

SPECIAL DISTRICT ASSOCIATION  
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VAIL, COLORADO

# The Importance of an Internet Presence for Special Districts:

## Getting "There" from "Here"

By James C. Fouch  
and Michael R. Rothberg

RTW



September 14, 2000

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an Internet Presence  
for Special Districts:**

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by  
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Presented to  
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## About the Authors

**James C. Fouch** is Webmaster for Rothberg, Tamburini & Winsor, Professional Engineers and Consultants, Inc. and also is a Web Designer/Consultant for their RTW Webservices Division. Jim holds a degree in Fine Art and is also educated and trained as a professional graphic designer with extensive experience in computer and marketing graphics. He is able to put these artistic skills to work alongside his technical expertise to design and develop websites. He possesses a comprehensive knowledge of such languages and technologies as HTML, dHTML, XHTML, JavaScript, VBScript, Cascading Style Sheets, and Active Server Pages. Jim can be contacted at:

James Fouch  
[RTW Webservices](#)  
1600 Stout Street, Suite 1800  
Denver, Colorado 80202  
720.930.9347  
[jcf@rtwwbservices.com](mailto:jcf@rtwwbservices.com)

**Michael R. Rothberg** is a principal and president of Rothberg, Tamburini & Winsor, Professional Engineers and Consultants, Inc. Mike has extensive experience in working with special districts, other governmental entities and private sector clients. His knowledge of the needs of special districts have enabled him to serve as District Engineer for several special district clients and allowed him to understand the relationships between the districts and their taxpayer customers. Mike can be contacted at:

Michael Rothberg  
[Rothberg, Tamburini & Winsor](#)  
1600 Stout Street, Suite 1800  
Denver, Colorado 80202  
303.825.5999  
[mrr@rtweng.com](mailto:mrr@rtweng.com)

## What is the Internet: Where Exactly is “There”?

It seems to be virtually everywhere now – every time you turn around, you see “www dot something” on television, on billboards, in magazines, and you hear it on the radio and people mumbling about some “site” they visited the night before. You may even be lumped in with the approximate 48% of the American population that are now using the Internet (*source: Computer Industry Almanac’s estimate of 136 million users based against the United States Census Bureau’s current American population estimate of 276 million people*). But just what is “The Internet?” In short, the Internet, “the Information Super-highway” or more simply, “the Net” is quite basically a group of computers networked together, much like the network you may be connected to in your workplace.

In 1957, the U.S. government formed the Advanced Research Projects Agency (ARPA), a division of the Department of Defense that was given the task of ensuring American leadership in science and technology in military applications. In 1969, as a response to the threat of nuclear war, ARPA created “ARPANET,” the predecessor of the Internet, which was designed to continue communication between computer sites in the event one or more of them were destroyed in an attack. The ARPANET network used telephone connections to network together major computers at the UCLA, UC at Santa Barbara, Stanford, and the University of Utah. Within a couple of years, many more educational as well as research institutions joined the network.

As ARPANET developed, more and more groups attached themselves to the growing network. This shared usage between the government, universities and research groups brought forth the term “Internet.” Throughout the 1970s, developers created the protocols used to transfer information over the Internet, and by the 1980s, Usenet newsgroups and electronic mail had been born. Most users were affiliated with universities, although libraries began to connect their catalogs to the Internet, too. In 1991, to give users a friendly, easy-to-use interface, the University of Minnesota created its “Gopher,” the forerunner of today’s search sites, which was a simple menu system for accessing files on other computers through the Internet.

As the world moved into the ’90s, the availability of the personal home computer grew and so did the general population’s interest in the transfer of information over the Internet. The Internet has since grown into a public cooperative and self-sustaining entity with over 135 million users in the United States alone, accounting for over one third of the 375 million people online throughout the world (*source: E. T. Forecasts*). This already astonishing worldwide user figure is anticipated to reach 490 million by 2002 (*source: Computer Industry Almanac*).

There are some differences, however, between the Internet and the network that you may use in your office. Unlike the one you may have at work, the Internet network system is worldwide. The Internet is also not dependent on any one computer or server; it functions whether all of its parts are functioning or not. The wonderful thing about the Internet is that a person using a computer can access (given permission) the information from any other computer on the Internet.

This sharing of information leads us to what is termed the “World Wide Web.” The WWW, or more colloquially “the Web,” is the public section of the Internet. The revolutionary feature of the Web is the integration of “hypertext.” Hypertext is an organization of informational units that allows for connected associations between documents or pages, most commonly programmed in Hypertext Markup Language (HTML). These associations are commonly known as “links,” which users may follow at their discretion to other pages on the Web as constructed by the author of the document. This gives a user access to what is growing at a rate of about 7 million per day into more than 2.4 billion unique pages on about 5,000,000 different websites (*source: Cyveillance, Inc.*), enabling you to review reference materials such as newspapers and magazine articles, as well as television show transcripts and schedules, access movie reviews and automobile ratings, play games, watch movies, listen to radio stations, download music, track airline flights, map vacations, trade stocks, pay bills, buy just about anything you can imagine and much, much more. In one way or another, the Internet is about providing information, entertainment or the ability to make monetary transactions for goods and services (*e-commerce*) from any online computer.

### **Getting Connected: The Vehicle to Get “There”**

With all of these web pages and all of these computers connected to the Internet, one wonders how individuals can connect to the Internet or publish a web page themselves. Just as ARPANET was in 1969, today’s Internet is networked via telephone lines. The computers that provide access to the Internet or the computers that make web pages available for viewing are connected to the rest of the Internet through dedicated telephone lines. In essence, this means that these computers are connected *all of the time* on a connection that is *only used to gain access to the Internet*. These computers (or servers) are generally owned and maintained by what is commonly referred to as an Internet Service Provider (ISP). There are two kinds of ISP.

ISPs that provide access to the public are also sometimes referred to as “Internet Access Providers.” For a monthly fee, these companies provide a gateway that allows a personal computer to access the Internet when it is connected to the ISP computer through a telephone line via a modem. Through the ISP’s server, one is able to move freely about (surf) the Internet. To accomplish this “surfing,” one not only needs a computer and a modem, but also an Internet web browser. The term “browser” refers to an application program that is installed on a

computer, which allows the user to “browse” content on the Web in the form of hypertext documents. The first so-called browser was Mosaic<sup>®</sup>, which was introduced in 1992, allowing the user to view the first Graphical User Interface (GUI) based web pages. Since then, two major browsers have climbed their way to the top of the heap. The first was Netscape Navigator<sup>®</sup>, which only a few short years ago held over 80% of the browser market share. Now, that share of the market has been driven to almost half of that at 41.5%, due mostly to the emergence of Microsoft’s Internet Explorer<sup>®</sup> (IE), which now commands 43.8% of this market when adding in the factor of AOL’s users who receive IE as their default browser (*source: International Data Corporation*). It is quite likely, that if you are online, you are using one of these two browsers.

The second type of ISP is the provider that makes websites available to the public on the Internet. These ISPs are also called “hosts,” of which there are currently an estimated 91.5 million in the world (*source: Matrix Information and Directory Services, Inc.*) Commercial web hosting is a service, in which an entity will pay the ISP to harbor a website on its server, usually for a monthly fee. For this fee, the ISP makes a website available to the public through the Internet on a dedicated connection. Often, for an additional charge, these ISPs can also provide a month-to-month statistical analysis of your website that can include the number of monthly visits, list which pages are being visited most often, and provide the names of the ISP’s that the visitors are using to access the Internet, to name a few benefits.

## Moving Around: The Address of “There”

Once connected, one must have a clear path laid out to one’s destination. Once someone has access to the Internet through the services of an ISP, there must be a way to easily find the websites that are hosted by the other ISPs. This retrieval of hypertext documents is accomplished by pointing your computer through your ISP gateway to another ISP server via a URL (universal resource locator), commonly called an address. This may sound quite intimidating, but URLs are merely the “www ‘dot’ something ‘dot’ com” addresses that every organization either has already, **or probably should**. These addresses are also referred to as domain names. The top-level domain names (TLDs) are **.com** for a commercial web site; **.org** for a non-profit organization such as museums and libraries; **.gov** for a federal governmental site; **.mil** for military branch; **.edu** for an educational facility like universities; and **.net**, which is reserved for computer network based sites like businesses providing Internet service. Two character domain names are reserved as country codes, some of which have recently been purchased by big business for commercial use.

The Internet Network Information Center (InterNIC), a cooperative activity between the U.S. government and Network Solutions, Inc., began as the organization responsible for registering and maintaining these top-level domain names. Recently, the government has decided to open the registration of domain

names up to competition. They have, in essence separated the registration from the supervision of the domain names. So, while Network Solutions as well as several other entities can now be used to register domain names, a new non-profit organization, called the Internet Assigned Numbers Authority (IANA), has been appointed to oversee the domain names as InterNIC once did.

Some problems exist with the Domain Name System (DNS), the foremost being the fact that for each TLD, there can be only one registration for each name. For instance if a company's name is Vanguard Travel and another company's name is Vanguard Construction, only one of them can have rights to the domain name "www.vanguard.com." Another problem is that because anyone can register any unused domain name, there have been conflicts between the owner of a trademark, and someone who registered a domain name utilizing that trademark. Yet another problem along these same lines is the hoarding of generic terms that are obvious to people looking for information on a particular subject. For instance, someone looking for information about cars is likely to go to "www.cars.com." While, this seems a pretty obvious address, there can be only one cars name for the TLD of *.com*. All of these problems have led to an address exhaustion crisis, where one's options are becoming more and more limited to what names remain available to be registered. While some small solutions are being presented to combat address exhaustion, such as buying two character country codes like *.cc*, *.tv* and *.hm*, there still remains a large problem.

Another way one can find a website online is through a search site. This is especially useful when a domain name is not obvious or when one is unsure for what he or she is looking. Over 75% of people on the Internet use search sites to traverse the web and one half of all web users spend at least 70% of their time using these sites (*source: Real Names, Inc.*). Search sites fall into two categories: search engines and search directories.

Search engines, like Google, which currently boasts the largest index of pages, create their listings automatically. Search engine robots crawl or "spider" the web, and then make that information available through a searchable database. Page titles, body copy and other elements all play a role in how a webpage is indexed. The relevancy of a link within an engine's search results is determined in different ways by different search engines. Some by search popularity, some on link popularity, others on content matching. Often search engines are partnered with other search engines or database to increase the performance of their database. Search engines are generally used when trying to find specific content on a webpage by entering keywords.

On the other hand, a search directory like Yahoo!, which currently ranks as the most popular search site (*source Nielson's NetRatings*), depends on humans for its listings. Web pages are submitted with a short description to the directory, or editors write one for sites they review. A search looks for matches only in the descriptions submitted, unless a search engine is also used. Search directories

are generally utilized when one has specific questions or knows of a product, organization or site that is probably cataloged in a logical fashion.

## **Seeing the Sights (Sites): What Can Be Found “There?”**

Although the majority of the web sites can be categorized into either being one of information, entertainment or e-commerce, the technologies that are being developed to enhance the way these sites are viewed are growing exponentially. As programming and scripting languages advance and server technologies become increasingly more powerful, informational sites have become more dynamic and personalized, making it easier to find and view the information for which you are looking.

Entertainment sites are constantly setting the standards for technology as the speed at which people connect continues to increase. Macromedia Flash<sup>®</sup> and Shockwave<sup>®</sup>, Real Player<sup>®</sup>, Apple QuickTime<sup>®</sup>, and Microsoft Windows Media Player<sup>®</sup>, to name a few, are applications that enhance a web browser to allow users to take part in multimedia web pages utilizing technologies making animation files like *swf* and *fla*; movie files like *rm*, *mpeg*, *mpg*, and *mov*; as well as audio files such as *ra*, *wav*, *au*, and *mp3*. These applications make it possible to experience presentations, play games, watch movies, and listen to radio stations and one’s favorite songs right from the comfort of one’s own computer.

Perhaps the biggest advances have come in the arena of e-commerce where developments in Internet security, server technologies and database connectivity have helped to almost double the Internet business-service revenue from last year’s \$22 billion to \$40.3 billion as of July 2000 (*source: National Retail Federation/Forrester Research, Inc.*), with the holiday season yet to come. These online shopping and service sites make it possible to execute transactions for just about anything from anywhere at any time.

## **What the Internet Can Do for You: Why Be “There?”**

Why does a special district, municipality, small town, or other government entity want a web site? Your customer, ratepayer or taxpayer views you as a business that should provide the services that they want and need. Although you are a unique type of business and your customer has no options for obtaining your services elsewhere, your customer wants and deserves good, reliable and convenient services none-the-less.

In the course of serving your customer base, next to the primary services you provide, providing information is a big part of what you do. Obtaining an Internet presence is one of the best and most accessible methods of providing this

information. Your information, if published on the Web, will be available 24 hours a day, seven days a week, 365 days a year, and it is available from almost anywhere in the world. Having a website hosted by an ISP means that it is connected to the Internet so that anyone else that is connected to the Internet can access it through your ISP's dedicated connection. For a special district or other governmental entity, this in turn means that you are providing customer service through your website, without it having to be staffed. Although a web presence can never replace your customer service staff, the benefits that a web presence provides to your customer base and to you, are essential in today's service world.

### **Customer Benefits: What They Get From Your Being "There"**

Lifestyles have changed and continue to change as we advance in the technical information age. As these changes have occurred as a result of advancing technology, so have the expectations of people in response to these changes. Current trends in today's lifestyles have begun to demand that information and service be available after the regular business hours of Monday through Friday from 8am to 5pm. Although special districts and other governmental entities are used to providing their services 24 hours a day/seven days a week, they usually do not staff their offices for the public beyond normal business hours. Many people are unable to visit your offices during normal business hours. Some are even unable to call during these hours. Some people would like to access your information at their convenience and at their location. The widespread use and application of the Internet has made it commonplace for people to expect that organizations be online during after hours, when it is convenient for them to access this information. For these, and other reasons, it is becoming more commonplace and even expected for an organization to provide customer service information in a medium that is available all hours of the day. The Internet is this medium.

Another popular lifestyle trend is the number of people who travel extensively on business or telecommute. The number of telecommuters in the United States grows at approximately 15% per year and now exceeds ten million people (*source: The United States Government*). When a person is away on business or telecommuting, they may be at home, out-of-town, out-of-state, or even out of the country. In spite of their location, they may need to carry on their normal daily activities, which include dealing with your organization. Wherever they may be, they may be unable to visit your office and/or unable to telephone your office. However, if they have access to the Internet, then they could have access to your information, if it was published on the Internet. This quality of being available "worldwide" is one of the Internet's strongest assets as well as one of the biggest benefits to your customers.

As we all know, we live in a very mobile and transient society. The worldwide Internet can also benefit your potential customers: the people who do not yet live in your service area, but are considering it. Since these people may not have any

idea how to get in touch with your organization and obviously cannot easily visit your office, the Internet is a logical method of obtaining information about your organization and their new community.

An Internet presence is synonymous with “convenience” to your customers. In today’s busy hustle and bustle, this is perhaps the greatest benefit of having an Internet presence. People are able to acquire wanted information without having to spend time on the telephone, especially on hold. People are able to obtain needed information without travel. When you can supply them useful information over the Internet, your customers may not have to pack up, get in the car and drive to your office, or go out of their way whatsoever.

On a well designed website, people are able to quickly and easily find answers to questions that are commonly asked by your other customers. Based upon your past experience servicing these people, you can anticipate their questions and needs, and supply them with the answers and solutions they are seeking right on your website. This ease of access to the answers of Frequently Asked Questions (FAQs) for your customers is yet another convenient benefit that a website can provide.

The information that is available on a website, once viewed on a webpage, has been downloaded onto your visitors computer. This means that they may now save it or print out a hardcopy. In essence, what you have done by publishing your information over the Internet is make it available for your customers to have and to share in many different media with anyone.

The benefits of an Internet presence to your customers are numerous. What other media can also allow you to provide information to your customers anytime and anywhere, information that is at the same time convenient, downloadable, sharable, and updateable? Information that anticipates their needs and answers their questions? Other than the Internet, there are no other media that offer all of these benefits.

### **Your Benefits: What You Get From Being “There”**

Not only will an Internet presence benefit your customers, but it can also benefit your organization. First of all, it is obvious that when you offer something that benefits your customers, your reputation will benefit. Alongside the ‘anytime’ availability of a website are the benefits you receive from the far reach of the Internet. An Internet presence enables you to provide valuable information to your customers, and also to your potential customers anywhere in the world.

One of the greatest benefits of an online presence is the distribution of the information itself. You provide automatic availability of information to your customers, to businesses who might be able to help or serve your needs, to

similar districts or utilities, to potential customers and their insurance companies or real estate agencies. That is a tremendous asset.

Through the Internet, you are able to disperse a great deal of information. This may take the place of many of the general phone calls your organization receives. This may reduce or eventually even take the place of some of the printed materials you may produce. In the end, you not only have further informed the public about, and generated interest in your organization, but you have done it relatively inexpensively. You have probably saved money in the form of printed materials or overhead customer service.

All sorts of information can be made available over the Internet regarding your special district. Some of the information will depend upon the type of district you are and some of some of the information will be helpful in any case. Here is a brief listing of some items you may want to include on your District's website:

General	Water/Sanitation	Fire	Recreation	Other Unique
Information About the District	Description/Images of Facilities	Description/Images of Apparatus	Description/Images of Facilities	Consumer Tips
District History	Facility Diagrams	Station Locations	Park Locations	District Maps
Statement of Purpose	Rate Schedule	Fire Prevention Consumer Tips	District Maps	Apparatus
Frequently Asked Questions	Billing	District Maps	Activities/Programs	Closures
Links to Offsite Organizations	Rate History/Impacts	Communications and Dispatch	Special Youth Programs	Training
Contact Information	District Maps	Disaster Preparedness	Special Senior Programs	Reports
Employment Opportunities	Water Conservation Consumer Tips	District Ordinances	Class Schedule	Construction Schedule
Newsletter	Online Forms	EMS	Pool Schedule	Constitution and Bylaws
Board Members/ Meetings	Consumer Confidence Reports	Training	Special Events	Environmental Information
Public Notices	Policies and Procedures	Burn Permits	Fee Schedule	Storm Drainage
Community Calendar	Rules and Regulations	Response Listing	Registration Policies and Dates	Funding

Providing this type of information over the Internet can save you time and money while improving your image to your customers and potential customers, anywhere and anytime.

## **The Future: Where Being “There” Is Going**

As we have seen in current trends, the Web is not just a vehicle for information, but also a key point of sales generally referred to as Electronic Commerce (e-commerce). This commercial avenue has the same worldwide, 24-7 benefits as posting information on the Internet, with the capability of conducting transactions for goods and services. By the end of this year, 29% of the people online will purchase a good or pay for a service over the Internet. This is estimated to grow to 38%, accounting for an estimated \$1.6 trillion in transactions by 2003 (*source: International Data Corporation*). What does this mean for a special district? It means that any transaction that currently takes place in your office, by mail, or over the phone, can be made online without security risk.

A special district can make billing, bill review and/or bill payment available over the Internet. With today's technology, it is possible to securely provide statements online, have bills automatically sent via e-mail, and accept payments for bills online. This can be as automated as an organization's budget will allow and can even be integrated directly into an organizations accounting software. This is currently offered by the world's largest long distance companies, and some large investor owned utilities. It is being done for two main reasons: convenience and cost savings.

If your district offers goods for sale, they can be made available to view and be purchased through your website. For instance, if you sell any items such as district maps, books and reports, rules and regulations, district memberships, standard specifications and plan details, etc.; then images of these items can be published on your webpage and a secure encoding can be setup so that credit card payments can be accepted for these items over the Internet.

Another up and coming technology is one that allows an organization to monitor the people visiting a website and proactively open up a channel for direct contact with them to provide more personalized customer service over the Internet. With advances in technology taking place everyday, the future of the Internet appears to be a blindingly bright one.

## **Drawbacks to a Web Presence: Being “There” Is Not Being Everywhere**

Although an Internet presence, has many obvious benefits, it should be mentioned that there are a few potential negative issues that must be considered when having a website. First and foremost, it should be stated that a website can never replace an organization's human and customer service. A website should be thought of as an augmentation of your customer service, that creates another avenue for your customers to obtain some of the information for which they are looking. It should not be thought of as a replacement for your staff. A staff is

still needed to answer the specific questions of your visitors, even the ones that may have been to your website.

Along these same lines, you must remember that face-to-face personal contact is reduced. While some will agree that this is not always a bad thing, it sometimes is. When developing an Internet presence, care must be taken to ensure that your organization is still portrayed as a group of service oriented people. That you are not a machine hosting a website, coldly providing services. This can be a problem as we have all seen over the past decade as technological advances are made. There are times when your customers will need to talk to a human being. An organization must be very careful to preserve the essence of human interaction, maintaining your accessibility and your “service with a smile” attitude.

You must not lose sight of a current condition of the Internet, that is the fact that not everyone is connected. While 48% of Americans are connected to the World Wide Web, this still leaves 52% who are not. Further, if a person is connected to the Internet, this does not guarantee that he or she will visit a particular website. So as you develop your website, it is wise to remember that not all of your customers will have access to the Internet, and those who do may not access your site.

One critical condition in your choosing to have an Internet presence is that it must be updated and maintained. Information must be up-to-date, accurate and fresh. This is a case of “if you do it, you must do it right” or you will not only lose the benefit, you may cause yourself PR harm. You must keep the information you publish on your website current. A website also needs to appear aesthetically fresh. The colors, images and general “look” of a website should be updated along with the content so that visitors are not bored or feel like they are seeing the “same old thing.” A general rule of thumb is that a website should look brand new about once a year.

## **Developing Your Internet Presence: How to Get “There”**

Once you have decided that you would indeed like to develop an Internet presence, you will probably ask, “How do I do it?” Development of a website should not be taken lightly. Your website will essentially be your “storefront,” your “offices,” and the “faces of your staff” in the virtual world of cyberspace. The initial steps that are taken in the development stage are crucial to the final outcome of the web design. These steps include: establishing goals, defining your audience, developing content, charting navigation, registering a domain name, and choosing a host. Sometimes one or more of these steps are overlooked and consequently, your website suffers. An organization should carefully consider each step as they embark on developing their website.

The first step, though seemingly obvious, is to establish the goals of a website. This is to say “Why do we need a website?” Generally, in the case of a special district, this is primarily the distribution of information. But then other matters need to be decided upon as well: How simple or complex should it be; how much information; will goods or services be sold; will it be marketed; what will my future uses of content likely be; and many others. These kinds of questions should be asked before any movement is made toward further development.

Once you have answered the questions as to why a website is needed, an organization must then ask of itself, “Who will this website be for?” Defining the audience that you believe will compose the majority of visitors to your site is of utmost importance. Not only will defining your visitors help you to determine how your site should look and feel from a design standpoint, but anticipating how they will be connecting to the Internet will also determine how your website will be programmed or “coded”. Questions you might ask yourself to help define your target audience might be: who are they; what kind of information are they looking for; how are they connecting to the Internet; and so forth. Without asking these questions, an organization runs the risk of developing a website that does not meet the needs of the audience for which the website is truly intended.

Once you have answered the “why” and the “who,” your organization is ready to ask the question, “What will be available on the website?” This in essence asks, “what kind of content should be provided or what information should we make available on the site?” As discussed earlier, this could include information like: general district information; history; contact information; facilities information; rate schedules; district maps; current events; Board information; Frequently Asked Questions; budget information; and much more. It is obvious why content generation is so important in website development: it is the stuff of which a website is made. Without it, there would be no reason for your visitors to visit.

With the “why,” “who,” and “what” addressed, the next question is “How will the site be navigated?” A poorly developed website is one in which it is hard for a visitor to find the information they are looking for. This flaw can be avoided by taking the time to logically design a flow model that outlines the hierarchy of the pages within the site. Hence, a path of links is developed that your visitors will follow to obtain the information they require. While this is not a difficult thing to accomplish, it is a commonly overlooked step in the development of a website.

Once you have determined the “why,” “who,” “what,” and “how” you need only to answer “Where will the website be on the Internet?” The answer to this will be twofold: you will need to secure a domain name or in some cases several domain names for the address of your website(s), and you will need to choose an ISP to host your website. When securing a domain name(s), it is wise to choose a name(s) that is most likely the name that your audience will expect you to have. If the name of your organization is the Acme Water District, some logical

domain name choices might be: “acme.org,” “acmewater.org,” or “amd.org.” Once you’ve chosen a name(s) that has not already been registered by someone else, you can reserve it for your organization. You can actually do this at any time, and it is highly recommended that you do so as soon as possible, even if you do not plan to have a website in the near future. This way, when the time comes, your domain will be registered to you and ready to use when you are ready to establish your Internet presence.

The second facet of “where” your website will be, is which ISP you choose to host it. As stated before, there are literally millions of ISPs capable of hosting your website. You simply need to choose one that meets your needs. Things to consider are reliability, pricing, services offered, size restrictions, technologies offered, available bandwidth and so forth. Another thing that might be taken into consideration is location. Although it does not matter in any way where an ISP is physically in relation to online visitors, it may be a preference of yours.

After these first steps have been taken, the next task in the development of a website is its actual design and coding. Depending on the scope of your website, you can choose the route in which you proceed. You essentially have three options available for the development of your site. You could have a current member of your staff develop the site, you could create a Webmaster position in your organization to develop the site, or you can contract with a web design consultant to develop your website. Any of these routes are acceptable given that they fit your needs. You will choose the one that best fits your needs or you may develop some mix of the alternatives.

### **In-House Development: Getting “There” by Yourself**

One option for getting a website developed, is to put the task into the hands of a current staff member. Although developing a website is not the easiest of tasks, there may be someone on your staff with enough computer experience and design savvy to do the job. This option makes sense if you do not have a large site to develop, if the site is not interactive, and you have a relatively simple design scheme.

There are two ways to go about preparing a staff person to develop your website: either have them learn how to code HTML, or purchase an HTML editing software package. Both of these options have their “pros” and “cons.” Learning to code HTML has its rewards in that it allows a person to see the inner-workings of a webpage. Learning HTML programming can be accomplished by either utilizing published resources (books or internet resources) or by enrolling in an HTML course.

One benefit to learning how to program in HTML is that a person will be able to look at code and decipher it, this is extremely useful for debugging and

troubleshooting purposes especially in regard to cross-browser compatibility (ensuring a page looks the same in more than one browser). Another benefit is that once you have a foundation of knowledge established, it is easily expanded, and with dedication, one can keep up with current standards.

On the downside, books and especially HTML classes can be expensive, in addition, the process of learning how to program can be quite time consuming especially if you are new to programming altogether.

The alternative to learning how to code in HTML is to purchase and learn how to use an HTML editor. These editors, commonly referred to as WYSIWYG editors (What You See Is What You Get), are fairly easy to learn and use. They are similar in nature to desktop publishing applications and even somewhat related to word processing programs, where a webpage is designed on the screen how it will be seen in a browser and then the code is generated for you.

The benefit of an HTML editor is that some WYSIWYG editors are fairly quickly learned, and for the most part, easy to use. This of course is dependent upon the scope of the website to be designed and relative to the designers experience.

Among the downsides to a WYSIWYG editor is that higher-end editors can be relatively expensive. If you have a website with very little design involved, you can sometimes get away with a less expensive editor or even use a word processor capable of saving documents as HTML files. Another downside is that even in the higher-end editors, the HTML code does not always meet current standards nor do they always produce consistent results in different browsers.

While giving the task of website development to a current staff member is sometimes a feasible one (if the site is fairly small, does not require complex designing, and does not need interactivity that demands advanced script programming), most organizations will require a more experienced person for the job. This is because a web developer will not only need to know how to build an HTML document, but also understand how to get it published, how to maximize the efficiency of meta tags, how to write scripts, how to ensure cross-browser compatibility, how to make a website accessible to people with disabilities, how to register a website with search engines and many other tasks, which are really only learned over time and developed with experience. If you find that you are going to need an experienced web developer, you have two directions that you can consider. You can either create a new Webmaster position in your organization and hire a person to work for you in this capacity, or contract the job out to a consultant.

## **Hiring a Developer: Getting “There” by Yourself**

If your organization is a larger one and/or your budget can afford to take on another position, hiring your own Webmaster may be the route for you. This can be especially beneficial if you are planning to have a large site to which pages are added and information will need to be updated daily or weekly. You should be hiring someone with an appropriate amount of experience who will be able to develop large-scale sites, integrate interactivity and scripting, and give the proper attention to aesthetic design. This has benefits in that you are hiring a person with experience, who will also be able to spend the time getting to know and understand your organization from the inside. They will also be able to spend all of the time needed to develop your website.

The downside to this is the hiring process and the cost of the position. If your organization does not understand the technology used to design a website, it can be difficult to hire someone with the right qualifications. When interviewing for this position, ask for a portfolio or list of website address that they have designed. Ask them to explain the process they used to develop each site. When looking at a résumé, make sure they know the languages at their current standards. The current standards for web design are XHTML 1.0 (or the previous, HTML 4.01), JavaScript 1.4, and VBScript 5.0. Some of the current WYSIWYG editors that you should look for on a résumé are: Adobe GoLive 5.0, Macromedia DreamWeaver 3.0, Microsoft FrontPage, and Hot Dog Pro 5.0. In addition to the technical qualifications, graphics and design expertise are also very important. The site must be aesthetically pleasing for its purpose to the audience. You may want them to also be proficient with software such as graphics, animation and other multimedia applications. These would consist of programs such as: Adobe Photoshop 5.5, Adobe Illustrator 9.0, Adobe LiveMotion 1.0, CorelDraw 9.0, Macromedia Fireworks 3.0, Macromedia Freehand 9.0, Macromedia Director 8.0, Macromedia Flash 4.0, or other equivalents. Of course, if you want your Webmaster to be able to take advantage of these kinds of software, then your organization will have to purchase them. There are several other technologies that are beneficial depending on the scope of your site, especially if you plan to do e-commerce, like ASP, ColdFusion, CGI Perl, and Oracle to name a simple few out of the many that are available.

## **Contracting a Consultant: Getting Help to Get “There”**

If you don't think that training a staff member or hiring a new one is the solution for you, there is another avenue that you can take to get your Internet presence developed. This would be to contract the job out to a consultant or web design firm. This option basically has all of the same benefits that hiring a Webmaster would. You would be gaining an expert who could aesthetically design your site and develop it to current standards. You will generally pay a fee for the development of the site, which should include helping you register a domain name, help you get the site hosted, design and develop the site itself, publish it

and register it with search engines. If further maintenance is required, it is usually charged out by the individual job.

As you would in hiring a Webmaster, you need to take care in checking the consultant's portfolio and references and make sure that they are fluent in current web design standards. A difficulty you might find with dealing with a web design consultant is that it is hard to define scope and therefore, the costs of the project ahead of time. A traditional bidding approach does not really apply to a web consultant, because before development begins it is not easy to determine the size of a website and the time that will be involved to create it.

## **Conclusion:**

### **“There” is Here to Stay**

The question at hand is, “Does my organization, or will my organization need a website?” The answer is most likely, “Yes.” As you have seen, the Internet is not a passing fad. There are 375 million people currently online around the world, expected to increase to 490 million people by the year 2002 (*source: The Computer Industry Almanac*). If you were waiting to see the Internet go away, it won't. The Internet is the information, communications and commerce medium for now and the foreseeable future. The many people who are now online, expect most businesses and organizations to be online.

With all of the benefits that an Internet presence provides to both you and your customers, it is very unlikely that you wouldn't want to publish a website.