STATEMENT OF BRADFORD BURNHAM, MANAGING PARTNER, UNION SQUARE VENTURES, LLC HEARING:

WHY NET NEUTRALITY MATTERS: PROTECTING CONSUMERS AND COMPETITION THROUGH MEANINGFUL OPEN INTERNET RULES

UNITED STATES SENATE COMMITTEE ON THE JUDICIARY SEPTEMBER 17, 2014

Thank you Chairman Leahy for the invitation to participate in this hearing to address the vitally important question of how make sure the Internet remains an engine of innovation and economic growth.

My perspective has been shaped by a career spent on both sides of the issue, first as a telecommunications executive at AT&T and Partner at AT&T Ventures, where I worked with or invested in the infrastructure of the Internet, and now at Union Square Ventures where we invest exclusively in applications layer services like Twitter, Tumblr, Kickstarter, Etsy, and Lending Club.

I believe we are at a crossroads. The rules the FCC is now considering will shape the Internet ecosystem for many years to come and could have a profound effect on our economy, our place in the world and ultimately on the nature of our society.

Almost everyone has benefited from the phenomenal innovation enabled by the Internet -whether you are playing Words with Friends with your grandchild, or collaborating with other
scientists across continents or finding validation and support in an online community - but few
of us have stopped to think about how all this happened. The rich, dynamic, emergent
innovation we have witnessed happened because of two two key characteristics of the
Internet's architecture. First, the underlying protocols of the Internet separated applications
from infrastructure, making it possible to create a networked application without knowing
anything about, or seeking permission from, the underlying network. Second, developers
could create applications, confident they could reach the millions of consumers who had
already paid to be connected to the Internet. These two characteristics radically lowered the
cost of building and distributing Internet applications, opening the market to a much larger and
more diverse pool of creators.

For the first time, people without money, connections, or corporate backing could create an application and reach a global audience. Facebook was created in a dorm room. Foursquare spent \$25,000 to reach their first 100,000 users. When Tumblr had 100,000 users, they were two employees, a part time designer and a couple of desks tucked away in the corner of another startup. Each of these companies -- and thousands more -- started from scratch and

grew to reach global audiences. And they have since gone on to empower hundreds of millions of others: independent craftspeople setting up shop on Etsy, filmmakers raising millions of dollars on Kickstarter, journalists reaching global audiences on Twitter, musicians launching careers on Soundcloud, and so on.

This incredible explosion of innovation and democratization of opportunity happened because it became so cheap to create and distribute an application on the Internet that innovators no longer required permission from a boss, a network operator, or an investor to launch a business. If you could imagine a service like Instagram or Pinterest you could build it yourself and get it into the hands of thousands or millions of consumers almost overnight. Later, once you had a large audience, you could approach investors from a position of strength to raise the money needed to grow your business. This is the model of innovation that powered the growth of the Internet. And all of this is about to change.

Until recently, internet access providers could not tell if you were watching Netflix, playing Angry Birds, or posting on Facebook -- by default, access to the internet was "open". They have now deployed "deep packet inspection" technology that allows them to see what services you are using. Because they can now figure out which packets are which, access providers can now charge application developers for faster delivery of packets, slow traffic they decide is less important, and even block traffic altogether.

As the cable and telephone companies deployed equipment to identify which packets came from which applications, the FCC undertook a number of actions to keep the Internet a level playing field, culminating in the formal adoption of network neutrality principles in 2010. For the last several years, one of the biggest providers of broadband Internet access, Comcast, has been operating under network neutrality principles they agreed to as a condition of their merger with NBC. Because, of all of these factors, Internet access providers have not exploited their powerful market position, and the Internet has remained relatively open.

Today, those merger agreements are near expiration, and the FCC's ability to enforce open internet principles has been sharply curtailed by the DC Circuit Court's decision in the Verizon case, which supported the FCC's policy goals, but ruled that the FCC couldn't legally pursue them without reclassifying internet access providers as "telecommunications services" rather than "information services".

Unfortunately, the FCC, in search of a compromise, is not proposing to reclassify Internet access. Instead, they are proposing rules that would explicitly allow cable and telephone companies to treat internet applications differently for a variety of business and network management reasons.

The combination of these new technical abilities and these proposed rules will dramatically increase the cost of creating and distributing Internet applications. Applications developers will have to think about the network management strategies and even the business interests of cable and telephone companies when they design their applications. They will also have to change the way they approach investors.

Every web service developer knows speed is a feature. They all work to shave milliseconds off the time it takes to load a page. Startups will need to raise the money up front to buy access to the fastlane to succeed, making it impossible to launch first -- as Tumblr and Foursquare did -- and then raise money to fund the growth of a proven concept. No new service will be created in a dorm room. And services like video, voice, and payment services that compete with the applications layer ambitions of the cable and telephone companies will find it especially hard to raise money.

It may seem like I am overstating my case but ask yourself how comfortable you would be investing in a new electric appliance if the company that delivered power to that device were able to throttle or cut off that power while delivering full power to their own devices or the devices of their business partners. What if your new device had to compete with a device that got electricity for free. If electric utilities were able to do these things, consumers could no longer shop for appliances without knowing what deal the manufacturer had with the utility. Investors would not be able to support promising new ideas without negotiating access to electricity up front. It seems obvious that allowing electric utilities to discriminate between different appliances technically or financially would distort the market for appliances. The companies that provide access to the Internet are asking to be able to do all these things.

Lobbyists for the cable and telephone companies like to jump on this analogy to suggest that advocates for the open Internet are fuzzy headed liberals who want the Internet regulated as a public utility. This is a cynical but effective misdirection. I am a capitalist. I believe in markets. If anything, like many investors, I lean libertarian. I am not suggesting the Internet should be regulated. I am suggesting the telecommunications networks -- that are, for the foreseeable future, the only practical way any of us will get to the Internet -- be required not to exploit that privileged position to distort the vibrant market for Internet applications.

This is not some dangerous new government intervention into a free market. We have always recognized that telecommunications services were essential services because they are the connective tissue of our entire economy. In fact, until 2004, there was no question that Internet access was a telecommunications service. It was only then cable companies convinced the FCC to treat Internet access as an information service. That was a fiction then, and it is still a fiction. How many of us, use any information service from our Internet access provider. Most of us spend our time on the Internet on a service created on a shoestring just a few years ago. I understand why cable and telephone companies would like to change that. I understand why it is in their business interest to leverage their powerful market position to advantage their own applications layer services or get paid to advantage other providers services. I don't understand why anyone other than the access providers and their shareholders would think this a good idea.

There is a way to preserve the key characteristics that enabled the emergence of the rich profusion of applications on the Internet. It is possible to keep the cost of developing and distributing an Internet application within the reach of anyone with a computer and a little programming experience. All we have to do is call a spade a spade, classify last mile broadband access as a telecommunications service and then immediately forbear most of the

regulatory overhead of current telecommunications regulation. This would give the FCC sound legal authority to adopt the kind of open internet rules we need to protect innovation and investment on the Internet: rules against blocking; rules prohibiting application-specific discrimination; and rules banning access fees.

This simple, clear, solution is the lightest-weight approach possible. Not only is it not overbearing government regulation, it is the only way to prevent the distortion of the market for Internet applications which would ultimately require much more heavy handed intervention. We can preserve the freedom to innovate on the Internet. We can align incentives to encourage investment in both the infrastructure layer and the applications layer. We can have fast, robust networks and the decentralized, emergent innovation at the applications layer that is the Internet as we know it. We are at a crossroad. We just have to choose the right road forward.