequently asked of their department. Establish a process to gather ideas from the various departments in your government. No matter what method you choose, it’s important to get others’ ideas on what features, services, and content should be included in the site.

For example, one county used quarterly cabinet meetings with department heads to encourage contributions and ideas. Other representatives said they gathered input through more informal, free-flowing discussions with key people.

www.montgomeryny.com



The screenshot shows a web browser window displaying the Montgomery County website. The page title is "Demographics and Census". Below the title, there is a banner for the "U.S. Census Bureau" and a navigation menu with links like "Home", "About Us", "Contact Us", etc. The main content area is titled "Montgomery County Census Information" and contains a table with the following data:

MUNICIPALITY	Population	Under 5	Over 65	Homeless	Median Income	Household Poverty
Adrian	5,301	1,500	1,200	0,074	\$10,000 - \$12,500	
Adrianville	2,554	1,400	400	0,001	\$12,500 - \$15,000	
Andover	1,200	300	1,200	2,200	\$10,000 - \$12,500	
Wedge Hill	400	40	50	100	\$10,000 - \$12,500	
Wedge Hill	1,200	40	200	100	\$10,000 - \$12,500	
Wedge Hill	400	50	100	100	\$10,000 - \$12,500	
Wedge Hill	1,200	200	100	1,000	\$10,000 - \$12,500	
Wedge Hill	400	100	100	100	\$10,000 - \$12,500	

The Montgomery County Web site provides demographic and census information that can be used by citizens and businesses for research.

Gather outside advice

There may be individuals and groups in your community that can provide expertise and advice as you develop your site. Chambers of commerce, tourism groups, your counterparts in state government, planning commissions, and local civic groups may all have a stake in the Web site. Tap their ideas. They can help your project move forward and generate community support.

Incorporate creativity

Some of the best Web site features grow from the seeds of creative ideas. Whether they come from department heads, citizens, or Web masters, it's important to cultivate these ideas.

One city site developed from ideas generated by its economic development office. The success of those ideas grew quickly into an effective citywide Web site. One county used a flowchart to capture all of the ideas generated for its site. First they organized the ideas according to the county executive's mission, then expanded the flowchart with additional ideas.

Tips from colleagues

"Look at a variety of sites—government and non-government—for ideas on what will and won't work for you."

"Enlist contributors from throughout your government. Choose people with good knowledge of your municipality (to help provide content) and those who know the Web (to help design the site)."

"Educate yourself. Buy a book or take a class on Web design and development."

"Ask for assistance from other knowledgeable professionals and organizations."

"Don't limit the creativity of your Web master. Channel it."

Setting Objectives

Most governments create their Web sites around this simple objective: to easily and quickly provide essential information to citizens, businesses, and visitors. They then develop a set of more narrowly defined goals. Here are some ways to help you set objectives that will focus the work on your site.

Identify players (stakeholders) and resources

In order to identify the objectives that work best for you, think about the stakeholders and resources involved. The stakeholders are the people and groups working on the project and affected by it. Your stakeholders may include constituents, municipal departments, elected officials, external government agencies, and other groups that are key to your project's success. Identifying these groups and understanding what they want or need, and how your site will affect them, will help you make decisions about its features.

Compile an inventory of all the resource needs. Identify those that you don't have and develop plans for getting them. Acquiring these resources can involve budget requests or more creative methods such as devising new models for collaborating or sharing resources.

Tips from colleagues

"Choose an objective that's manageable. It's better to start small with an objective that you can deliver successfully."

"Stick to the objective. Avoid overloading the site with too many extra features that don't help fulfill your main goal."

Define and set goals

Think about the services and information citizens, businesses, and local groups want from your government. Can you quickly and easily deliver them on a basic Web site? Establishing a set of concrete goals will help frame the project and drive decisions about design, implementation, and management.

Participants said it was important for them to remember they were creating a government site, not an entertainment one. That helped them keep their objectives clear and simple.

Some of the goals that were established by participants include:

- Creating a 24-by-7 town hall
- Boosting tourism and development
- Making pending legislation more accessible to citizens
- Putting all forms and applications online
- Publishing election results in real time
- Integrating Geographic Information Systems (GIS) to benefit citizens, emergency workers, economic developers, and construction companies

Build and maintain a policy framework

Before beginning a Web site, be sure you have policies in place regarding: purpose of Web use in municipality business, appropriate use by staff, public access to municipal records, privacy and confidentiality of personal or sensitive information, security of computing and network resources, and records management.

Review existing policies about computing, telecommunications, records management, copyright, and similar topics. Some will continue to serve you well and others will need to be updated to take the Web into account. Specific programmatic policies, especially ones about handling personal information, may need to be updated.

www.albanyny.org



Economic development is one of the clear themes on the City of Albany's Web site.

Think of policies as guiding principles, not as technology-specific procedures. The rate of change in the underlying technologies requires that policy statements focus on service objectives rather than on the technologies themselves. Policies guiding the use of technology resources should be reviewed regularly to ensure that they remain useful and appropriate.

Be user-centered

A user-centered or citizen-centric approach keeps efforts focused on what citizens want and need from your government's site. Citizens may not know which department handles certain programs and services. That's why sites should be organized from the perspective of the citizens looking in, not from the perspective of government looking out.

Use themes to anchor your site

In New York State, several local and county government sites are anchored with tourism or chamber of commerce information. Tourism sites offer details about popular attractions and a calendar of events, as well as hotel and restaurant information. Chamber of commerce-related sites offer demographic and commercial real estate information, as well as economic statistics about the labor market and manufacturing. Anchoring your site with one or more of your government's priority themes attracts a predefined set of users and helps them recognize your site.

www.schoharie.net



Schoharie County uses tourism as one of the main themes to anchor its Web site.

Identifying Costs

People often underestimate the cost of developing a Web site. There are so many different kinds of expenses that it is easy to overlook some.

The county and municipal representatives who participated in the study identified the following costs: hardware and software, staff time for technical work and content creation and management, overtime pay, contracts with ISPs, and the often intangible costs of competing job priorities for staff. Most of these governments figured out how to develop their sites within existing budgets and using current staff. For them, their sites quickly became regular costs of doing government business.

Human resource issues: overtime pay and job priorities

Since most staff who work on Web projects already have other full time jobs, you can run into overtime and job priority issues. These costs are often hard to track, but they were a primary cost for the county and local governments we interviewed. The more the Web site becomes part of day-to-day government operations, the more your government may want to consider creating a dedicated Web master position.

Participants said that in many cases they spent personal time developing and maintaining the Web site without additional compensation. As they took on new Web site duties, their other responsibilities did not decrease.

To outsource or not to outsource


A vast majority of the governments with whom we worked chose to develop their sites in-house and outsource the hosting. The decision to outsource hosting for one county was driven entirely by costs. It was much cheaper to pay an ISP \$100 a month than spend \$30,000 to buy a server and invest in the technical staff expertise.

For one city, the decision to outsource was even easier. Under a 10-year agreement, a local college hosted the site for free. The main cost to the city was a slower connection when classes were in session.

By contrast, participants said outsourcing site design and development can be very expensive. One city paid a contractor as much as \$115 an hour for the changes it made while developing its Web site.

Because developing a Web site is such a creative and continuous process, the cost of those changes added up quickly.

www.oneonta.ny.us



The City of Oneonta Home Page - Netscape

The City of Oneonta would like to thank **Hartwick College** for hosting it's web pages.

Signing the guestbook certainly is not a requirement to enter the City's site but we sure would like to know what your thoughts are and where you are from!

Sign City Guestbook

Be notified when the City's home page is updated.
Enter your email address below,
then click the "Join List" button.

Form is inactive.

The City of Oneonta partnered with Hartwick College, which agreed to host its site for 10 years.

Partnerships

Partnering with surrounding governments may reduce costs. It allows you to share technical staff expertise, project outsourcing costs, and/or the technology infrastructure needed to host and maintain the site.

One municipality said it was starting to develop a partnership with its county government. Others were contemplating the idea for future Web site initiatives.

Tips from colleagues

“The people costs are the main ones. The rest doesn’t account for as much.”

“Detailed, segregated costs are basically irrelevant when you’re talking to governments of very small size. The work is just rolled into our regular jobs.”

Designing the Site

Creating your site's look, content, and features is an evolving process. Even though your government may not have the time, staff, and funds to devote an entire team to the design effort, it's important to periodically check in with others in your government to make sure you're heading in the right direction.

Here are some things you need to do when designing your municipal Web site.

Keep your audience in mind

Knowing how your citizens use the Web can help you design your site around their needs. There is a great deal of research available about how people use the Web. For example, Jakob Nielsen, considered the guru of Web usability, says it should take no longer than 10 seconds for a page to load on a user's computer. If users must wait longer than that, traffic to your site will begin to drop off.

Take the high road

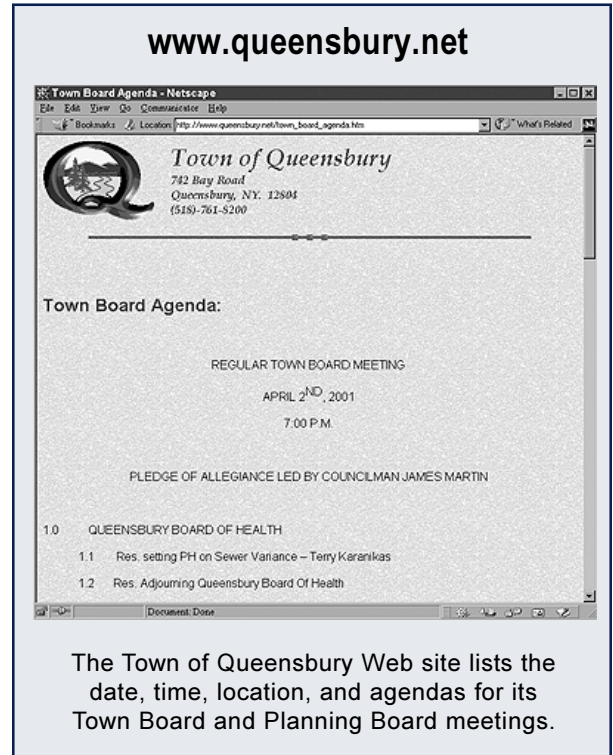
Citizens want solid, factual information presented in an unbiased manner. Give people the information and services they need to live, work, and do business in your community.

Communities can become emotionally divided over contentious hot-button issues. For example, communities along the Hudson River have debated heatedly over whether or not to dredge for PCBs. Other communities face similar contention over the environmentally sensitive land use and site development issues. Your municipal Web site is not the place to take sides, but can be a helpful source of factual information such as hearing dates and legal references.

Select features and content

Key features identified by focus group participants include:

- Public meeting agendas and minutes
- Community events calendar
- Department hours, phone numbers, locations, and staff directories
- Profiles of elected officials
- Government program descriptions and qualifications for participation



The Town of Queensbury Web site lists the date, time, location, and agendas for its Town Board and Planning Board meetings.

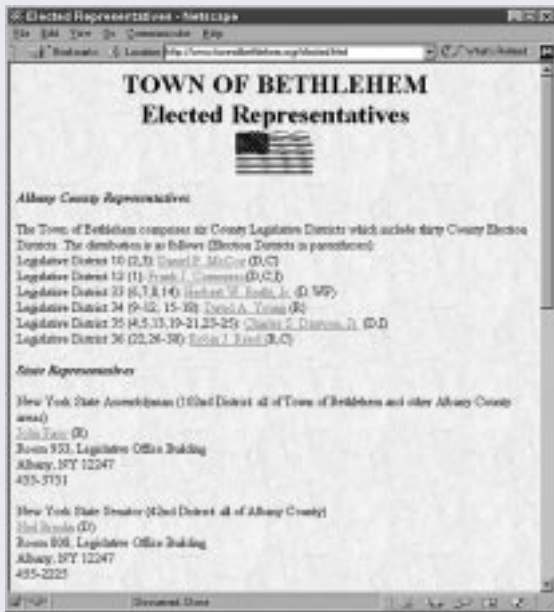
- Frequently asked questions (FAQs) about municipal departments, events, etc.
- Tourism information
- Municipal news
- A search engine
- Clerk services—especially downloadable forms and applications
- E-mail to officials and staff

Create Web documents

You don't have to be an experienced Web programmer to create documents for your site. Web site software packages are fairly easy to learn and use, even for novices. These tools provide templates for all types of Web pages.

One town clerk "cut and pasted" his municipality's original Web site. He took advantage of simple Web site development tools that provided him with all the infrastructure he needed to develop a good informational site. He learned a little programming along the way as he made site improvements.

www.townofbethlehem.org



The Town of Bethlehem lists its locally-elected officials with their contact information.

Provide links

Think about logical ways to link to pertinent information within your site and on external sites. You may want to cross-reference department listings with a map showing their location, or link the town board meeting minutes to an e-mail comments page. You may also want to provide links to other Web sites, like the local daily newspaper, weather service, schools, and community organizations.

Provide e-mail access

Providing e-mail access for citizens will expand the number and diversity of correspondence coming into your government offices. Decide whether to have a central e-mail address for all incoming correspondence or provide links directly to the e-mail accounts of elected officials, departments, or government employees. And decide how the mail will be managed. E-mail is still official correspondence, the amount of which will surely increase when it is offered on your site.

Build in access for people with disabilities

You also need to make sure your site is designed with all kinds of users in mind, including those with disabilities such as vision or hearing loss. New York State's technology policy regarding Web site accessibility calls for compliance with "priority 1" checkpoints of the World Wide Web Consortium's Web Accessibility Initiative. This includes providing text descriptions for video and audio content. (See New York State Office for Technology in the Additional Resources section on page 19.)

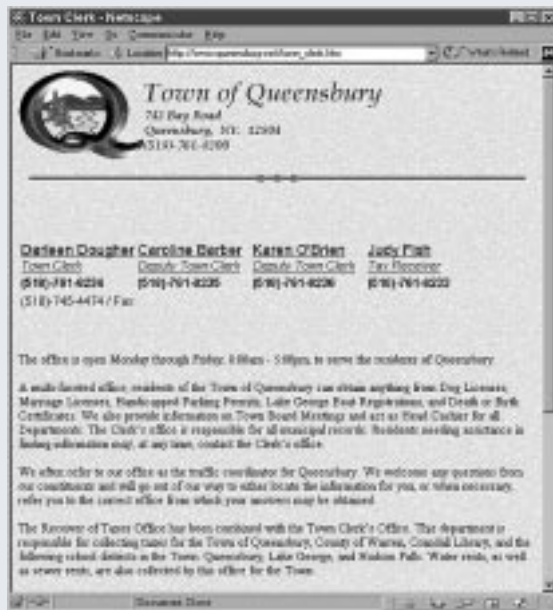
Tips from colleagues

"Keep the design simple and user friendly. Make the text come up first. Avoid overdoing graphics and pictures."

"Use simple navigation. Don't make users click more than three times, ideally just once or twice, to locate the information they want."

"Keep in mind that people have different abilities, hardware, and browsers, and design for these variables."

www.queensbury.net



The Town of Queensbury Web site provides users with e-mail access to its various departments.

Build in access for all Web devices

Your users will be accessing your site with all types of different browsers, modems, monitors, PCs, and even cell phones or other hand-held devices. Your site will look and behave differently on all of these different displays. You can't control exactly how the site looks on all different Web devices, but there are ways to design your site for maximum functionality across the different platforms.

Use style guidelines

Just like any brochure or advertisement, your Web site makes a statement about your county or municipality. Citizens will judge it by its content, as well as its appearance and style. Here is some advice on style guidelines offered by state, county, and municipal Web masters:

- Identify yourself—Links from external sources allow visitors to enter your site at any point. Be sure every page identifies your municipality.
- Make it easy to communicate—Include forms and e-mail links. Forms may be used to solicit information, register for events, or subscribe to a newsletter. E-mail forms allow visitors to contact any number of people within your government.
- Use templates—Your site's pages should have a consistent look and feel. Use templates to create standardized headers, footers, fonts, graphics, and backgrounds.
- Date stamp your pages—Let visitors know when the material they are viewing was last refreshed by displaying the most recent revision date on each page.
- Use graphics judiciously—Graphics are attractive, but often overused. Too many or too large graphics slow down the communications process and frustrate users.
- Give help—Use indexes, tables of contents, and search tools to help orient users and guide them to the information they want.
- Include useful links—Link to useful resources within your own site and on other sites. A few briefly described, well-chosen links are more valuable than a long laundry list.
- Avoid dead ends—Use navigation aids, like "top-of-page," "return-to-home," "next page," and "previous page" buttons, freely. Don't let your visitors get stuck in dead ends with no way to get around.
- Offer low-tech options—Not every user has the technology to take advantage of a graphical interface. Be sure your site is usable by the widest possible audience, which includes offering low-tech options.

Employ prototypes and a phased approach

Prototyping is an important tool for reducing risk in Web site development. It allows you to create a quick model and analyze the results before going further. A prototype is a tangible product that demonstrates how the Web site can support organizational goals, and may be an important factor in garnering necessary support and resources. Prototyping is a great way to bring users into the design process. You can show it at meetings or at community events to get users' advice before you make design decisions.

www.alleganyco.com



The screenshot shows a web browser window displaying the Allegany County Government website. The browser's address bar shows 'http://www.alleganyco.com/'. The website has a dark navigation menu on the left with the following items: Allegany County Government, Recent For Process, Calendar of Events, County Links, County Officials, Development, S-P-T, Employment & Training, Health Department, Legislation, Local Job Search, Local Government, Morning Minutes, News, Office for the Aging, Planning Services, Board's Office, Social Services, Tax Department, Tax Data List, Tourism, and Treasurer. The main content area is titled 'Allegany County Links' and features five icons: Education & Instruction, Cultural Resources, Historical, Events, and Volunteer Services. Below the icons, there are four text-based links: 'Allegany Historical Society', 'Arts Near Gallery, Cghs, New York', 'The Bicycle Man', and 'The Center for Environmental and Energy Research at Alfred University'. Each link has a brief description of the resource.

Allegany County offers links to a number of useful resources.

Implementing the Plan

Once you've laid the groundwork for your site, it's time to implement your ideas. Building your project one component at a time reduces risk and raises confidence. Results can be seen and evaluated more rapidly, and lessons from one phase can be applied to the next. Try to stay flexible and experiment with new methods for implementing subsequent phases.

To outsource or not to outsource

There are two ways to get your information on the Internet: load the site on a municipal computer and acquire a connection to the Internet, or contract with an outside organization to host your site and make it available to the public.

One large town already had a server and hosts its site in-house. Another city started with an ISP but plans to bring the site to its own server within the next year or two. The rest of the participants use an ISP to host their site. Each is appropriate in different situations and has its own costs and benefits.

Register your domain name

Before your site goes live, it needs a domain name—an Internet address or URL. It is important to choose a domain name that is easy to remember. The conventional naming system for counties in New York State looks like this: www.co.rockland.ny.us. For cities, it looks like this www.ci.ithaca.ny.us/. For towns, it looks like this www.town.clarkstown.ny.us/. For villages, it looks like this www.village.briarcliff-manor.ny.us.

Several of the participants said their county or municipality registered a dot com, dot org, or dot net address, like www.colonie.org. Some registered more than one address to ensure citizens could access the site in more than one way. For example, Rockland County uses both www.rocklandgov.com and www.co.rockland.ny.us as URL addresses that reach its home page.

How to register

There are several organizations that can register your domain name. Choose the one that makes the most sense to your county or municipality.

The US Department of Commerce owns a Web Site—www.interNIC.net—that provides a great deal of information about how to register a domain name. It covers such issues as choosing a registrar, the registration process, and the cost of registration.

Internet Service Providers (ISPs)

The ISP market is changing quickly, with new providers appearing and companies consolidating fairly often. It's important to evaluate your options carefully and consider your long-term needs.

An ISP provides Internet access and may be a public agency, such as New York State's Office of General Services, or a private company, like Net Heaven, America Online, or many other local or national companies. ISPs offer a variety of services, from simple dial-up Internet connections to full Web site development. These are common ISP services:

Internet connection. The ISP provides a network connection to the Internet. Issues such as speed and availability of the connection are important considerations. They affect the time users must spend to access and use your site.

Web site hosting. An ISP provides server space and network connections which you can rent to house your site and enable it to be accessed by your citizens. In this arrangement, your government would keep the design, content, and maintenance responsibilities of your site in-house.

Web page development. Many ISPs provide Web site development services. These may range from simply converting documents into HTML to designing your overall site. Some ISPs can create content, implement your site, and conduct marketing activities.

Web servers and other services. An ISP may be able to provide services such as a Web server, e-mail, and discussion groups. Customized applications, like database access and search engines, are often unavailable through ISPs and require in-house hosting of the service.

Test your Web service

Before making your site available to the public, it's important to test it thoroughly. The site should be tested by project members first, then by a larger audience within your municipality, and finally the public. Develop a formal plan to test the site's structure, content, presentation, and interface, and incorporate the test results before launching the site.

Generally, you test to find out if your site is organized and user-friendly. Some specific things to test for are: graphics appearing in the right places, correct and logical links, useful introductory information for content, reasonable response times for downloading graphics, adequate connection times, and operational security features. Testing isn't just a pre-launch activity. Updates and new pages need to be tested before being added to your site. You should also periodically check the links.

Get a little help from your friends

Tell others about your site, invite them to visit, and ask for honest opinions and feedback.

Market your service to the outside world

The government representatives we worked with said there are a number of conventional ways to get your site some recognition in the community, including:

- Sending press releases to the local media
- Having the county executive, mayor, or town supervisor make public speeches
- Delivering presentations to local associations and organizations
- Placing stories in local newspapers

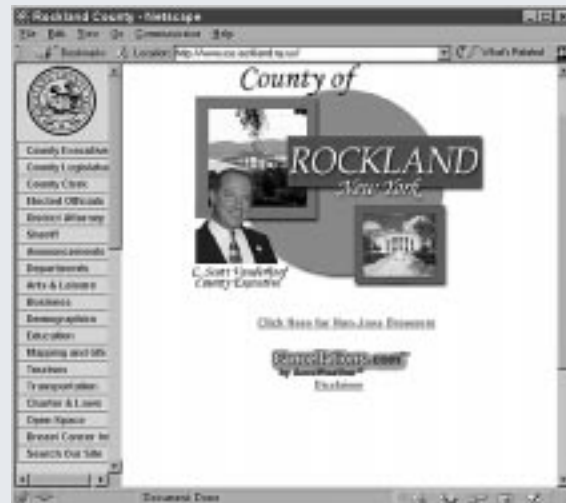
Tips from colleagues

"Know what to look for in an ISP including security, access, and speed."

"Get a meaningful domain name that identifies your municipality with brand name recognition."

"Run your site in search engines so people can find it easily."

www.rocklandgov.com
www.co.rockland.ny.us



Rockland County has an in-house Web master and outsourced its Web hosting services for \$100 a month, rather than spending \$30,000 to buy a server and invest in the technical staff expertise it would take to maintain it.

- Posting the address on all government documents, particularly tourism brochures and official letterhead
- Putting the Web address on government vehicles

Get other services and directories to point to you

The Web also provides several mechanisms for getting your site "on the map." Ask an all-inclusive search listing service, such as the one provided by Yahoo, to add links to your site. Contact other services to find out what portions of your site are regularly scanned so you can put the right words in your content.

Directory services like Yahoo need human intervention to get your Web site listed in the proper categories. You can assist the positive positioning of your Web site by supplying keywords in the meta tags, using descriptive titles within the title tag, and ensuring that the first 66 lines of your online documents contain as much information about your site as possible.

Managing the Service

Putting your county or municipality on the Web is a change in the way you communicate with your citizens. It's also rapidly becoming an expected way to do business at all levels of government. With this in mind, manage your Web site with an understanding that it is changing your government and its relationship with the community.

Manage the change

If your Web site is to remain a dynamic and valuable resource, it must keep pace with the way your government works. To accomplish this, you need to continually consider Web content as an integral part of government operations. The following questions may help:

- What current information and/or services would be delivered more effectively over the Web?
- What information dissemination and/or services could be complemented by the Web site?
- Is there potential for the Web site to include new or existing services?
- How will increased demand and communication be handled?
- What impact will the new or enhanced Web site have on various staff?

Maintain relationships

The day-to-day operation of the Web site requires the cooperation and collaboration of many people. Obtaining their active participation requires an internal marketing and education effort aimed at presenting the long- and short-term benefits of devoting resources to the effort. Keeping them informed about progress and changes to the site will help maintain their participation and support along the way.

Manage the new way of interacting with citizens

For sites with one central e-mail address, managing incoming e-mails and ensuring timely responses will be a key issue for your government. Many government organizations have a standard process for tracking correspondence. Consider how e-mail fits into that process.

In one city, the Web master received all correspondence, decided where it should be directed, then directed it to the appropriate department head, council member, or office. Whoever received the e-mail was then responsible for responding to the inquiry. Another municipality had e-mail links to each department so the citizen engaged in direct correspondence with the appropriate department or legislator.



The Town of Colonie provides a page of e-mail links to town officials and staff members.

Adopt an editorial process

Just like publishing a new brochure, sending out a press release, or developing a new application form, there is usually a sign-off approval process for getting new content ready for the Web.

While some of their editorial processes were more systematic than others, few participants have formal written guidelines. The Web master for one county accepts whatever is submitted as long as it has the approval of the submitting department head. Sometimes this process requires him to make an additional phone call or return the document so it can be resent through the appropriate review process.

One town has a staff person whose main responsibility is getting documents from various departments, tracking them through the approval process, and then making them ready for the Web site. Other representatives cited less stringent processes: they publish any information that comes to them and fix any problems after the fact. These Web site managers said they rely on the contributors for the integrity of the document. And since the Web is dynamic, it's easy to make quick changes and corrections if needed.

Encourage content ownership

Wherever possible, be sure each page or related group of pages on your site has a content "owner." Content owners must also pay attention to updating and refreshing the material on their pages. For example, a person in the highway department may "own" that department's pages and is responsible for the accuracy of the information on those pages. Failure to maintain accuracy could have significant ramifications ranging from losing visitors to liability issues. It is critical, therefore, that whoever owns the page understands the material and keeps it up-to-date.

Manage electronic records

Web sites represent a new challenge for record keeping. Managing the record created when a user completes an online form is a good example. Understanding how the form captures information and integrates it into business processes is the first step toward managing the business-oriented records.

E-mail messages also pose a record-keeping challenge. Sometimes e-mail represents a quick person-to-person communication, or it can document an action or decision. These messages need to be handled as any other document related to the business of government.

Tips from colleagues

"Have an immediate backup and diagnosis plan set up in case your server/site goes down."

"Put up only content that you can efficiently manage and regularly update."

"Adopt policies, procedures, and standards for site design, implementation, and ongoing management functions."

"Continually update the whole site, especially the home page. Users want to see new features and know the site is as current as possible."

Evaluating the Impact

The most important point to keep in mind when evaluating your Web site is deciding whether it is meeting your goals. Refer often to the objectives set for the site. Your most useful feedback often comes from citizens and colleagues.

Public comment

Public comment—positive or negative—can come in many forms, including e-mails, phone calls, or newspaper articles.

One city asks all its Web site visitors to sign a guest book and comment on their experiences. This guest book used a free service that enabled users to post comments about the site and the city.

Internal feedback

Critical insights can come from colleagues inside government. These comments may be “a slap on the hand or a pat on the back,” as one participant said. Or these comments may be suggestions for new information or services that can improve the effectiveness of the site.

Counting visits

The Web site itself is a great place to collect data. Statistical programs and counters will keep track of the source and number of times people access various pages, download documents, and perform other activities. Like the guest book, these services are available free on the Internet.

The counties and municipalities we worked with track visits to particular areas of the site. For instance, tourism and economic development departments in some of the counties and cities want regular updates on the number of visitors to specific Web pages.

Assess efficiency and effectiveness

Baseline data is an essential foundation for measuring performance changes. Collect baseline data while your site is in development. Then continue to gather performance and usage statistics after the site is up and running. You'll want to

measure the site's efficiency and effectiveness. Consider these questions:

- Does the Web service cost more or less than the traditional version of the same service?
- Does the Web service reach the same or different customers?
- Does the site allow you to provide a service that can't be offered by traditional methods?
- Have phone calls, letters, and visits changed in nature or frequency?

Other ways to evaluate your site

Web feedback forms are another way to ask users to evaluate your site. You may also want to collect data related to service objectives by conducting surveys, gathering cost data, and interviewing staff and customers. Whatever methods you choose, the goal is to get concrete data that tells you how well your site is working for your customers.

www.orleansny.com

Orleans County collects user comments about its Web site.

Refine or revise your service

If evaluation data show that certain aspects of your service are burdensome or too expensive to sustain, you may want to change or drop them. If other parts are very popular or generating savings or revenue, you may want to enhance them. There are many possibilities. Take the time to collect, analyze, and understand the feedback and make your decisions accordingly.

The local and county governments we met with tend to refine or revise their sites based on feedback they receive from users inside and outside their government. For example, one county put the budget on its site in direct response to citizen requests. Again, participants said they balance the feedback and ideas they receive with the time they have to implement and maintain them.

Tips from colleagues

“Review site usage statistics and consider the comments you receive to help you determine how to refine the site.”

“Our evaluation is either a slap on the hand or a pat on the back.”

“Think to the future and develop a plan for the site’s evolution.”

Continuing the Work

This publication provides an overview of the issues you’ll encounter and resources you’ll need when developing your government’s Web site. But this is just a start. CTG has several resources that contain more in-depth information that may be useful as you move through the Web site creation and implementation process.

Developing and Delivering Government Services on the World Wide Web: Recommended Practices for New York State, from which this guide was adapted, contains more detailed lessons and tools. An electronic version of this report is available at www.ctg.albany.edu/projects/inettb/pract2.pdf

A companion piece, ***WWW Starter Kit***, gives some quick tips and techniques to help you get started. The kit is available online at www.ctg.albany.edu/projects/inettb/startkit.html

Making Smart IT Choices is a handbook that presents CTG’s signature methodology designed to help government managers evaluate information technology options. It contains a number of analytical tools that can help you make your way through the development process. Access the handbook online at www.ctg.albany.edu/resources/smartit.pdf

Did You Know? Using the Internet to Find Current and Best Practices offers more detailed instructions on how to find best and current practices in Web site designs and services. The kit is available online at www.ctg.albany.edu/resources/news/didyouknow7-00.pdf

Additional Resources

Association of Towns of the State of New York Web site offers links to a variety of towns in the state. It also includes information on member services, including training programs, research and information services, legal services, computer software programs, insurance programs, and a variety of publications.

www.nytowns.org/

Getting Online: a guide to the Internet for small town leaders, published by the National Center for Small Communities, explains in plain English the power, organization, and tools of the Internet, with emphasis on the World Wide Web.

www.natat.org/ncsc/

Jakob Nielsen's site includes his bi-weekly column on Web site usability, reports on how to optimize your site, as well as other information that can help you build and maintain a simple and effective Web site.

www.useit.com

Local Government On-Line: Putting The Internet to Work, published by the International City/County Management Association, shows you how to boost your local government's efficiency and productivity, exploiting the capacity of the Internet to better serve the public.

bookstore.icma.org

MuniNet Guide and Review showcases the outstanding Web sites and features it has encountered over the past 12 months. They look for sites that help increase both government accountability and citizen involvement.

www.muninetguide.com/toppicks/toppicks.asp

The New York State Archives offers records and information management publications for state and local government agencies. Some of the topics that pertain specifically to county and municipal Web sites include managing electronic records (e-mail records). Other publications may also be of interest as you develop and maintain your site.

www.archives.nysed.gov/pubs/lgrtip.htm

The New York State Association of Counties (NYSAC) Web site links to the counties that have sites on the Web. It also provides information on the member services such as conferences, legislative affairs, and policy and research data.

www.nysac.org

New York State Conference of Mayors and Municipal Officials (NYCOM) Web site links to cities and villages on the Web. It also provides updates on association events such as conference and training opportunities, and on legislation and policies that impact the State's cities and villages.

www.nycom.org/

The New York State Office for Technology Web site offers policies on Internet Technology and e-mail use in government agencies, as well as an array of other information. There is also a report on Information Technology Consultations with NYS Local Governments.

www.ofc.state.ny.us

The official US Domain Registry for the United States provides URL registration for all state and local governments (city, county, township, parish, village), K-12 districts and schools, community colleges, technical schools, museums, libraries, organizations, businesses, and individuals.

www.nic.us

The World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential as a forum for information, commerce, communication, and collective understanding. W3C's Web Accessibility Initiative provides insight and advice on how to make Web sites accessible.

www.w3.org

The Yale Web Style Guide is a useful source when creating Web pages. It is an outgrowth of their Web development projects. It reflects their attempts to apply some of the lessons they've learned in twelve years of designing and implementing software and Web sites.

www.info.med.yale.edu/caim/manual/contents.html

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