Good evening. Thank you for holding a hearing on such an important economic development topic, and for inviting me to testify.

My name is Jonathan Bowles and I am the research director of the Center for an Urban Future, a non-partisan policy think tank that does research, publishes reports and holds hearings on issues that are important to New York City’s future. Our focus is on economic development and workforce development. This morning, for instance, we held a lively panel discussion about how the city can do a better job of tapping the economic potential of the city’s academic and scientific research institutions.

About a year and a half ago, the Center for an Urban Future received funding from the Alfred P. Sloan Foundation to write a major report about this very topic: the growing importance of broadband to New York City’s economy and the obstacles to the broader deployment of broadband to businesses throughout the five boroughs. And for the past year, my research assistant Tara Colton and I have conducted more than 100 interviews about this topic with business owners in all five boroughs; leaders of industry associations; representatives of local development corporations, BIDs and other business intermediaries; telecommunications industry officials; academic experts and government officials.

Among other people, I spent a lot of time interviewing Nick Noe about the good work that Council Member Brewer and the Committee on Technology in Government has been doing. Before he left the Council, Nick served on this project’s Telecommunications Advisory Board.

I am still in the process of finishing up a draft of the report, which should be ready for release in the next 6 weeks. Today, I’d
like to share a couple of our important conclusions, and a few ideas for moving forward.

First, I don’t need to tell you that T1 lines, DSL and other forms of high-speed “broadband” Internet connections have long been a basic requirement for Wall Street brokerages, media companies, software firms, dot coms and other businesses considered to be a part of the “New Economy”. But what we’ve found is that in today’s digital age, broadband is becoming an increasingly critical communications tool for businesses in almost every industry—-from printers and film production companies to food distributors and architects.

Today, companies of all types—even old economy stalwarts like manufacturers and freight shippers—are discovering that they need the Internet to perform basic operations, to become more efficient, to save money and, ultimately, to survive in a global economic landscape where technology is prevalent. At the same time, it’s become crystal clear that in this competitive climate, a super-slow dial-up connection simply won’t get the job done.

As one person who works with businesses in Greenpoint told me: “Broadband makes businesses more efficient. One can purchase online, communicate with accountants and lawyers online, complete banking transactions online, receive and send time and content sensitive files online. And once there is an integration of services, such as telephone, Internet, video, and security, additional overhead is reduced and time is saved.

All of these benefits can’t be overstated at a time when businesses in nearly every industry are facing intense competition from around the block and across the globe. And for businesses operating in high-cost locations like New York City, broadband can help level the playing field and give firms the competitive edge they need to thrive.

After talking with business owners and industry leaders both here and in other parts of the country, we found that most sectors are embracing broadband technologies. And fast.

Printing companies, for instance, are increasingly receiving high-resolution digital files from clients via e-mail, and, in turn, sending proofs back the same way. With broadband, these often-heavy files can be downloaded in a few seconds. With dial-up, they could take minutes.

More and more woodworkers, architects and other design-oriented businesses are using fast, reliable broadband connections to receive orders in digital format and to transmit multiple design options to their clients.

Recording studios and audio mastering houses now transmit audio files—from demos to finished recordings—to music companies and others involved in the creative process. Audio recordings are sometimes posted on a web site, so clients can listen and comment. And broadband makes it possible for technicians to work with digital editing equipment and other sophisticated software programs that need to be updated regularly.

Animation and film businesses typically need large amounts of bandwidth to upload extensive visual files and edit projects online. As one animation entrepreneur told us: “We continually post and update work online for our clients through a server which they access. These files are large and require a solid broadband connection. Ninety percent of our editing process is done over the Internet through constant uploads to our hosting server.”

Businesses in the health care sector—from hospitals to HMOs—have been streamlining their billing and claims services online. Like firms in other sectors, health care companies all over the city use a broadband Internet connection to send files, take orders by e-mail, and communicate with their salespeople across the city. One health care company president told us: “This business would go right back into the dark ages [without broadband]. In the world of health care, there have been tremendous cuts in reimbursement. Without this technology, we could never be efficient enough to stay in business. We’re totally dependent.”

In the air cargo industry, businesses at JFK Airport and around the country are already using broadband technologies-
—including wireless, hand-held devices—to track freight shipments and book freight reservations online. Tighter security measures expected to be implemented in the near future will require freight forwarders and other cargo officials to file Customs declarations online, through a Web database.

Exporting firms are increasingly taking advantage of videoconferencing and other high-end communications technologies to establish new relationships with international buyers and expand business opportunities.

I could go on…

The good news is that businesses in most parts of the city today can obtain a high-speed Internet connection, an important step up from just a few years ago.

The bad news is that a vast number of businesses in New York – particularly small and mid-sized firms located outside of Manhattan’s office districts – are still using a super-slow dial-up connection to access the Internet and many are not hooked up to the Web at all. We also found that companies located outside of Manhattan’s central business districts still have a paucity of broadband service options, often face long delays in getting hooked up, and in many cases, experience frequent interruptions in their service. In addition, even the most bare-bones broadband options are still too pricey for many small businesses, and only a fraction of the firms outside of Midtown and downtown Manhattan are in buildings that are wired with fiber optic cables, the technology that delivers the fastest, highest-quality broadband service--and the type of service that’s nearly ubiquitous in Manhattan’s central business districts.

All of this presents a difficult challenge for New York at a time when some of the city’s brightest prospects for economic growth lie outside of Midtown and Downtown of Manhattan. Already, roughly 102,000 of the city’s 213,000 businesses (48 percent) are located outside of Manhattan. But there are clear opportunities for growth in these parts of the city.

Because we haven’t finished our report, or shared our recommendations with our Telecom Advisory Board, I’m hesitant at this point to talk too much about potential solutions. But I will say that there are no easy answers.

Part of the problem is that companies outside of Manhattan’s central business districts just don’t have a lot of options. While cable modems are available to residential customers almost everywhere throughout the five boroughs, they still aren’t an option for most businesses. Cable companies primarily target this service to residential customers, who usually already have the infrastructure in their homes or apartments to receive cable television. DSL offers more flexibility for many small businesses, but many firms say it can still takes months to get. And because the condition of the copper telephone wires in some parts of the city are extremely old, in bad shape and haven’t been upgraded in years, DSL service can be very unreliable.

Another big problem, however, is simply a lack of demand. Many old economy businesses still aren’t aware of the benefits of broadband. The CEO’s of some manufacturing firms in the city, for instance, don’t even use a computer or have e-mail. While more and more firms are awakening to the benefits of broadband, many areas haven’t reached the critical mass where telecom companies feel confident that they can recoup the high cost of building out a more modern infrastructure in underserved areas. The critical mass of business customers just isn’t there.

One other problem is that many building owners simply don’t understand how important this is. Many still charge high fees and put up other barriers to telecom companies that hope to offer broadband services to companies in their buildings.

We’re still formulating a list of recommendations that would address some of these issues, but I’ll be happy to share my full report with all the members of these committees as soon as it’s ready.