

U.S. General Services Administration • Office of Governmentwide Policy

NEWSLETTER

Citizen Online Participation in Government • Issue 9 • November 2000

This newsletter is available online at the Office of Intergovernmental Solutions Homepage at http://policyworks.gov/intergov/

Online Civic Engagement in Government

By Martha A. Dorris Assistant Deputy Associate Administrator Office of Intergovernmental Solutions

"We the People of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquility, provide for the common defence, promote the general welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America." In many ways, technology is allowing the American people to participate in government in the very ways that our forefathers intended when they crafted our Constitution - a government of the people, by the people, and for the people.

In This Edition

Worldwide Trends1
International News......3
Private Sector.......7
State and Local13
Federal News......21

As the election season that decided our nation's leadership in the next millenium occurred, data indicates that the majority of Americans feel disconnected from government. According to a new poll sponsored by the Council for Excellence in

Government and conducted by the survey research firms of Peter D. Hart and Robert Teeter, they believe that government is no longer "of, by and for the people." In 1997, Hart and Teeter also found that young Americans, ages 19 to 34, were more positive about government than older Americans. Their opinions were even more positive when reminded about government's role in national accomplishments, in science and technology and in solving problems and helping people.

Technology has created a window to reengage the American public. At a recent conference on 21st Governance sponsored by the National Academy of Public Administration (NAPA), civic engagement was defined as the collaboration among individuals, government, and the private sector to influence and determine decisions of government. While many remain disengaged, technology is now being used as a leadership tool for reengagement. In Canada, civic engagement is a "two-way learning process that allows for seasoned reflection. encourages a willingness to listen to the values and perspectives of others, and supports the reframing of interests and perspectives in the context of a search for common ground and solutions acceptable to all citizens."

From its most simple form, technology allows the government to provide information online to

citizens more than ever before. Environmental information is provided which allows citizens to select environmentally preferred places to live. In addition, examples exist throughout the world where information is available from both the government and industry on issues within the local communities. As we have recently witnessed, technology allows political candidates to educate citizens through Internet-based political sites. Some efforts have been initiated to allow voting electronically. Like-minded citizens are now able to find each other, organize themselves, and act on shared concerns. Examples also exist of grassroots organizations being able to place proposed legislation on voter ballots after collecting the number of required voter signatures via the Internet. This was a process that could cost up to \$1 million US in the past. In Canada, public servants engage citizens in the development of policy and in fostering the creation of virtual communities.

Several examples exemplify the power of the Internet. In Athens, Georgia, fans of the popular rock-group REM were able to delay the destruction of train trestles by instituting a worldwide Internet campaign. Local politics in Athens were affected by e-mail from Sweden. To purchase the trestle, \$25,000 needs to raised. Athens, Georgia is also facilitating donations via the Internet.

Worldwide Trends

There are an estimated 110 million land mines in 64 nations across the world. These cause an estimated 800 deaths each month and many more serious injuries as a result of land mines. In the mid 1990's, most developed countries resisted a proposed treaty among nations to control the spread of these devices. Jody Williams, the leader at the time of the International Campaign to Ban Landmines, used Internet to bring world attention to the issue and was an essential part of the Ottawa convention which led to a treaty which 100 nations signed. Jody Williams won the Nobel Peace prize in 1997 for her work in mobilizing attention which led to pressure on governments to address the problems caused by land mines. Internet allowed large numbers of people across the world to come together and cause governments to change their position on land mines.

The reengagement of citizens depends on government's ability to satisfy citizen expectations. To engage a citizen and not meet their expectations may result in future disconnection. Governments around the world are using many



different methods for soliciting citizen feedback. GSA's Office of Intergovernmental Solutions recently published "Citizen Expectations for Electronic Government Services." This report surveys program managers in federal, international, state and local governments to obtain their experiences and lessons learned in

obtaining citizen input for their electronic government initiatives. Nineteen case studies were submitted, three from international governments, 11 from U.S. state and local governments, and five from the U.S. federal government.

Highlights from the new report provide some interesting findings. Citizens want choices for delivery of government services. Internet alone will not meet the expectations of citizens although they anticipate that it will be the foundation vehicle for service delivery. The survey results indicate that citizens hold government to a higher standard than the private sector in regard to privacy and information security safeguards. The digital divide is shrinking. It has less impact today than two years ago; and, it should decline in importance in two more years.

Citizens want the flexibility to deal with government on site (in person). They also want services to be delivered by mail, by telephone, by fax, CD-ROM, kiosk, interactive voice response systems, interactive TV and via the Internet. Collectively, the report suggests that governments that actively include citizens in the planning, development and implementation of electronic government initiatives will be the most successful in meeting citizen expectations. Copies of this report are available on-line at http://policyworks.gov/intergov.

Electronic civic engagement would not be complete without some discussion about electronic voting. Given the recent U.S. Presidential election, electronic voting will be a highlight in the upcoming administration. Arizona has some experience with electronic voting since it was used in their primary election. In addition, some Department of Defense employees voted electronically during the 2000 Presidential election. While many may believe that the confusion in

Comments and Suggestions

Your comments and suggestions are always welcome. Let us know if you find the information useful and what articles you like.

Also, articles may be submitted for publication. Please keep them less than 1,000 words and send an electronic copy to us. Remember to include your name, title, mailing address, e-mail address, and voice and fax numbers.

Send mail to: sally.matthews@gsa.gov john.clark@gsa.gov

Florida would have been eliminated if voting was conducted electronically, there is a host of issues that have need to be addressed to vote electronically via the Internet. However, Internet voting could bring a degree of reliability and quick tabulation that is needed. Based on the Hart Teeter poll of citizens in the U.S. prior to the election, they are still very concerned about security and privacy as an issue with electronic voting. In Germany, however, voting is one of the top three government functions that people like to see performed online. Based on the citizens input, in June 2000, the German Land Brandenburg conducted its first election using electronic signatures entirely over the Internet.

We are just now beginning to see how technology can transform the government and governance. As technology advances, and citizens become more comfortable with and accessible to the Internet, and when concerns about privacy and security are alleviated, citizen participation and engagement with government will also be transformed.

Mind Your Own Relationships

By Elisabeth Richard Director, Branch Strategies and Initiatives Directrice, Stratégies et initiatives sectorielles Government of Canada

No reproductions without permission from the author.

The internet forces the public service to operate in a new model: the network model. This new model, increasingly recognized as a winning social and business structure, can have a profound impact on the quality and number of relationships that governments increasingly need in an era of growing disenchantment about the public policy process. The new structure of governance is made of flat, flexible connections, ideally pulsating with continuous action.

In government this brings a fear that the volume of connections will be difficult to sustain. Government officers worry they don't have the tools of mass-listening required for this form of enhanced participation. Concerns related to the volume of relationships to create and maintain for example stop departments from building on them and turning them into a strategic advantage. There are many ambiguities about how the network model relates to the old processes. In the government traditional structure, ideas and action are implemented from the top down. The predominantly vertical public service structure is challenged in this environment where lateral and diagonal connections are heralded. The new model creates some identity crises

within the public service. The network model with its shifting borders seems a better fit for the private sector than the public service. Clearer lines of authority, enhanced by performance measurements and service bottom lines are more tangible in the private sector and help maintain the integrity of the organization. The diffusion of power in the government context makes it more difficult to function in the electronic world where multi-stakeholder relationships are multiplied. Officials are accountable to Ministers, while expected to be responsive to stakeholders, citizens and Members of Parliament.

Much is said about the virtues of electronic democracy. However, a technical utopia cannot be reached without the establishment of proper response mechanisms within government. Before the information highway can be used to harness the general public's opinion in a dynamic policy development process, integrating citizens as partners in the governance process, process need to be adapted. If the concept of participatory design is to be applied to government, if a structure of flat, flexible connections pulsating with continuous action is to be established, many questions must be addressed and public servants need to rethink their roles, the processes and structures designed in the post-war era.

Building Blocks

The ground is set for key elements of the network model. Public sector managers are now familiar with multi-stakeholder negotiations, and partnerships for service

Index to International News

Mind Your Own Relationships

Internet Voting: First Election Conducted Entirely over the Internet Using Electronic Signatures Successful in Germany......

delivery. Governments at many levels actively engage one another, private and third sector organizations, citizens and communities in new kinds of consultative and power-sharing arrangements. They emphasize horizontal approaches to planning and managing programs, and have fostered many partnerships to deliver them.

At the most senior levels, Canadian federal government officials explore how to operate more effectively in this world of rapid change, calling for a more distributed system of governance. It is suggested that more learningbased approaches be developed. At the working level, public servants experiment with learning processes to engage citizens as partners in governance. The order is tall, considering the wide definition of citizen engagement: "Citizen engagement is a two-way learning process that allows for seasoned reflection, encourages a willingness to listen to the values and perspectives of others, and supports the reframing of interests and perspectives in the context of a search for common ground and solutions acceptable to all citizens".

But other elements are still not in

place. In his presentation to a group of senior officials looking at renewing governance and the impact of "governing by learning in a world of rapid change", Harlan Cleveland notes the importance of knowledge-management to create a shared framework of interpretation. He emphasizes the key role of government in facilitating that process.

The promises and perils of the public service as a borderless institution and a learning organization - less centralized, less hierarchical and more integrated - are often discussed. The traditional structure of government and its decision-making processes don't easily lend themselves to sharing the agenda with those who are not in the full-time business of making public policy or are not formally accountable for doing so. Many public servants describe themselves as "horizontally challenged, vertically accountable" and wonder how the new model can mesh with principles of ministerial accountability. "For de-bureaucratization to work, it has to be accompanied by a degree of de-politicization....ministerial accountability in the traditional sense requires central direction and control." Also, traditionally, officials do not see their role as paramount when it comes to relationships with citizens. They see their role as a support to elected representatives.

Notwithstanding these uncertainties, this new role is at the center of the citizens' preoccupations. When asked to describe how they view government, citizens cite many elements of the network model: partnership, coordination,

engagement, broker.

At the Working Level

The public service of the Government of Canada, at the operational level, has responded in recent years by engaging citizens in many policy development processes and by fostering the creation of virtual communities. Public servants have used the internet to strengthen and engage many groups of stakeholders. It is used as a tool for narrowcasting, sending and receiving information to and from various groups of stakeholders in many sectors of industry for example the mining sector. It is also used to facilitate the relationships between stakeholders themselves, for many-tomany communications. In some cases, for example, an internet dialogue got "people communicating with people", sharing their experiences. This is particularly true in communities where stakeholders were far apart geographically. In this environment of multi-stakeholder relationships and horizontal connections, government's role as a broker becomes evident. A Federal policy on Consultation and Citizen engagement is being drafted and will highlight the role of networking technologies to achieve this. The Working Group on Internet Guidelines of Electronic Consultation and Engagement is currently documenting the obstacles, best practices. Pressures to consult online are growing and departments are looking for models.

Links, nodes, web: this vibrant structure defies government traditions built for vertical accountability. However a close examination of the network model allows one to select elements which can be turned into a strategic advantage, and alleviate some of the obstacles. The network model for example addresses the fear of volume: since the network is made of myriad associations relating to each other, responsibility in maintaining these relationships is distributed. If government does have a responsibility in fostering these relationships, the maintenance is shared with the stakeholders.

Practice shows that traditional hierarchy does have a role in this environment: the involvement of the minister is a key ingredient of success in an online dialogue. Evidence of efficient online dialogues is accumulating, where issues of volume and "mass-listening" are addressed successfully.

As the Electronic Service Delivery agenda progresses, the need for mechanisms to support on-line online relationships with citizens increases considerably. Citizens increasingly expect ad-hoc ad-hoc as well as structured feedback mechanisms to the services and information that the government provides. There is a growing consensus concern among public servants involved that we need to have in place the appropriate communication tools to support them. The service consultation and feedback initiatives are a good "listening" exercise; they are often a entry door into the world of interactivity and citizen relationships for program managers. As industrialized countries strive to achieve their goals for delivering services on-line online, they are starting to find, sitting in front of their monitors, a new wave of

citizens with growing expectations. Just as these citizens expect to participate in the design of services, they will expect to have, at their keyboards, mechanisms to participate in the design of policies.

Business models in the new economy show that companies have turned around their business using on-line online technology. The customer-centric network model is the winning structure. This might is also turn out to be true for public service organizations.

For more information, contact Elisabeth Richard at 613-993-9575 or via e-mail at elisabeth.richard@pwgsc.gc.ca.

Election Conducted Entirely over the Internet Using Electronic Signatures Successful in Germany

By Oliver René Rüß Central Administration for Data Processing and Statistics Brandenburg, Germany

World society is becoming more and more Web-orientated. In order to maintain its central position in social processes and adapt to the rapidly changing structures of communication in the new millennium, government has to offer new ways of participation and service through the Internet. Accustomed to the high level of

service from the private sector, citizens have set demanding standards for administration as well. According to recent polls, voting is one of the top three government functions people like to see performed online.

To face this challenge the Central Administration for Data Processing and Statistics (LDS BB) in the German Land Brandenburg participated in a nation-wide research project (I-Vote). The director of the LDS is also chief returning officer of the State Brandenburg. Therefore, the LDS provides experience in all relevant subjects.

The first election using electronic signatures and conducted entirely over Internet - a staff council election – was held successfully in June 2000. Nothing but workstations, mouse-clicks and smart cards were used to cast one's vote. Only the LDS-network and personal computers or a special computer in the public vote room were used and votes transferred through the Internet into a virtual ballot box.

The election in the LDS BB was a great achievement. Around 60% of the staff voted by I-Vote, the new Internet voting software developed in the framework of the project. The employees were satisfied with the new and very convenient way of voting. The project has given evidence that it is possible to conduct elections over the Internet and to guarantee that voters can be identified clearly. Fraud can be avoided and secrecy can be maintained.

The first step was a mock election of the council of the statutory health insurance last year using PIN numbers as identification. When it became clear that PIN-numbers could not guarantee the security and integrity of the election, electronic signatures were used in the second step, a real election in the city of Osnabrueck in February 2000. Students had the choice to vote for their parliament either by traditional ballot or Internet voting.

The purpose of the ongoing project is to test electronic signatures for nation-wide or European elections. One major problem in the Internet voting process is that there is neither identification in the polling place nor delivery of a traditional hand-written signature as with votes by mail. Therefore, the face-to-face identification procedures had to be replaced by electronic signatures. A voter has to sign his ballot data electronically to identify himself and to avoid manipulation. This personal signature is based on smart card technology. The cards used for the I-Vote procedure were only issued after an identity-check done by at an authorized identification point. The system approaches the standards of the German "Digital Signature Act".

I-Vote improves the voting process by

- giving citizens the opportunity to vote at polling day without going to the polling place
- confirming when the vote is registered in the ballot box

- improving the traditional voting and voting by mail with a better faster and more reliable system
- allowing instant recounts
- · reducing costs in the long run
- increasing turnout

With the project, a framework for safe and reliable voting processes was built and the main principles in election process were guaranteed (some exemptions had to made in the pilot project). Also, a legal framework and functional specification were developed. Information was encrypted for secrecy. A separation of responsibilities between groups for the virtual ballot box, the certification authority that provides electronic signatures, and the electoral register, was used to prevent fraud.

Recently LDS and other partners in the German D 21 initiative explored the constitutional and technical conditions for holding an Internet election in conformity with the constitutional requirements (free, general, secret, equal and direct ballot) at state level. They also investigated offering a broad information structure within the system regarding political programs and presentation of candidates.

Only by using new technologies and electronic signatures can public administration offer new procedures to contact the offices directly through the Internet without long visits to town halls or local authorities. Communication procedures without any change of media (paper-data-paper) were of great importance to achieve

modernization and cost reduction. The electronic signature is necessary to identify and authenticate both sides. It replaces the old way of person-to-person interaction, paper-based documents and signatures, without compromising the security or integrity of information. It will contribute towards safety and data protection in all forms of electronic communication between citizens and government.

The I-Vote pilot project is not only necessary because of its technical and organizational impacts but also because of various judicial questions related with the following fields: administrative law, the data protection act and election law. The LDS intends to establish a registration authority to identify the applicants for smart cards, issue the cards and advise the administration on Internet voting. Also quality characteristics to certify electronic election systems will be developed.

The German Digital Signature Act is Art. 3 of the Federal Act Establishing the General Conditions for Information and Communication Services. An English version is available at http://www.iid.de/rahmen/iukdgebt.html.

For more information please contact Oliver R. Ruess, attorney at the Landesamt für Datenverarbeitung und Statistik, phone. 004933139530, fax 004933139498 or via email oliver-rene.ruesz@lds.brandenburg.de or contact the websites www.brandenburg.de/evoting or www.internetwahlen.de.

Top Ten E-Democracy "To Do List" for Government in the United States

By Steven Clift Democracies Online http://www.e-democracy.org/do

Governments across the United States have an exciting opportunity. We can revitalize our spirit of democracy and build an e-government that is of the people, by the people, and for the people. The Internet, if used with democratic intent and spirit can and will bring people closer to their governments. We can break down the "us" versus "them" mentality and embrace the miracle of government as the one institution the people jointly own in their local communities, states, and nation.

I started thinking about these issues when I coordinated Minnesota government online (1994-1997). Today, I see even more urgency and need for aggressive government-sponsored e-democracy activity in every government office, agency and program. To help us get started I have drafted the "Top Ten E-Democracy "To Do List" for Government in the United States." It is up to us:

1. Announce all public meetings online in a systematic and reliable way. Include the time, place, agenda, and information on citizen testimony, participation, or observation options. Use the Internet to build trust in in-person democracy.

- 2. Put a "Democracy Button" on your site's top page which brings them to a special section detailing the agencies/government units purpose and mission, top decision-makers, links to enabling laws, budget details and other accountability information. Share real information that help a citizen better understand the legitimacy of your government agency and powers. Give citizens real information on how to best influence the policy course of the agency. This could include links to the appropriate Congressional, legislative, or council committees and bodies.
- 3. Implement "Service Democracy." Yes, most citizens simply want better, more efficient access to service transactions and information products your agency produces. Learn from these relationships. Actively use comment forms, online surveys, citizen focus groups to garner the input required to be a responsive e-government. Don't automate services that people no longer want or need. Use the Internet to learn about what you can do better and not just as a one-way self-service tool designed to limit public interaction and input.
- 4. End the "Representative Democracy Online Deficit." With the vast majority of government information technology spending focused on the administrative side government, the representative institutions from the local level on up to the Federal government are growing increasingly weak. Invest in the technology and communications infrastructure of those institutions designed to represent the people. Investing in elected officials voice through

Index to Private Sector News

Top Ten E-Democracy "To Do List" for Government in the United States7

The Impact of the Internet on Representational Democracy9

Campaigns Online10

technology is investing in the voice of the people. Cynicism aside, options for more direct democracy can be explored, but invest in what we have today - representative democracy.

- 5. Internet-enable existing representative and advisory processes. Create "Virtual Committee Rooms" and public hearings that allow in-person events to be available in totality via the Internet. Require in-person handouts and testimony to be submitted in HTML for immediate online availability to those watching or listening on the Internet or via broadcasting. Get ready to datacast such items via digital television. Encourage citizens to also testify via the Internet over video conferencing and allow online submission of written testimony. The most sustainable "e-democracy" activities will be those incorporated into existing and legitimate governance processes.
- 6. Embrace the two-way nature of the Internet. Create the tools required to respond to e-mail in an effective and timely manner. E-mail in the most personal and cherished Internet tool used by the

average citizen. How a government deals with incoming e-mail and enables access to automatic informational notices based on citizen preferences will differentiate popular governments from those that are viewed as out of touch. Have a clear e-mail response policy and start by auto-responding with the time and date received, the estimated time for a response, what to do if none is received, and a copy of their original message. Give people the tools to help hold you accountable.

7. Hold government sponsored online consultations. Complement in-person consultations with time-based, asynchronus online events (one to three weeks) that allow people to become educated on public policy issues and interact with agency staff, decision-makers, and each other. Online consultations must be highly structured events designed to have a real impact on the policy process. Don't do this for show. The biggest plus with these kinds of events is that people may participate on their own time from homes, schools, libraries and workplaces and greater diversity of opinions, perspectives, and geography can increase the richness of the policy process. Make clear the government staff response permissions to allow quick responses to informational queries. Have a set process to deal with more controversial topics in a very timely (24-48 hours) fashion with direct responses from decision-makers and top agency staff. Do this right and your agency will want to do this at least quarterly every year, do it wrong the first time and it will take quarter of a century to build the internal support for another try.

Check on the work in Canada, The Netherlands, Sweden and United Kingdom in particular and you'll discover the governments in the United States are years behind in this exciting area. Let's catch up!

- 8. Develop e-democracy legislation. Tweak laws and seek the budgetary investments required to support governance in information age. Not everything can be voluntary. What is so important that government must be required to comply? There is a limit to what can be squeezed out of existing budgets. Even with the infrastructure in place the investment in the online writers, communicators, designers, programmers, and facilitators must be increased to make Internetenhanced democracy something of real value to most citizens and governments alike.
- 9. Educate elected officials on the use of the Internet in their representative work. Get them set-up technologically and encourage national and international peer-to-peer policy exchanges among representatives and staff. Be careful to prevent use this technology infrastructure for incumbency protection. Have well designed laws or rules to prevent use of technology and information assets in unknown ways. Don't be overly restrictive, but e-mail gathered by an elected official's office shouldn't suddenly be added to a campaign e-mail list.
- 10. Create open source democracy online applications. Don't waste tax dollars on unique tools required for common governmental IT and democracy needs. Share your best in-house technology with other governments around the world.

Leverage your service infrastructure, be it proprietary or open source, for democratic purposes. With billions being spent on making administrative government more efficient, a bit of that should be used inefficiently. Democracy is the inefficiency in decision-making and the exercise of power required for the best public choices and outcomes. Even intentional democratic inefficiency can be made more effective with IT.

In the end, have fun and experiment. Seek out those in other governments who have had practical experience and trade tips along the way. Join the **Democracies Online Newswire** http://www.e-democracy.org/do to meet others inside and outside of government who are interested in improving democracy and government through the use of information and communication technologies. Together we can build an e-government of the people, by the people, for the people.

For more information, contact Steven L. Clift at (612) 822-8667 via e-mail at E: clift@publicus.net or visit his web site at http://www.publicus.net.

The Impact of the Internet on Representational Democracy

By Stephanie Vance Advanced Consulting

It seems like you can't click the mouse these days without finding a website seeking to connect citizens with their government. But are these sites really helping citizens connect with their elected officials in a meaningful way? Has the Internet really led us to the brink of direct democracy? Or are the communications that are coming through these sites merely adding to the white noise that permeates Capitol Hill?

Does "Point-and-Click" Make a Difference?

As someone who spends a great deal of time teaching people how to effectively communicate with Congress, I am concerned that some of these sites leave people with the impression that being an effective citizen advocate is as easy as clicking a mouse. Pointing and clicking on the "yes" or "no" button on vote.com's site is not equivalent to participating in a meaningful way – even if your vote is forwarded to your Congressional representative. Frankly, your vote, if you are lucky, will simply be tallied with other opinions, and that tally (again, if you're lucky) may be 1/10th or 1/20th of a factor in your representative's decision-making process. In most cases, your "yes" or "no" vote is simply deleted from the system.

If Not, What Does?

So what really influences members of Congress? I'll give you a hint: it's not money. In fact, it's good old-fashioned policy analysis, research, and personal beliefs. To be an effective advocate, you must become part of that process – and you don't get there by pointing and clicking.

The most important thing to remember in seeking to influence the policy making process is that you have something of value to contribute. You probably have a particular reason why you feel the way you do about a specific policy proposal, or a reason why you're seeking a change in law. A thoughtful approach to policy issues combined with a careful explanation of why it's important to you personally is very compelling to congressional staff and members. In writing a personal, thoughtful, well-argued letter or e-mail, your chances of influencing your Representative's decision-making process increase dramatically.

People ask me all the time whether e-mail is an effective means to communicate with Congress. I tell them that the tools citizens use to communicate with their elected representatives are far less important than what they say. As I talk about (some would say ad nasueum) in my book, "Government by the People: How to Communicate with Congress", the key to being effective in your written communications is ensuring that someone on staff actually thinks about what you have to say. So how do you do that? By being personal, relevant, asking for a response, and reaching the right person.

The Personal Approach: By far, the most compelling and effective letters combine a thoughtful approach to policy issues with a careful explanation of why it's important to the author personally. In most offices, it is these letters that the member of Congress actually sees, not the letters generated by mass postcard or form letter campaigns. For example, one of the members I worked for routinely asked to see the five to ten most thoughtful, rational letters we received in a week. These letters received much more attention then other less personalized correspondences.

Why Are You Relevant? You are relevant to the Congressional office because you are a constituent or because you represent a constituent, and you can demonstrate that connection by including your postal address on every correspondence, whether it's e-mail, fax, or traditional letter.

Ask for a Response: Given the limited time and budgets in congressional offices, priority will always be given to letters that require an answer. Asking for a response means someone on the staff has to think about what you've said and, in some way, address your concerns or comments.

Reaching the Right Person:
Correspondence requesting a meeting or site visit should be sent to the Executive Assistant or Scheduler. Educational and informational correspondence about your program should be sent to both the member and legislative assistant assigned

to your issue. You can find out who these people are at www.congress.org

By following these guidelines, you can dramatically increase the chances that your correspondence will be noticed, whether you send it via e-mail, snail mail, or carrier pigeon!

Will the Internet Make Representational Democracy Obsolete?

But will all this personal, thoughtful letter writing really be necessary in ten years? Some people argue that the Internet heralds a new day for democracy, where people will vote for their representatives and eventually vote on policy issues directly and online. Essentially, Congressional representatives would become obsolete. However, this "ballotinitiative" model of government ignores the most important role that your elected official plays in the process, paying attention to every issue under the sun 24 hours a day, 7 days a week. Think about it. Under the direct democracy model, you would be pointing and clicking to cast your vote approximately 900 times a year. That's over twice a day, every day including weekends. You'd be voting on Permanent Normal Trading Relations for China, the Patient's Bill of Rights, legislation to promote Digital Signatures, and whether to name the Post Office in Garden City, Kansas after Clifford R. Hope.

Don't get me wrong. I love the fact that all of these sites are emerging and that some are flowering. The Internet is an important and powerful tool for connecting citizens to their government. But so was the printing press, the telephone, and CSPAN. It's what we do with these tools that matter. Content, thoughtful analysis, and personal perspectives still matter. So go ahead and point and click – but follow that up with a thoughtful e-mail, letter or phone call. You'll be a better citizen and we'll all have a better Democracy.

For more information, contact Stephanie Vance of Advanced Consulting at (202) 338-6311 Vance@AdvocacyGuru.com or visit http://www.advancedco.net/.

Campaigns Online

By Tracy Westen, Chairman Grassroots.com, Inc.

James Madison said, "A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy; or, perhaps both." Without adequate voter information, democracies become arbitrary and capricious, and citizens become suspicious.

A 1996 Washington Post public opinion poll reported that Americans who knew the least about government were the most likely to be mistrustful toward it. For these cynical citizens, ignorance had, quite literally, bred contempt.

Voters today are immersed in a flood of omnipresent media. Ironically, they too often cast their ballots in substantial ignorance. Hundreds of thousands of candidates for lesser--known offices--school board, judge, community college district, county

supervisor, state assembly, treasurer, and lieutenant governor--appear on ballots every year but lack the ability to inform voters about their candidacies.

Can the Internet change this?

Candidates are rapidly adopting the Internet to disseminate information. During the 1992 national election, none of the major Presidential candidates had World Wide Web sites. By 1996, and 2000, all of them did. Today, about 72% of Republican candidates nationwide have websites, as do 63% of Democrats and 36% of third-party candidates.

Voters are also turning to the Internet. Eighty percent of online Americans are registered voters, and nearly a quarter of Americans now receive at least some of their campaign news through the Internet. A 1996 poll reported that two-thirds of all Americans would use the Internet to find out more about political candidates if the information was available.

But voters don't have the time to visit dozens or hundreds of candidate and ballot measure sites. Fortunately, the Internet's unique power has a solution. News, electronic commerce and special-interest websites are aggregating otherwise disparate information. Political websites are also beginning to accumulate all the relevant campaign, voter and election information into one convenient location and format as well.

DemocracyNet (<u>www.grassroots.com</u> or <u>www.dnet.org</u>), a partnership between Grassroots.com and the

League of Women Voters, is a landmark attempt to provide voters with instant access to accurate candidate information in thousands of federal, state and local races-all on one convenient website. Voters entering their zip code can instantly review biographies and dozens of issue statements provided directly by candidates in many races on their ballot. As of September 2000, DemocracyNet of Grassroots.com had over 10,500 participating candidates, and thousands more are joining every week.

DemocracyNet allows candidates and ballot measure committees to submit a statement of up to 1,000 words on any issue of their choosing. A large red check mark automatically appears in the public portion of the Issue Grid, indicating that the candidate has submitted a position on that issue. At the same time, the words "No Comment" appear under names of the candidate's opponents, and those opponents are notified of the new issue by e-mail or fax. Candidates can then rebut or add new statements on issues as many times as they wish.

Voters can view the candidates' full statements, review biographical and endorser information, e-mail or fax candidates comments on their positions, or ask candidates why they have not taken a position on a particular issue.

The Issue Grid creates new incentives for candidates to debate each other. Because DemocracyNet is free and easily updateable at all times, candidates find it easy to respond to opponents' arguments. Voters can

watch the debates unfold over time.

More importantly, DemocracyNet's usage suggests this new approach to electoral information may even improve the nation's political discourse.

(1) Broader Range of Issues.

Television is costly. It forces candidates to limit their advertising budgets to a few central, hot button issues ("education," "social security," etc.) and ignore many others. By contrast, DemocracyNet encourages candidates to address a much wider array of issues, or risk receiving a "No Comment" indication opposite their name.

In one Los Angeles State Assembly special election, the front-runner initially placed no issue statements in DemocracyNet's Issue Grid. A challenger then added five positions, leaving the front-runner with five "No Comments." Within days, the front-runner responded by adding his own positions on all five issues. By the election, the candidates had engaged each other on eight substantive issues. The front-runner would not have addressed these issues without DemocracyNet's "issue challenge" from his opponents.

(2) More Substantive

Discussions. Candidates using television tend to avoid taking detailed positions on specific issue, since this may risk losing voters who may disagree. DemocracyNet, however, rewards candidates who provide voters with specificity.

In New York's US Senate race, Hillary Clinton posted no statements until Rick Lazio

entered his opening statement. Clinton posted her opening statement the very next day. In a Los Angeles City election, the leading candidate initially submitted a vague and generalized position on a local zoning issue. When the challenger rebutted with a far more specific issue position, the frontrunner responded with a detailed accounting of her record, listing all her significant accomplishments. DemocracyNet's format encourages candidates to present their messages directly, and in sufficient detail, to hold the voter's attention. The result is an enhanced dialogue between the competing candidates.

(3) Fewer Negative Messages.

Candidate television ads are often "negative." Research shows that viewers remember a negative message longer and more vividly that a positive one. Candidates using DemocracyNet, however, confront a significantly different audience—voters actively seeking information on the candidates' positions. These voters are impatient with generalities, evasions and negative attacks. They want to understand the candidates' positions on issues, not to watch them attack others. For this reason, candidates using DemocracyNet have primarily submitted positive and not negative statements for the Issue Grid.

(4) Reduced Campaign Finance Disparities. A candidate's ability to communicate to voters generally turns on the size of that candidate's campaign budget. Candidates with personal wealth or superior fundraising abilities can transmit more information to voters.

Because DemocracyNet is free to candidates, third party and lesser-financed candidates can reach the voters without time-consuming fundraising. More importantly, DemocracyNet tends to diminish fundraising disparities between candidates. On television, money determines the number of voter impressions. On DemocracyNet, voters themselves control the number of "hits" or page views.

(5) Improved Debate Stimulated by Lesser-Known Candidates.

Television debates often exclude third-party candidates—such as Reform Party's Pat Buchanan and Green Party's Ralph Nader—who are thought not to have a realistic chance of winning. This deprives third-party candidates of their traditional role: prodding the leading candidates to address new issues that they might otherwise avoid.

DemocracyNet gives all third party and lesser-known candidates an equal opportunity to present their views alongside the visible leaders. This year, DemocracyNet even contains positions from candidates for Mosquito Control District in Florida.

(6) Increased Use of Multi-Lingual Messages.

Voters rarely see messages in languages other than English, particularly on television, because the cost of producing them is often higher than the anticipated returns. Access to DemocracyNet, however, is free to candidates, and it contains virtually unlimited digital storage capacity. Candidates can place statements in the Issue Grid in multiple languages. In one current Florida senate race, candidates have

placed statements on "education," "guns" and "home ownership," "anti-drug war" and "campaign finance reform" in the Issue Grid in Spanish.

(7) Promise of Additional Benefits. The DemocracyNet also promises many additional benefits:

- It allows voters more easily to review the qualifications of women and minority candidates who, historically, have had greater difficulty raising money to buy their way into the electoral debate.
- It allows voters to compare the views of candidates in new ways—one candidate on all issues, all candidates on a single issue.
- It allows voters to review candidates' positions when they want—not leaving them dependent on the timing of television commercial.
- It will eventually allow voters to view candidates' positions in alternative formats—text, audio and video—thus attracting those voters who prefer to take the measure of a candidate in a more personal and direct way than text;

Online voter information systems like DemocracyNet do have disadvantages. They require users to seek out political information—instead of having radio, television or direct mail deliver it unsolicited into their homes. They are only accessible to voters with computers and modems. And they may encourage the electorate to exercise ultimate political control instantly via ballot initiatives,

referenda and other forms of future "electronic direct democracy."

But interactive communications technologies offer significant hope for revitalizing American democracy. In a world of escalating campaign contributions, increasingly negative television commercials and growing cynicism toward candidates and government officials, new technologies can encourage broader issue discussions, greater specificity in candidate positions and positive messages over negative ones. New communications systems can begin to uncouple wealth from voter impressions, make candidate messages available in multiple formats and languages and encourage two-way communications—from candidate to candidate, from voter to candidate and from voter to voter. To the extent democracy needs "saving," the new generation of interactive digital communications technologies have arrived—just in time to help.

For additional information, contact Tracy Westen, Chairman, Grassroots.com, Inc. at Tel: 415-633-1143 Email: tracy.westen@grassroots.com

Wired for Participation: State Environmental Agencies on the Web

By Thomas C. Beierle Fellow, Center for Risk Management Resources for the Future beierle@rff.org

As the number of U.S. households with computers clears the 50 percent mark and over 40 percent of all households become connected to the Internet, information technology is rapidly changing how we work, shop, and recreate. Increasingly, it is also changing how we practice democracy. Although electoral, legislative, and advocacy politics have grabbed many of the electronic democracy headlines, the Internet has been changing the way that administrative agencies interact with the public as well. Indeed, it may be at the administrative level where we will see some of the most interesting adaptations of traditional citizen engagement to the Internet age.

Environmental agencies, in particular, may benefit from putting participation on-line. The changing nature of environmental problems, the range of public values they invoke, and the conflicts they engender have all led to increased attention to the role public participation can play in environmental decision-making. From policy development by advisory committees and regulatory negotiations to the public availability of information on facilities' toxic releases, there is an increased acceptance of an enhanced public role in environmental decisionmaking and implementation.

Increasingly, this role may be played out on-line. Web-based

databases, such as the Environmental Protection Agency's Toxics Release Inventory can make detailed, localized, and customized environmental information available. On-line rulemaking, such as the Department of Agriculture's recent effort on organic standards, can break down geographic barriers, and allow agencies to hear from people that would not normally participate in person. As the WTO and World Bank protests have highlighted, the Internet can also allow people to find like-minded citizens and organize to act on shared concerns.

As part of a larger project to examine the impact of the Internet on public participation in environmental decision-making, Resources for the Future has recently completed a survey of how the 50 states are using the Internet to engage citizens in environmental governance at the administrative level. As "laboratories for democracy," the states may be the source of ideas and experience that anticipate how environmental governance will change over the next decade.

Overall, the survey suggests that electronic democracy in state-level environmental decision-making is in an early and experimental phase. All state environmental agencies have a web site. Most states appear to be well along in providing environmental information to their citizens. Opportunities for on-line interaction with government and among citizens, on the other hand, are much more limited. Some states stand out with innovative examples of on-line citizen engagement, such as:

 Pennsylvania's Department of Environmental Protection, which provides "County Environmental

Index to State and Local News

Wired for Participation: State Environmental Agencies on the Web......13

Click Here for Success: Online Support for a Grassroots Petition Effort14

Arizona's Compact to Improve
Our Neighborhoods17

Web-based communication tools support a digital community in Washington State17

The Internet, a Train Trestle and Athens, GA18

California Smart Initiative19

Notebooks" that link citizens to a wealth of environmental information and resources in their area (http://www.dep.state.pa.us/dep/counties/county.htm);

- Texas' Natural Resource
 Conservation Commission whose
 website has an entire "Citizens"
 page devoted to public
 participation with many links to
 environmental information and
 opportunities to participate
 (http://www.tnrcc.state.tx.us/citizens.html);
- Washington Department of Ecology, which notifies people twice a week of upcoming rulemaking activities and opportunities to comment with their "WAC Track" feature (http://www.wa.gov/ecology/leg/ wactrack/wactrack.html);
- Arkansas's Department of Environmental Quality, which, among others, allows citizens to comment on regulations electronically (http://www.adeq.state .ar.us);

 Florida's Department of Environmental Protection, which has a feature called "Web Conferencing" that provides an online forum for the public to post and read comments on various topics (http://www.dep.state.fl.us/confs/webconf.htm).

These and other examples indicate that it is a good time for states to learn from each other about how to employ basic participatory features and to experiment more broadly with on-line engagement. In our discussions with state agency personnel, a number of themes emerged that are relevant to this effort

First, states are more advanced, and more comfortable, with providing environmental information to their citizens than they are in providing opportunities for on-line interaction. Relatively few agencies have quality opportunities for interactive electronic public involvement, and interviewees expressed quite a few reservations about excessive interaction. However, on-line rulemaking appears to be an emerging form of interactivity in many states. In these states, on-line comments are being treated in the same way as traditional comments.

Second, on-line efforts are changing the demands placed on bureaucracies. Providing a seamless face to the public increases pressure for internal coordination and cooperation. Dealing with constrained bandwidth and other resources causes agencies to prioritize within and among different programs. Externally, the demands of various stakeholders—the general public, the regulated community, and legislators to name a few—are forcing agencies to be strategic in their use of resources for on-line efforts.

Third, engaging citizens on-line appears to be a considerably lower priority than streamlining processes for the regulated community. State web sites are generally more geared towards the regulatory community than the public, with permitting information, forms available online, business assistance centers, and other features. In some cases, even the interactive features at least partially designed to engage the public are mainly being used by regulated firms.

Fourth, in spite of the cautious approach many states are taking to online participation, most of those interviewed felt that the Internet is a dynamic and efficient way of getting in touch with the public. Agency personnel mentioned a number of advantages and efficiencies associated with engaging people on-line rather than off-line. The enthusiasm about participation, however, has not been met with much rigorous evaluation to see whether it is warranted. Beyond counting the number of hits on a web site, there has been little systematic analysis of who is participating electronically and why.

Overall, the survey and our conversations with agency staff members indicate that the use of the Internet by state environmental agencies to facilitate improved public participation will continue to increase. Innovative states will continue to push the envelope of what technology allows and more cautious states will adopt basic features as decisionmakers become convinced of their efficacy. In fact, now is the time for states to take stock of their own efforts and learn from each other about best practices as they deal with an increasingly wired public.

For addition information, contact Thomas C. Beierle, Fellow, Center for Risk Management, Resources for the Future via e-mail beierle@rff.org.

Click Here for Success: Online Support for a Grassroots Petition Effort

by Frank Brusca Ariel Performance Centered Systems

Introduction

In recent years, the number of voter initiatives, referenda and recall campaigns have increased sharply. In most cases, local laws mandate some type of petition activity as part of the qualifying process. The logistical and legal constraints placed on such efforts can be daunting and have probably contributed to the abandonment and failure of many efforts. Groups needing to submit petitions have an amazingly short period of time to gather signatures and stringent technical requirements. Identifying, focusing and coordinating efforts on the voter base is particularly difficult and challenging. Voter populations are geographically dispersed, mobile and some are deceased. Often, election boards require that names and addresses be an exact match to the records in their databases. With these formidable obstacles it is no wonder that many petition efforts fail in either the signature gathering stage or in the signature validation stage. In the summer of 2000, a grassroots organization based in Yellow Springs, Ohio, successfully staged a petition drive to commence the recall of two sitting members of the

Village Council. The group used two technology-based tools to facilitate its efforts. First, a web site was developed to convey information to villagers. Second, and most importantly, the group placed a small portion of the Greene County Board of Election's voter database on a private web site and used that data base to manage major parts of the campaign.

Need

Prior to the launch of the petition effort, the grassroots organizers met to discuss what systems should be in place. The petition team decided it wanted a system that would provide the following information and capabilities:

- A list of all registered voters with name, address, phone number as well as whether they are active or inactive voters. The list would have to include the full legal names and addresses of each voter as recorded in the voter registration list.
- An indication of whether a voter has signed or refused to sign the petition or was as yet uncommitted, including a way to instantly change the voter's status.
- Query building to allow the petition carriers to generate virtually any list of voters based on name, address, precinct and/or voting activity.
- A note reading and writing capability for each voter.
- A real time "box score" alerting the petition team how far the effort had progressed toward certain goals.

Approximately 30 petition carriers were assembled to gather the mini-

mum 613 signatures. About 20 of the carriers had online access and e-mail accounts. Despite the high number of carriers with online access, most possessed a minimum of experience with database applications. The system would need to accommodate these vital members of the petition campaign.

The system was built and installed on a protected portion of the group's web site. Because the information in the database contains sensitive information, it was important to install security to prevent the general public from accessing the data. Each petition carrier was given a unique ID and password. The passwords were both encrypted and randomly generated to ensure system and data security. Sets of richly illustrated instructions were provided to every petition carrier who had online access.

Prior to going live, the petition team "kicked the tires" to make sure the system did not crash or otherwise become problematic. After a few minor bugs were fixed, the system went live.

Using the System

Almost immediately, the petition carriers started accessing the system. At first, they merely wanted to generate lists of voters. With these lists, the petition carriers were able to focus on target populations. Within a few days, the petition carriers started recording their progress online, noting who had signed the petitions and who had refused. Petition carriers who did not have online access were "partnered" with those who did and were encouraged to pass along information on a daily basis, or to use a public computer, such as at the local library.

The note writing capability proved to be one of the most valuable aspects of the system. Being able to write notes such as, "George needs more information on the village finances before he'll sign" enabled one petition carrier to convey information quickly and easily to other team members. Petition carriers recorded notes such as:

- Would not sign but will vote for recall in the election.
- Needs an absentee ballot.
- Slammed the door in my face do not bother this guy anymore.
- This person has moved to Seattle.
- Deceased.

Since petition carriers had lists containing the full legal names and addresses of the registered voters, the team was able to completely eliminate improper signatures and addresses. Before pen hit paper, the carriers were able to instantly validate personal information with what the county database contained. If there was a mismatch, it was instantly noted and corrected.

During the first 16 days of the 20day campaign, petition carriers recorded a daily average of 40 signatures in the online system. In the last two days, some query-building refinements allowed the petition carriers to gather 120 additional signatures. This is most significant. Normally at this point in the petition gathering effort, the numbers plateau and the returns diminish. Because of the online database and the last minute query-building refinements, the petition carriers were able to achieve a 50% increase in signature gathering in the last

two days of the campaign. This data fine-tuning pushed the group over the top in terms of numbers of signatures and well ahead of the deadline.

One aspect of the online database system that caught the petition team by surprise was the online box score feature. The system presented the current tally and the group's progress towards various numeric goals. Petition carriers found this feature exciting and it added a somewhat competitive element to the effort. Numerous carriers found using the system and viewing the tally as "addicting." Petition carriers indicated that they could hardly wait to get online and see the difference their progress and work made.

Another benefit of having a centrally managed online voter database is that when members of the group traveled out of town on business or vacation, they were still able to see real time how things were going at home. Others were able easily to pursue their list of prospects to a culmination.

Petition Results

When the signatures were submitted to the Board of Elections, the group found it had easily met the minimum number of signatures. In fact, the group had 20% more signatures above the minimum. During the validation process, the Greene County Board of Elections certified an amazing 98% of the signatures. These high success and validation rates are especially noteworthy. Carole Garman, Director of the Greene County Board of Elections, described the group's high validation rate as "very unusual and certainly not typical." Other grassroots groups in the area report that their petition efforts generally

result in validation rates of about 60-70%.

The group is now engaged in the campaign leading up to an October 3, 2000, special election. Once again, the group has established a private online voter database to facilitate the campaign efforts. When the new election campaign database system was discussed, the campaigners (former petition carriers) pleaded for some capability to see the raw numbers translated into something meaningful (such as the box score used in the earlier petition effort). In response, an election prediction algorithm was developed taking into consideration how each voter is leaning (based on campaigners' one-on-one conversations) as well as their past voting habits (how likely they are to vote at all). With this information, an election prediction is calculated. As the special election campaign progresses, campaigners can now go online and see a real time prediction of the election and see it change as they add information to the system.

Summary

The topography and methodology of grassroots politics in Yellow Springs is changing, as it is everywhere. The increase in recall, referendum and initiative activities by everyday citizens indicates that people everywhere are starting to want to take back their government. Their increasing level of involvement can be facilitated by technology properly employed. The use of online voter-information management means that political activities can be more efficient, focusing time, money and energy in areas where it is needed the most. Use of these systems also means that campaign workers are just a mouse click away from immediate access

to vital campaign information.

For petition-based efforts world-wide, using some form of an online database system is warranted. Doing without such a system will most certainly result in inefficiency and wasted time and money. Without such a system, the probability for failure is significantly increased.

Will the application of this kind of technology result in a case of the "haves" succeeding and the "havenots" destined for failure? That is difficult to say. The total expenditure for the online database system was minor. All of the systems described here were home grown and developed with volunteer effort. So, cost is not an issue. What does matter is having team members who understand data management. In that regard, it really boils down to "those who know" information management and "those who do not." Hopefully, more people will be able to manage information in the future. The increasing ubiquity of web-based systems and databases make building such a system easier than in the past.

Election Day Results

Even though the grassroots group's information was highly organized and even predicted a major victory in the special recall election, they lost. The outcome was very close -- 51% to 49% against recall. Despite the recall group having the information advantage in the campaign, there were two factors contributed to its defeat. First. editorials and news stories against the recall election by the local newspaper proved to be very difficult to challenge - there are no other sources of news in the village. Second, the recall opposition rallied on election-day and was able

to bring in a large number of voters in the last hours of the election.

Technology can do pretty amazing things for today's election campaigns, yet it cannot overcome biased media and the simple act of rallying voters to the polls. These are our lessons learned.

For addition information, contact Frank Brusca via e-mail frank@kingsfield.com.

Arizona's Compact to Improve Our Neighborhoods

By Steve Capobres Deputy Director Department of Commerce State of Arizona

On February 4, 2000, Arizona's Governor Jane Dee Hull launched new approach to comprehensive neighborhood revitalization, the ACTION Communities Initiative. ACTION stands for "Arizona's Compact to Improve Our Neighborhoods." The initiative is a partnership between the Governor's Office and the U.S. Department of Justice and Arizona State University.

In her 2000 State of the State address, Governor Hull said, "The ACTION Communities Initiative gives our citizens a real chance to take back their neighborhoods from crime. We are asking communities to prepare their own anti-crime strategies based on their own needs. We are providing \$6 million in resources from existing programs to accomplish their goals and help turn neighborhoods around. It's a better way of doing business, a bet-

ter way of sustaining safe communities."

In addition to the \$6 million in grants, a number of in-kind services will be available to local governments in the first year. Two sites will be selected this fall to receive the coordinated package of assistance. The funding comes from existing programs that have been consolidated for this purpose. Ten state agencies are participating with the Arizona Department of Commerce taking the lead.

Steve Capobres, Assistant Deputy Director of Commerce who also serves as director of the ACTION Communities Initiative states, "While the concept of consolidating funds and targeting high risk areas is not new, the reality of 10 state agencies coming together focused on one area is unprecedented. Under Governor Hull's leadership, we are charting new territory for other states to take notice."

Neighborhood groups and advocates were encouraged to call their local city or county manager's office for details on how their area may participate. An informational workshop related to the program and application was held on Friday, March 3, 2000, at the Holiday Inn, SunSpree Resort in Scottsdale, Arizona. The applications were available to eligible local governments by calling the Arizona Department of Commerce or visiting its web site at www.azcomerce.com. The request for funding applications deadline was August 15, 2000.

For additional information, contact Steve Capobres, Deputy Director, the Department of Commerce at (602) 280-1365.

Web-based communication tools support a digital community in Washington State

By Michael D. Curtright Assistant Director, Computer Services Division Washington State Department of Information Services

In Washington state, digital government is embodied by an accessible and increasingly personalized public service experience. Digital Washington is the place on the Internet where citizens manage their relationships with government, meet as trading partners, and where governments transform the way they do business. Underpinned by a strong state Internet portal, Washington is using web-based communication tools to build community like never before.

The latest usage numbers on web-based services such as LISTSERV® indicate that Washington's government organizations are using electronic communications to reach constituents and enhance customer service in new ways—and that users are responding positively.

A flexible one- or two-way communication tool

LISTSERV allows one-way broadcasts of news items such as press releases or meeting agendas, as well as ongoing e-mail discussions among list subscribers. A "list owner" can play a role in moderating two-way lists: performing services such as organizing multiple email responses and answering subscriber questions. List hosting is

available to all Washington state and local governments, allowing them to quickly and cost-effectively share information with public customers and other government organizations.

Since DIS began offering LIST-SERV to its agency customers in April 2000, the number served has increased from 18 lists with 2,000 subscribers to 60 lists with more than 11,156 government and citizen subscribers. Organizations have the option of setting up governmentonly lists for specific agency business, or creating topic lists that users at other levels of government or the general public can subscribe to. All of the lists are hosted on the state's award-winning Internet portal, Access Washington at www.access.wa.gov.

Savings for government; control for subscribers

This powerful communication tool frees agencies from self-maintaining e-mail lists and gives subscribers control over the information they receive. And in contrast to conventional mailing lists, subscribers can choose to instantly add or remove their e-mail addresses from LISTSERV.

Citizens can subscribe to public lists covering a wide variety of topics, including emergency and disaster information, ecology news and regulatory developments, digital government policy updates, and bulletins for job seekers.

Government agencies are using LISTERV to circulate committee work and encourage multi-agency knowledge sharing. Organizations can save significant printing and mailing dollars by transforming traditional paper publications into electronic newsletters.

Centralizing public service on the state Internet portal and maximizing it with tools such as LISTSERV are just two examples of the Washington State Digital Government Plan in practice. Through this kind of opt-in, one-to-one information sharing, the state is improving and strengthening relationships between citizens and their government.

More detailed information on how the state of Washington is using LISTERV is available at http://listserv.wa.gov.

The Internet, a Train Trestle and Athens, GA

By Ethan Kaplan Murmurs.com

Editor's Note: The following is an article that first appeared in a fan newsletter for the popular rockgroup R.E.M. and is reprinted with the author's permission. The train trestle described in this article appears on the back cover of R.E.M.'s first full-length release, Murmur, and is a landmark to fans around the world.

The trestle on the back of Murmur is evocative of many things to the individual REM fan. To some it is a part of the great REM mythology: a glorification of southern Gothicism and culture, much like a good Faulkner book. To others it is a tangible piece of a history we might have only read about in "It Crawled From the South." And to others it is a piece of the past in Athens, much more than just an REM landmark; a relic of a bygone past when trains ruled and the Global Village existed only as far as the southern railroad's reach.

Whatever the individual relationships to the train trestles in Athens, GA, the news that these trestles were to be torn down shook up REM fans on the Internet to such a degree that a mass mobilization of support was unleashed to an extent of which the city of Athens had never seen before. E-mail from Sweden effecting politics in Georgia? How is this possible? What does this say to the broader implications of local politics and global influence? What specifically does it say about REM fans?

Lets start at the beginning. It was a quiet day on rec.music.rem, as there was not much new things going on. We knew that REM was in Dublin, but that was about it. Paul Buchart (a member of the infamous Side Effects on the fateful April day in 1980) posted a message informing us that the trestle made famous on the back of the album Murmur was being torn down. A few messages later and the e-mail address of Mayor Doc Eldridge was posted. Taking the lead on that, Norwegian Stine Morgan Olsen (known as "Mrs. Meat Science" as a tribute to Mike, on Murmurs.com) posted the e-mail address in various places, including Murmurs' discussion board.

A massive e-mail campaign took place, with an estimated 200 e-mails flooding into City Hall in Athens. The local press picked up the fact that people as far away as Norway were concerned with the trestle. The mayor was so impressed with the outpouring of support (and the fact that about 50 Internet REM fans made it into town for AthFest), that he got a stay of execution for the destruction with an option to purchase.

However the destruction of the trestles had already begun, and we later found out that the purchase of the trestle would cost \$25,000. So began the second phase of the Trestle movement. On October 2, 2000, t-shirts were put on sale, with 50 percent of the total cost of the shirt going to the trestle fund. As well, the Athens government is working on making it easy to donate over the web.

The issue with the trestles has broader implications than just saving an REM landmark or preserving a piece of Athens history. The fact that a global campaign over the Internet had the ability to effect local politics really turns the notion of local politics on its head. Just as the Internet has reduced spatial boundaries in communication to virtually nothing, it is now effecting real world spatial relations in the sense that a city, for whatever reason, can become everyone's city.

Most REM fans feel a special connection to the city of Athens, especially those that have been there to visit. In a way, because of the REM connection, REM fans feel almost residents of the city. The REM connection almost forms a sense of civic pride in the town, as it is our church steeple, our train trestle, our 40 watt club, etc. In this way, REM fans have, with this instance, become a sort of watchdog of REM history in the town, and by proxy have come to be a watchdog of Athens history.

Some dissenters feel that this issue is a local Athens issue, not a global REM fan issue. To them I give a quote: "When one person, for whatever reason, has a chance to lead an exceptional life, he has no right to keep it to himself." That is from Jacques Yves Cousteau. Now

rephrase that for a group situation: if for whatever reason a group of people have the ability to help a situation, they have no business sitting on their hands doing nothing. Murmurs.com's involvement in this is for the same reason: it reaches a global audience that I felt might care about this issue, and hence I used that influence in order to promote an issue that I felt passionate about.

I should hope this issue of globalization affecting the local politics of a city is just the beginning of both the effect of the Internet on local government, as well as individual REM fans activism in their own localities. If this whole trestle issue gives the impetus for an REM fan to take a look at their home-town, and try to save a piece of history in it, then I think the campaign has succeeded, even if the trestle is torn down.

REM fans have proven with this whole campaign to be among the most altruistic, selfless and politically outspoken music fans in the world. It is a wonderful testament to the band that their fans are so willing to act in order to save pieces of their hometown. It is a wonderful thing that the band's history of generosity and charity has rubbed off on their fans in such a tangible way.

Even if we fail to save the trestle, I still think we have succeeded on some levels. We have succeeded in demonstrating the power of the Internet to speak to a global audience about issues great and small. And we have succeeded in showing the world the greatest qualities of both REM and their fans. I should hope that this act is only the beginning of fan-based charity. REM feels strongly about many issues in this world, and if we

as Internet REM fans can use our collective voice to help those issues, then by all means we should.

For more information, contact the Save the Trestle Campaign at trestle@murmurs.com.

California Smart Initiative

By Marc Strassman Chief Proponent Smart Initiatives Initiative

As brick-and-mortar government evolves into e-government, giving citizens access to information and services online, it is essential for the maintenance of democracy that these same citizens gain equally free access to making government policy, as well as being recipients of it.

Giving actions taken over the Internet the force of law while giving every citizen adequate authenticated access to the Internet makes it possible to re-form democracy on a basis that is simultaneously both intimate and national, and even possibly global.

Approximately half the states already have in place the initiative process, whereby citizens or groups can propose laws that the state legislature sees fit, for whatever reason, not to pass. But it is difficult and expensive to qualify an initiative for the ballot. In California, it takes at least one million dollars to pay a professional signature gathering company to collect the 420,260 signatures necessary to qualify a ballot initiative.

This means that only either very motivated grass-roots organizations or people or groups with a lot of money can avail themselves of this procedure.

But if it were legal to sign initiative petitions right online, using digital certificates, then a good idea might be enough to propel an initiative onto the ballot. A replica of the official petition form, instead of being presented to harried pedestrians in malls where the owners have done everything they can to exclude signature gatherers and where they continue to object to the presence of citizens who might distract consumers, could be posted on a web site, surrounded by materials explaining the measure and exhorting citizens to sign it.

With the widespread privatization of public space, it is increasingly hard to find places where signatures can be gathered on petitions. Many state legislatures, jealous of citizens making laws they won't, worried that the Internet will disintermediate them the way it's rendered obsolete so many other twentieth century institutions, have tried to limit citizens' rights to collect signatures in public, while simultaneously ignoring calls to put the Internet to work in ways that would circumvent many current real-world obstacles to signature gathering.

Now comes the Smart Initiatives movement, seeking to add petition signing to the growing number of processes that are now being done faster, cheaper, and more conveniently over the Net. The Smart Initiatives Initiative, now pending in the Attorney General of California's office, would let initiative proponents put their measures into proper graphic form, then post

them on the Net, where those who so chose could use a digital certificate issued by the state to digitally "sign" it.

No paper, no pen, no need to engage in negotiations about access. No heat, rain, cold, or table carrying for petition circulators. No need to reduce the content of the initiative to a short slogan, since having it online along with explanatory and exhortatory materials will mean prospective signers can examine the legislation's text and its supporters arguments at their leisure, 24/7.

And initiative sites can also include chat rooms for discussion of the initiative, Frequently Asked Questions, links to related sites, audio and video clips discussing the measure, live webcasts (audio or video) of presentations on the initiative or debates between proponents and opponents, and so on, all of which would be difficult or impossible to bring to a mall and all of which would enhance the democratic process in general and the public understanding of every specific initiative in particular.

From the point of view of the election officials who need to sign off on the validity of the hundreds of thousands of signatures required to qualify a ballot measure, letting them be signed online with digital signatures ought to be seen as a dream come true. Currently, the paper-and-ink petitions submitted by initiative supports in one batch on the latest possible day allowed are not really checked very thoroughly. A small percentage of the signatures are checked, by hand, against the voter registration cards, and the results of this "random sample" are extrapolated to determine if enough valid

signatures have been gathered.

But with digitally signed petitions, the computers automatically, and almost instantaneously, authenticate and validate the digital signatures. This means that every signature can be checked and authenticated, or rejected as inauthentic. The digital signing of initiative petitions is faster, cheaper, and every bit as private and sure as the current paper-andink method and allows for a more thorough validation process. Because it is all these things, Smart Initiatives would improve citizen access to the substantive content of initiatives and it would cut the cost of qualifying an initiative by several orders of magnitude.

Automating the signature gathering process will not mean that every proposed initiative would qualify for the ballot. The same number of citizens, now using digital certificates, would still need to sign the petition. But having the Smart Initiative system in place would mean that a good idea that found favor with 420,260 Californians who find their way to that measure's website would qualify for the ballot, without its supporters needing to raise a million dollars.

Still, this would only be the first step, since a majority of the voting public would still need to vote for the initiative when they encountered it on the ballot. But, at least in this first phase of the initiative process, putting it on the ballot, ideas and the will of the people could begin to count for more than cash.

For additional information, contact Marc Strassman at (818) 985-0251 or via e-mail Etopia@pacificnet.net.

E-government Improves Environmental Protection: Access to EPA Information Vital to Civic Participation

By Brendan Doyle Office of Information Analysis and Access

U.S. Environmental Protection Agency

More and more Americans now have unprecedented access 24 hours a day, 7 days a week via the Internet to the government's information resources. Such access empowers and helps citizens make important decisions about their health, their family's health and the environment in their communities. For example, asthma sufferers can avoid an attack by finding out if ground-level ozone levels exceed health-based standards (called a CODE RED air quality alert when it occurs) and staying indoors. Retirees planning a move to the southern U.S. can find out which counties offer clean air, safe drinking water, lead-free housing, high quality rivers, lakes and streams and affordable environmental services. Surfers and people who like to fish can find out whether their nearby beach has posted a health advisory or whether fish and other wildlife from the local stream or river are safe to eat. And vehicle buyers can research which cars and Sport Utility Vehicles have the best fuel economy.

The Internet and the emergence of "e-government" promise a cleaner, healthier and safer environment for all Americans by giving them the ability to surf EPA's web site (www.epa.gov) to find information and download our data and analytical tools. While some of our visitors are trying to help their children with a school project, more often than not they are trying to make a decision that could protect their health or community's environment. Take just one example. EPA's Toxic Release Inventory (TRI) (authorized by the **Emergency Planning and** Community Right to Know Act of 1986) is a publicly-accessible database housing information on the release, storage and transport of over 650 chemicals released to the air, water and land from more than 25,000 facilities nationwide. Between 1988 to 1998 -- just 10 years -- U.S. companies have reduced or prevented releases of 350TRI chemicals by more than 45 percent. That's equivalent to preventing 1.5-billion pounds of toxics from entering the atmosphere every year.

These impressive results are achieved in part by providing community members and shareholders with information about the environmental conditions where they live, work and play. Public access to TRI data also encourages businesses to find safer substitute materials for manufacturing and to prevent chemical releases. By providing access to toxic release data and easy-to-use, online analytical tools, like "TRI Explorer" (www.epa.gov/triexplorer), EPA enables citizens to compile their own reports about the amount of a specific chemical being released at

Index to Federal News

E-government Improves
Environmental Protection:
Access to EPA Information Vital
to Civic Participation21

Evolving Technology Shifts the Format and Challenges of Processing Public Comments ..22

National Dialogues for Public Participation23

The Partnership for Advancing Technology in Housing (PATH) Using Technology to Find Better Housing Solutions.....25

Connecting Children, Youth and Families At-risk with Resources

the facility, county, state or industry level. What's more, links to related health effects information help web site visitors understand what may occur when people are exposed to a particular chemical.

Public access to the environmental data and information has expanded beyond the TRI program to also include information on drinking water safety, pesticides and household products labeling, and "Energy Star" (energy efficiency) ratings on appliances. In addition, EPA also provides the public with the its new online Ultra-Violet (UV) Index, which measures the strength of the sun's rays. By entering their zip code on the "Your Community" page on EPA's web site, citizens can also map their neighborhood area by zip code, city, county, state, watershed or region, and locate facilities that are regulated by EPA. What's more, by drilling down through the

many data layers in EPA's "Envirofacts" Web site, users can query more than ten different air quality, water quality, drinking water safety, waste management and toxic releases databases. And, with our new "error correction button", users can give us direct feedback on errors they find in our databases; we'll respond and correct them as quickly as possible, often well before the "ten-day" customer service standard that we have adopted.

We know that providing public access to environmental data and information comes with significant responsibilities. We are determined to provide the highest levels of information security, in accord with current federal security law and our own plans to protect our programs, information, and systems. Specifically, we need to vigilantly protect each EPA web site visitor's identity and personal information and to safeguard confidential business information. In addition, we must assure that those who are disabled or handicapped (both inside and outside of the Agency), those who don't have computers at home, school or work, and those who primarily speak a language other than English can access and use our data and information. As an active member of the federal government's Chief Information Officers' Council, EPA is committed to doing the best we can to meet these challenges especially securing the data and information that we steward. We must do this if we want to maintain the American public's confidence and trust in "e-government" now and in the future.

The Internet is a tool that promotes civic responsibility because it provides the American public with access to the information and resources that they need to make decisions that protect their health and their environment. As a result, it has the potential to dramatically increase the level of public trust and participation in government programs. Public access to environmental data and information -- and "e-government" in general -- empowers people, thus invigorating our democracy and ensuring that all who live with the consequences of environmental decisions have a real voice in making those decisions.

For further information, please contact Brendan Doyle, Senior Policy Advisor, by telephone at (202) 260-2693 or via e-mail at doyle.brendan@epamail.epa.gov.

Evolving Technology Shifts the Format and Challenges of Processing Public Comments

By Michael Eng and Sarah Palmer Institute for Environmental Conflict Resolution

On May 26, 2000 President Clinton announced his intention to provide "strong and lasting protection for the coral reef ecosystem of the Northwestern Hawaiian Islands." He directed the Secretaries of the Departments of the Interior and Commerce, working cooperatively

with the State of Hawaii and consulting with the Western Pacific Regional Fisheries Management Council, to develop recommendations within 90 days for a new, coordinated management regime to increase protection of the ecosystem and provide for sustainable use. The Departments were also directed to conduct "visioning" sessions, which would provide opportunities for public hearing and comment to help shape the final recommendations.

Due to the interagency and intergovernmental aspect of the President's directive, the Departments asked the U.S. Institute for Environmental Conflict Resolution, a neutral, independent federal entity, to facilitate and document the public visioning sessions, receive and process submitted public comments, and issue an independent report of the public input process and results. To this end, the U.S. Institute fielded a team of facilitators to conduct seven public visioning sessions - one in Washington, DC and six in Hawaii on five of the eight main Hawaiian Islands. In addition, during the 21day public comment period, which began on July 12th and concluded on August 2nd, the U.S. Institute received over 1000 written comments.

The request for public comments was announced in the Federal Register on July 12, 2000, as well as shortly thereafter through notices in newspapers published on each of the main Hawaiian Islands. Many organizations quickly disseminated the announcement of the request for comments through electronic and personal

communication networks. The U.S. Institute also established a Northwestern Hawaiian Islands web site to facilitate the submission of public comments. This website: www.ecr.gov/nwhi provided a means for individuals to submit their comments directly or via email to the Institute.

Approximately 1090 separate comments were received during the 21-day public comment period. Private individuals submitted over 95% of the comments received. Official organizational comments were submitted by approximately 24 non-governmental organizations. Three government agencies submitted comments. More than 60% of the public comments were submitted to the U.S. Institute by fax; approximately 25% by email; approximately 7% by mail; about 4% were submitted via the web site; and just less than 2% of the written comments were submitted at the various public meetings using the comment forms provided. Many people chose to submit their comments through multiple means to ensure they were received, requiring a painstaking process to identify duplicate submissions. Another significant challenge was in deciphering handwritten comments and signatures. Many people who submitted comments via email and fax failed to provide their names and addresses, making verification problematic. We also witnessed the emergence of very sophisticated web sites created by coalitions of organizations that allow any of their members to very quickly fax detailed pre-formatted comment letters electronically with just a few mouse clicks.

All the written and faxed comments were converted into an electronic format to facilitate their analysis, replication, and distribution in the final report. The content analysis required the review of each comment to identify issues and themes that were then entered into a database. This approach, though time consuming, permitted the identification of subtle themes that may not have been otherwise identified. This database was then used to sort and categorize issues for their inclusion and discussion in the report. Within a two-week period, the analysis of the public comments and publication of the final document, the Northwestern Hawaiian Islands Public Input Report, were completed and disseminated to the Departments and the public via the Internet.

The variety of means by which comments were submitted reflects an increased public comfort with faxing, and a small but encouraging response for electronic submissions. Challenges remain in identifying means of verifying handwritten names and cross checking for duplicate submissions. The Institute is also exploring various types of content analysis software capable of identifying subtle themes to assist in the analysis process. The authors welcome feedback and suggestions on approaches and the use of specific technologies, that may be useful in meeting the information management challenges created by high volumes of public comments received through multiple media (i.e., hand written, web, e-mail, faxed).

For further information contact, contact Michael Eng or Sarah Palmer. You can reach Michael Eng, Senior Program Manager, U.S. Institute for Environmental Conflict Resolution, by telephone at (520) 670-5299 or via e-mail at: eng@ecr.gov.

You can reach Sarah Palmer, Environmental Research Specialist, U.S. Institute for Environmental Conflict Resolution, by telephone at (520) 670-5299 or via e-mail at: palmer@ecr.gov

National Dialogues for Public Participation

Robert D. Carlitz and Laurie Maak, Information Renaissance and Patricia Bonner, US Environmental Protection Agency

The Internet opens up significant new avenues for public participation in the formulation of policy by federal agencies. The agencies often have a mandate to encourage such participation, which has traditionally been cumbersome and expensive to implement.

Two characteristics of the Internet lend themselves to this task:

Interactivity: The Internet is a two-way communications medium, through which agencies can inform the public about upcoming programs and issues and receive comment from the public on these issues. Furthermore, the structure of the Internet allows commenters to communicate among themselves, with the resulting

conversations assuming the form of a dialogue, rather than a more restricted private question and answer session.

Universality: Internet connections are intrinsically low-cost. With the deployment of a massive infrastructure, now reaching most schools, libraries and other public buildings, there is the promise of universal participation in the formulation of public policy. This is not to say that everyone will speak out on every issue, but it does mean that people who care about a particular issue, or who have an important stake in some area, will be able to make their views known to the relevant agency at the appropriate time.

A recent event orchestrated by the Environmental Law Institute (ELI) and Information Renaissance (Info Ren) under a grant from the US **Environmental Protection Agency** (EPA) illustrates the potential of this approach. A National Dialogue on Libraries as a Community Resource for Environmental Information took place online from September 18-29, 2000. This Dialogue involved over 500 people from across the country, representing a broad spectrum of stakeholders and guided by a panel of experts and a Dialogue moderator. Archives of the discussion and related materials remain available on the project site, < http://www.networkdemocracy.org/epa >. The present article provides the authors' overview of this event.

The focus of the Dialogue was on how EPA might work with libraries to disseminate needed and useful environmental information via the Internet. Info Ren designed and produced the Dialogue. The project's technical architecture includes a Web site that provides a venue for the discussion and an archive for background materials and participants' comments. The project is a good example of how the complementary resources of a federal agency and its non-profit partners can develop an activity that expands the capabilities and reach of all organizations involved.

The structure of the Dialogue involved a registration form to gather demographic data, a "Briefing Book" to orient participants, a panel of experts and a moderated online discussion among participants and panelists. The discussion was organized into message threads that dealt with subtopics arranged according to an agenda drawn up by the project organizers.

The Dialogue on Libraries allowed for informal interactions among participants and agency staff, while providing a high level of detail, as appropriate. The result was to provide the agency and the general public, environmental and citizen groups, libraries and the business community, with valuable reference resources and to build personal connections that will facilitate ongoing and future activities.

The focus of the Dialogue on Libraries was very specific, and it took place over a two-week period. This structure allowed for an intensive review of the relevant issues and a rapid evolution toward consensus, where possible, or at least a clear statement of conflicting positions. There are many areas in which Dialogues are likely to be of value for federal agencies. Perhaps the most far-reaching and important is in the area of rulemaking. Info Ren's initial work with National Dialogues was in fact in this area. In 1996, working with the Federal Communications Commission (FCC), Info Ren developed a Dialogue that brought hundreds of teachers and librarians into the FCC's rulemaking on the E-rate, a portion of the Telecommunications Act of 1996 which sought to provide low-cost telecommunications services for schools and libraries.

The impact of the E-rate Dialogue was dramatic. Prior to this event only two of the nation's 16,000 school districts had been heard from in the formal comment process. This contrasted sharply with the nearly complete representation of the telecommunications industry. Through the E-rate Dialogue the number of school districts participating in the discussion jumped one hundred-fold. A similar increase in the representation of local libraries also occurred.

It is clear that online Dialogues can greatly facilitate the discussion of complex and technical issues. The ability of these Dialogues to combine an educational function with the task of soliciting public input is key to their effectiveness in this area. Thinking beyond rulemaking, we can envision a sequence of steps, all of which could profitably involve online Dialogues:

Planning. The Libraries Dialogue provides an example of this application. More generally, a Dialogue can support visioning and planning, with the message threads leading naturally to summaries of public input in specific areas.

Rulemaking. Many agencies follow a common set of rulemaking guidelines. These guidelines mandate public input, which could often be provided very effectively through the mechanisms we have described.

Enforcement. Here the online records of the planning and rulemaking processes would be invaluable. In areas where there is controversy in the application of a rule, additional Dialogues could help educate the public and assist agencies in focusing on those aspects of a rule of most concern to the public.

For further information from Information Renaissance, contact Robert D. Carlitz or Laurie Maak. You can reach Robert D. Carlitz, Executive Director by telephone at (412) 471-4636 or via e-mail at: bob@info-ren.org. You can reach Laurie Maak, Dialogue Producer, by telephone at (412) 471-4636 or via e-mail at: lauriem@info-ren.org. Information Renaissance, 600 Grant Street,

For further information from the US Environmental Protection Agency, contact Patricia Bonner, Customer Service Director, by telephone at (202) 260-0599 or via email at: Bonner.Patricia@epa.gov. US Environmental Protection Agency, 1200 Pennsylvania Ave NW, Washington, DC 20460.

Pittsburgh, PA 15219

The Partnership for Advancing Technology in Housing (PATH) Using Technology to Find Better Housing Solutions

By Kenneth Sandler The Department of Housing and Urban Development

Lots of government programs these days advocate the use of advanced and innovative techniques and technologies to solve the problems of today and tomorrow. It can be a tough challenge for these programs, however, to practice what they preach.

The Partnership for Advancing Technology in Housing (PATH) is one government program that is meeting that challenge. Launched by President Clinton in 1998, PATH (the Partnership for Advancing Technology in Housing) is a public-private partnership to promote and expand research, development, demonstration and deployment of advanced housing technologies that help PATH to meet its four main goals. Those goals are to, by the year 2010:

- Reduce the monthly cost of new housing by 20 percent
- Cut the environmental impact and energy use of new housing by 50 percent or more and reduce energy use in at least 15 million existing homes by 30 percent or more

- Improve durability and reduce maintenance costs by 50 percent
- Reduce by at least 10 percent the risk of loss of life, injury and property destruction from natural hazards and reduce by at least 20 percent residential construction work illness and injuries

PATH has a variety of efforts underway to help it meet these ambitious goals:

- A web-based Technology Inventory with extensive information on over 150 housing technologies, including their benefits and costs, how to install and use them and where to get more information.
- Over two dozen pilot, demonstration and field evaluation projects around the country, where housing developments are demonstrating that technologies that meet PATH goals can work effectively in real-life applications.
- Interactive opportunities for homebuilders to learn about energy efficient, environmentally friendly, durable, affordable and safe housing technologies, such as the "Hands-On Builder" conferences.

PATH also has 5 working groups of industry, government, non-profit and academic representatives to bring in the kind of input the program needs to stay on the cutting edge. These working groups focus on Consumer Education, Barriers

and Insurance, Quality and Labor, Finance, and Technology Roadmapping. The remainder of this article will discuss the Technology Roadmapping working group and how it used technology to facilitate its own process.

Roadmapping is a difficult exercise that begins with a broad question such as, in this case, "What advanced technologies can meet the PATH goals, and what research and development activities are needed to bring those technologies to the marketplace?" From that broad beginning, it is then a continual narrowing process by which the group aims to identify specific housing technologies on which public and private R&D should be focused.

PATH's Technology Roadmapping process, conducted in cooperation with the National Association of Home Builders Research Center, began with a brainstorming process among 35 participants from the housing industry in March 2000. While this was a face-to-face session, the rest of the process was designed to account for the fact that the industry experts in question were not all in the same geographic location.

Hence, based on discussion at the brainstorming session, 40 technology options were identified, and write-ups were posted on a dedicated web site, http://roadmap.nahbrc.org. The web site includes a public area with descriptions of these technology options, along with opportunities for visitors to post comments and view others' comments. It also includes a private area limited to Roadmap participants; which is precisely

where much of the group's work was accomplished. The group members were invited to review and comment on the technology options on-line, including entering on-line evaluations quantifying potential benefits, risks, market size, R&D cost and development time of the different options. The web site permitted members to view each others' evaluations and group median evaluations for all 40 options. They could also update their own evaluations on subsequent visits.

Some coaching was needed during this process, particularly for the less computer-skilled of the group. And reminders were needed to spur full participation. However, although some participants reported finding the process onerous at first, most found that it became easier as they dug deeper into it. In the end, nearly 90% of the participants stuck through the entire evaluation process, a good result for a complicated effort dependent on its members' voluntary participation.

The evaluations and comments were then reviewed and special scorecard software developed by the RAND Corporation was used to tally it all up and identify broad categories of housing technology that best matched with the evaluation results. (Other factors, such as making sure that the technology areas selected were a good fit with PATH goals, also were considered at this point.)

As a result, PATH's Technology Roadmapping process identified three primary areas on which housing technology R&D should be focused: whole-house and building process redesign, information

technology to accelerate and streamline home-building, and advanced panelized-type systems. The Roadmapping effort continues, as the group works to flesh out these broad areas in increasing detail.

But just as importantly, the process that was used allowed for a geographically-scattered group to come to consensus in a way that was simultaneously efficient and democratic. Technology-based approaches that improve decision-making as in this example, will surely become increasingly important as government strives to meet growing calls both to be quicker, smarter and leaner and to increase the opportunities for citizens and interest groups to have more input into government programs. In this way, PATH has tried to set an example on decision-making technology -- even as it leads the way toward advancements in housing technology.

For further information, please contact Kenneth Sandler, Green Building Coordinator, by telephone at (202) 708-4302, ext. 102 or e-mail him at:

Kenneth_G._Sandler@HUD.GOV. You may also view the PATH web site located at: http://www.pathnet.org

Connecting Children, Youth and Families At-risk with Resources

By Barbara Woods Cooperative State Research, Education, and Extension Service U.S. Department of Agriculture

The Children, Youth and Families at Risk (CYFAR) initiative, since 1991, has undertaken a national effort through the State Extension System in the Land Grant Universities to work at the community level with at-risk audiences. The work has been a collaborative effort in which information technology is key part of each funded project.

As the CYFAR initiative got underway, the use of information technology became a valuable tool. A unique part of CYFAR is the deployment of computers, Internet access and associated tools to local community sites for use by at-risk clientele who participate in the educational programs provided by State Extension System in the Land Grant Universities and the collaborators. At-risk audiences that include parents/families, children and community people are using the computers to learn new skills and connect with resources beyond their local community.

The congressional funding that supports CYFAR is resulting in at-risk clientele access to and use of information technology. A few examples of CYFAR projects that show the at-risk audiences are making use of information technology are:

- The Pennsylvania project reports "citizens participating in computer programs have increased language and communication skills, computer literacy, and analytic ability;"
- Alaska's project sees the importance of Internet in linking remote communities; and uses educational software to teach aquaculture, watershed management associated with the salmon resource as well as technology literacy skills;
- The South Dakota project data show that "90% of children who participate in their after school program learn two or more skills such as use of e-mail, key boarding and interactive learning programs."

A distributive model is used to manage the technology- based resources. Specifically, Children, Youth and Families Education and Research Network (CYFERNet) represents the web site that provides access to resources. Through CYFERNet, those working with at-risk children, youth and families can access existing resources, add to the collection of resources, and direct their clientele to the resources for their use.

There are CYFAR projects in all states and territories. Each project has access to and uses information technology resources in the educational programs. Participants and interested constituents can interact with various educational resources through e-mail and web sites. E-mail allows interaction with experts and others. The web sites put at the participants' level

access to the tools that allow them to expand their knowledge and skills.

For further information about this article, contact Barbara Woods, Member of the CYFERNet Technology Team, by telephone at (515) 294-9610 or via e-mail at: bawoods@iastate.edu. For details pertaining to this effort, contact CYFERNet at cyf@reeusda.gov or call (612) 626-1111.

U.S. General Services Administration
Office of Governmentwide Policy
Office of Intergovernmental Solutions

Official Business Penalty for Private Use, \$300