It is a pleasure to be here with you at the Media Institute. As most of you know, at NTIA we have been almost totally consumed with reviewing and awarding broadband grants under the Recovery Act. As of today, we’ve announced over $620 million in awards and we’ll be continuing to make awards as quickly as we can as we close out the first funding round. We’re already accepting applications for round two, and for those of you working on applications, we have a firm deadline of March 15th for all applications to be submitted and we will not extend that date given our statutory obligation to complete all awards by the end of September.

But that’s not what I came here to talk about today. Instead, I’d like to focus on the Internet and some key policy questions that NTIA will be working on this year.

The United States, and indeed all nations that depend on the Internet, face an increasingly urgent set of questions regarding the roles of the commercial sector, civil society, governments, and multi-stakeholder institutions in the very dynamic evolution of the Internet. I can think of no more appropriate place to discuss these issues than the Media Institute, given the vital role the Internet plays in advancing our Nation’s First Amendment values, and the Institute’s long tradition as a forum for exploring the nexus between the First Amendment and communications policy.

From the very first encounter between our Constitution and the Internet, courts have recognized the Internet as an unprecedented gift to the First Amendment. When the Supreme Court first considered the relationship between the Internet and freedom of speech, the Court recognized the Internet as a “never ending world-wide conversation.” (ACLU v. Reno, 521 U.S. 844 (1997).) Since then, the conversation has only grown, but as we become more economically, socially, politically—and even emotionally—dependent on the Internet, we must continue to examine how best to assure that this conversation can continue, can engage more and more people, and can be a platform for innovation in both public and private sectors of societies around the world.

The wide reach and central role that the Internet plays in our society has prompted many to refer to the Internet as an ‘ecosystem.’ I’d like to spend a little time examining just whether the ecosystem metaphor is a useful guide for policy makers. What lessons can we draw from this metaphor and which lessons should we avoid?

In the physical world, I associate the dynamics of a natural ecosystem with two important concepts: first, the presence of some set of biological laws such as natural selection, that second, leads to a balance or equilibrium state so that even when there is a disturbance these natural
operations and laws bring the ecosystem back to an equilibrium state (maybe different than before, but an equilibrium).

Applying this concept to the online ecosystem could lead us to accept the idea that the Internet is self-regulating and there is some natural order that will always emerge no matter how the system may be disturbed. From this concept some argue that policymakers should just leave the Internet alone.

In fact, “leaving the Internet alone” has been the nation’s Internet policy since the Internet was first commercialized in the mid-1990s. The primary government imperative then was just to get out of the way to encourage its growth. And the policy set forth in the Telecommunications Act of 1996 was: “to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.”

This was the right policy for the United States in the early stages of the Internet, and the right message to send to the rest of the world. But that was then and this is now.

As we at NTIA approach a wide range of Internet policy issues, we take the view that we are now in the third generation of Internet policy making. Here’s how history looks to us.

1. Internet Policy 1.0: transition to commercialization (1990-2000): In the 1990s, let’s call this period, Internet Policy 1.0, when the first commercial Internet service providers began providing commercial service and the World Wide Web was created, opportunities for innovation and investment “at the edges” of the network and in the last mile were drivers of growth. Innovation “at the edges” meant the development of exciting and novel applications that were often, literally, conceived in a garage. The guiding philosophy was: the more the better. The government imperative was to seek unrestrained growth of the Internet. It not only worked, but some of those very innovations continue to facilitate the Internet’s vitality and growth.

2. Internet Policy 2.0: from the garage to Main Street (2001-2009): After the turn of the century and for the last decade, the Internet experienced tremendous economic growth and social innovation. We call this period, Internet Policy 2.0. By one estimate, half the number of U.S. homes had Internet access within ten years after commercialization, and NTIA estimates that today, about 70 percent of U.S. households have Internet access. Despite this growth, policy issues emerged during this era which have not been effectively addressed:

- Privacy: During this past decade, more and more personal data was being collected leading to a growing unease with the ‘notice & choice’ model. How many of us really read those privacy policies or just click away at the “Yes, I agree…” in order to get on with what you want to buy, read or post?
- Security: Individual users and large enterprises found that they were required to devote more time and money to addressing security threats.
- Copyright infringement: Over the last ten years, we’ve seen great innovation in the development of new business models, such as iTunes, but at the same time, we’ve also seen a surge in the piracy of intellectual property, and the negative impacts this disregard for copyright law has had on traditional content industries.
3.  **Internet Policy 3.0:** It’s now time to respond to all the social changes being driven by the growth of the Internet. We need Internet Policy 3.0. We enter this new decade recognizing that we rely on the Internet for essential social purposes: health, energy efficiency, and education. It’s also a general engine for economic and social innovation. We must take rules more seriously if we want full participation, but we must keep the need for flexibility in mind.

We have much higher expectations of the Internet today than we’ve had in the intervening years. The Internet, and particularly broadband Internet, are the central nervous system of our information economy and society, and can provide unprecedented opportunities to address our current challenges in health care, energy efficiency, education, and government openness.

It is important not only to preserve, but to enhance access to this open and dynamic medium that fosters unprecedented innovation and public participation. Going back to the ‘ecosystem’ metaphor, the Internet is not a natural park or wilderness area that should be left to nature. In fact, I don’t think any of you in this room really believe that we should “leave the Internet alone.”

It’s more accurate to describe the Internet is an agglomeration of human actors—it’s a large and growing social organization. There are no natural laws to guide it—and there is most certainly no self-regulating equilibrium point because this cacophony of human actors participating in this organization demands that there be rules or laws created to protect our interests. That’s human nature. For example:

- If you’re a user, you want to know that you can make a transaction online without your credit card information falling into the wrong hands.
- If you’re a content owner, you want to be allowed take action against users that infringe your copyright.
- If you are a small backbone provider, you want rules to govern peering relationships with large providers.
- If you’re a large enterprise, you want your investment to protect against hacking and intrusion to be sound.
- If you are a network owner, you may be against Net Neutrality rules, but that does not mean there are not any rules, it just means the network owners get to create their own rules about whether and when to discriminate.

Despite the tremendous economic growth and social innovation that has occurred online over the past decade, policy tensions such as these have arisen and have not been effectively addressed. Given all the human actors involved in the Internet with all their competing interests, we have to ask, do governments have to be involved to sort out these interests so that the Internet will continue to thrive?

I say yes but just as emphatically, I say that the government’s role need not be one of a heavy-handed regulator. There’s little question that our existing regulatory structures are poorly equipped to deal with these issues. They are too slow, they are too backward looking, and they are too political to be effective.
But it concerns me that in the absence of some level of government involvement, we will lose the one thing that the Internet must have—not just to thrive, but to survive—the trust of all actors on the Internet.

- If users do not trust that their credit card numbers and private information are safe on the Internet, they won’t use it.
- If content providers do not trust that their content will be protected, they will threaten to stop putting it online.
- If large enterprises don’t have confidence that their network will not be breached over the Internet, they will disconnect their network and limit access to business partners and customers.
- If foreign governments do not trust the Internet governance systems, they will threaten to balkanize the Domain Name System which will jeopardize the worldwide reach of the Internet.

Those are just some examples but I think this issue of trust applies to every actor on the Internet.

A good place for policymakers to start as we define our role and what our actions should be is to preserve and maintain trust in the Internet. (Interestingly it’s easier for government agencies to organize to prevent bad actions rather than nurture good ones. So we have the DOJ Antitrust Division but we do not have an agency that is for trust).

At NTIA, we’re not a regulatory agency, but as the principal advisor to the President on telecommunications and information policy, I think we have role to play in preserving and building trust on the Internet.

Our agenda this year is to refocus on the “I” in NTIA – Internet and information policy – and play the role of preserving and building trust and to balance out the policy tensions I mentioned earlier.

Let me list for you our initiatives for the year:

- Privacy policy. Here’s the question: How can we enable the development of innovative new services and applications that will make intensive use of personal information but at same time protect users against harm and unwanted intrusion into their privacy? We are launching a series of listening sessions this spring with industry, advocates and academics in the field, and will follow up with a notice of inquiry and public outreach events.
- Child protection and Freedom of Expression: As more children go online, how do we ensure proper targeting of law enforcement resources against serious crime while remembering that most important line of defense against harmful content is the well-informed and engaged parent or teacher? Later this year, the Online Safety Technology Working Group, created by Congress and convened by NTIA, will issue a report on the state of the art in child protection strategies online.
• Cybersecurity: How do we meet the security challenge posed by the global Internet which will require increased law enforcement and private sector technology innovation yet respect citizen privacy and protect civil liberties. We’re participating in a Commerce Department cybersecurity initiative that will address these issues, particularly as they relate to improving the preparedness of industry for cyber attacks.
• Copyright protection: How do we protect against illegal piracy of copyrighted works and intellectual property on the Internet while preserving the rights of users to access lawful content? NTIA and our sister agency at the Department of Commerce, the US Patent and Trademark Office, are beginning a comprehensive consultation process that will help the Administration develop a forward-looking set of policies to address online copyright infringement in a balanced, Internet-savvy manner.
• Internet Governance: In our role administering the Federal government’s relationship with the Internet Corporation for Assigned Names and Numbers (ICANN), how do we ensure that ICANN serves the public interest and conducts its activities with the openness and transparency that the global Internet community demands? Last fall, NTIA and ICANN set forth a framework for technical coordination of the naming and numbering system and I am looking forward to soon participating in the first of the administrative reviews to ensure that these commitments are carried out in full.

All of these efforts must involve collaboration – among government agencies, foreign governments when appropriate, and key Internet constituencies—commercial, academia, civil society.

Our approach to answering these questions will be to engage the key constituencies and serve as a convener. NTIA is looking for solutions to these issues through consultations to advance the ball forward.

We will be flexible in terms of outcomes – the solutions that emerge through our consultations may be recommendations for legislation or regulation, but if they result in individual actors accepting new processes, so much the better.

At the end of the day, all of these initiatives have as their goal to preserve and protect the trustworthiness of this extraordinary medium.

If we are successful, maybe we will change our name to the National Trust the Internet Administration.

Thank you.