

Institute for Policy Integrity
Free to Invest: The Economic Benefits of Preserving Net Neutrality
Media Resource Kit

Thanks so much for your interest in the Institute for Policy Integrity's latest project, "Free to Invest: The Economic Benefits of Preserving Net Neutrality." Enclosed here, you will find the following resources:

Fact Sheet #1: Net Neutrality Backgrounder
Fact Sheet #2: The Economics of a Free Internet
Fact Sheet #3: Highlighted Figures.
Fact Sheet #4: About Policy Integrity

To schedule an interview with a member of the project team, contact Edna Ishayik at ednai@nyu.edu or (212) 998-6085.

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Free to Invest Fact Sheet #1: Net Neutrality Background

The Internet has dominated the past decade. It has drastically altered the daily lives of millions of people: families separated by continents communicate on their computer screens as if they are in the same room; shoppers buy clothes, music, cars, and homes online; and experts share information about everything from cupcakes to particle physics.

Across the globe, so many of the defining political and cultural moments of the last ten years centered around the electronic networks that connect us: political protests organized from smart phones; news of natural disasters breaking online and spreading virally; and a presidential debate becoming a nationwide town hall as Americans sent in questions from their computers.

The way we have come to use the Internet is a function of its openness—the cost of starting a website and sharing content with the world is low. Anyone with a few hundred dollars can buy a domain name, rent space on a server, and begin publishing content that anyone with an Internet connection can access. People with new ideas are encouraged to test them out as the number of users online can make the pay-off well worth the investment.

For every YouTube, Wikipedia, or Google there are thousands of websites and applications created and tested—some are game-changers, and some are not. But the depth and breadth of content is what drives the Internet to become wider, smarter, and more useful as each day passes.

Behind the scenes, this dynamic, referred to as “net neutrality”) works like this: end-users pay Internet Service Providers (ISPs), like Verizon or Comcast, for access to the Web; and content providers, like newspapers, blogs, and businesses, pay ISPs a onetime fee to upload information online. Without net neutrality, ISPs could charge content providers again when users access content.

Adding these fees would increase the costs of creating websites and applications. Smaller websites might not be able to afford the fees leading them to close up shop. Start-ups might not actually start up because it costs too much or the profits aren’t worth the investment. If too many sites decide it’s just not worth the price of entry, the Internet loses value to the people who use it.

If ISPs could charge content providers to reach broadband subscribers, then companies like Time Warner could charge a site like Yahoo a different price than say, Wikipedia to reach Time Warner subscribers. Or, if Wikipedia could not reach an agreement with Time Warner, then Time Warner subscribers would be unable to access the site at all. Smaller websites that can’t afford to pay premium rates could be put on a slower track leading to longer load times and relegating the pages to relative obscurity.

This prospect threatens the dynamic that makes the Internet so valuable: all users can access all content on the Internet—it is all there to be used, shared and expanded, 24 hours a day, without regard to location or provider. Without it, the Web becomes less powerful to everyone on it.

Instead, net neutrality encourages an entrepreneurial cycle that breeds more content and attracts more users. This generates economic benefit for all users.

It is impossible to predict how a rapidly changing technology like the Internet will look in the next decade and beyond—what will the next Twitters, Googles and Facebooks be? By protecting incentives for new content development, net neutrality helps ensure that we get to find out.

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Free to Invest Fact Sheet # 2: The Economics of a Free Internet

Free to Invest provides in-depth research and analysis on the economics of the net neutrality issue. After six months of careful study, the authors of the report arrived at 5 main findings:

1. The Internet **produces billions of dollars of free value for the American public:** Information is shared, reused, and reconfigured without fees or penalties. Websites are not compensated when their content is repurposed or passed on—that means fewer subscriptions to paid services, fewer direct page views, and a loss of advertising dollars. This economic dynamic has been taken for granted as the Internet grew around the idea that information resides in the public domain—free to be emailed, Tweeted, blogged, and discussed.
2. As a result of this, the Internet is more useful to everyone on it, but ISPs and content providers are at a disadvantage since they are not compensated for all of the information they disseminate. **This leads to systematic underinvestment in the Internet:** if that income could be accessed, it would encourage investment in infrastructure and content. The inability to access that income results in a market failure.
3. Without net neutrality rules, new technologies could lead to pricing practices that transfer wealth from content providers to ISPs, a form of price discrimination that would reduce the return on investment for Internet content—meaning **website owners, blogger, newspapers, and businesses would have less incentive to expand their sites and applications.**
4. Additional investment in broadband infrastructure would also increase the value of the Internet—making it faster and accessible in more places. But **charging content providers for access to ISP customers is an extremely inefficient economic tool** to do that, primarily because most additional revenue generated for ISPs is likely to be transferred to the their shareholders rather than invested in expanding broadband lines.
It is relatively easy to directly support infrastructure development, but hard to provide direct support for content. Targeted government support for ISPs to expand access where needed, along with net neutrality rules to protect content providers, best combination of policies for overcoming the market failure of underinvestment in the Internet.
5. Without net neutrality rules preventing priority pricing techniques, there could be changes in the way content appears online. If ISPs create “priority” or “fast lane” access to content providers at a fee, users could experience uneven access to websites and applications. While some content providers may benefit from this architecture, many types of websites will be especially harmed. Ultimately, **prioritization could reduce incentives for content creators, potentially lowering the overall value of the Internet for all users.**

Overall, the report identifies a number of trade-offs between enforcing net neutrality or not and finds that using net neutrality incentivizes content more efficiently than removing it would incentivize infrastructure improvements.

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Free to Invest Fact Sheet #3: Highlighted Charts and Graphs

Figure 1: Internet Pricing Structure

Below is a simple diagram that represents the structure of the Internet. On the right side are content providers who upload their applications and websites onto the Web usually via an Internet Service Provider, but it could be any of a variety of types of companies that sell access to the Internet.

This is typically the only fee that content providers pay to access the Internet and Internet subscribers. ISPs connect their private networks to the Internet in the center of the figure.

Broadband subscribers in homes and businesses across the country pay an ISP like a phone or cable company for online access. The pipes between this ISP's Internet access point and its subscribers' computers constitute a privately owned and operated subnetwork. This last stretch of wires and pipes are often referred to as the "last mile" of the Internet—the part that connects the network to individuals (depicted on the left side of the figure below)

The last mile is the heartland of the net neutrality debate. The cost of building a last mile network is extremely high and is often borne entirely by the ISP that constructs the network. Building this type of network requires physical or wireless connections to be built between and ISP's Internet access point and each subscriber's household or business. This last mile network is the ISP's most valuable asset.

Some say that content providers profit from the last mile but do not compensate the ISP companies for their investment in the infrastructure that enables that profit.

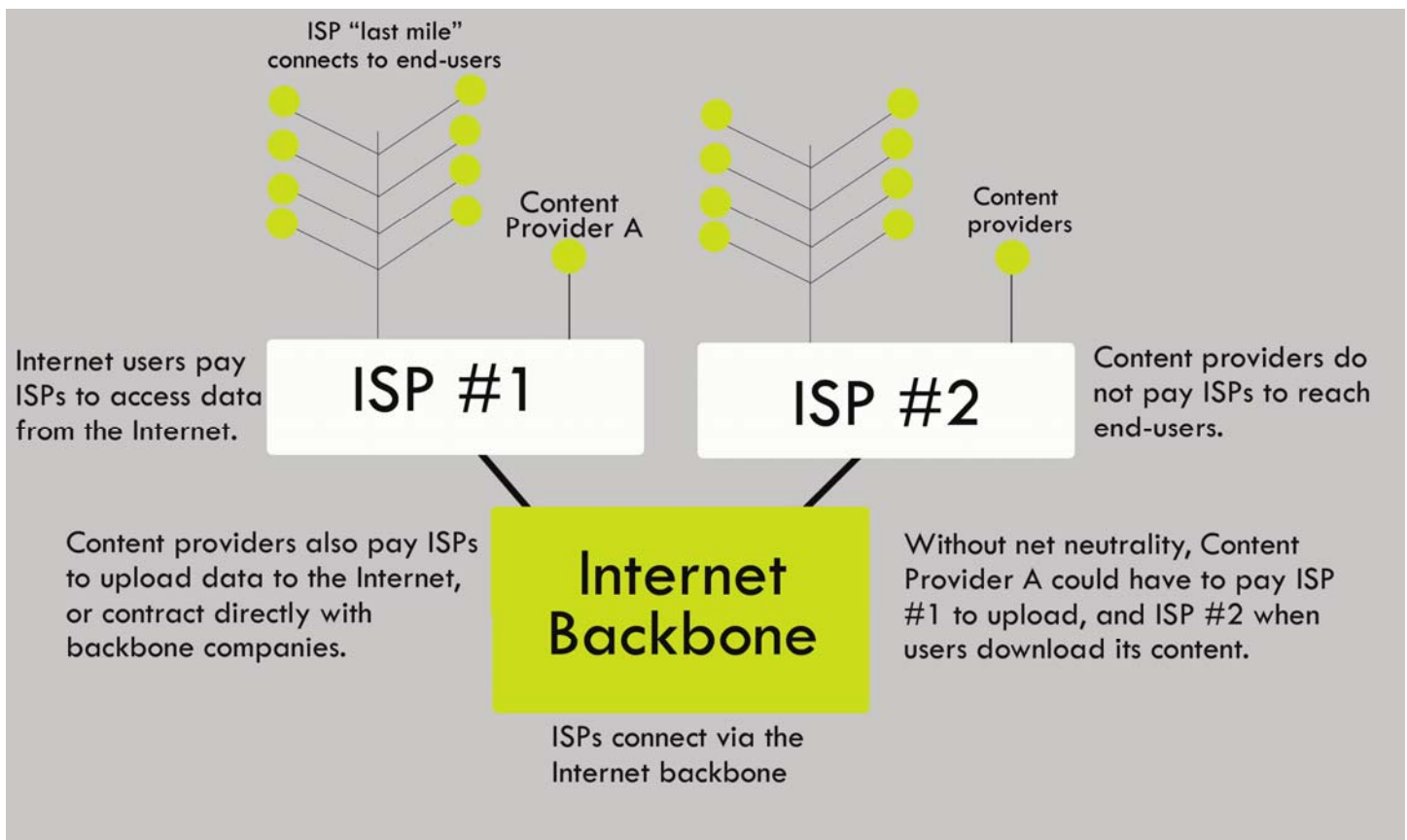


Figure 2: The Network Effect

The Internet exhibits what is known as the “network effect” which occurs when the value of a good or service increases as others purchase it. The telephone is an example: one person who purchases a phone does not benefit unless others buy phones too.

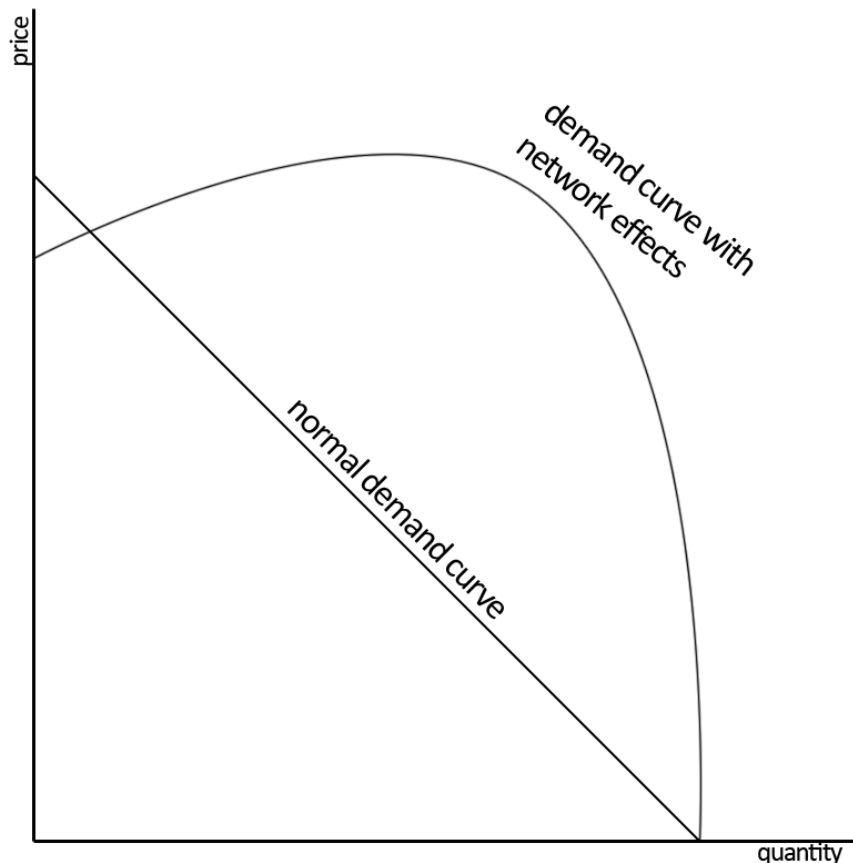
The value of the Internet increases to each user as more users log on. This happens in part because Internet users are also content creators. Few people can program Java apps, but many people comment on news stories, send emails to listservs, and post items to eBay. The structure of the Internet makes it easy to generate content that other users will find valuable.

Individual websites, such as Craigslist, also benefit from the network effect—as the number of users increase, the websites become more valuable to each one. As networks expand, this feedback loop reinforces growth; the same feedback system could work in reverse. Imagine if there were fewer buyers and sellers on eBay: it would not be as effective for either group.

The figure below demonstrates this dynamic. Demand curves indicate how many buyers are willing to purchase a good at various prices. For a standard good, the demand curve slopes downward because for most goods, there are a small number of people willing to pay a large amount to purchase the good and more people willing to pay successively smaller prices.

The network effect demand curve starts somewhat lower than the standard demand curve, because without other people on the network the willingness of a consumer to purchase the good is lower. Instead of sloping downward, the network effect demand curve slopes upward because as more people join the network, users’ willingness to pay for the good increases.

At a certain point the standard demand effect kicks in and additional users are not willing to pay as much for access to the network. At that point, the network effect demand curve also begins to slope downward.



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Free to Invest Fact Sheet #4: About Policy Integrity

The Institute for Policy Integrity works with advocacy organizations and governments to use economics and law to protect the environment, public health, and consumers. Working at the national and local levels in the United States and across the globe, Policy Integrity projects bring economics to bear on issues like climate change, women's health, and net neutrality.

Because cost-benefit studies, when done well, often favor strong protections, Policy Integrity encourages advocacy organizations and governments to apply economics to public policy questions. Its team of lawyers and economists help identify and pursue areas ripe for economic analysis.

Policy Integrity was founded in 2008 by Richard L. Revesz and Michael A. Livermore, the co-authors of *Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health*. Revesz has been the dean of New York University's School of Law since 2002—his work has helped set the agenda for contemporary environmental law scholars. Livermore is Policy Integrity's executive director and an expert on environmental regulation and policy. Policy Integrity has received support from several major charitable foundations including the Hewlett Foundation and the Rockefeller Family Fund. Advisory board members include former White House chief of staff, John Podesta and former Office of Information and Regulatory Affairs administrator, Sally Katzen.

Check out Policy Integrity commentary and blog posts at [Forbes](#), [The New Republic](#), [BusinessWeek](#), [Grist](#) and [National Journal](#). For coverage of Policy Integrity projects look at [USA Today](#), [New York Times' Green Inc](#) and [Wall Street Journal's Environmental Capital](#).

Project Highlights:

Counting the Benefits of Climate Change Regulation: Policy Integrity teamed up with the Environmental Defense Fund to help improve the technique used by the federal government to estimate the economic benefits of greenhouse gas controls.

Supporting Net Neutrality: Policy Integrity is partnering with a coalition led by Free Press and Consumers Union to support a Federal Communications Commission rule that would prevent Internet-service providers from discriminating against websites based on content. Policy Integrity has conducted research which shows that this network neutrality rule is likely justified in economic terms.

Opposing Longer Trucking Hours: Last summer Policy Integrity participated as amicus in litigation undertaken by Public Citizen challenging a regulation that would increase the number of hours worked by truckers. IPI argued that the rule overlooked large public health consequences for truckers and was therefore in violation of the Administrative Procedure Act.

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