# Informing
# COMMUNITIES

## Sustaining Democracy in the Digital Age

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THE REPORT OF

**THE KNIGHT COMMISSION** ON THE
**INFORMATION NEEDS OF COMMUNITIES** IN A DEMOCRACY

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# Foreword

The idea of a high-level commission to examine the information needs of 21st Century American citizens and communities originated at an Aspen Institute forum in the summer of 2007.

Participants in that discussion noted both the spread of digital technology and that, in a democracy, information is a core community need. There was also a sense that people with digital tools and skills have distinct political, social and economic advantage over those without them, as do the roughly 60 percent of Americans who have broadband access over those in rural areas or the poor who do not.

Finally, we were beginning to realize that people with digital access have a new attitude toward information. Instead of passively receiving it, digital users expect to own the information, actively engaging with it, responding, connecting. In sum, they expect to be able to act on and with it in an instant.

The thesis evolved that technology was changing attitudes toward information in basic, critically important ways, but that free flow of all sorts of information continued to be as critical as ever to the core of democracy. We proposed a commission to inquire into the nature of this change and suggest a way, or ways, forward.

In April of 2008, the John S. and James L. Knight Foundation and the Aspen Institute announced the formation of the Knight Commission on the Information Needs of Communities in a Democracy. Rather than on media, the Knight Commission would focus on communities, in the places where people live and work. The Commission was given a deceptively simple charge:

1. Articulate the information needs of a community in a democracy,

2. Describe the state of things in the United States, and

3. Propose public policy directions that would help lead us from where we are today to where we ought to be.

The result is not standard fare and we are delighted. This report focuses on the information people actually need, and works back from there, suggesting ways that the flow of information and its uses may be enhanced. That is a fundamentally different approach from traditional media policy that sought to promote or regulate existing media. Since the current pace of information technology change is rapid to the point of defying regularization or regulation, the Commission's approach is to steer to the true north of what is constant, the need for the free flow of information in a democracy.

Nothing in this report is meant to be prescriptive. Everything in this report is meant to propose and encourage debate.

Nevertheless, vision emanates from core values and it seems to us axiomatic that access to information is essential, while definition of what is valuable information is open to debate. Therefore, if there is no access to information, there is a denial to citizens of an element required for participation in the life of the community. That is as real politically (in denying voters information about candidates and issues) as it is socially (consider digital social networks) and economically (in a world where entry level job applications at MacDonald's or Wal-Mart must be made online, denial of digital access equals denial of opportunity).

What is a government to do? We think there is a lesson in the administrations of Dwight D. Eisenhower and Abraham Lincoln. They understood the need to connect the nation and did it, using the latest, popular technology. In the middle of the Civil War, the nation embarked on the construction of the transcontinental railroad, linking east and west for commerce and development. Post-World War II, Eisenhower caused to be built the United States Interstate Highway System, allowing the connection of the entire nation by car and truck.

Lincoln did not ask if people travelled for pleasure or commerce. Eisenhower did not care whether you drove a Cadillac or Ford. They cared that the nation be connected and that is our lesson. In the area of communications today, there is no greater role for public bodies, whether White House, Congress or state and local legislatures, than to invest in the creation of universal broadband access for all Americans, regardless of wealth or age, no matter that they live in rural or urban communities. Enabling the building of a national, digital broadband infrastructure and ensuring universal access is a great and proper role for government.

The Knight Commission further proposes that we take as national policy the strengthening of the capacity of individuals to engage with that information. Access is the beginning; education and training, public engagement and government transparency logically follow. Many variations on these themes are suggested here as the beginning of a national debate.

A final note: journalism matters. While the Knight Commission did not set out to "save" journalism, and its focus is on communications more generally, there is a clear understanding that we must find sustainable models that will support the kind of journalism that has informed Americans. The fair, accurate, contextual search for truth is a value worth preserving.

In constructing the Knight Commission, we purposely did not choose a panel of "experts." While we sought diversity of views, the size of the group meant that we would not have full representation from every corner, though we tried to correct for that through a wide range of witnesses at hearings. We are grateful to them and to the staff because what we got is what we wanted: an insightful report by a panel of 15 thoughtful Americans that we hope will generate healthy debate for the benefit of our democracy.

**Alberto Ibargüen**
President and CEO
John S. and James L. Knight Foundation

**Walter Isaacson**
President and CEO
The Aspen Institute

# Statement by the Co-Chairs

The Knight Commission on the Information Needs of Communities in a Democracy was assembled in 2008 to recommend policy reforms and other public initiatives to help American communities better meet their information needs. This project would not have been possible without support and generous funding from the John S. and James L. Knight Foundation, headed by President and CEO Alberto Ibargüen, and the organizational talent and assistance of the Aspen Institute, headed by President and CEO Walter Isaacson. We are deeply grateful to Alberto and Walter, as well as to Charles M. Firestone, who directs the Aspen Institute Communications and Society Program, which provided the Commission with its institutional home.

The current Knight Commission report represents months of intense study and debate among the Commissioners, all of whom contributed to this effort with wonderful insight, candor, and goodwill. While this report conveys the sense of the center of gravity of the Commissioners' deliberations, understandably, not every Commissioner agrees with every sentence or point in the report.

We could not have succeeded without the help of a great many others. Peter M. Shane, the Jacob E. Davis and Jacob E. Davis II Chair in Law at the Ohio State University, served as our Executive Director. He bore chief responsibility for programming the Commission's meetings and community forums, and served as the Commission's lead drafter, working in collaboration with Charlie Firestone and with Michael Fancher, the recently retired, 20-year Executive Editor of the *Seattle Times*, under whose leadership the *Times* won four Pulitzer Prizes.

Other key staff and consultants from the Aspen Institute included Erin Silliman, who served as project manager; research associate Musetta Durkee; and Jessica Schwartz Hahn of Peitho Communications, who advised us on our outreach efforts. The Aspen team was assisted throughout the process by their Knight Foundation colleagues Eric Newton, Vice President for Journalism; Gary Kebbel, Journalism Program Director; Marc Fest, Vice President for Communications; and Mayur Patel, Director of Strategic Assessment and Impact.

During April and May 2009, the Commission launched a period of public outreach that garnered over 1,100 responses to a series of online questions, plus reactions to a draft introduction to our report. That process was facilitated by the team of PBS Engage, including Angela Morgenstern, Senior Director, PBS Interactive; Jayme Swain, Director, PBS Engage; Amy Baroch, Senior Project Manager, PBS Engage; Betty Alvarez, Content Manager, PBS Interactive; and Kevin Dando, Director, Digital and Education Communications.

Of course, the Commission also learned a very great deal from the many experts and community members who shared their insights with us at our Commission meetings and forums around the country. Appendices to this report identify all of our witnesses, as well as a roster of experts and leaders from a variety of fields who graciously acted as informal advisors throughout the process to the Aspen Institute Communications and Society Program. We are thankful to all of them.

In pursuing our work, we have been well aware that we are following in the path of other distinguished Commissions. These include the Hutchins Commission of the late 1940s, whose report, *A Free and Responsible Press*, still speaks in significant ways to the social responsibilities of the media; the Carnegie Commission on Educational Television, whose 1967 report lent significant impetus to the funding of public broadcasting in the United States; and the National Advisory Commission on Civil Disorders (better known as the "Kerner Commission"), which, in 1968, criticized the media for incomplete and often inaccurate reporting of African American affairs throughout American communities.

In a sense, the Knight Commission's purview has been even broader than the focus of our predecessors because we have sought to look comprehensively at the circulation of news and information in local communities. This mandate required us to inquire not only as to the state of the press, but also as to the role of other key institutions as well. These include government, technology firms, libraries, schools, foundations, community development organizations, and other private organizations that make up the institutions of civil society.

Nonetheless, there is a thread that plainly ties together all of these efforts over the decades: a desire to protect and enhance American democracy through information. It is in that spirit that we are pleased to forward this report to the American people. We believe that the Commission has accurately identified a series of profound challenges if America is to achieve the ideal of truly informed communities. We are also excited and energized by all we have learned about the creative and dedicated people of all ages and walks of life throughout the United States who are trying to help meet those challenges for the benefit of all of us. We look forward to the dialogue on these issues in the days and years ahead.

**Marissa Mayer**
**Theodore B. Olson**
Co-Chairs

October 2, 2009

There need be no
second-class citizens in the
democratic communities
of the digital age.

**THE KNIGHT COMMISSION** ON THE

**INFORMATION NEEDS OF COMMUNITIES**

IN A DEMOCRACY

# Executive Summary

# Executive Summary

The time has come for new thinking and aggressive action to dramatically improve the information opportunities available to the American people, the information health of the country's communities, and the information vitality of our democracy.

The Knight Commission on the Information Needs of Communities in a Democracy believes America is at a critical juncture in the history of communications. Information technology is changing our lives in ways that we cannot easily foresee. As dramatic as the impacts have been already, they are just beginning.

The digital age is creating an information and communications renaissance. But it is not serving all Americans and their local communities equally. It is not yet serving democracy fully. How we react, individually and collectively, to this democratic shortfall will affect the quality of our lives and the very nature of our communities.

America needs "informed communities," places where the information ecology meets people's personal and civic information needs. This means people have the news and information they need to take advantage of life's opportunities for themselves and their families. They need information to participate fully in our system of self-government, to stand up and be heard. Driving this vision are the critical democratic values of openness, inclusion, participation, empowerment, and the common pursuit of truth and the public interest.

To achieve this, the Commission urges that the nation and its local communities pursue three ambitious objectives:

- **Maximize the availability of relevant and credible *information* to all Americans and their communities;**

- **Strengthen the *capacity* of individuals to engage with information; and**

- **Promote individual *engagement* with information and the public life of the community.**

Public testimony before the Commission showed that America's communities have vast information needs. Those needs are being met unequally, community by community. Some populations have access to local news and other relevant information through daily newspapers, radio and television broadcasts, local cable news channels, hyper-local Web sites, services that connect to police reports and other sources of local information, blogs, and mobile alerts. Others are unserved or are woefully underserved.

> Information is as vital to the healthy functioning of communities as clean air, safe streets, good schools and public health.

Local journalistic institutions that have traditionally served democracy by promoting values of openness, accountability, and public engagement are themselves in crisis from financial, technological, and behavioral changes taking place in our society. Even before the 2008 recession, many news organizations faced shrinking audiences and declining advertising revenue. With the recession, they are struggling even more. There is plainly reason to be anxious about the consequences for local journalism, and therefore for local democratic governance.

Technologies for acquiring and disseminating news and information are changing rapidly. Emerging media have become amazing forces for enabling people to connect. But their full potential is not yet realized in the service of geographic communities, the physical places where people live and work.

America's information needs are yet more urgent because of the economic recession of 2008. But such crises often create opportunity, and the Commission believes the current moment marks a time of great possibility.

It is a moment of technological opportunity. Experiments in social communication abound. The advent of the Internet and the proliferation of mobile media are unleashing a torrent of innovation in the creation and distribution of information. Those who possess and know how to use sophisticated computing devices interact ever more seamlessly with a global information network both at home and in public.

It is also a moment of journalistic and political opportunity. Information organizations, including many traditional journalistic enterprises, are embracing new media in unique and powerful ways, developing new structures for information dissemination and access. Political leaders and many government agencies are staking out ambitious agendas for openness. The potential for using technology to create a more transparent and connected democracy has never seemed brighter.

At this juncture, muddled strategies and bad choices will result in missed opportunities for society. Mistakes can reinforce existing inequalities and worsen second-class status for people who lack the resources, skills or understanding required in the digital age. Clear strategies and smart choices can produce a revolution in civic engagement, government openness and accountability, and economic prosperity.

The Commission believes that achieving its vision of informed communities requires pursuing three fundamental objectives:

- **Maximizing the availability of relevant and credible *information* to communities.** The availability of relevant and credible information implies creation, distribution, and preservation. Information flow improves when people have not only direct access to information, but the benefit also of credible intermediaries to help discover, gather, compare, contextualize, and share information.

- **Strengthening the *capacity* of individuals to engage with information.** This includes the ability to communicate one's information, creations and views to others. Attending to *capacity* means that people have access to the tools they need and opportunities to develop their skills to use those tools effectively as both producers and consumers of information.

- **Promoting individual *engagement* with information and the public life of the community.** Promoting engagement means generating opportunities and motivation for involvement. Citizens should have the capacity, both individually and in groups, to help shoulder responsibility for community self-governance.

Information is as vital to the healthy functioning of communities as clean air, safe streets, good schools, and public health. People have not typically thought of information in this way, but they should. Just as the United States has built other sectors of its vital infrastructure through a combination of private enterprise and social investment, Americans should look to a similar combination of strategies in developing its information infrastructure as well.

Information is essential to community vitality. Informed communities can effectively coordinate activities, achieve public accountability, solve problems, and create connections. Local information systems should support widespread knowledge of and participation in the community's day-to-day life by all segments of the community. To achieve the promise of democracy, it is necessary that the creation, organization, analysis, and transmission of information include the whole community.

In addition to the information necessary to participate in elections and civic affairs, people need access to information to better their lives. Where families struggle to make ends meet and many men and women work multiple jobs, free time is limited. Indeed, the path to active civic engagement may begin with fulfillment of basic information needs, including information about jobs, housing, taxes, safety, education, transportation, recreation, entertainment, food, shopping, utilities, child care, health care, religious resources, and local news.

A community is a healthy democratic community—it is an "informed community"—when:

- **People have convenient access to both civic and life-enhancing information, without regard to income or social status.**

- **Journalism is abundant in many forms and accessible through many convenient platforms.**

- **Government is open and transparent.**

- **People have affordable high-speed Internet service wherever and whenever they want and need it.**

- **Digital and media literacy are widely taught in schools, public libraries and other community centers.**

- **Technological and civic expertise is shared across the generations.**

- **Local media—including print, broadcast, and online media—reflect the issues, events, experiences and ideas of the entire community.**

- **People have a deep understanding of the role of free speech and free press rights in maintaining a democratic community.**

- **Citizens are active in acquiring and sharing knowledge both within and across social networks.**

- **People can assess and track changes in the information health of their communities.**

Another insight that emerged from the Commission's study: journalistic institutions do not need saving so much as they need creating. Both private and public investments are needed to exploit this moment of journalistic opportunity fully.

Original and verified reporting is critical to community information flow. The challenge is not to preserve any particular medium or any individual business, but to promote the traditional public-service functions of journalism. Rather than ask how to save newspapers, a better question is, "How can we advance quality, skilled journalism that contributes to healthy information environments in local communities?"

The Commission applauds efforts throughout the country to find new solutions and business models to preserve valued journalistic institutions and create new ones. There is a transition underway requiring fresh thinking and new approaches to the gathering and sharing of news and information.

The Commission has formulated 15 strategies for pursuing the three fundamental objectives of information availability, citizen capacity, and public engagement. The recommendations propose action by government, communities, the media, and citizens. The following are condensed versions of those recommendations.

## *Conclusions and Recommendations*

### A. Maximizing the Availability of Relevant and Credible Information

# People need relevant and credible information to be free and self-governing.

**THE COMMISSION CONCLUDES:**

- **The current financial challenges facing private news media could pose a crisis for democracy.**

- **Public media should provide better local news and information.**

- **Not-for-profit and non-traditional media can be important sources of journalism.**

- **Public information belongs to the public. Government must be more open.**

- **Informed communities can measure their information health.**

**THE COMMISSION RECOMMENDS:**

| | |
|---|---|
| **1** | **Recommendation 1: Direct media policy toward innovation, competition, and support for business models that provide marketplace incentives for quality journalism.** |
| **2** | **Recommendation 2: Increase support for public service media aimed at meeting community information needs.** |
| **3** | **Recommendation 3: Increase the role of higher education, community and nonprofit institutions as hubs of journalistic activity and other information-sharing for local communities.** |
| **4** | **Recommendation 4: Require government at all levels to operate transparently, facilitate easy and low-cost access to public records, and make civic and social data available in standardized formats that support the productive public use of such data.** |
| **5** | **Recommendation 5: Develop systematic quality measures of community information ecologies, and study how they affect social outcomes.** |

## B. Enhancing the Information Capacity of Individuals

# People need tools, skills, and understanding to use information effectively.

**THE COMMISSION CONCLUDES:**

- **All people have a right to be fully informed.**

- **There need be no second-class citizens in informed communities.**

- **Funding to meet this goal is an investment in the nation's future.**

- **Americans cannot compete globally without new public policies and investment in technology.**

**THE COMMISSION RECOMMENDS:**

| 6 | **Recommendation 6: Integrate digital and media literacy as critical elements for education at all levels through collaboration among federal, state, and local education officials.** |
|---|---|
| 7 | **Recommendation 7: Fund and support public libraries and other community institutions as centers of digital and media training, especially for adults.** |
| 8 | **Recommendation 8: Set ambitious standards for nationwide broadband availability and adopt public policies encouraging consumer demand for broadband services.** |
| 9 | **Recommendation 9: Maintain the national commitment to open networks as a core objective of Internet policy.** |
| 10 | **Recommendation 10: Support the activities of information providers to reach local audiences with quality content through all appropriate media, such as mobile phones, radio, public access cable, and new platforms.** |

## C. Promoting Public Engagement

To pursue their true interests, people need to be engaged with information and with each other.

**THE COMMISSION CONCLUDES:**

- **Creating informed communities is a task for everyone.**

- **Young people have a special role in times of great change.**

- **Technology can help everyone be part of the community.**

- **Everyone should feel a responsibility to participate.**

**THE COMMISSION RECOMMENDS:**

| 11 | **Recommendation 11: Expand local media initiatives to reflect the full reality of the communities they represent.** |
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| 12 | **Recommendation 12: Engage young people in developing the digital information and communication capacities of local communities.** |
| 13 | **Recommendation 13: Empower all citizens to participate actively in community self-governance, including local "community summits" to address community affairs and pursue common goals.** |
| 14 | **Recommendation 14: Emphasize community information flow in the design and enhancement of a local community's public spaces.** |
| 15 | **Recommendation 15: Ensure that every local community has at least one high-quality online hub.** |

The United States stands at what could be the beginning of a democratic renaissance, nurtured by innovative social practices and powerful technologies. With tools of communication (both old and new), dynamic institutions for promoting knowledge and the exchange of ideas, and a renewed commitment to engage in public life, Americans could find themselves in a brilliant new age.

The Knight Commission has recommended a series of strategies that, in various ways, exhort our major public and nonprofit institutions to give new priority to values of openness, inclusion, and engagement. The values questions posed are equally profound, however, for individual citizens and for media institutions. Creating informed communities is a task for everyone.

Communities throughout America need for their members to re-examine their individual roles as citizens in the digital age. More than ever, technology enables each citizen, as well as every business firm and every nonprofit organization, to be a productive part of the community. Those opportunities, however, and the social benefits they offer, imply a reciprocal responsibility to participate.

Likewise, communities can call upon their media institutions to confront how new technological capacities and social practices are challenging core values. The evolving relationship among journalists, media firms, and the public should engender a deep discussion about how these changes affect such values as objectivity, privacy, and accountability.

This report is intended to help America maintain its commitment to enduring information ideals, even as individuals and communities create information ecologies more relevant, participatory, and inclusive than ever. There need be no second-class citizens in the democratic communities of the digital age. Whether America fulfills this vision will require individual and collective initiative at every level of society.

America needs a vision for "informed communities." Paramount in this vision are the critical democratic values of openness, inclusion, participation, empowerment, and the common pursuit of truth and the public interest.

# Informing Communities: Sustaining Democracy in the Digital Age

# Introduction

The time has come for new thinking and aggressive action to ensure the information opportunities of America's people, the information health of its communities, and the information vitality of our democracy. Every advance in communications technology expands the possibilities for American democracy, but every information system also creates potential winners and losers.

The information revolution is benefitting those in the middle class and up and, in a different way, many young residents of urban and suburban communities. They have never had greater access to more relevant information. But many Americans are in danger of remaining or becoming second-class citizens in the digital age, whether because of low income, language barriers, lack of access to technology, limited skills and training, community norms, or lack of personal motivation. The poor, the elderly, rural and small town residents, and some young people are most at risk. Those who belong to more than one of these groups are especially vulnerable. To take perhaps the most dramatic example of an enduring divide: "Only sixty-eight percent of households on Tribal lands have a telephone; only eight Tribes own and operate telephone companies; and broadband penetration on Indian lands is estimated at less than ten percent."[1]

If the problem were simply "not keeping up" with the latest information technologies and capabilities, the situation would be bad enough. But many people are now losing the information sources they have relied on, as newspapers, TV, and radio reduce news coverage to survive financially. In a democracy, the very idea of second-class citizenship is unacceptable; yet, for many, second-class information citizenship is looming.

The inability of some to participate fully in community life through a loss of information harms not only those directly affected. It also harms the entire community. Democratic communities thrive when all sectors are active participants.

The Knight Commission on the Information Needs of Communities in a Democracy believes America is at a critical juncture. Information technology is changing our lives in ways that we cannot easily foresee. Critical intermediating practices—journalism perhaps most obviously—are facing challenges of economics, organization, and values. As dramatic as the impacts have been already, they are just beginning. How we react, individually and collectively, to the information challenges and opportunities now presented to us will affect the quality of our lives and the very nature of our communities.

## Informed Communities

As the Knight Commission's full name attests, its fundamental charge has been to identify and articulate the information needs of communities in a democracy. The Commission has addressed that mandate by reviewing academic and industry research across a wide range of disciplines; hearing directly from experts on media, community and public policy; staging public hearings across the United States; and drawing on its own collective expertise.[2] Through this process, the Commission has come to understand "information needs" in a particularly expansive way. The question "What are a community's information needs?" is more than a question about the categories of knowledge that people require. It is best understood as a question about the kind of information ecology—that is, the kind of environment for information and communications—that a community ought to become.

> America needs "informed communities," places where the information ecology meets people's personal and civic information needs.

In short, America needs a vision for "informed communities," places where the information ecology meets the personal and civic information needs of people. This means people have the information they need to take advantage of life's opportunities for themselves and their families. It also means they can participate fully in our system of self-government, to stand up and be heard. Paramount in this vision are the critical democratic values of openness, inclusion, participation, empowerment, and the common pursuit of truth and the public interest.

To achieve this vision, the Commission believes that the nation and its local communities need to pursue three ambitious objectives:

- **Maximize the availability of relevant and credible *information* to all Americans and their communities;**

- **Strengthen the *capacity* of individuals to engage with information; and**

- **Promote individual *engagement* with information and the public life of the community.**

The Commission might well have reached these conclusions even without the economic downturn of 2008. Public testimony before the Commission showed the nation's vast information needs are being met unequally, community by community. Some populations have access to local news and other relevant information through daily newspapers, radio and television broadcasts, local cable news channels, hyper-local Web sites, blogs, mobile alerts, and services that connect to police reports and other sources of local information. Others are woefully underserved.

Key democratic institutions are under obvious stress—public service journalism perhaps most of all. Access to news and information is critical to democracy. Journalists serve as watchdogs over public officials and institutions, as well as over the private and corporate sector. They provide information for citizens to run their lives, their communities, and their country. News organizations also foster civic understanding, engagement, and cohesion. When they work well, they help make communities open, officials accountable and publics engaged.

For over a decade, many local news institutions have been in crisis from financial, technological and behavioral changes taking place in our society. Before the recession, many newspapers were facing falling subscriptions and declining advertising revenue. With the crash of 2008, they are struggling even more.

Some observers worry that many newspapers may not recover or will become only a shadow of their former selves.[3] Some local broadcast news programs are losing audiences and revenues.[4] In many communities, news organizations are increasingly less able to meet the needs of citizens. For example, a 2009 *American Journalism Review* survey found 355 newspaper staff reporters covering their respective statehouses full time—a decrease of more than 30 percent over the last six years.[5] Nearly three-quarters of the respondents to a 2009 Associated Press Managing Editors survey expressed their belief that shrinking staffs were hurting their capacity to keep readers informed.[6] There is plainly reason to be concerned for local journalism, and, therefore, for local democratic governance.

New technologies are rapidly changing the processes for acquiring and disseminating news and information. Emerging media have become amazing forces for enabling people to connect. But their full potential is not yet realized in the service of geographic communities, the places where people live, work, and vote.

## A Moment of Opportunity

The economic downturn of 2008 added urgency to all of these concerns. It was like an earthquake shaking the global economy to its core, and the aftershocks of uncertainty are rattling families, communities, institutions, and the nation. But such crises often create opportunity, and the Commission believes the current moment is a time of great possibility.

It is a moment of technological opportunity. Experiments in social communication abound. The advent of the Internet and the proliferation of mobile media are unleashing innovation in the creation and distribution of information. Those who possess and can use sophisticated devices interact ever more seamlessly with a global information network both at home and in public.
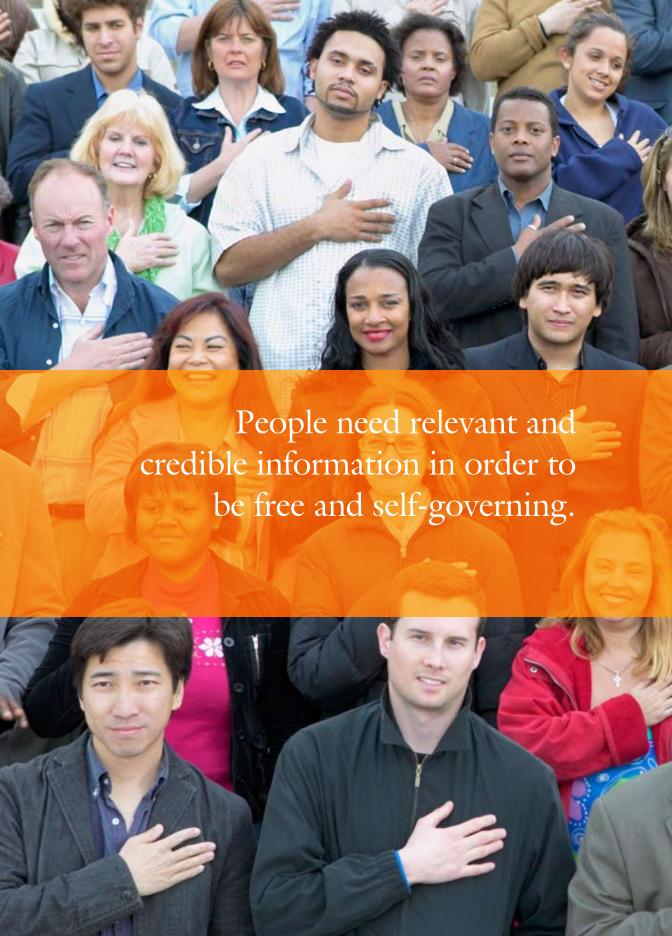
Wireless devices may bring new services to the consumer at gigabit speeds within the next three-to-five years.[7] Even now, mobile devices are increasingly popular as a way to connect to the Internet. They represent a chance for Americans who cannot afford a personal computer to connect to the communication revolution, just as millions of people do around the world.

African Americans and English-speaking Latinos currently represent especially active populations of mobile Web users. Between the end of 2007 and early 2009, roughly 48 percent of African Americans and 47 percent of English-speaking Latinos accessed the Internet via a mobile device as opposed to 32 percent of the general population. As reported in 2009 by the Pew Internet and American Life Project, African Americans on any given day are 70 percent more likely to access the Internet on a handheld than white Americans.[8]

It is also a moment of journalistic and political opportunity. Media firms are searching for economically sustainable models to make their reinvention viable. Many news organizations, old and new, are embracing new technologies to create innovative processes for connecting the public to the information it needs and wants. Political leaders and many government agencies are staking out ambitious agendas for openness. The potential for using technology to create a more transparent and connected democracy has never seemed brighter.

The Commission has created what it hopes will be a helpful framework for seizing these opportunities. The following is the Commission's articulation of community information needs and the critical steps necessary to meet them.

People need relevant and credible information in order to be free and self-governing.

# PART I
## What are the Information Needs of Communities in a Democracy?

# What are the Information Needs of Communities in a Democracy?

## Community Functions Depend on Information and Exchange

American democracy is organized largely by geography, which is why the Commission has focused primarily on the needs of geographically defined communities.[9] Local communities need to accomplish at least four things that depend on information.

- Communities need to *coordinate*. Activities like elections, emergency responses, and even community celebrations succeed only if everyone knows where to be at what time and what role to play. This requires a system of information and exchange. Information is also the central resource in enabling the creation of economic and social connections that build a community's capacity for action.

- Communities need to *solve problems*. They have to identify goals, challenges, and options for response on everything from building the local economy, to improving the performance of community schools, to protecting health and safety and combating local hunger. They have to estimate the consequences of alternative approaches. They have to weigh those consequences in light of community values. All of this requires information, interpretation, analysis, and debate.

- Communities need to establish systems of *public accountability*. Public officials answer to voters for their performance in office. Voters need information and analysis to assess how officials are doing their jobs.

- Finally, communities need to develop *a sense of connectedness*. They need to circulate ideas, symbols, facts, and perspectives in a way that lets people know how they fit into a shared narrative. A community's system of meaning evolves as new voices and new experiences enter the information flow. People need access to that information to avoid feeling alienated and excluded.

## Communal and Personal Needs Intersect

Communities can fulfill their key functions only through the individuals who live there. This means that the information needs of any local community are inevitably connected to the personal information needs of its people.

To begin with, people have to be able to meet their personal and family needs in ways that leave time and energy available for community issues. Then, for community processes to work, people require information that relates directly to participating in public life.

Moreover, the streams of personal and civic information shape each other. In many cases, news about the larger community may be essential to helping people fulfill their personal objectives. Conversely, as people work on their individual goals, they see the links between their personal lives and the public life of their communities. The civic and the personal are inescapably intertwined.

> The citizen's information needs are both civic and personal.

The Commission's emphasis on democracy reinforces this insight. At a minimum, democracy means self-governance in a political system protective of liberty and equality. In its deepest version, however, democracy means something more. It connotes a commitment to individual freedom in daily life. It means opportunity to pursue one's personal goals and objectives, within the law, however one chooses. The citizen's information needs are both civic and personal.

## Envisioning and Measuring Success and Failure

In a perfect world, citizens could reliably measure their information needs and gauge their satisfaction. Community members could quantify the assets of their local information ecology. Researchers could correlate information assets with positive social outcomes. Citizens and their representatives could formulate recommendations to improve social outcomes by making specific, measurable improvements in information handling.

However, information researchers have not developed the tools to perform these tasks with precision. The Commission has viewed international efforts at such indexing with interest.[10] It has looked at efforts to create tools that would be useful locally to assess a community's information ecology.[11] Such efforts do not yet enable us to measure information flow successfully or relate that flow to other community outcomes.

Millions of Americans meet their information needs through broadband service and home computers or Web-enabled mobile phones. At their desks or just walking their neighborhoods, they have access to more information than many nations hold in all the books in their national libraries. Today's information consumers can pull together the news they want to follow in a convenient Web page. They can apply online for a job, a loan, or college admission. They can check their children's school lunch options and keep track of homework assignments. Before they go to the doctor, they can arm themselves with information from health Web sites or online support groups. They do not overdraw their bank accounts because they can check balances online and move funds from one account to another. They pay bills efficiently without ever using a postage stamp.

Against this baseline, it is easy to describe what failure looks like. For individuals, failure is the inability to apply for jobs online. Failure is the inability to get relevant health information. Failure is not being able to take advantage of online educational opportunities or use online tools to track the education of one's children. Millions of Americans lack the tools or the skills to match their information-rich contemporaries in pursuing personal goals. The freedom they enjoy to shape their own lives and destiny is stunted. These people are falling into second-class citizenship. This is true even putting aside the actual civic activities that online connectedness makes possible. Even if they want to engage in the public affairs of their communities, the navigation of life's daily mundane tasks requires disproportionate time and energy. This is not democracy at work.

In terms of community coordination, failure looks like the aftermath of Hurricane Katrina. People know of dangers but do not organize in response to them. When emergencies strike, information systems break down. People do not know where to find food, shelter, health care and basic safety.

In terms of community problem-solving, failure is the proliferation of problems unaddressed. Downtowns dry up. Pollution spreads. Employers leave. Unemployment climbs. Dropout rates increase. Public health problems intensify.

A community without public accountability suffers from unresponsive government. Neglect is common, corruption all too plausible. Money is wasted as government officials are slow and awkward at doing what other governments do quickly and nimbly. Voter turnout is low, not because people are satisfied, but because people are resigned.

A community without a sense of connectedness is a group of people who know too little about one another. Social distrust abounds. Alienation is common. Everyone assumes that somebody else is getting "a better shake." The community loses out on the talents of people who lack either the opportunity or motivation to share

their skills. When problems arise, there is little common ground to solve them. People feel excluded, that they are not "part of the action," and they disconnect from one another.

## Engagement Involves Both Information and Information Intermediaries

Part of what is missing in these sketches of individual and community failure is information. But the problem is not the lack of information; it is an absence of engagement—personal involvement with the larger community based on accurate and timely information.

> Unless people, armed with information, engage with their communities to produce a positive effect, information by itself is powerless.

Information alone does not guarantee positive outcomes. Consider one famous example. A front-page story in the June 8, 2004, *Times-Picayune*[12] in New Orleans detailed a near-stoppage in the work needed to shore up the city's levees. The mere revelation of that information in itself did not mobilize the effort that might have spared the city the worst ravages of Hurricane Katrina 14 months later. Interested or influential people did not engage with the information in timely, effective ways. Unless people, armed with information, engage with their communities to produce a positive effect, information by itself is powerless.

Engagement is the critical point where community and individual information needs intersect. Communities need policies, processes, and institutions that promote information flow and support people's constructive engagement with information and with each other.

A community's information ecology works best when people have easy, direct and timely access to the information they need. Many communities are developing online systems to access a variety of public records. Information aggregators use tools to help people quickly find the relevant records and data. Among the more exciting developments is increasing online availability of all kinds of public data, not just conventional "records." Initiatives like these enable private and nonprofit

entrepreneurs to use existing government information as the basis for new businesses and civic projects. The sharing of data can also improve the quality, accountability and efficiency of government.

Direct access to information, however, is not a complete solution to a community's needs because *information can overwhelm*. Emerging technologies may help people sift, organize and evaluate information. But even tech-savvy individuals are unlikely to possess the institutional resources they need to meet all their personal information needs and objectives without help. No individual can generate all the analysis, debate, context and interpretation necessary to turn raw information into useful knowledge.

Thus, just as communities depend on citizens for engagement, individuals depend on formal and informal institutions for support to engage with information. The local daily newspaper is one such intermediary. So are local television and radio newsrooms. Some support comes from private enterprise. Public and nonprofit institutions can also function as intermediaries, sometimes through face-to-face programming, sometimes via Web sites. Family, friends and co-workers can be intermediaries. But the key point is simple: effective, trusted intermediaries help people engage with information.

## Journalism Is a Critical Intermediating Practice

Individuals and communities depend on news as a critical element of the information ecology, and effective intermediaries are critical in gathering and disseminating news.

The 1947 Hutchins Commission Report, *A Free and Responsible Press*, defined news as "truthful, comprehensive, and intelligent account[s] of the day's events in a context which gives them meaning."[13] The best journalism serves the interests of truth by reporting as fact only what can be verified through multiple trusted sources.

News can be life-enhancing. It can be decisive to individuals in their personal affairs. Local, national and international events can point the way to important challenges and opportunities. News can affect decisions that are both mundane and essential to personal well-being: where the Board of Education will locate a new school, whether plans are advancing for light rail through city neighborhoods, early reports of a possible flu outbreak at a local community college.

The news also helps people to connect their private and public concerns. It helps them identify and take advantage of opportunities to put issues of personal importance on the public agenda. To serve their individual purposes, people need continual access to news that is credible, verified and up-to-date.

News is also essential for the community as a whole. Community coordination cannot exist without shared news. The dissemination of information, debate and analysis is central to problem solving. The Hutchins Commission emphasized the importance of media's role in projecting a "representative picture of the constituent groups in the society." The news connects subcommunities by letting one neighborhood know what another neighborhood is doing and how the affairs of some affect the fortunes of all.

News promotes accountability. Watergate, the Pentagon Papers, and the 2007 Walter Reed Army Medical Center scandal are iconic examples. A 2003 international study showed a strong association between national levels of corruption and the "free circulation of daily newspapers per person." The same investigators found a similar relationship across American states. Government corruption declined in the United States between the Gilded Age and the Progressive Era. Historians identify the development of an information-oriented press as a possible factor.[14]

In the same vein, a 2008 MIT study found that members of Congress who are covered less by their local press work less for their constituencies, as evidenced by lower federal spending in their districts. They vote their party line more often, testify less often before congressional hearings, and appear to serve less frequently on constituency-oriented committees. This research suggests a tie between news coverage, voter awareness, and official responsiveness. Voters living in areas with less coverage of their members of Congress were found to be "less likely to recall their representative's name, and less able to describe and rate them."[15]

In any community, journalists are the primary intermediaries for news. They are the people most systematically engaged in gathering, analyzing and disseminating news. The connection between the potential positive effects of news and the vitality of professional journalism makes sense. Public accountability is an obvious case. People behave better if they think they are being watched. But journalism that is good at watching people in power is hard. It requires training, determination and time. It can also be expensive, especially when the prospects of legal expenses are added to the budget necessary to cover the basic costs of reporting and production.

The journalism of the future may or may not take the familiar form of newspapers. But for true public accountability, communities need skilled practitioners. They ask tough questions. They chase obscure leads and confidential sources. They translate technical matters into clear prose. Where professionals are on the job, the public watchdog is well fed. Part-time, episodic or uncoordinated public vigilance is not the same.

Part I: What are the Information Needs of Communities in a Democracy?

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The Commission recognizes that new technologies and techniques can bring more information to light and can complement or substitute for more traditional journalism. This is an evolving process. But in the end, the goals of journalism persist and remain vital. Someone needs to dig up the facts, hold people accountable and disseminate the news.

## Information Intermediaries Need Both Private and Public Investment

Effective information intermediaries require resources. But because *information is often a public good*, there are at least two challenges in funding them.

First, information creates what economists call "positive externalities." These are benefits for the public as a whole from which no individual firm can profit. An informed public is likely to be a more engaged public. It is likely to make better decisions and to resolve conflict more productively. Better informed people are more helpful resources to one another. But no one economic actor will invest enough personal resources to achieve these outcomes because the benefits will flow to everyone in the community, not just to the investor.

Much information is also "non-rivalrous." One person's consumption of information does not reduce the amount others can consume. People who do not pay for information can thus make free use of a lot of the information that other people have paid for. This produces a "free rider" problem. People underinvest in information because they suspect that they can benefit, without paying, from the investments of others. (If others read newspapers and share what they learn, why subscribe?)

These facts point to a critical economic consequence: just because communities need journalism does not mean that consumers in the marketplace will generate enough revenue to support that journalism. Specialized publications, whether for investment counseling or restaurant reviews, can be market-supported. But subscriptions alone have never supported and are not likely ever to pay the full cost of gathering and disseminating general local news. In the 20th century, advertising compensated for much of the shortfall because advertisers were willing to pay substantial sums to newspapers and local broadcast stations to reach their audiences. The Internet and the fragmentation of media markets through the proliferation of new outlets have undermined this business model. Adjusted for inflation, newspaper ad revenues fell 31 percent between 2000 and 2007,[16] hitting metropolitan dailies the hardest. These trends clearly call into question how communities and their citizens will pay for news and information in the future.

Because of information's special character, America has a long history of providing social support for the development and transmission of news and information. Beginning in the 18th century, the Postal Service subsidized the delivery of newspapers,[17] and postal subsidies still support nonprofit publications. Congress created and partially funds public radio and public television. Commercial broadcasters have enjoyed protected use of their airwaves at little or no cost. States help to finance schools and colleges, and local communities fund libraries, as forms of social support for the generation and transmission of knowledge.

Public policies need to allow or encourage private market mechanisms to robustly serve community information needs. But because so much information is a public good, communities and the country also need to make some public investments in the creation and distribution of information.

Accordingly, if communities are to enjoy the kind of information ecology that fosters individual and collective success, they will need to pursue a dual course of action. Public policies need to allow or encourage private market mechanisms to robustly serve community information needs. But because so much information is a public good, communities and the country also need to make some public investments in the creation and distribution of information.

## Promoting Democratic Values

In sum, a compelling vision for meeting the information needs of communities in a democracy must first take account of the needs of individuals who make up America's communities. It requires attention to the core community functions we have identified, the role of intermediaries, and the economics of information. But it also requires pursuing the values that a democratic information system should serve. In distilling all that it has read and heard, the Commission has come to regard the following five values as paramount here:

1.  **Openness.** The information ecology should be maximally available to everyone as a producer and consumer of information and, within the bounds of law, should support the widest possible range of choices for personal lifestyle and civic initiative.

2.  **Inclusion.** The information system should reflect the interests, perspectives, and narratives of the entire community; everyone should be able to find information relevant to their needs.

3.  **Participation.** The information system should operate to encourage and support people's productive engagement with information for personal and civic purposes.

4.  **Empowerment.** Individuals should have the opportunity to pursue their talents, dreams and interests. Communities should be able to govern their own affairs successfully, reflecting the needs and values of their members.

5.  **Common Pursuit of Truth and the Public Interest.** People should be able to differentiate what is credible, verifiable and rigorously determined from what is speculative, false or propagandistic. They should also be able to engage with information and each other to develop public decisions that maximize community welfare.

The Commission recognizes that putting these principles into operation is challenging, in large part, because important values often exist in tension with one another. Democratic communities must invariably struggle, for example, with the balance between openness and privacy, and between the freedom of speech and the accountability of speakers. These issues, however, only underscore every citizen's need for the news, information and analysis necessary to participate meaningfully in the public decisions that effectively strike that balance.

The Commission believes that achieving its vision of informed communities requires pursuing three fundamental objectives, each discussed in the following sections of the Commission's report:

- **Maximizing the availability of relevant and credible *information* to Americans and their communities.**
  Availability implies the creation, distribution and preservation of information. In addition to making important public information available directly to individuals, information flow improves when credible intermediaries help people to discover, gather, compare, contextualize and share information.

- **Strengthening the *capacity* of individuals to engage with information.**
  Attending to *capacity* means that all people have access to the tools they need and opportunities to develop their skills to use those tools effectively as both producers and consumers of information. Everyone in a democracy should be able to communicate their information, creations and views to others. The Commission envisions actions that expand access to information and communications technologies, create more effective and affordable use of existing technologies, and foster lifelong learning at all levels and in multiple settings.

- **Promoting individual *engagement* with information and the public life of the community.**
  Promoting *engagement* means generating opportunities and motivation to engage. The Commission envisions actions for engaging young people more deeply in the lives of their communities. It also envisions enabling communities to capitalize on the creativity and technological skills of young people and other segments of the community who may otherwise be overlooked or underengaged. Finally, the Commission encourages actions that empower citizens, both individually and in groups, to assume greater responsibility for community self-governance. This includes local community activism around access to information as a public need.

The Commission believes that the vigorous pursuit of these objectives would help produce what truly deserve to be called "informed communities." In such healthy democratic communities:

- **People have convenient access to both civic and life-enhancing information, without regard to income or social status.**

- **Journalism is abundant in many forms and accessible through many convenient platforms.**

- **Government is open and transparent.**

- **People have affordable high-speed Internet service wherever and whenever they want and need it.**

- **Digital and media literacy are widely taught in schools, public libraries and other community centers.**

- **Technological and civic expertise is shared across generations.**

- **Local media—including print, broadcast, and online media— reflect the full reality of the communities they represent.**

- **People have a deep understanding of the role of free speech and free press rights in maintaining a democratic community.**

- **Citizens are active in acquiring and sharing knowledge both within and across social networks.**

- **People can assess and track changes in the community's information health.**

An informed community would regard the health of its information environment as being as central to community success as the quality of its water system or electrical grid.

It would protect that health by persistent and simultaneous focus on issues of information availability, citizen capacity and public engagement.

Clear strategies and smart choices can produce a revolution in civic engagement, government openness and accountability, and economic prosperity.

# PART II
# Commission Findings and Recommended Strategies

# Commission Findings and Recommended Strategies

## A. Maximizing the Availability of Relevant and Credible Information

To lead full lives in America's democratic republic, citizens need two kinds of information: civic information and life-enhancing information. These may come from the same sources or through the same media. The same information sometimes serves both purposes, but they remain distinct categories. Successful problem solving for both individuals and communities requires access to both. Yet, millions of Americans lack ready access to relevant, credible information in either or both categories.

Salvador "Chava" Bustamante is a former labor organizer currently working with the California organization Strengthening Our Lives. SOL promotes the involvement of Latinos in politics. As a speaker at the Commission's September 8, 2008, public forum, Mr. Bustamante highlighted the dual nature of the information people need to live as successful citizens in a democratic community. He said:

> Fifteen years ago, I became a citizen, and I have been voting in every election. The reason I do it is because I want to participate in all the decisions that affect my life and the life of my community.... But being part of a democracy to me means more than one man or woman equals one vote. Democracy to me means making available all the opportunities in our society to as many people as possible all so we all can prosper.... Democracy is giving everybody an opportunity to better their lives.

*Civic and social information* is the information people need to "participate in all the decisions that affect . . . the life of [a] community." People need to know their rights and how to exercise them. They need to know how well public officials and institutions function. They need the underlying facts and informed analysis about the social, economic, political and cultural factors that shape the community's challenges and opportunities. They need news.

But, as Mr. Bustamante emphasized, democratic citizens also need *life-enhancing information*. This is information related to people's personal welfare and ambitions—how to protect and advance their health, education, and economic position. Members of underserved populations have a special need for information about available services that can benefit them and their families. Mr. Bustamante's straightforward testimony made the point poignantly. Speaking of his own life in the United States, he said, "Personally, I feel like I wasted a lot of time trying to find information about how to reach my goals. I know that if I would have had access to information about how to get my GED or training opportunities for a better job, I probably would have continued my education rather than working in the fields for 12 years." Many Americans share Mr. Bustamante's experience or something like it.

### Information Ecologies

In terms of serving these two distinct information needs, every local community offers a specific information ecology. Its environment will include people interested in finding things out and sharing what they know. It will include people who know how to access at least some of the facts that community members need.

> Every local community offers a specific information ecology.

The community will have formal and informal networks for people to exchange knowledge, ideas, opinions, and perspectives. It will have organizations that generate and transmit news and information. It will have institutions that help people sort through the overwhelming torrent of words, symbols and ideas bombarding them daily. Virtually everyone will be involved in creating and receiving information.

But, as the Commission heard frequently, not all information ecologies are equally effective. Few work equally well for all community members. Some communities and their citizens are conspicuously better off than others.

## Communities Need Strong Information Intermediaries

The problem of information access is not a problem of volume. People are frequently awash in information, but they are desperate for trusted assistance to help make sense of the information they have. Everyone depends to some extent on intermediaries to help acquire, verify, select, and make sense of information. The range and quality of intermediaries will always be central to a healthy information ecology. This is true for both civic and life-enhancing information.

**Libraries** are vital actors on this stage. There are 9,198 public libraries in the United States, with over 16,500 outlets. Americans use them. Visits to public libraries totaled 1.4 billion in 2005. The circulation of materials topped two billion items.[18] Over 68 percent of American adults today have a library card. This is the highest number since the American Library Association began tracking this statistic in 1990. Over three-quarters of all Americans used public libraries in the year leading up to a September 2009 survey.[19] Young adults between 18 and 30 are the most likely to use libraries and the most likely to say they will use libraries in the future.[20]

Moreover, public libraries increasingly emphasize civic and media training and serve as key centers for community dialogue. Yet, public libraries are typically strapped for resources. A 2006 study by the ALA showed that many libraries sustained deep cuts in fiscal years 2003, 2004, and 2005.[21] As tax revenues dwindle, many libraries are having to cut hours and programs just when they are most needed.

**Higher education institutions** are also key information intermediaries. They have become increasingly important as sources of expertise and talent for social and economic development. This is dramatically evident in the evolution of land grant university extension services. No longer does "extension" signify a lonely agent driving an aging station wagon out to share crop information with area farmers. Many extension programs offer consulting services for small towns and rural areas doing strategic planning for economic growth and environmental sustainability. They sponsor public health programming and financial counseling. They publish online agricultural newsletters.

These and similar programs are evident across the full range of higher education. From the largest research universities to America's more than a thousand community colleges, the best of the higher education sector is translating faculty teaching and research into practical resources for individuals and communities.

The **nonprofit sector** is also likely to provide important information services. Local foundations and other nonprofit initiatives—for example, America's 15,000 senior centers—frequently channel information to community residents about issues of health, education, and economic opportunity. The Internet has been a boon to such activity. Even very low-cost, non-interactive Web sites may function effectively to deliver basic information to people looking to address personal and family issues.

## Journalism Is Essential to Community Health

Journalists are key intermediaries in terms of local news and information flow. The Commission understands journalism broadly to encompass "the gathering, preparing, collecting, photographing, recording, writing, editing, reporting, or publishing of news or information that concerns local, national, or international events or other matters of public interest for dissemination to the public."[22]

> How can we advance quality, skilled journalism that contributes to healthy information ecologies in local communities?

Throughout the twentieth century, the practice of journalism found numerous outlets. Mainstream daily newspapers, community weeklies, the ethnic and alternative press, private and public radio and television, and cable news organizations have all been part of the mix. These media are now joined by an expanding array of online sources. Some new media resemble their pre-digital forebears. Others more closely resemble social networking sites and collaboratively gather, edit, and disseminate information.

During the months of Commission deliberations, near-daily news stories detailed the financial difficulties of metropolitan daily newspapers. Headlines report newspaper company bankruptcies, the shutdown of some newspapers, and threats to close others. The newspaper industry lost 100,000 jobs over the last decade, although this figure is hard to evaluate without knowing how many of those were journalists. The Project for Excellence in Journalism estimates that, from 2001 to the end of 2009, the total job loss among newspaper journalists will likely pass 14,000. That is roughly 25 percent of the industry's news workforce lost in nine years.[23] It is no wonder that "whether and how to save newspapers" are questions much discussed across the blogosphere.

The Commission agrees there is serious cause for concern. Newspapers may have their shortcomings, but in many communities, they have been for a century or longer the primary source of fair, accurate and independent news. They are usually the major provider of "beat" and investigative journalism. They often set the news agenda for other community outlets, including both broadcast and new media. They have been critical to how cities, towns and regions understand themselves and their circumstances. Television and radio are also critical news sources, but are unlikely to offset fully any drop that local communities experience in original, verified newspaper reporting. That is because the average radio station provides under an hour of daily news coverage,[24] and television stations, even as they increase their news coverage, are doing so with fewer and less experienced journalists on staff.[25]

From the standpoint of public need, however, the Commission believes that the challenge is not to preserve any particular medium. It is to promote the traditional public service functions of journalism. The key question is, "How can we advance quality, skilled journalism that contributes to healthy information ecologies in local communities?"

> Hundreds, if not thousands, of American communities receive only scant journalistic attention on a daily basis, and many have none.

## The Changing Face of Journalism

Journalistic institutions do not need saving so much as they need creating. The 2007 Newspaper Association of America count of daily newspapers in the United States was 1,422. At the same time, there are 3,248 counties, encompassing over 19,000 incorporated places and over 30,000 "minor civil divisions" having legal status, such as towns and villages.[26] It follows that hundreds, if not thousands of American communities receive only scant journalistic attention on a daily basis, and many have none. Even accounting for community weeklies—a 2004 survey identified 6,704 such papers nationwide[27]—it is likely that many American communities get no attention from print journalism at all. Joe Hansen of Montana's Big Timber News Citizen Newspaper Group and the Executive Director of the Western EMS (Emergency Medical Services) Network, told the Commission that no one should assume that local media in smaller towns cover a larger percentage of the community's relevant events. Coverage falls short everywhere.

The Commission applauds efforts throughout the country to find new solutions and business models to preserve valued journalistic institutions and create new ones. We recognize there is a transition underway requiring fresh thinking and new approaches to the gathering and sharing of news and information.

Network technology may have hastened the decline in revenues to existing mass media institutions. But that same technology can lead to a new ecology of journalism in which reporters and their publics intermix in new ways.

> A next stage is emerging with new forms of collaboration between full-time journalists and the general citizenry.

Some journalism organizations are already using network technologies to address cuts in coverage of local news. Among the most exciting aspects of the technology revolution is the opportunity it creates for emerging concepts like networked journalism and open source reporting.[28] We have already seen the rise of "citizen journalists." These are nonprofessionals who use commonly available text, audio and video tools to create their own news stories or contribute to others. There are likewise "citizen editors," bloggers who collect news stories created by others that they believe are most interesting and relevant to a potential audience. A next stage is emerging with new forms of collaboration between full-time journalists and the general citizenry.

Networked journalism allows news enterprises to reorganize so that full-time staff members act as nodes for networks of citizen participants who cover every "beat" conceivably relevant to the news organization's audience. Through networked journalism, technology can enable a diffusion of the news-gathering functions, creating greater coverage of local affairs. Technology also permits new depth in local news. In "open source reporting," reporters, editors and large groups of users all work on the same story.[29]

## Local Nonprofits Can Also Perform Some Journalistic Functions

New, low-cost communication tools have likewise enabled non-profit organizations to undertake journalistic activity in response to the decline in local news. Muhammed Chaudhry, the President and CEO of the Silicon Valley Education Foundation (SVEF), presented one example at the Commission's September 8, 2008, forum in Mountain View, California. He related the evolution of his organization in terms that will likely sound familiar to other non-profits.

Chaudhry described the difficult information landscape his organization confronts with regard to its core focus—public education. There are 33 separate school districts in Santa Clara County, 19 in San Jose alone. As a result, according to Mr. Chaudhry, "There is no cohesion of message on public schools in general regarding their challenges, successes, or needs. There is not one body, a clearinghouse, articulating, 'Here's what our schools need; here's what our teachers need.'"

> Through networked journalism, technology can enable a diffusion of the news-gathering functions, creating greater coverage of local affairs.

At the same time, according to Chaudhry, cutbacks have diminished local media's coverage of schools. The *San Jose Mercury News* dropped from eight reporters covering education to three. As for television, "[t]here are four major networks that cover the entire Bay Area population, which now exceeds six million people," he continued. "Providing strong localized coverage of our schools? Impossible."

Mr. Chaudhry then offered a brief snapshot of the information opportunity his organization saw amid its complex information ecology:

> If we want to engage citizens in the process of change in our education system, we must do three things: inform, inspire and involve. We must inform the public of the challenges and opportunities our schools face. We must inspire them to believe that there are real solutions to our education problems and that through their action, we can implement those solutions. Finally, we must involve the public into action on the information we are able to deliver to them.

> Informing comes first. And that comes by getting information out. Where we've seen traditional media struggle, SVEF believes there is opportunity . . . . An organization like SVEF takes on the role of 'reverse reporting.' . . . We can create a constant stream of information that an outlet, like the *Mercury News*, can use to draw readers. We can make it topical and compelling to readers, but we also ensure that it is localized and thus relevant to our audience. The *Mercury News*, in our example, plays less of a role of 'reporting' information and more the role of 'connecting' readers to information.

In short, the SVEF is contributing to journalism.

Situating journalistic activity in nonprofit advocacy organizations raises critical ethical questions. Independence of judgment and sensitivity to conflicts of interest are hallmarks of the best journalism. Because nonprofit advocacy organizations are committed to mobilizing public support for their particular issues, striving for dispassionate reporting will pose important issues. With appropriate training and resources, however, local nonprofits can help their communities by "filtering, integrating, analyzing, contextualizing, and authenticating information"[30] that is relevant to community welfare.

Such new intermediaries will likely supplement, rather than displace conventional news organizations and new forms of for-profit news. The traditional values of journalism cannot be completely outsourced. The Commission expects that news gathering and dissemination will have many new players, both public and private, performing journalistic functions. And in that process, the role and values of traditional journalism will be extremely important.

Just as networked journalism is creating new models for collaboration, new models for independent journalism are also emerging. Some new initiatives are taking advantage of opportunities arising from the economic crisis facing news organizations. For example, there are new projects that simultaneously create opportunities for aspiring young journalists, while reclaiming the experience and talents of mid-career journalists who have lost their jobs at local journalistic enterprises.

## Public Access to Data Requires Government Support and Cooperation

A key variable affecting the information ecology will be the ease of getting relevant facts and data. Government is a central actor in determining that access. Government agencies create and maintain information about government activity. They know how citizens can acquire government services most easily. Government can provide leadership in offering access to information in forms that are usable by everyone, including accessible media for people with disabilities.[31]

Governments are also frequently the chief collectors of social information. They track where people live and work, how schools perform, what houses are worth, which businesses are opening and closing, public health patterns, and much more. Sharing this information with the public (while respecting privacy and confidentiality where appropriate) can empower individuals and groups to spot new business opportunities. It can reveal avenues for local improvement. It can trigger important stories in local media.

Governments could do much more to make available the civic, social and economic data they possess. The coalition behind 2009 Sunshine Week, a national initiative to spur public dialogue on open government and freedom of information issues, sponsored a national survey to determine the online availability of 20 categories of information.[32] As the organizers explained, "The categories for the survey were selected for generally serving the overall public good—the kind[s] of information people need for their own health and well-being and that of the community." Only half the states offer even a dozen of these categories online. One state— Mississippi—offered only four. In the case of campaign finance reporting, one observer calls the current pattern "failure by design." Many states allow candidates to use paper forms to report contributions and expenditures. This significantly impairs government's capacity to easily share public information. As a result, the public does not gain timely access to the information.

Government performance also falls short in the preservation and handling of public records. Every state has open records laws. So does the federal government. Yet, freedom of information audits routinely show failures to turn over documents that the law requires agencies to disclose. Compliance is too often slow and uncooperative. Both journalists and members of the public sometimes encounter demands for extraordinary fees.

Citizens frequently have no obvious recourse short of litigation when they are denied their information rights. The Commission supports the efforts of local nonprofit groups to gather and disseminate a wide variety of data on community conditions. Government could support and facilitate disclosure efforts far more aggressively.

**The bottom line for local communities is that people need relevant and credible information in order to be free and self-governing.**

**THE COMMISSION CONCLUDES:**

- **The current economic challenges facing private news media could pose a crisis for democracy.**

- **Public media should provide better local news and information.**

- **Not-for-profit and nontraditional media can be important sources of journalism.**

- **Public information belongs to the public. Government must be more open.**

- **Informed communities should be able to measure their information health.**

**THE COMMISSION RECOMMENDS:**

| 1 | **Recommendation 1: Direct media policy toward innovation, competition, and support for business models that provide marketplace incentives for quality journalism.** |
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Throughout American history, the main source of journalism has been private enterprise. The Commission does recommend below that the United States intensify its commitment to public media. But the journalism supported by marketplace incentives—including both for-profit and not-for-profit models— is likely always to provide the lion's share of original and verified reporting. The health of the private media sector is an important public-policy goal. So too is the independence of private media from governmental intervention on content grounds.

Existing companies and start-ups are busily searching for business models to sustain local news operations. Government's first role should be to let experimentation thrive. Governments should avoid regulations that distort incentives. Rules should not make investments in traditional media artificially more attractive than new ventures, or vice versa. Governments should be careful not to pose barriers to innovation. Agencies should regularly re-examine whether rules serve the proper ends of public policy in light of changing economic and technological conditions. This includes rules regarding property rights, ownership limits, and the legal obligations of media firms.

In the Commission's view, the central tenets of media policy should be innovation and competition. Federal agencies that regulate electronic media should make it possible for as many economically viable competitors as possible to gain access to local audiences. It is important to improve citizen access to the information sources of their choice.

Policy makers should promote competition both within and between different media platforms. There should be sufficient competition among providers of new and traditional information services to meet the needs of information consumers with the greatest effectiveness and at lowest cost.

While the Commission clearly does not invite governments to meddle in the practice of journalism, it is aware of a number of proposals to aid journalistic organizations. A persuasive case has not been made to the Commission for direct subsidies to private media enterprises. But there is a social value of journalism. So, without recommending any particular measure, the Commission suggests that governments explore modest viewpoint-neutral tax and regulatory changes to help media ease the burden of rapid change amid financial turmoil.

For example, state and federal governments could include a state sales tax exemption for print and online journalism subscriptions, or a federal tax credit for the support of investigative journalism.[33] Other changes to federal tax law could include "permissive joint operation of for-profit and not-for-profit journalism enterprises within the federal tax exemption regime, amendment of the deduction limitations for contribution of a newspaper business to a not-for-profit organization, deferral of gain in taxable acquisitions of newspapers by not-for-profit organizations, and permissive use of tax-exempt conduit bond financing in such acquisitions."[34] Not-for-profit news organizations could also be strengthened if their advertising revenues were at least partially tax-exempt and if rules against engaging in unrelated businesses were relaxed. Without endorsing these measures, the Commission commends them for public dialogue.

Local governments should take note of the civic value of private investment in information infrastructure. Public policy should encourage local entrepreneurs to fill local information voids or provide alternatives in local information flow. Community-focused venture funds and tax incentives may be appropriate to spur local entrepreneurship in media and technology applications with civic virtues.

Innovation, competition, and marketplace incentives will be critical to the growth of both for-profit and not-for-profit models. Foundation funding will undoubtedly help to launch and sustain many significant local efforts. Still, the most successful nonprofits are likely to be those that succeed at developing multiple streams of revenue that are fed back into the organization. The Commission thus expects that public policies that support market incentives for the production of quality journalism will serve the interests of both for-profit and not-for-profit models.

| **2** | **Recommendation 2: Increase support for public service media aimed at meeting community information needs.** |

Like private media, public broadcasting in the United States has a mixed history of providing local news and information. On the one hand, a 2007 Roper opinion poll found that nearly half of all Americans trust the Public Broadcasting Service "a great deal," higher than the numbers rating commercial television and newspapers.[35] On the other hand, with some notable exceptions, public broadcasting in America has been widely criticized as being insufficiently local or diverse. Public stations do not have a strong record of spearheading local investigative journalism, and most public radio broadcasters have little or no local news reporting staff. Finally, again with some promising exceptions, local public stations have failed to embrace digital innovations as a way to better connect with their communities.[36]

The American commitment to First Amendment values has long bred an appropriate caution against reliance on government as a sponsor of news and information. But public broadcasters in the United States have demonstrated their capacity to deliver high-quality, fair, and credible news and information programming free of government interference.

Public broadcasting needs to move quickly toward a broader vision of public service media, one that is more local, more inclusive, and more interactive.

Public broadcasting in the United States has added a context and fullness to news and information during the past 40 years. But it has fallen short of its promise. Breakthroughs in children's programming have not been mirrored in the information field. Simply put, our public media do not fully reflect the public nor engage with it sufficiently on the community level.

It is important now for public policy in the digital age to play a more determined role in enhancing the performance of public broadcasting in local news.

Public broadcasting needs to move quickly toward a broader vision of public service media, one that is more local, more inclusive, and more interactive. This means pursuing greater integration of new technologies and communication practices with traditional forms of broadcasting. It means using digital platforms to engage local institutions effectively in the public sphere. To advance this, government as well as private sector donors should condition their support of public media on its reform. They should support the creating, curating, and archiving of public media content on the community level.

The Commission agrees with the recent conclusion of American University's Center for Social Media that "[w]hat is needed for the future of high-quality [public media] content is at least partial taxpayer support for the many existing operations and for innovative new projects."[37] Other countries with similar commitments to freedom of speech and of the press make much larger per capita contributions to the financing of public media. The United States federal government, for example, spends $1.35 per capita for public media, as compared to $22.48 per capita in Canada and $80.36 per capita in England.[38] A modest increase in tax-supported revenues would not compromise the American model of combined government seed money and local contributions, and it would recognize that seeding local public media makes sense in the digital age. Accordingly, Congress should increase the funding available for the transformation and localization of America's public media.

| 3 | **Recommendation 3: Increase the role of higher education, community and nonprofit institutions as hubs of journalistic activity and other information-sharing for local communities.** |
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Nonprofit institutions are reservoirs of expertise. Local community organizations, such as community development organizations, churches, fraternal organizations, and chambers of commerce, are critical in the transmission of information. All should make a priority of sharing information within the community and providing the tools necessary to turn information into knowledge.

This is especially important for otherwise underserved populations. It is critical that all segments of the community be able to locate useful online content that is directly relevant to their needs and interests. Whether the institution provides life-enhancing or civic information, it can strengthen the decision making of community members by providing information that is relevant, accurate, and

accessible. A genuine community effort to engage all neighborhoods in effective information flow could entail a variety of information portals run by different not-for-profits.

An especially worthy priority for nonprofit institutions, including foundations, may be financing short-term fellowships for journalists covering state and local government. Given the connection between serious news coverage of government and public accountability, the not-for-profit sector should be especially attentive to addressing reduced coverage of statehouses across the country.

Institutions of higher learning should likewise regard promoting community information flow as central to their mission. Community colleges may have especially strong relationships with adult and working-class students who can be involved in community-based projects. Faculty, staff, and student bodies can enrich a community's knowledge base in many ways. Universities should reward faculty members who share their expertise through public outreach initiatives. They should promote the dissemination of research-based knowledge in all fields and set up or contribute to online digests of research findings.

**4**     **Recommendation 4: Require government at all levels to operate transparently, facilitate easy and low-cost access to public records, and make civic and social data available in standardized formats that support the productive public use of such data.**

Public information belongs to the public. Governments at all levels should adopt a theme implicit in the remarks of many Commission witnesses: "Make information available; people will find ways to use it productively."

## Open Government Laws

In this digital age, governments should define public information as broadly as possible, with only very narrow, specific exemptions. Governments at all levels should ordinarily collect data electronically and in standardized formats. Respecting individual privacy and other legal requirements of confidentiality, governments should then place their public information online in standardized formats, optimized for search with appropriate tags. In short, information should be available in ways that people can remix, mashup, and circulate for private or public

purposes. Achieving this level of openness is likely to entail major investments in the information infrastructure supporting government at the local and state levels. Major technology companies could make an enormous contribution to the public interest by volunteering expertise and facilities that could help accomplish this ambitious objective.

Federal, state, and local jurisdictions should clearly identify and train employees responsible for handling records requests. Laws should penalize government agencies and their employees who violate their own public information rules. Openness requirements should apply to all public bodies and government contractors. Finally, governments should provide for independent oversight of their transparency efforts.

### Transparency in Government

The public's business should be done in public. Open-meetings laws should require that all public agencies conduct their deliberations and take their actions openly. The public should be able to witness and participate in the process of governing. If possible, governments should allow citizens to participate in hearings or other fact-gathering processes electronically.

At every level, legislative bodies should operate with genuine transparency. Members of the public should be able to track and comment upon successive versions of proposed statutes and ordinances, whether federal, state, or local. Except in genuine emergencies, legislators should not vote on proposals that have not had public vetting with a meaningful opportunity for public comment.

> The public's business should be done in public.

Public trust in the judicial system likewise requires open courtrooms. In criminal and civil matters, any closing of proceedings or sealing of records should meet a high standard in terms of the public interests protected. Court proceedings, particularly at the appellate level, should be open to cameras.

**5** | **Recommendation 5: Develop systematic quality measures of community information ecologies, and study how they affect social outcomes.**

Communities lack good tools to assess the quality of local information ecologies. There are no widely accepted indices for comparing different communities' ecologies or determining whether information flow within a particular community is improving or degrading. Communities need measures of both kinds. If activists, policy makers, and the general public had more concrete ways of describing, measuring, and comparing the systems of community news and information flow, it would be much easier to mobilize public interest around community information needs.

Communities can begin to lay the groundwork for such indices by conducting systematic self-assessments of their information environment. As a possible starting point for such an assessment, the Commission has composed a Healthy Information Community checklist (Appendix I) that local leaders can use. The regular compilation of data can begin with charging a diverse and inclusive community task force to take stock of the local information environment and offer a public report.

## B. Enhancing the Information Capacity of Individuals

A community may be awash in timely and relevant information, yet not get maximum benefit from its information richness. That is because people cannot fully utilize the information available to them without the tools to access it and the skills to use those tools effectively. America already faces serious literacy challenges with regard to making sense of text. The proliferation of digital media raises further challenges with regard to understanding and communicating through new and often complex outlets.

America's current media landscape boasts an astonishing array of technological innovation for the creation, analysis, reshaping, and distribution of information:

- **The online local news and information ecology now includes local news aggregation sites, hyper-local information aggregators, citizen-journalism sites, local social networking, and place-specific blogs.**

- **The blogosphere and other social media platforms have emerged as powerful vehicles for individual and community expression, for community-building, for news aggregation and interlinking, and for community discussion.**

- **Tools are becoming available to improve the journalistic quality of blogs and to link them to sources of advertising support.**

Moreover, the pace of technological innovation is matched by cultural innovation in the use of new tools for civic and social purposes. Prominent examples include microblogging as a tool for emergency response and journalistic reporting, online maps as a tool for community organizing, and mobile telephony as the basis for citizen journalism.

*Public Media 2.0*, a compelling recent report by the American University Center for Social Media, identified five critical ways—choice, conversation, curation, creation, and collaboration—in which new tools and social practices are changing people's media habits:

> **Choice.** Rather than passively waiting for content to be delivered as in the broadcast days, users actively seek out and compare media on important issues through search engines, recommendations, videos on demand, interactive program guides, news feeds, and niche sites. . . .

**Conversation.** Comment and discussion boards have become common across a range of sites and platforms, with varying levels of civility. Users are leveraging conversation tools to share interests and mobilize around issues. Distributed conversations across online services . . . are managed via shared tags. Tools for ranking and banning comments give site hosts and audiences some leverage for controlling the tenor of exchanges. . . .

**Curation.** Users are aggregating, sharing, ranking, tagging, reposting, juxtaposing, and critiquing content on a variety of platforms from personal blogs to open video-sharing sites to social network profile pages. Reviews and media critiques are popular genres for online contributors, displacing or augmenting other genres, such as consumer reports and travel writing, and feeding a widespread culture of critical assessment.

**Creation.** Users are creating a range of multimedia content (audio, video, text, photos, animation, etc.) from scratch and remixing existing content for purposes of satire, commentary, or self-expression, breaking through the stalemate of mass media talking points. Professional media makers are now tapping user-generated content as raw material for their own productions, and media outlets are navigating various fair use issues as they wrestle with promoting and protecting their brands.

**Collaboration.** Users are adopting a variety of new roles along the chain of media creation and distribution—from providing targeted funds for production or investigation to posting widgets that showcase content on their own sites to organizing online and offline events related to media projects to mobilizing around related issues through online tools, such as petitions and letters to policymakers. "Crowdsourced" journalism projects now invite audience participation as investigators, tipsters, and editors. So far, it is a trial-and-error process.[39]

The Commission concurs with the authors of this report that "[t]hese five media habits are fueling a clutch of exciting new trends, each of which offers tools, platforms, or practices of enormous possibility."[40]

It is obvious, however, that these trends help people only if they have access to necessary hardware, software, and Internet connectivity, and have the skills to use them. Americans are potentially excluded from these trends by at least three overlapping "gaps."

First is a **broadband gap**. Today, broadband Internet service is insufficiently defined by the federal government at the lowest common denominator, including speeds as slow as 200 kilobits per second. That speed is inadequate, for example, to transmit video programming at a level of quality comparable to video that consumers already receive over today's cable or satellite systems. Quality video on that order would require Internet speeds at least 10 times faster than the lowest speed the current FCC standard accepts as "broadband." Further, only about 25 percent of American households with annual incomes below $20,000 have a broadband connection even as currently defined.[41] Thirty-seven percent of adult Americans still do not subscribe to broadband services at home,[42] and roughly one-third of rural American communities cannot subscribe to broadband services at any price.[43] As a consequence, millions of Americans are simply being left out of the communications revolution.

> Roughly one-third of rural American communities cannot subscribe to broadband Internet services at any price . . . . Only about 25 percent of American households with annual incomes below $20,000 have a broadband connection.

Within the broadband gap, there are two especially troubling and widening geographic divides. One is between some communities in the United States and otherwise comparable communities in other countries that offer superior broadband service to a larger percentage of their populations. The other is between rural and urban Americans. Several developed countries from Asia and Europe offer significantly faster average broadband services than are available in the United States,[44] threatening to put even our high-penetration cities at an economic disadvantage.

At the same time, within America, the broadband gap often hits poorer and more rural states hardest. Only about a third of the populations of Mississippi and West Virginia have broadband at home, for example. Median household income alone explains nearly three-quarters of the variation among states in rates of home broadband adoption.[45]

Second is a **literacy gap**. According to the 2003 literacy survey of the National Center for Education Statistics, 43 percent of adults fell short of the standard for "intermediate" prose competence. They were unable to read and understand "moderately dense . . . prose texts." They fell short in "summarizing, making simple inferences, determining cause and effect, and recognizing the author's purpose." This means, for example, that more than four in ten adults would have trouble "consulting reference materials to determine which foods contain a particular vitamin."[46]

Statistics on high school graduation rates reinforce this discouraging picture. Across the country, roughly 30 percent of high school seniors fail to graduate on time, with graduation rates in some major cities at barely 50 percent overall.[47] Of the 13 percent of adult Americans scoring at "below basic" literacy, the lowest standard on the NCES survey, fully 55 percent had never graduated high school.[48] This fact strongly supports the intuitive connection between schooling and literacy. To the extent local information flow remains largely text-based, adult literacy and high-school dropout rates pose serious challenges. Indeed, the increasing technical complexity of public issues in areas like health, the environment, and telecommunications is likely to intensify the civic disadvantage of citizens with limited text literacy.

These two gaps combine to reinforce what leading media scholar Henry Jenkins has dubbed the "**participation gap**." This is the gap "in social experiences between [people] who have a high degree of access to new media technologies at home and those who do not."[49]

As explained by Professor Jenkins, "There's a huge gap between what you can do when you've got unlimited access to broadband in your home and what you can do when your only access is through the public library, where there are often time limits on how long you can work, when there are already federally mandated filters blocking access to certain sites, when there are limits on your ability to store and upload material, and so forth."[50] Having a home computer correlates with higher rates of school enrollment and graduation rates, even controlling for other factors associated with levels of educational attainment.[51] Home Internet use also results in higher standardized reading test scores for children of low-income families, without regard to the age of the children involved.[52]

Those not participating confront both reduced digital literacy—the understanding of and capacity to use new information technologies—and reduced media literacy—the capacity to access, analyze, evaluate, and create messages in a variety of media.

Having a home computer correlates with higher rates of school enrollment and graduation rates, even controlling for other factors associated with levels of educational attainment.

The Commission concludes that anyone caught on the wrong side of these three gaps runs a significant risk of being relegated to second-class citizenship. Without public-policy intervention, people who are currently disenfranchised are unlikely to "catch up." Those Americans advantaged by geography and personal resources will continue to pursue the cutting edge in both technology and training. Without public action, however, there will continue to be gaps between the information haves and have-nots. These threaten to create a two-tiered society with limited democratic possibilities for too many individuals and communities.

**In short, people need the tools, skills, and understanding to use information effectively.**

**THE COMMISSION CONCLUDES:**

- **All people have a right to be fully informed.**

- **There need be no second-class citizens in informed communities.**

- **Funding to meet this goal is an investment in the nation's future.**

- **Americans cannot compete globally without new public policies and investment in technology.**

| 6 | **Recommendation 6: Integrate digital and media literacy as critical elements of education at all levels through collaboration among federal, state, and local education officials.** |
|---|---|

Successful participation in the digital information ecology entails two kinds of literacy, or skill sets. One is typically called "digital literacy," learning how to work the information and communication technologies of our networked age and understanding the social, cultural, and ethical issues surrounding those technologies. The second is "media literacy," the ability to access, analyze, evaluate, and create the information products that media disseminate.

It may be tempting for teachers and administrators who are themselves uncomfortable with new media to view digital and media competencies as "add-ons" to basic learning in "reading, writing, and arithmetic." They are, however, new forms of foundational learning.

Although virtually every school in the United States is connected to the Internet, many local communities have not integrated either digital or media literacy into their K–12 curricula. The Internet is offered primarily as a research tool, and students' encounters with the Internet are framed by issues of reliability and censorship. The situation is often little better at the college level and for adult education generally. There may be more chances to learn the tools, but only rare opportunities to explore their use and implications more deeply. In many communities, informal adult-education opportunities to develop digital and media literacies are often wildly oversubscribed, if they exist at all.

The future of American democracy demands that we educate our citizens better, starting at an early age:

> With an ever-increasing range of media messages in so many forms, students need to understand the process by which authors convey meaning about socially constructed experience. The use of digital media and popular-culture texts not only stimulates young people's engagement, motivation, and interest in learning but enables them to build a richer, more nuanced understanding of how texts of all kinds work within a culture.[53]

It may be tempting for teachers and administrators who are themselves uncomfortable with new media to view digital and media competencies as "add-ons" to basic learning in "reading, writing, and arithmetic." These competencies are, however, new forms of foundational learning.

> The federal government should launch a national initiative to assess the quality of digital and media literacy programs in the nation's schools.

The consequences of neglecting this challenge can be dire. Students who are deeply immersed in the world of online communication outside of school may find classrooms that marginalize new technologies both tedious and irrelevant. For students who lack online access at home, schooling that fails to provide digital and media skills threatens to leave them at a profound social, economic, and cultural disadvantage.

The federal government should launch a national initiative to assess the quality of digital and media literacy programs in the nation's schools. This should include efforts made in institutions of higher education to prepare future teachers for the new literacies. The survey should determine what schools are teaching their students and measure the needs for both equipment and teacher training. It is also critical to evaluate the learning opportunities available to Americans who have already graduated high school and to promote best practices for education at all levels to help Americans strengthen their digital literacy. Only a combination of national leadership and state and local initiative can successfully produce the reforms needed.

<table>
<tr><td>**7**</td><td>**Recommendation 7: Fund and support public libraries and other community institutions as centers of digital and media training, especially for adults.**</td></tr>
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America's libraries need sufficient funding to serve as centers for information, training, and civic dialogue. Public libraries are located in nearly all communities in the United States. Most of them are wired for Internet service. Nearly all offer public Internet, and almost three-quarters are the only providers of free public computer and Internet access in their communities.

These libraries need additional resources to serve the public's digital needs. Inner city libraries frequently have extensive waiting times for computer use. Libraries need to support the software programs necessary to enable neighborhood youth to work on their homework assignments.

They also need the resources and support to work effectively towards improving digital literacy. For example, the Commission proposes that funds should be available to public libraries for mobile teaching labs to provide digital literacy instruction to members of the public. Eligibility to receive a mobile teaching unit could be based on E-rate criteria—that is, the criteria already used to qualify schools and libraries for discounted telecommunication services under the FCC-directed Universal Service program. Approximately 10,000 public libraries applied for E-rate discounts in 2008, and E-rate funds might also be made available for a mobile teaching initiative. This approach would ensure that the communities that most need the mobile teaching units would have priority consideration.[54]

Libraries need additional resources to serve the public's digital needs.

The Commission also endorses digital literacy funding for community institutions, such as community centers and community-based development organizations. These organizations provide crucial services in the area of digital and media training, and can be useful sites to engage even moderately Internet-capable adults in sharing their knowledge with those less skilled. Community organizations that already serve as trusted information providers to underserved populations are well situated to help integrate their clients more effectively into the community's information networks.

| **8** | **Recommendation 8: Set ambitious standards for nationwide broadband availability and adopt public policies encouraging consumer demand for broadband services.** |
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The Commission endorses the view of the Federal Communications Commission that all Americans, urban and rural, should have affordable access to robust broadband services. However, the federal government's current embrace of broadband services, including economic stimulus for rural broadband services improvements, is insufficient to ensure the United States will reach full-fledged universal digital citizenship.

All Americans should have access to high-speed Internet service wherever and whenever they need it. In part, this means wireless access that can extend beyond home, work, and community centers. In their homes, however, consumers should have access to affordable Internet service capable of receiving and transmitting video programming with picture and sound quality comparable to the range of high-definition programming they receive over cable and satellite television systems in most American communities. To this end, the Commission endorses the government's use of financial incentives to help spur broadband deployment in areas where it has lagged because of market economics. The cost of such system upgrades for wired and wireless Internet services will likely be counted in the tens of billions of dollars. But not to make such an investment, we believe, will cost the nation significantly more in the years to come in lost competitiveness worldwide.

Government and commercial telecommunications firms have various levers to accomplish this goal (including subsidies and regulatory policies), but the Commission does not recommend using any one of these over the others. We simply note that many nations that lead in broadband deployment have used strategic incentives to encourage development of high speed Internet service. Toward this end, the federal government should determine systematically the kinds of Internet connectivity American households have, looking at speed, cost, the service providers involved, and whether access is wire-based or wireless.

If all Americans regardless of age, ethnicity, income or geography believe that broadband service will genuinely help them to address issues of everyday life, they will likely use that service in greater numbers.

Communities cannot realize the full benefit of broadband deployment, however, unless people actually connect to broadband networks. The Commission thus encourages public support for the development of applications that will make broadband service more attractive. If all Americans regardless of age, ethnicity, income, or geography believe that broadband service will genuinely help them to address issues of everyday life, they will likely use that service in greater numbers.[55]

The Commission endorses these suggestions as elements of an overall leadership strategy to make broadband adoption as rewarding and universal as possible.

<table>
<tr><td>**9**</td><td>**Recommendation 9: Maintain the national commitment to open networks as a core objective of Internet policy.**</td></tr>
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The early architecture of the Internet supported untold user innovation, yielding vast social benefits. Under the so-called "end-to-end principle," computing intelligence resided chiefly with users at the ends of the network. The owners and operators of the networks exerted little control over the flow of data. Over time, however, network owners and operators asserted that their active management of networks would also yield benefits, especially with regard to network security and the ability to support new services. The policy challenge is to balance these network benefits against the potential risk to innovation. It is critical that network practices do not undermine the overall environment for innovation.

The Federal Communications Commission's embrace of the four Internet freedoms identified by then-FCC Chairman Michael Powell well illustrates the federal commitment to openness. The first freedom is the right to access content of the consumer's choosing. The second is the freedom to use all lawful applications. The third is the freedom to attach personal devices that do no harm to the network. Chairman Powell identified the fourth freedom as the right to receive full and accurate information about one's service plan. The FCC broadened that freedom into an expansive right to competition. These principles are widely accepted, and the FCC should vigorously enforce them in a way that assures the public open access to the content and services they desire. The Knight Commission regards the openness of networks as essential to meeting community information needs. Legislators and other policy makers should remain vigilant and committed to maintaining openness.

**10**  **Recommendation 10: Support the activities of information providers to reach local audiences with quality content through all appropriate media, such as mobile phones, radio, public access cable, and new platforms.**

The uses of new technologies are frequently so astonishing that it is easy to forget about the importance of *all* information and communications technologies. Print is not dead. Broadcast and cablecast, for many Americans, remain the primary sources of news and information. Mobile phones are ubiquitous. New technologies tend to supplement, rather than replace old technologies. Public policy should enable local communities to capitalize on all available tools for connecting citizens to local information flows.

Those who regulate broadcast and cable should prioritize policies to allow as much news and information as possible to reach local audiences via these channels. The Commission notes significant initiatives, such as those of Denver Open Media, Public Radio Exchange, and pegmedia.org, which are creating model programs for sharing high-quality community programming. Public, educational, and government cable channels belong in a favored tier in terms of ease of access. As much as possible, the federal government should fashion spectrum policies to accommodate low-power FM and other innovations that increase the number of voices over the local airwaves.

Community-based technology centers can provide the training and equipment for citizens to take advantage of all the available media for creating and sharing community news and information. Enhancing the capacity of individuals to produce, organize, and disseminate information should not be limited to online platforms.

## C. Promoting Public Engagement

Skilled people, appropriate technologies, and reliable and relevant information are the building blocks of a successful communications environment. What generates news and information flow in that environment, however, is not just those building blocks. It is engagement—specifically, people's engagement with information and with each other.

Engagement within a community can take infinite forms. People engage when they watch, listen to, or read the news, discuss local affairs with neighbors, attend community celebrations, and volunteer for civic projects. They engage in formal ways, such as voting and running for office. They engage in informal ways, such as writing letters to the editor or to their elected representatives or blogging. The process of engaging does not mean that everyone must be active as a citizen at every moment. Engaging does mean, however, that people regard their geographically defined communities as communities in a deeper sense. They see their neighbors as a network of shared information and sustenance bound by feelings of mutual obligation and support.

What engagement means to a democratic community is that citizens genuinely participate in self-governance. Communities thrive when citizens are motivated to accept responsibility with respect to community issues. Communities are sustained when people feel themselves empowered to organize in order to achieve positive outcomes either through their own actions or the responsiveness of their elected representatives. Information is essential to this empowerment process, and personal involvement in community issues can provide the critical context in which information becomes active.

In a democratic community, any citizen who wants to should also have opportunities to exercise vigilance over those who conduct civic affairs. The network of people who engage daily with civic information may never include everyone, but ideally, the groups of citizens who engage seriously with civic information should represent the entire community. Otherwise, community problem solving may not fully reflect everyone's interests. Engagement opportunities should not arbitrarily exclude anyone.

Engagement is important because of what its presence provides and because of what its absence portends. Engagement builds what political scientist Robert Putnam has famously called "social capital."[56] Social capital is the stock of trust, reciprocity, and habits of cooperation that allow people to collaborate successfully for common purposes. Research suggests connections between social capital and indicators of community success such as public health, economic sustainability, and low crime rates.[57]

## Strong Community Problem Solving Requires "Bridging Capital"

Putnam's work identified two kinds of social capital, "bonding" and "bridging." Bonding social capital arises *within* fairly homogenous and close-knit groups. Bridging social capital arises *among* groups. Bridging capital helps knit together different neighborhoods, different social classes, and different subcommunities as they may be defined by age, religion, ethnicity, or culture.

Where strong bridging ties exist, people maximize their prospects for exchanging information or developing information collaboratively. No one is expert in everything, but everyone is informed about some things, including their own experience. The public's diversity of information and perspective can contribute mightily to a community's sense of shared identity and collective knowledge. When people engage across group lines, they share the diverse levels of information that all citizens possess. They inevitably strengthen a community's capacity for problem solving.

> When people engage across group lines, they . . . strengthen a community's capacity for problem solving . . . . What follows from disengagement . . . is ignorance, misunderstanding, and higher levels of social conflict.

What follows from disengagement is the flip side of these community assets. Instead of trust, there is alienation. Instead of cooperation, there is indifference. Instead of knowledge, there is ignorance, misunderstanding, and higher levels of social conflict. People do not contribute to the larger community because they do not feel a part of it. They potentially suffer not only as citizens, in their public role, but as private individuals as well. They have less information about available opportunities. They have fewer connections to address issues in their own lives. There is even evidence that reduced social capital can be injurious to personal health.[58]

Despite the vastly different demographics of Silicon Valley, the state of Montana, and the city of Philadelphia, the Commission's forum in each locale revealed a lack of, and yearning for, bridging capital. Speakers in Philadelphia addressed gaps in understanding and communication across racial and ethnic lines, and between working-class and wealthier Philadelphians. Speakers in Montana spoke of the relative "information isolation" of rural communities, including Native American communities. Speakers in Mountain View, California, addressed the need to bridge ethnic and economic subcommunities, but also gave voice to the alienation of young people.

The Commission is aware that the testimony it received represents only a slice of America's story. The consistent impression left, however, was that many Americans do not see themselves fully represented in the "mainstream" information flows of their local communities.

The witnesses who spoke to the Commission about their experiences as workers, as members of ethnic minorities, or as advocates for young people all believed that mainstream media convey too little information about—or relevant to—their subcommunities. They also see their concerns portrayed to the larger community in ways that are superficial, misleading, and negatively stereotypical. A common theme is that readers learn about poor people, labor unions, ethnic minorities, and youth only through stories framed by conflict.

Members of minority groups may engage less with mainstream media because they doubt whether mainstream media reflect the reality of their communities. Minorities own approximately eight percent of the full-power radio stations in the United States, three percent of the television stations.[59] Since 2000, minority journalists have never accounted for more than 14 percent of the total professional print journalism community, with the percentage in 2009 amounting to 13.4 percent. And more than 42 percent of print newsrooms in America employ no journalists who are African American, Asian American, Native American or Latino. Of the 6,000 journalists who lost their jobs in 2008, 854 were members of racial minorities.[60] These are stark figures considering that, within the next 35 years, it is likely that America's "minorities" will come to represent the numerical majority in the United States.[61]

Yet, it is clear that people want to engage. The impulse to share information, to create and be part of a larger information flow, is powerful across all groups in society. Raj Jayadev, a youth organizer who helped create *Silicon Valley De-bug*, a multicultural, youth-produced magazine, told the Commission that, in the current decade, "'youth organizing' and 'youth media' have become synonymous." He reported:

> Young people who are not from the dot-com fast track—having either not seen themselves in the traditional media or only saw themselves portrayed as criminals, drop-outs, or detractors to the community—have taken this work to another level through an embrace of newer technologies . . . . A consequence of not being included in the news world is an abandonment of it all together and an impulse to simply have your own.

In a similar vein, although witnesses testified to insufficient bridging between ethnic and mainstream media, ethnic media are in many ways thriving within the subcommunities they serve.

The Commission believes local communities can significantly strengthen public engagement by addressing two issues: opportunity and motivation. Because increased engagement has significant payoffs for both individuals and communities, it behooves institutions to address what makes engagement plausible and inviting to the general public, and to expand opportunities for constructive engagement where feasible.

**To pursue their true interests, people need to be engaged with information and with each other.**

**THE COMMISSION CONCLUDES:**

- **Creating informed communities is a task for everyone.**
- **Young people have a special role in times of great change.**
- **Technology can help everyone to be part of the community.**
- **Everyone should feel a responsibility to participate.**

## 11 Recommendation 11: Expand local media initiatives to reflect the full reality of the communities they represent.

Media institutions, old and new, will inevitably continue to be major players in the information networks serving local communities. As democratic institutions, they can serve their communities most effectively, however, if they reflect and help give voice to all segments of the public in the way news is gathered, analyzed, and shared. Mainstream media have an unusual capacity to foster the "bridging capital" that is critical to community welfare. This may be especially critical where communities are fragmented along social, economic, or political lines. Local media have the unique potential to enable citizens to see how life looks from the perspectives of multiple groups and to engage people in conversation across group lines.

Access to credible and knowledgeable sources from all segments of the community will be easier for newsrooms whose journalists are connected to all of a community's ethnic, social, economic, and political subnetworks. If any segment of the community is unrepresented among the people who do the work of journalism, the accuracy and credibility of that journalism suffers. Conversely, a news organization's commitment to represent the entire community can help overcome the sense of social exclusion that exists in many communities and discourages engagement.

Just as the diversity of a newsroom can bridge across a community's various constituencies, so can and should diversity in a community's media ownership. Achieving diversity in the ownership of mainstream print and broadcast media has proved a difficult challenge. Communities would benefit if the evolution of new media provided significant opportunities for minorities and other underrepresented groups to achieve a substantial ownership stake in the news and information sector.

<table>
<tr><td>**12**</td><td>**Recommendation 12: Engage young people in developing the digital information and communication capacities of local communities.**</td></tr>
</table>

Media habits of Americans vary greatly with age. Younger Americans, especially if relatively well-off, tend to integrate advanced information and communication technologies into their daily lives in ways that seem largely alien to their elders. To be an innovator in the social uses of digital media, it helps to have had early and lifelong experience. At the same time, many technologically savvy young people have little connection to the ideas and challenges of local democracy. This uneven distribution of knowledge across the generations actually creates a unique opportunity.

## Imagine a "Geek Corps for Local Democracy" where, as a post-college opportunity, American youth volunteer to help connect a physical community to the networked infrastructure.

Imagine a "Geek Corps for Local Democracy" where, as a post-college opportunity, American youth volunteer to help connect a physical community to the networked infrastructure. They would be assigned to diverse communities to help local government officials, librarians, police, teachers, and other community leaders leverage networked technology. Geek Corps participants would teach community members how to use technology. They would help local leaders to understand technological shifts and how they can leverage new technologies for community practices. Participants from all the communities involved would be connected into a national network of participants to share best practices, develop collectively usable code, and build a network of information systems for local democracy.

Programs are already underway in which high school students volunteer to help with technology efforts. But the local nature of such initiatives means that there is little coordination among communities. A Geek Corps would weave together the local and the national through networks of passionate youth. Ideally, such a program would have the same stature as the Peace Corps or AmeriCorps, such that participants would be welcome into jobs with open arms. Yet, the real benefit for most youth would be a deep understanding of how different communities work and how democracy plays out at the local level. Those who invited Geek Corps participants to their community should relish the opportunity to help these youth understand local democracy and governance. The result is cross-generational civic education.

Geek Corps participants would need to have varying types of technological skills. The pay would not be overly generous. The unique quality of the opportunity would make up for the low level of income in the short-term. There would need to be a process for assessment to assure that local needs were met. A national staff could help coordinate local participants and provide a technological backbone to the project.

To work, this program will need support at both the local and national levels. It would make most sense for communities to fund a portion of the costs and for their contributions to be matched either by foundations, corporations, or the federal government. Local communities would also have to provide a structure for the Geek Corps participants to engage with the relevant community players.

**13** **Recommendation 13: Empower all citizens to participate actively in community self-governance, including local "community summits" to address community affairs and pursue common goals.**

As powerful as the Internet is for facilitating human connection, face-to-face contact remains the foundation of community building. Indeed, recent years have seen an explosion in the use of the Internet not only to create "virtual communities" among strangers, but to enable people who know and encounter each other offline to sustain and deepen their connection. To build the "bridging capital" that American towns and cities need in order to prosper, local communities should pursue opportunities for citizens to share responsibility for addressing community needs and to organize on a community-wide basis to discuss common problems and to pursue common goals.

Community summits can be important catalysts for such self-governance activity. To be successful, local summits will have to make sense within the context of an actual decision-making agenda. Such gatherings should have the potential to lead to constructive action and to help identify and empower citizen-leaders who can move the common agenda forward. Engagement should be motivated by common awareness that what the gathering decides will create an action agenda that citizens can and will pursue. Inviting citizens to engage with one another and then offering an experience that is accessible, energetic, and constructive can overcome the barriers to opportunity and motivation that too often keep people at home.

A good start for initiatives in community dialogue would be summits directed at creating community action agendas to improve the local information environment. Mayors' offices and city councils could lay the groundwork for such summits by using the Healthy Information Community checklist in Appendix I as a framework for gathering the basic facts about the community's information environment. A follow-up summit could then bring together the public, private, and not-for-profit sectors in a united search for specific local steps in pursuit of the "informed community" vision. They could collaborate to map additional community information assets and determine voids that need addressing. They could design initiatives to promote information availability, citizen capacity, and public engagement.

**14**   **Recommendation 14: Emphasize community information flow in the design and enhancement of a local community's public spaces.**

Survey research shows that the physical aspects of place will often drive people's sense of attachment to their local community. Concern for the environment is converging with strategic planning around issues of social and economic development to renew interest in the creation and redesign of inviting public spaces. Such spaces can become inviting hubs for social contact within and among community groups. They can also become key spots for information sharing.

In addition to architectural measures, information technologies can help bring people together in a common space. It is easy to imagine public digital displays of news and culture becoming a major attraction in many communities. Public transportation venues, parks, community centers, and shopping malls could become the sites for kiosks featuring local information.

These efforts would not be a substitute for home access to broadband, but they could promote community information flow by encouraging citizens to be out and about. They would be interesting and aesthetically appealing ways for local residents to connect to the larger community.

**15** | **Recommendation 15: Ensure that every local community has at least one high-quality online hub.**

Given the volume of information on the Internet and the infinite diversity of user interests, it is not possible for any one Web site to aggregate all of the online information local residents want and need. Just as communities depend on maps of physical space, they should create maps of information flow that enable members of the public to connect to the data and information they want.

Communities should have at least one well-publicized portal that points to the full array of local information resources. These include government data feeds, local forums, community e-mail listservs, local blogs, local media, events calendars, and civic information. The best of these hubs would go beyond the mere aggregation of links and act as an online guidebook. They would enable citizens to map an effective research journey by letting people know what is available and where. The site should leverage the power of new forms of social media to support users in gathering and understanding local information.

Where private initiative is not creating community online hubs, a locally trusted anchor institution might undertake such a project with the assistance of government or foundation funding, or support from those who also support public media.

## Conclusion and a Call to Action

The United States stands at what could be the beginning of a democratic renaissance, enabled by innovative social practices and powerful technologies. With multiple tools of communication, dynamic institutions for promoting knowledge and the exchange of ideas, and renewed commitment to engage in public life, Americans could find themselves in a brilliant new age. People would enjoy unprecedented capacity to fulfill their individual aspirations and to collectively shape the future of their communities. Community discussion, collaboration, and accountable public decision making could make life better in every neighborhood, town, and city.

To thrive in a democracy, America's local communities need information ecologies that support both individual and collective community life. They need accurate, relevant news and information to fuel the common pursuit of the truth and the public interest. Improving local ecologies requires public policies that support the production and dissemination of relevant and credible information, enhance the capacity of individuals to engage with information, and promote people's engagement with information and with one another. Informed communities require well-designed strategies to make these objectives a reality.

The questions America faces at this point in its information history, however, go beyond questions of strategy to questions of values. The Knight Commission has recommended a series of strategies that, in various ways, exhort our major public and nonprofit institutions to give new priority to values of openness, inclusion, and engagement. The values questions posed are equally profound, however, for individual citizens and for the institutions of the media.

Communities throughout America need for their members to re-examine their individual roles as citizens in the digital age. The opportunities of the current moment are conspicuously interrelated with new technologies of human connection. More than ever, these technologies enable each citizen to be a productive part of the community.

Those opportunities, however, and the social benefits they offer, imply a reciprocal responsibility to participate. Americans' sense of their very identity as citizens should entail a sense of responsibility to "step up" to the digital age. They need to attain the skills necessary to support first-class citizenship, to demonstrate an active willingness to acquire and share knowledge both within and across social networks, and to support democratic values in the way every person interacts with the information ecology that serves his or her community.

It is critical that Americans take the time to embrace the quality of community information flow as an issue worthy of their concern and involvement. The Commission has directed many of its recommendations to government agencies and officials. They are far more likely to respond if their constituents are campaigning day-in and day-out for a pro-information agenda.

Likewise, media institutions must confront how new technological capacities and social practices are challenging their core values. The evolving relationships among journalists, media firms, and the public should engender a deep discussion about how these changes affect the proper scope of intellectual property and such values as objectivity, privacy, and accountability. An increasingly uninhibited information culture creates opportunities not only for social benefit, but also for slander, harassment, fraud, pornography, spam, theft, intrusiveness, invasions of privacy, and all kinds of falsehoods, from innocent mistakes to intentional mischief.

It is unlikely that the formal instruments of law or the private initiatives of single individuals can fully address these challenges. Institutions that stand as critical nodes in America's information networks need to examine their own practices. They should consider how changes in institutional practice can protect core values at the same time that new ways are emerging for creating, organizing, and sharing information.

Society can be lulled into feeling that the very availability of exciting new tools will bring the solution to all problems. Alternatively, as long-standing practices are upended, people may imagine a past somewhat rosier than reality and exaggerate the threat to enduring values and allegiances. This Commission has tried to resist both impulses. This report is intended to help America maintain its commitment to enduring information ideals, even as individuals and communities create information ecologies more relevant, participatory, and inclusive than ever. There need be no second-class citizens in the democratic communities of the digital age. Whether America fulfills that vision will require individual and collective initiative at every level of society.

The Knight Commission has attempted to provide through this report a set of durable principles and broad recommendations that can frame the pursuit of the informed communities America needs. The Commission, however, understands "informed communities," like democracy itself, as a vision always to be pursued, not as a final state of perfection ever likely to be achieved. In that spirit, our first call is for an outpouring of additional ideas, dialogue, and action in communities throughout the United States. The "information issue" is everyone's issue.

## The Knight Commission on the Information Needs of Communities in a Democracy

# Endnotes

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9. For many purposes, communities are properly defined in a broad sense as "networks of interpersonal ties that provide sociability, support, information, a sense of belonging, and social identity." Barry Wellman, "Physical Place and CyberPlace: The Rise of Personalized Networking," 25 *Journal of Urban and Regional Research* 227, 228 (2001), available at http://www.chass.utoronto.ca/~wellman/publications/individualism/N_1_#N_1_. The quality of democracy, however, depends fundamentally on people's relationship to the places in which they live. Geography defines the scope of people's common governance over resources for which they share jurisdiction. At the founding of the republic, there was a significant correspondence between the geographical boundaries that defined people's sense of community and most of the structures that evolved to produce news and information. From the age of the telegraph to the digital age, the evolution of technology has steadily worked to erode, if not eliminate, that correspondence. This is one key reason why focusing on the needs of geographically defined local communities is now so crucial.

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11. At USC Annenberg, Professor Sandra Ball-Rokeach has developed the thesis that local communication infrastructure plays a critical role in three components of civic engagement: neighborhood belonging, collective efficacy, and civic participation. She has even developed a measure that she calls Integrated Connectedness to a Storytelling Network (ICSN), which she has determined—at least for the local communities she has studied—to be an effective summation of the relationship between what she calls local media connectedness, their scope of connections to community organizations, and the intensity of interpersonal neighborhood storytelling. Yong-Chan Kim & Sandra J. Ball-Rokeach, "Civic Engagement From a Communication Infrastructure Perspective," 16 *Communication Theory* 173 (2006). Researchers Mark Lloyd and Phil Napoli, in addition, have proposed a local media diversity index that could be used to correlate elements of media diversity with local levels of both civic participation and civic knowledge. Mark Lloyd and Phil Napoli, *Local Media Diversity Matters: Measure Media Diversity According to Democratic Values, Not Market Values*, Center for American Progress (2007), available at http://www.americanprogress.org/issues/2007/01/pdf/media_diversity.pdf. These projects, along with such community assessment efforts as the Sense of Community Index, D. W. McMillan & D. M. Chavis, "Sense of Community: A definition and theory," 14 *American Journal of Community Psychology* 6–23 (1986), the National Civic Health Index created by the National Council on Citizenship, available at http://www.ncoc.net/index.php?tray=series&tid=top5&cid=97, and Patchwork Nation, http://www.csmonitor.com/patchworknation/, point the way to the possibility of a deeper understanding over time between the precise elements of local information ecologies and other positive social outcomes.

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13. The Commission on Freedom of the Press, *A Free and Responsible Press – A General Report on Mass Communication: Newspapers, Radio, Motion Pictures, Magazines and Books*, 20 (1947).

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16. Ira Machefsky, *Newspaper Advertising Revenue Trends*, TheNumbersGuru.com, Aug. 1, 2008, available at http://thenumbersguru.blogspot.com/2008/07/newspapers-advertising-revenue-trends.html (based on data from the Newspaper Association of America, available at http://www.naa.org/TrendsandNumbers/Advertising-Expenditures.aspx).

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57. "Sustainable development and sustainable communities typically measure indicators that show the overall health of the community: i.e., looking at measures of the economy, health, crime, in addition to human and social capital levels. We completely agree that a community's stock of social capital is not the sole measure of a community's health. Nevertheless, we believe that social capital is important in that it is a key driver for these other indicators (economy, health, crime, etc.) rather than merely a goal in and of itself." The Saguaro Seminar: *Civic Engagement in America*, available at http://www.hks.harvard.edu/saguaro/faqs.htm#2. See Susan Saegert, Gary Winkel, and Charles Swartz, *Social Capital and Crime in New York City's Low-Income Housing*, 13 Housing Policy Debate 189 (2002), available at http://www.fanniemaefoundation.org/programs/hpd/pdf/hpd_1301_saegert.pdf (describing how social capital helps lower crime).

58. Ming Wen, Christopher R. Browning, and Kathleen A. Cagney, *Neighbourhood Deprivation, Social Capital and Regular Exercise during Adulthood: A Multilevel Study in Chicago*, at 44, Urban Studies 2651 (2007).

59. S. Derek Turner, *Off the Dial: Female and Minority Radio Station Ownership in the United States*, Free Press (June 2007), available at http://www.freepress.net/docs/off_the_dial.pdf; S. Derek Turner and Mark Cooper, *Out of The Picture: Minority & Female TV Station Ownership in the United States*, Free Press (Oct. 2006), available at http://www.stopbigmedia.com/files/out_of_the_picture.pdf.

60. *Changing Media*, note 38, at 191–192.

61. U.S. Census Bureau News, *An Older and More Diverse Nation by Midcentury*, Census.gov (Aug. 14, 2008), available at http://www.census.gov/Press-Release/www/releases/archives/population/012496.html.

The following endnotes appear in Appendix IV:

62. The Commission was assisted in the organization of this forum by Dave Mills, Program Officer (San Jose), John S. and James L. Knight Foundation.

63. The Commission was assisted in the organization of this forum by Professor Monroe Price of the University of Pennsylvania's Annenberg School of Communication, along with Annenberg staff members Sylvia Beauvais and Libby Morgan, research fellow Kate Coyer, and graduate student Lee Shaker. The planning team also included Matt Bergheiser, Program Officer (Philadelphia), John S. and James L. Knight Foundation, and Todd Wolfson, Media Mobilizing Project.

64. The Commission was assisted in the organization of this forum by Dean Peggy Kuhr and Professors Dennis Swibold and Denise Dowling of the University of Montana School of Journalism.

# Appendices

# APPENDIX I
# Taking Stock: Are You a Healthy Information Community?

No one has developed a system for scientifically measuring the quality of a local community's information environment. But communities can begin to take stock of their information environments by considering the following eight features that the Knight Commission report stresses as elements of a healthy information community:

1. **A majority of government information and services online, accessible through a central and easy to use portal**

   - Driver license and vehicle registration information

   - Tax information

   - Social services

   - Contact information for government officials

2. **A local government with a committed policy on transparency**

   - Are documents publicly available and understandable?

   - Are they easy to obtain and promptly released under appropriate freedom of information laws?

   - Is government operating in the sunshine?

3. **Quality journalism through local newspapers, local television and radio stations, and online sources**

   - Are they economically healthy and robust, providing high quality civic information as well as life-supporting information?

   - Is there a diversity of viewpoints and competitive choice?

4.  **Citizens with effective opportunities to have their voices heard and to affect public policy**

    - Are there civic organizations prepared to transform information into active civic engagement and public policy engagement?

    - Is there opportunity for public comment on proposed policies and expenditures?

    - Are there online channels for expressing views and concerns?

    - Does the community have regular summits and town meetings to inform and engage the community in civic issues?

5.  **A vibrant public library, or other public center for information that provides digital resources and professional assistance**

    - Does the community have public spaces available to all that provide easy access to Internet content as well as traditional sources material, such as newspapers, periodicals and books?

6.  **Ready access to information that enhances quality of life, including information provided by trusted intermediary organizations in the community on a variety of subjects:**

    - Health

    - Education resources

    - Employment

    - Social services

    - Public transit

    - Emergency services

    - Arts and Entertainment

7. **Local schools have computer and high-speed Internet access, as well as curricula that support digital and media literacy**

   - Are kids trained to use the modern digital tools to learn, to produce content, and to coordinate and organize activity? This is digital literacy.

   - Are kids trained to question the validity of online material, develop a critical eye, perceive and protect themselves from dangerous situations, and appreciate the dictates of journalistic integrity? This is media literacy.

8. **High-speed Internet is available to all citizens**

   - Does local and state government promote development of and access to a telecommunications infrastructure that gives easy and affordable access to services and information found primarily on-line or digitally?

   - Are these services, including high speed Internet access, available in the home, in schools and in other public institutions?

   - Are there choices of service providers?

   - Wireless and wireline communications and Internet services are valuable and offer different experiences. Are both available?

# APPENDIX II
# Executive Director's Memo:
# Potential Action Items

Date: September 1, 2009
To: Marissa Mayer and Theodore B. Olson, Co-Chairs
From: Peter Shane, Executive Director
Re: Some Potential Responses to *Informing Communities*

I have prepared for your review a list of some of the kinds of responses the Commission might anticipate from various actors if they were moved to implement vigorously the Commission's 15 actual recommendations. In some cases, these speculations are more specific than the Commission's recommendations and have not been discussed or endorsed. Nonetheless, the list gives an idea of the range of initiatives likely at least to come under consideration within the report's various potential audiences. Of course, the specific steps needed to implement the Commission's strategies and recommendations will probably evolve over time and take different forms in different communities. When the Commission launches its online public dialogue with the launch of the report, the public will undoubtedly have additional or substitute suggestions.

## Congress

- **Adopt universal broadband as the standard for the country, creating a network that connects the nation, just as the nation has done with railroads and highways.**

- **Require federal agencies to collect information electronically and, wherever possible, place it online in accessible, standard, searchable formats.**

- **Fund the development of special training programs for federal employees responsible for handling records requests.**

- **Require agencies to pay penalties from general appropriations if found by a court to have acted in gross disregard of the law in withholding mandatorily disclosable records from the public.**

- **Authorize the administrative imposition of discipline on agency employees who willfully violate their own public information rules.**

- **Adopt a Government Contractor FOIA to ensure public access to the records of private contractors that bear on the discharge of their public functions.**

- **Require agencies, where practicable, to allow citizens to participate in hearings or other fact-gathering processes electronically.**

- **Provide for the televising of federal judicial proceedings, except when precluded in rare, special circumstances.**

- **Consider a federal tax credit for the support of investigative journalism.**

- **Allow permissive joint operation for for-profit and not-for-profit enterprises within the federal tax law regime.**

- **Amend deduction limits for contributions to non-profit news organizations and deferral of gain in taxable acquisitions of newspapers by not-for-profit businesses.**

- **Authorize increased support for public media, including increases for news and information at the local level.**

- **Adopt tax relief on ad revenues to support the growth of nonprofit journalism.**

- **Increase the postal subsidy for the delivery of nonprofit print journalism.**

- **Direct the Department of Education to launch a national initiative to assess the quality of digital and media literacy programs in the nation's schools.**

- **Authorize the FCC to expand the categories of library services available for support from E-rate funding.**

- **Appropriate funds to help support local community "Geek Corps" that involve young adults 18–26 in providing technical training and consultation to local governments and community groups.**

## State Legislatures

- Recognize universal broadband as part of a national standard, creating a network that connects everyone in the state at least at the level set by the federal government.

- Reform state FOI laws to promote best practices. Reaffirm that all information should be public unless specifically exempted by statute.

- Require state and local agencies to collect information wherever possible electronically and in standard formats.

- Fund the development of special training programs for state and local employees responsible for handling records requests.

- Require agencies to pay penalties from general appropriations if found by a court to have acted in gross disregard of the law in withholding public records.

- Authorize the administrative imposition of discipline on agency employees who willfully violate their own public information rules.

- Adopt a Government Contractor FOIA to ensure public access to the records of private contractors that bear on the discharge of their public functions.

- Require agencies, where practicable, to allow citizens to participate in hearings or other fact-gathering processes electronically.

- Provide for the televising of state judicial proceedings, except in rare, special circumstances.

- Exempt the purchase of print and online journalism from state and local sales taxes.

- Support the creation of community-focused venture funds and local tax incentives to spur local entrepreneurship in media and technology applications.

- Adopt tax law changes to support the growth of not-for-profit journalism.

- Consider "community information enhancement" in the design and construction of public facilities built with local funds.

- Mandate the development of state curricular standards on media and digital literacy.

## FCC and Other Federal Agencies

- **Complete a national broadband strategy aimed at bringing Americans low-cost high-speed Internet access, including wireless, everywhere they want and need it.**

- **Establish a national target for household broadband access at speeds sufficient to support video transmission at a level of quality comparable to the household video services now delivered through cable and satellite television services.**

- **Adopt public policies encouraging consumer demand for broadband services. Continue to use financial incentives to help spur broadband deployment in areas where it has lagged because of market conditions.**

- **Consider an inquiry to define the appropriate characteristics of open networks.**

- **Determine and clearly map the kinds of Internet connectivity American households have—looking at speed, cost, the service providers involved, and whether access is wire-based or wireless.**

- **Push for the inclusion of public, educational, and government cable channels in the basic cable package offered by any cable service operator.**

- **Use E-rate funds to support public libraries' creation of mobile teaching labs to provide digital literacy instruction.**

- **Pursue spectrum policies to accommodate low-power FM and other innovations that increase the number of broadcast voices over the local airwaves.**

- **Promote diversity in media ownership.**

## Foundations

- **Host community forums on meeting the information needs of the community, perhaps modeled on the Knight Commission forums, to produce a local action agenda to improve information flow.**

- **Encourage online information hubs in communities where market conditions have not established them.**

- **Provide short-term fellowships for journalists covering state and local government.**

- **Support community-based technology centers to provide the training and equipment for citizens to produce, organize, and disseminate information through online and broadcast platforms.**

- **Condition new support for public media on the digital transformation and localization of the service.**

- **Promote media projects aimed at serving entire communities.**

- **Follow up on the recommendations in this report to see to their implementation.**

## Libraries

- **Create mobile "digital literacy" classrooms.**

- **Provide classes or other means of teaching digital literacy.**

- **Host community forums on local issues.**

- **Provide the technology needed to meet public demand.**

## Universities, Colleges, and Community Colleges

- **Create civic engagement programs across the curriculum that credit students for community projects that develop their civic knowledge.**

- **Encourage research aimed at describing, measuring, and comparing the quality of community news and information flow over time and across geographies.**

- **Expand free and low-cost adult digital and media literacy courses.**

- **Reward faculty research relevant to local issues that is shared through public outreach initiatives.**

- **Distribute as much research as possible clearly and openly online.**

- **Create teacher education courses on the integration of digital and media literacy into K–12 subject matters.**

## Local Governments

- **Conduct systematic self-assessments of their information environments. A possible starting point for such an assessment is the Commission's Healthy Information Community checklist.**

- **Fund community organizations providing digital media instruction to the general public.**

- **Fund digital and media literacy instruction in the public schools.**

- **Ensure that all public high schools support opportunities for students to engage in journalism in all forms.**

- **Ensure that the financial resources available to public libraries in FY 2011 are sufficient to meet community needs, including the provision of computing services and high-speed Internet connections, plus staffing adequate to provide support and training for digital literacy programs.**

- **Support community "Geek Corps" that involve young adults 18–26 in providing technical training and consultation to local governments and community groups.**

- **Stage community summits as a way of empowering both individual citizens and community groups to organize around an action agenda that they help to develop and implement for the resolution of local issues.**

- **Consider a "community information enhancement" in the design and construction of public facilities built with local funds.**

- **Take leadership in fostering widespread broadband diffusion to all citizens in the community.**

- **Provide local government information online in understandable, standardized, searchable formats; invite citizens to participate in local hearings electronically; and provide government services online in streamlined form.**

- **Fund the development of special training programs for employees responsible for handling records requests.**

- **Allocate local government funds for advertising in ways that reach the entire community.**

## K–12 Education

- **Teach students, in age-appropriate ways, to interpret and evaluate what is presented to them as news and information.**

- **Help students to develop digital and media skills that will enable them to produce and communicate their ideas and creative products effectively and engage productively with online information networks.**

- **Encourage students to develop the habits and ethics that support respectful online interaction with others.**

## Media and News Organizations

- **Openly share and discuss the organization's strategies to make sure that issues relevant to all segments of the community receive appropriate coverage.**

- **Sustain the "watchdog" function essential to civic accountability and promote public understanding of its value.**

- **Participate vigorously to keep government open.**

- **Serve the interests of public debate.**

- **Strive to have the diversity of staff at all levels reflect the diversity of the community it serves.**

- **Operate the daily news operations of verification and clarification with integrity, accountability, and openness.**

- **Provide staff training to maintain standards and credibility and foster innovation.**

- **Consider work with citizens who are actively engaged in local news reporting through blogs and Web sites.**

### Civic Organizations

- **Create high-quality local information portals and blogs on the issues around which the group is organized.**

### Tech Companies and Entrepreneurs

- **To the extent permitted by law, provide pro bono or discounted services and products to help state and local governments build the information infrastructure necessary to achieve openness and transparency.**

### Citizens

- **Be a media literate citizen who takes full advantage of the opportunities of the digital age.**

- **Prod local authorities to take stock of the community's information environment, starting with the Knight Commission's "Taking Stock: Are you a Healthy Community?" checklist, and blog about the issues raised.**

- **Consume news from multiple sources.**

- **Vote.**

- **Be vigilant to protect the freedom of expression of all speakers, while also protective of other people's privacy, property rights, and sensibilities.**

- **Participate in public forums and freedom of information coalitions.**

- **Find and contribute to local blogs and community resource efforts; engage in local news reporting.**

# APPENDIX III
## Speakers at Meetings of the Knight Commission

To assist in its deliberations, the Knight Commission devoted much of its first four meetings to hearing presentations by experts who briefed the Commission on developments in information and communications technology, trends in media, journalism and journalism education, the structure of community information flow, and the achievements of—and challenges facing—community institutions dedicated to empowering community self-governance through information and organization. Below is the roster of the speakers from these meetings. Each was speaking solely in his or her individual capacity; institutional affiliations are supplied for identification purposes only. The Commission is grateful for the time and insights of all participants. None is responsible for the content of this report, which represents solely the views of the Knight Commission. Minutes of these meetings and videos of all presentations are available at www.knightcomm.org. Speakers listed in order of appearance.

JUNE 24, 2008

### Washington, D.C.

**Bryan Alexander**, Research Director, National Institute for Technology in Liberal Education

**Michael Wood-Lewis**, Founder, Front Porch Forum

**Vincent Price**, Provost and Professor of Communication and Political Science at the University of Pennsylvania

**Barbara Cohen**, President and Founder, Kannon Consulting

**Jeffrey Stevenson**, Managing Partner and Co-Chief Executive Officer, Veronis Suhler Stevenson

**Jon Wilkins**, Partner, McKinsey and Co.

**Beverley Wheeler**, Executive Director, District of Columbia State Board of Education

AUGUST 9, 2008

## Aspen, Colorado

**Tom Rosenstiel**, Director, Project for Excellence in Journalism

**Loris Ann Taylor**, Executive Director, Native Public Media

**Ron Williams**, Founder, Detroit Metro News and other alternative weeklies; Publisher, Happy Frog (www.happyfrog.ca)

SEPTEMBER 9, 2008

## Mountain View, California

**Larry Alder**, Product Manager and Member of Alternative Access Team, Google

**Krishna Bharat**, Creator, Google News

**Adam Smith**, Print Product Manager, Google

**Lior Ron**, Project Manager, Google Earth and Google Maps

**Jason Miller**, Group Project Manager, AdSense, Google

**Sandra Ball-Rokeach**, Professor and Associate Dean for Faculty Affairs, USC Annenberg School of Communication; Director, Communication Technology and Community Program; and Principal Investigator, Metamorphosis Project

NOVEMBER 17, 2008

## Chicago, Illinois

**Keith Hampton**, Assistant Professor, Annenberg School for Communication, University of Pennsylvania

**Mary Dempsey**, Commissioner, Chicago Public Library

**Alan C. Miller**, Founder, News Literacy Project and former investigative reporter, *Los Angeles Times*

**Patrick Barry**, Journalist and Content Manager for LISC/ Chicago's New Communities Program

**Toni Preckwinkle**, Alderman, Ward 4, Chicago

**Jim Capraro**, Executive Director, Greater Southwest Development Corporation

**Jack Doppelt**, Medill School of Journalism, Northwestern University

**Michele Bitoun**, Medill School of Journalism, Northwestern University

# APPENDIX IV
## Speakers at Knight Commission Community Forums

To assist in its deliberations, the Knight Commission sponsored three full-day forums during fall, 2008 in three demographically distinct American communities: Mountain View, California; Philadelphia, Pennsylvania; and Missoula, Montana. Below is the roster of the speakers from these forums. Each was speaking solely in his or her individual capacity; institutional affiliations are supplied for identification purposes only. The Commission is grateful for the time and insights of all participants. None is responsible for the content of this report, which represents solely the views of the Knight Commission. Video of all presentations is available at www.knightcomm.org.

SEPTEMBER 8, 2008

**"Meeting the Public's Information Needs in Silicon Valley"**
**Google Corporate Headquarters**
**Mountain View, California**[62]

ROUNDTABLE ON UNMET COMMUNITY INFORMATION NEEDS

**Salvador (Chava) Bustamante**, Strengthening Our Lives (SOL)

**Emmett Carson**, President and CEO, Silicon Valley Community Foundation

**Muhammed Chaudhry**, CEO, Silicon Valley Education Foundation (SVEF)

**Matt Hammer**, Executive Director, People Acting in Community Together (PACT)

**Judy Nadler**, Senior Fellow in Government Ethics, Markkula Center for Applied Ethics, Santa Clara University

**Kim Walesh**, Chief Strategist, City of San Jose, California

**ROUNDTABLE ON MEDIA**

**Jim Bettinger**, Director, John S. Knight Fellowships for Professional Journalists, Stanford University

**Linjun Fan**, *Albany Today* blog

**Raj Jayadev**, Founder, Silicon Valley De-Bug

**Linda O'Bryon**, Chief Content Officer, KQED Public Media

**George Sampson**, News and Program Director, KLIV Radio Station

**Dave Satterfield**, Managing Editor, *San Jose Mercury News*

**ROUNDTABLE ON TECHNOLOGY AND INNOVATION**

**Richard Adler**, Principal, People & Technology, and Research Affiliate, Institute for the Future

**danah boyd**, Commissioner, Knight Commission on the Information Needs of Communities in a Democracy

**Mike McGuire**, Vice President of Research, Gartner

**Chris O'Brien**, Project Manager, The Next Newsroom Project, and Reporter, *San Jose Mercury News*

**Amra Tareen**, AllVoices.com

**Holmes Wilson**, Co-Founder, Participatory Culture Foundation

SEPTEMBER 27, 2008

## "Meeting the Public's Information Needs in Philadelphia" University of Pennsylvania Annenberg School of Communication Philadelphia, Pennsylvania[63]

### ROUNDTABLE ON UNMET COMMUNITY INFORMATION NEEDS

**Peter Bloom**, Director and Co-Founder, Juntos

**Nijmie Dzurinko**, Executive Director, Philadelphia Student Union

**Don Kimelman**, Managing Director, Information Initiatives, The Pew Charitable Trusts

**Janet Ryder**, Vice President of Labor Participation, United Way of Southeastern Pennsylvania

**Paul Socolar**, Editor and Director, *The Notebook*

**Zack Stalberg**, President and CEO, The Committee of Seventy

### PANEL ON CHALLENGES TO MAINSTREAM MEDIA

**Josh Cornfield**, City Editor, Metro Philadelphia

**Dave Davies**, Senior Writer, Philadelphia Daily News

**Phyllis Kaniss**, Executive Director, American Academy of Political and Social Science, Annenberg School for Communication, University of Pennsylvania

**Susan Phillips**, Reporter, WHYY, Inc.

**Chris Satullo**, Columnist and Director of Civic Engagement, *The Philadelphia Inquirer*

**Wendy Warren**, Vice President and Editor, *Philly.com*

### ROUNDTABLE ON ALTERNATIVE MEDIA

**Matt Golas**, Managing Editor, PlanPhilly

**Gustavo Martinez**, Reporter, Al Día

**Beth McConnell**, Executive Director, Media and Democracy Coalition

**Bruce Schimmel**, Founder & Editor Emeritus, Philadelphia City Paper

**Dan Urevick-Ackelsberg**, Founder, Young Philly Politics

**Linn Washington**, Co-Director, Multimedia Urban Reporting Lab (MURL)

**Todd Wolfson**, Founder, Media Mobilizing Project

OCTOBER 25, 2008

## Meeting the Public's Information Needs in Montana
## The University of Montana
## Missoula, Montana[64]

**VIDEOCONFERENCE ON THE NEEDS OF AGRICULTURE AND SMALL COMMUNITIES**

**Moderator: William Marcus**, Director, Broadcast Media Center, the University of Montana, Montana Public Radio/KUFM-TV, Montana PBS

**Senator Jerry Black**, Former owner and General Manager, KSEN-KZIN Radio

**Joseph D. Hansen**, Executive Director and Board Member, Western EMS Network

**Gary Moseman**, Managing Editor, *Great Falls Tribune*

**Russell Nemetz**, Agriculture Director, Northern Agriculture Network, and coordinates nation's best Farm Broadcaster Team

**Douglas Steele**, Vice Provost and Director, Montana State University Extension

**PUBLIC INFORMATION NEEDS ON THE ENVIRONMENT AND NATURAL RESOURCES**

**Moderator: Nadia White**, Assistant Professor, The University of Montana School of Journalism

**Gayla Benefield**, Community Organizer, Libby, Montana

**Tom France**, National Resources Counsel, National Wildlife Federation, Rocky Mountain Region

**Ian Marquand**, Former Special Projects Coordinator, KPAX Television, and Committee Chairman, Montana Society of Professional Journalists Freedom of Information

**Ray Ring**, Senior Editor, *High Country News*

**Jonathan Weber**, Founder, Publisher, CEO and Editor-in-Chief, NewWest.net

**THE INFORMATION NEEDS OF UNDERSERVED PEOPLE AND COMMUNITIES**

**Moderator: Sally Mauk**, News Director, Montana Public Radio

**Mark Anderlik**, Executive Officer, UNITE HERE Local 427,
and President, Missoula Area Central Labor Council

**Luella Brien**, Former Reporter, *Billings Gazette*, Member, Crow Tribe

**Ellie Hill**, Executive Director, Poverello Center, Inc.

**Patty LaPlant**, Enrolled member of the Blackfeet Tribe and
Coordinator of the National Native Children's Trauma Center

**Richard S. Wolff**, Gilhousen Telecommunications
Chair, Montana State University

**THE PUBLIC'S NEEDS FOR POLITICAL INFORMATION**

**Moderator: Dennis Swibold**, Professor of Public Affairs Reporting, The
University of Montana School of Journalism

**Linda Gray**, President, Max Media of Montana

**Charles S. Johnson**, Chief, Lee State Bureau

**Stephen Maly**, Executive Director, Helena Civic TV

**Matt Singer**, CEO, Forward Montana, and Founder, Left in the West

**K'Lynn Sloan**, Montana Correspondent, MTV Choose or Lose Street Team '08

# APPENDIX V
# Informal Advisors

To assist in Knight Commission deliberations, its staff regularly made informal inquiries of a great many journalists and academic and practitioner experts from a wide variety of fields. The Commission is grateful to all of the following individuals who offered input on one or more occasions. Each was commenting or providing research material solely in his or her individual capacity; institutional affiliations are supplied for identification purposes only. The Commission is grateful for the time and insights of all participants. None is responsible for the content of this report, which represents the views only of the Knight Commission.

**Martin Baron**, Editor, *The Boston Globe*

**Gary Bass**, Founder and Executive Director, OMB Watch

**Beverly Blake**, Program Director for Columbus, Macon and Milledgeville, John S. and James L. Knight Foundation

**Jeanne Bourgault**, COO and Senior Vice President for Programs, Internews Network

**Nolan Bowie**, Adjunct Lecturer in Public Policy and Senior Fellow of Shorenstein Center, Harvard University John F. Kennedy School of Government

**Angela J. Campbell**, Professor and Co-Director of Institute for Public Representation, Georgetown University Law Center

**Farai Chideya**, Author and Multimedia Journalist

**Ira Chinoy**, Associate Professor, Philip Merrill College of Journalism, University of Maryland

**Everette E. Dennis**, Felix E. Larkin Distinguished Professor of Communication and Media Management, and Director, Center for Communications, Fordham University Graduate School of Business

**Debra Gersh Hernandez**, ASNE Sunshine Week Coordinator

**Ellen Hume**, Research Director, MIT Center for Future Civic Media

**Paul Hyland**, Executive Producer, edweek.org

**Larry Jinks**, Director, McClatchy Company

**Sue Clark-Johnson**, Executive Director, Morrison Institute
for Public Policy, Arizona State University

**Eric Klinenberg**, Professor of Sociology and Director
of Graduate Studies, New York University

**Gerald Kosicki**, Associate Professor, The Ohio State
University School of Communication

**Joel Kramer**, CEO and Editor, *Minnpost.com*

**Peggy Kuhr**, Dean, University of Montana School of Journalism

**Nicholas Lemann**, Dean, Columbia University Graduate School of Journalism

**Amy Lesnick**, CEO, Full Circle Fund

**Mark Lloyd**, Vice-President for Strategic Initiatives,
Leadership Conference on Civil Rights

**Frank LoMonte**, Executive Director, Student Press Law Center

**Carolyn Lukensmeyer**, Founder and President, AmericaSpeaks

**Diane Lynch**, President, Stephens College

**Michael Maidenberg**, Consultant, John S. and James L. Knight Foundation

**Bill Marimow**, Editor and Executive Vice President, *The Philadelphia Inquirer*

**John McCarron**, Senior Scribe, LISC/New Communities Program

**Sascha Meinrath**, Research Director, Wireless Future
Program, New America Foundation

**Rachel Davis Mersey**, Assistant Professor of
Journalism, Northwestern University

**Philip Meyer**, Knight Chair Emeritus, School of Journalism and Mass
Communication, University of North Carolina at Chapel Hill

**Andrew Nachison**, Founder and CEO, iFOCOS and Founder, We Media

**Kimberly L. Nalder**, Assistant Professor, Department of Government, California State University, Sacramento

**Chris O'Brien**, Columnist, *San Jose Mercury News*

**Rory O'Connor**, Shorenstein Center, Harvard University John F. Kennedy School of Government

**Geneva Overholser**, Director, School of Journalism, USC Annenberg School for Communication

**Susan Patterson**, Program Director for Charlotte, North Carolina, Myrtle Beach and Columbia, South Carolina, John S. and James L. Knight Foundation

**Thomas E. Patterson**, Bradlee Professor of Government and the Press, Shorenstein Center, Harvard University John F. Kennedy School of Government

**Aaron Presnall**, director of Studies, Jefferson Institute

**Monroe Price, D**irector, Center for Global Communication Studies, University of Pennsylvania Annenberg School for Communication

**Hong Qu**, User Experience Researcher, YouTube

**Howard Rheingold**, author and teacher

**Alexandra Samuel**, CEO, Social Signal

**Ernest Sanders**, New Communities Program Organizer, Greater Auburn-Gresham Development Corporation

**Michael Schudson**, Professor, Columbia University Graduate School of Journalism

**Ben Scott**, Policy Director, Free Press

**Andrew Jay Schwartzman**, President and CEO, Media Access Project

**Lee Shaker**, Senior Research Specialist, Department of Politics, Princeton University

**Ben Shneiderman**, Professor, Department of
Computer Science, University of Maryland

**Josh Silver**, Executive Director, Free Press

**Keith L. Smith**, Associate Vice President, Agricultural Administration;
Associate Dean FAES; Director, Ohio State University Extension and Gist
Chair in Extension Education and Leadership, the Ohio State University

**Marc Smolowitz**, Executive Producer, Full Circle Fund

**James H. Snider**, President, iSolon.org

**Paul Starr**, Professor of Sociology and Public Affairs, and Stuart Professor
of Communications and Public Affairs, Princeton University

**Natalie (Talia) Jomini Stroud**, Assistant Professor, Department of
Communication Studies and Assistant Director, Annette Strauss
Institute for Civic Participation, University of Texas at Austin

**Teresa Jo Styles**, Professor, Department of Journalism and Mass
Communication, North Carolina A & T State University

**Loris Ann Taylor**, Executive Director, Native Public Media

**Patricia Thomas**, Knight Chair in Health & Medical Journalism, Grady
College of Journalism and Mass Communication, University of Georgia

**Esther Thorson**, Associate Dean for Graduate Studies and Research
and Director of Research, Donald W. Reynolds Journalism
Institute, University of Missouri School of Journalism

**Lars Hasselblad Torres**, IDEAS Global Challenge, MIT Public Service Center
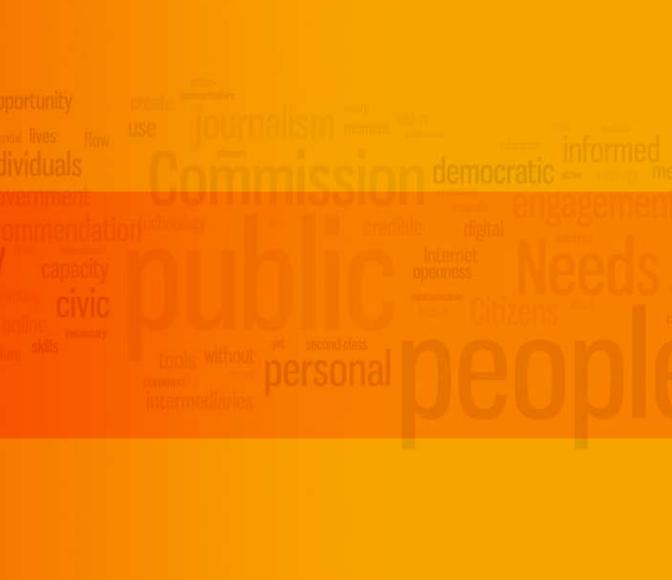
**Gordon Walek**, Chicago Local Initiatives Support Corporation (LISC)

**Tova Wang**, Senior Fellow, Demos

**Michael Weiksner**, Co-Founder, e-thepeople.org

**Bob Weissbourd**, Founder and President, RW Ventures, LLC

**Tracy Westen**, Chief Executive Officer, Center for Governmental Studies

# Members of the Commission

# Members of the Commission

**danah boyd** is a social media researcher at Microsoft Research and a Fellow at Harvard University's Berkman Center for Internet and Society. Her research focuses on how people integrate technology into their everyday practices. She has been analyzing different social media phenomena for almost a decade.

Dr. boyd received her Ph.D. from the School of Information at the University of California-Berkeley. Her dissertation "Taken Out of Context: American Teen Sociality in Networked Publics" examined teen engagement with social network sites like MySpace and Facebook. Her work was part of a MacArthur Foundation-funded project on digital youth and informal learning. The findings of this project are documented in the co-authored book *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*.

At the Berkman Center, danah co-directed the Internet Safety Technical Task Force to help identify risks and potential technical solutions for keeping children safe online. With support from the MacArthur Foundation, danah and her Berkman colleagues have created a Youth and Media Policy Initiative to further examine how research can inform policy.

Dr. boyd received a bachelor's degree in computer science from Brown University and a master's degree in sociable media from the MIT Media Lab. She has worked as a researcher for various corporations, including Intel, Tribe.net, Google, and Yahoo! She sits on corporate, education, and nonprofit advisory boards, and regularly speaks at industry conferences and events. She also created and managed a large online community for V-Day, a non-profit organization working to end violence against women and girls worldwide. Dr. boyd actively shares her research on her blog (http://www.zephoria.org/thoughts) and via Twitter (@zephoria).

**John S. Carroll** has been Editor of the *Los Angeles Times*, *Baltimore Sun* and *Lexington Herald-Leader*. He was a reporter in Vietnam, the Middle East, and Washington. He was a member of the Pulitzer Prize board for nine years and was its chair in 2003. He is a graduate of Haverford College, has had fellowships at Harvard and Oxford, and was the Knight Visiting Lecturer at Harvard's Kennedy School in 2006. He is now writing a nonfiction book and serving on several nonprofit boards.

**Robert W. Decherd** is Chief Executive Officer of A. H. Belo Corporation. A. H. Belo Corporation owns and operates the *Dallas Morning News*, Texas's leading newspaper and winner of eight Pulitzer Prizes; the *Denton Record-Chronicle*; the *Providence Journal*, the oldest continuously-published daily newspaper in the U. S. and winner of four Pulitzer Prizes; and the *Press-Enterprise*, serving southern California's Inland Empire region and winner of one Pulitzer Prize. A. H. Belo owns and manages various Web sites associated with the newspapers, as well as certain niche products, direct mail, and commercial printing businesses.

A. H. Belo's newspapers and related assets were spun off in February 2008 from Belo Corp., which Decherd led as CEO for the prior 21 years. Decherd has worked for A. H. Belo Corporation and Belo Corp. since his graduation from Harvard College in 1973. During his years as Belo Corp.'s CEO, the company grew in revenue from $397 million to $1.6 billion. Net income grew from $20 million to more than $130 million. The company's three major newspapers and 20 television stations, including six in the top 14 markets, have won 13 Pulitzer Prizes, 25 Alfred I. duPont-Columbia University Awards, 22 George Foster Peabody Awards, and 38 national Edward R. Murrow Awards.

Decherd has played a significant role in the newspaper and television broadcasting industries, and in freedom of information organizations. He has served on the boards of the Newspaper Association of America and the Freedom of Information Foundation of Texas, which he helped found, as well as being appointed to presidential and FCC commissions concerned with television industry issues.

**Reed E. Hundt** was Chairman of the Federal Communications Commission (FCC) from 1993 to 1997. He was a member of Barack Obama's Presidential Transition Team (2008–09) where he was the economic agency review group head. Reed is currently the Co-Chairman of the Coalition for the Green Bank, as well as Principal at REH Advisors, a business consulting firm. Reed has also served as a Senior Adviser to McKinsey & Company, a strategic management consulting firm. He was Co-Chairman of the Forum on Communications and Society at the Aspen Institute (1998–2006). From 1982 to 1993 he was a Partner in the Washington, D.C. office of Latham & Watkins, a national and international law firm and was an associate in Los Angeles and Washington offices (1975–1982). Reed is on the Board of Directors of Intel Corporation, Infinera, and Data Domain, all public companies, and a member of the board of Telegent Systems and Vanu, Inc., both private companies. Reed has been Principal at Charles Ross Partners, a consulting firm, since 1997. He serves as a member of the District of Columbia, Maryland, and California bars (former).

His books include *In China's Shadow: The Crisis of American Entrepreneurship* (Yale University Press, 2006) and *You Say You Want A Revolution: A Story of Information Age Politics* (Yale University Press, 2000). Reed graduated from Yale College (1969) with a B.A. in History magna cum laude and with honors with exceptional distinction in history. He graduated from J.D. Yale Law School (1974) and is a member of the executive board of the Yale Law Journal. He is married to Elizabeth Katz and has three children: Adam (b. 1982), Nathaniel (b. 1985), and Sara (b. 1989).

**Alberto Ibargüen** is President and CEO of the John S. and James L. Knight Foundation.

Previously, he was Publisher of the *Miami Herald* and of *El Nuevo Herald*. During his tenure, the *Miami Herald* won three Pulitzer Prizes and *El Nuevo Herald* won Spain's Ortega y Gasset Prize for excellence in journalism. Earlier, he was an executive at *Newsday* and at the *Hartford Courant*, and practiced law in Hartford, Connecticut.

Ibargüen is Chairman of the Board of the Newseum and of the World Wide Web Foundation. He serves on the boards of PepsiCo, American Airlines, ProPublica, and the Council on Foreign Relations. He is a former board chair of PBS.

He is a graduate of Wesleyan University and of the University of Pennsylvania Law School and served in the Peace Corps in Venezuela and in Colombia. For his work to protect journalists in Latin America, he received a Maria Moors Cabot citation from Columbia University and an honorary doctorate from George Washington University.

**Walter Isaacson** is the President and CEO of the Aspen Institute, a nonpartisan educational and policy studies institute based in Washington, D.C. He has been the Chairman and CEO of CNN and the Editor of *Time* magazine.

He is the author of *Einstein: His Life and Universe* (April 2007), *Benjamin Franklin: An American Life* (2003), and *Kissinger: A Biography* (1992), and coauthor of *The Wise Men: Six Friends and the World They Made* (1986).

Isaacson was born on May 20, 1952, in New Orleans. He is a graduate of Harvard College and of Pembroke College of Oxford University, where he was a Rhodes Scholar.

He began his career at the *Sunday Times* of London and then the *New Orleans Times-Picayune/States-Item*. He joined *Time* magazine in 1978 and served as a political correspondent, national editor, and editor of new media before becoming the magazine's 14th editor in 1996. He became Chairman and CEO of CNN in 2001, and then President and CEO of the Aspen Institute in 2003.

He is the Chairman of the Board of Teach for America, which recruits recent college graduates to teach in underserved communities. He is also Chairman of the Board of the U.S.-Palestinian Partnership, set up by the U.S. State Department to promote economic and educational opportunities for the Palestinian people. He is on the board of United Airlines, Tulane University, Society for Science & the Public, and the Bipartisan Policy Center. He was appointed after Hurricane Katrina to be the Vice-Chairman of the Louisiana Recovery Authority.

He lives with his wife and daughter in Washington, D.C.

**Benjamin Todd Jealous** grew up believing that there was no higher calling than to further the cause of freedom in this country and in the world. It is a mindset he inherited from of his parents and grandparents. Their drive for community betterment blazed the trail for Jealous' own deep commitment to social justice, public service, and human rights activism. Now, as the 17th President and Chief Executive Officer of the NAACP, and the youngest person to hold the position in the organization's 100-year history, Jealous is well positioned to answer the call.

During his career, he has served as President of the Rosenberg Foundation, Director of the U.S. Human Rights Program at Amnesty International, and Executive Director of the National Newspaper Publishers Association (NNPA), a federation of more than 200 black community newspapers. From his early days of organizing voter registration drives up until his nomination and election as NAACP president, Jealous has been motivated by civic duty and a constant need to improve the lives of America's underrepresented. All things considered, Jealous' leadership roles and active community involvement have well prepared him for his current duties as president of the NAACP. In fact, his path through journalism and the Black Press is not unlike several other former NAACP presidents, including Roy Wilkins, Walter White, Ida B. Wells, and W.E.B. Dubois. As a student at Columbia University, he worked in Harlem as a community organizer for the NAACP Legal Defense Fund. On campus, Jealous led school-wide movements, including boycotts and pickets for homeless rights, a successful campaign to save full-need financial and need-blind admissions when other national universities were cutting such programs, and an environmental justice battle with the university.

These protests ultimately led to the suspension of Jealous and three other student leaders. Jealous used this time off to work as a field organizer helping to lead a campaign that prevented the state of Mississippi from closing two of its three public, historically black universities, and converting one of them into a prison.

He remained in Mississippi to take a job at the *Jackson Advocate*, an African American newspaper based in the state's capital. His reporting—for the frequently firebombed weekly—was credited with exposing corruption among high-ranking officials at the state prison in Parchman. His investigations also helped to acquit a small black farmer who had been wrongfully and maliciously accused of arson. His work at the *Jackson Advocate* eventually lead to his promotion to Managing Editor.

In 1997, Jealous returned to Columbia University and completed his degree in political science. With the encouragement of mentors, he applied and was accepted to Oxford University as a Rhodes Scholar, where he earned a master's degree in comparative social research.

Jealous eventually went on to serve as Executive Director of the National Newspaper Publishers Association (NNPA). While at the NNPA, he rebuilt its 90-year old national news service and launched a Web-based initiative that more than doubled the number of black newspapers publishing online.

Most recently, Jealous was President of the Rosenberg Foundation, a private independent institution that funds civil and human rights advocacy to benefit California's working families. Prior to that, he was Director of the U.S. Human Rights Program at Amnesty International. While there he led efforts to pass federal legislation against prison rape, rebuild public consensus against racial profiling in the wake of the September 2001 terrorist attacks, and expose the widespread sentencing of children to life without the possibility of parole.

Active in civic life, Jealous is a board member of the California Council for the Humanities and the Association of Black Foundation Executives, as well as a member of the Asia Society. He is married to Lia Epperson Jealous, a professor of constitutional law and former civil rights litigator with the NAACP Legal Defense and Educational Fund. They presently reside in Washington, D.C. with their young daughter.

**Mary Junck** joined Lee Enterprises in 1999 as Executive Vice President and Chief Operating Officer. She became president in 2000, Chief Executive Officer in 2001, and Chairman in 2002.

She previously held senior executive positions at the former Times Mirror Company. As Executive Vice President of Times Mirror and President of Times Mirror Eastern Newspapers, she was responsible for *Newsday*, the *Baltimore Sun*, the *Hartford Courant*, the *Morning Call*, Southern Connecticut Newspapers and a magazine division. From 1993 to 1997, she was Publisher and Chief Executive Officer of the *Baltimore Sun*. She began her career with Knight Ridder at the *Charlotte Observer* in 1972 and advanced to Assistant Advertising Director at the Miami Herald, Assistant to the Knight Ridder Senior Vice President of Operations, and to Publisher and President of the *St. Paul Pioneer Press*.

She serves on the board of directors of the Associated Press and is a former board member of the Newspaper Association of America. In Davenport, she serves on the board of DavenportOne and Putnam Museum.

She received a bachelor of arts degree in English from Valparaiso University in Indiana and a master's degree in journalism from the University of North Carolina at Chapel Hill. She and her husband, Ralph Gibson, have a son and a daughter.

Lee Enterprises (NYSE: LEE) is a premier provider of local news, information, and advertising in primarily midsize markets, with 53 daily newspapers, online sites, and more than 300 weekly newspapers and specialty publications in 23 states.

**Monica C. Lozano** is Publisher and CEO of *La Opinión*, the nation's largest Spanish language daily newspaper, as well as Senior Vice President of Newspapers for impreMedia LLC, overseeing the company's entire publications group. ImpreMedia is the No. 1 Hispanic news and information company in the U.S. in online and print, with newspapers and magazines in most of the country's top Hispanic markets. In addition to the print platform, impreMedia distributes content through its online portal and newspaper sites as well as via mobile platforms.

*La Opinión's* award winning editorial content has established the paper as a leader in coverage of issues important to the Latino community and has been recognized by numerous journalistic, civic, and business organizations. The paper has received numerous awards including "Best Hispanic Daily Newspaper" from the National Association of Hispanic Publications and the coveted Ortega y Gassett Award from Spain, the highest honor in Spanish language publishing for Lifetime Achievement.

The newspaper has been involved in important public information campaigns designed to empower the Latino community in the areas of health, economic advancement, immigration, and education. *La Opinión* and impreMedia were national partners to the "Ya es hora" campaign targeting Latino civic participation in the presidential elections resulting in historic levels of voting in November 2008. It has also been selected as a national partner for the upcoming 2010 Census and has a program underway to support small business through these challenging economic times.

**Lisa MacCallum** is the Managing Director and General Manager of the Nike Foundation, a nonprofit organization supported by NIKE, Inc. that is dedicated to investing in adolescent girls as the most powerful force for change in the developing world. Lisa oversees all functions of the Foundation, including its investments and portfolio, accounting and finance, strategic planning and operations, and branding and communications. In addition, she ensures that all aspects of the organization are coordinated and deliver against the Foundation's mission to achieve maximum impact. She brings more than 15 years of business management experience to the Foundation.

Lisa has been with NIKE, Inc. since 2001. She served as the Business Development Director for USA Apparel, a $1.2 billion business division of NIKE, Inc. In that capacity, she was responsible for long-term business strategy, go-to-market strategic planning, and overseeing the resolution of time-sensitive business issues critical to the long-range success of the business. Lisa was also the Strategic Planning Director for NIKE, Inc.'s USA Region, a $5.3 billion combined consumer products and marketing organization (Athletic Footwear, Apparel and Equipment).

Previously, Lisa was a co-founder and company director of Tokyo-based Business Breakthrough, Inc., a satellite and Internet broadcasting company committed to strengthening management leadership in Japan through innovation in business management training.

During her time in Tokyo, Lisa provided independent consulting for Ohmae & Associates, focused on joint ventures and partnerships between Japanese companies and those based in the United States, Australia and other Asian countries. Earlier in her career, Lisa was responsible for driving growth planning initiatives for Coca-Cola's interest in Australia, New Zealand and the South Pacific Islands. She began her professional career with KPMG and as a Certified Chartered Accountant.

Lisa has contributed to editorials focused on the evolving dynamics of the global economy. Her work has appeared in *Time* magazine, *Japan Times*, the *Wall Street Journal*, and the *Australian Financial Review*. She serves on PEPFAR's Steering Committee for an HIV-Free Generation and is a member of the Knight Commission on the Information Needs of Communities in a Democracy. Lisa was born and raised in Queensland, Australia.

**Marissa Mayer** joined Google in 1999 as the company's first female engineer. Today, she leads the company's product management and design efforts for search and search properties as well as the overall user experience, including the Google.com home page. Google's search product portfolio includes Web search, images, news, books, products, maps, toolbar, iGoogle, and more. She also works with the company's user-experience team, developing designs and setting standards for the look-and-feel that keep the company's products simple, intuitive, and useful.

Marissa serves as Co-Chair of the Knight Commission on the Information Needs of Communities in a Democracy. She also is a member of the board of trustees for the San Francisco Ballet, San Francisco Museum of Modern Art, and the Smithsonian's Cooper-Hewitt National Design Museum. Her contributions and leadership have been recognized by numerous publications including *Newsweek*, *BusinessWeek*, *Fast Company*, *Portfolio*, and the *New York Times*. In 2008, at 33, Marissa became the youngest woman ever to be included on *Fortune's* Most Powerful Women's list (#50).

Concurrently with her full-time work, Marissa has taught introductory computer programming classes at Stanford University, which has recognized her with the Centennial Teaching Award and the Forsythe Award for her outstanding contributions to undergraduate education. Marissa earned both her B.S. in Symbolic Systems and her M.S. in Computer Science from Stanford, specializing in artificial intelligence for both degrees. She also holds an honorary doctorate of engineering from Illinois Institute of Technology.

**Andrew J. Mooney** is the Executive Director of Local Initiatives Support Corporation/Chicago (LISC). Founded 30 years ago, LISC is a not-for-profit development intermediary that provides grants, loans and equity—as well as technical assistance—to community organizations engaged in the revitalization of their neighborhoods.

Under Mr. Mooney's leadership, LISC/Chicago has become one of the nation's leading community development agencies. Since 1996, he has raised approximately $120 million in grants and loans to invest in the city's neighborhoods, leading in turn to the development of approximately 23,000 units of housing, 2.5 million square feet of commercial space, and numerous community facilities, leveraging over $2.5 billion in total investment.

Mr. Mooney and his colleagues are best known for cutting-edge community development strategies that have become national models, including the New Communities Program (NCP), a comprehensive effort at neighborhood development supported by the John D. and Catherine T. MacArthur Foundation. Other initiatives include the Centers for Working Families; Elev8, a community schools program; the Chicago Neighborhood News Bureau (CNNB); the Digital Excellence Demonstration Communities (DEDC); and Neighborhood Sports Chicago.

Mr. Mooney has devoted his career to community development and has held leadership positions in a number of agencies. Early in his career, he led the Chicago Housing Authority, and in more recent years, served a second term on the CHA board, co-authoring the latter's groundbreaking "Plan for Transformation." He has been on the governing boards of a number of public and private agencies, and is currently a member of the Knight Commission on the Information Needs of Communities in a Democracy.

A native of Chicago, Mr. Mooney is a graduate, summa cum laude, of the University of Notre Dame, and of the University of Chicago, where he was a Danforth Fellow.

**Donna Nicely** has served as Director of the Nashville Public Library since 1995. Prior to that, she was Director of the DeKalb Public Library in Decatur, Georgia. She is involved in many leadership positions in her community and the library profession, including the boards of Community Foundation of Middle Tennessee, the Nashville Downtown Partnership, Country Music Foundation, and Nashville's Agenda Steering Committee. Donna has served on the Urban Libraries Council Executive Board, and was Chair from 2004 to 2005. In July 2009 she was awarded the Charlie Robinson Award from the Public Library Association, which recognizes a library director for innovation and risk taking.

**Theodore B. Olson** is a Partner in Gibson, Dunn & Crutcher's Washington, D.C. office, a member of the firm's Executive Committee, Co-Chair of the Appellate and Constitutional Law Group and the firm's crisis Management Team.

Mr. Olson was Solicitor General of the United States during the period 2001–2004. From 1981 to 1984 he was Assistant Attorney General in charge of the Office of Legal Counsel in the U.S. Department of Justice. Except for those two intervals he has been a lawyer with Gibson, Dunn & Crutcher in Los Angeles and Washington, D.C. since 1965.

Mr. Olson has argued 55 cases before the United States Supreme Court. He is a Fellow of the American College of Trial Lawyers and the American Academy of Appellate Lawyers. He is currently Co-Chair of the Knight Commission on the Information Needs of Communities in a Democracy. Mr. Olson is a member of the Board of Trustees of the Ronald W. Reagan Presidential Foundation and a member of the Board of Directors of the National Center for State Courts. He was a Visiting Scholar at the National Constitution Center, 2006–2007.

**Michael K. Powell** served as Chairman of the Federal Communications Commission at a time of revolutionary change in technology and communications. He was appointed by President Clinton in 1997 and was designated Chairman by President Bush in 2001.

As chairman, Mr. Powell created the right regulatory conditions to stimulate the deployment of powerful technologies that put more power in the hands of the people. He clearly saw the importance of the rise of digital technologies and the impact they would have on our lives, from health care to education. As chairman, he focused on initiatives that encouraged market-driven solutions that promoted consumer interests and drove innovative approaches to getting broadband technology out to people—such as broadband over power lines, WiFi hotspots, cable broadband and DSL. From campaigning for the right to keep your phone number when switching wireless carriers to fighting to block unwanted telemarketing calls with a Do-Not-Call list to cautiously policing the airwaves for indecency, Mr. Powell put consumers at the forefront in this exciting and dynamic marketplace.

Chairman Powell previously served as the Chief of Staff of the Antitrust Division in the Department of Justice.

Mr. Powell was an associate in the law firm of O'Melveny & Myers, and he clerked for the Honorable Harry T. Edwards, Chief Judge of the U.S. Court of Appeals for the D.C. Circuit.

Mr. Powell graduated in 1985 from the College of William and Mary with a degree in government. He earned his J.D. from Georgetown University Law Center.

Mr. Powell is currently a Senior Advisor of Providence Equity Partners, Mr. Powell is also a board member of Cisco, ObjectVideo, the Rand Corporation, the Aspen Institute, and America's Promise. He is also working to raise resources to build the American Veterans Disabled for Life Memorial in Washington, D.C.

**Rey Ramsey** is Co-Founder and Chief Executive Officer of One Economy Corporation. Mr. Ramsey led the organization's growth from four employees working in a basement to a global organization that has taken root on four continents. Since 2000, One Economy has helped bring broadband access into the homes of over 300,000 low-income Americans. More than 16 million people have visited One Economy's multilingual Web properties. Mr. Ramsey has been on the forefront of driving the creation and distribution of public purpose media, most notably through the Public Internet Channel (www. pic.tv), which he founded. Through One Economy programs, hundreds of youth have delivered nearly 50,000 hours of service to their communities.

Prior to the founding of One Economy, Mr. Ramsey served as President and Chief Operating Officer of the Enterprise Foundation. Before joining Enterprise, Mr. Ramsey served in the cabinets of two governors of Oregon as the state's director of housing and community services and practiced law. He was the Chairman of Habitat for Humanity International from 2003 to 2005. He holds a bachelors degree in political science from Rutgers University and is a graduate of the University of Virginia Law School.

**Paul Sagan**, President and CEO of Akamai, joined the company in October 1998. Sagan was elected to the Akamai Board of Directors in January 2005, and he became CEO in April 2005.

Previously, Sagan served as senior advisor to the World Economic Forum from 1997 to 1998, consulting to the Geneva-based organization on information technology for the world's 1,000 foremost multinational corporations.

In 1995, Sagan was named President and Editor of new media at Time Inc., a division of Time Warner, and worked in that role until 1997. Previously, he served as Managing Editor of Time Warner's News on Demand project and was a senior member of the team responsible for the development of the company's online, cable online, electronic publishing, and Internet publishing activities. He was a founder of Road Runner, the world's first broadband cable modem service, and Pathfinder, one of the Web properties that pioneered Internet advertising. Sagan joined Time Warner in 1991 to design and launch NY1 News, the cable news network based in New York City.

Sagan's career began in broadcast television news. He joined WCBS-TV in 1981 as a news writer and was named news director in 1987, a position he held until 1991.

Sagan, a three-time Emmy Award winner for broadcast journalism, became a fellow of the American Academy of Arts and Sciences in 2008 and was named a Global Leader for Tomorrow in 1996 by the World Economic Forum. He is a director of EMC Corp. (NYSE: EMC), and previously served as a director of Dow Jones & Company and Digitas, Inc. before they were acquired.

Sagan is a trustee of Northwestern University; a graduate of the Medill School of Journalism; co-chairman of the Medill Board of Advisors; a member of the Dean's Council at the Kennedy School of Government at Harvard University; a member of the advisory board of the Shorenstein Center on the Press, Politics & Public Policy at the Kennedy School; an advisor to the MATCH charter public school in Boston; and a member of the Presidential Advisory Council at Berklee College of Music.