

# **Economic and Social Benefits of Broadband**

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# Overview

- **What is Broadband?**
- **Economic & Social Benefits**
- **Hype versus Reality – Can Broadband Deliver?**
- **The Potential Role of Government**



# What is Broadband?

- **Broadband has different meanings for different people – references can be confusing.**
- **Focus on capability, not speed.**
- **Broadband is enough two-way transmission capacity and speed to allow interactive high-quality full-motion video, data and voice applications simultaneously via one “pipe.”**



# Why Broadband?

- **Policy-makers may be skeptical that broadband can actually deliver benefits.**
- **If an economy must struggle to provide even the most basic services to its citizens, why should it worry about broadband access?**
- **Will this really drive my economy or just make Internet connections faster?**



# Broadband Applications

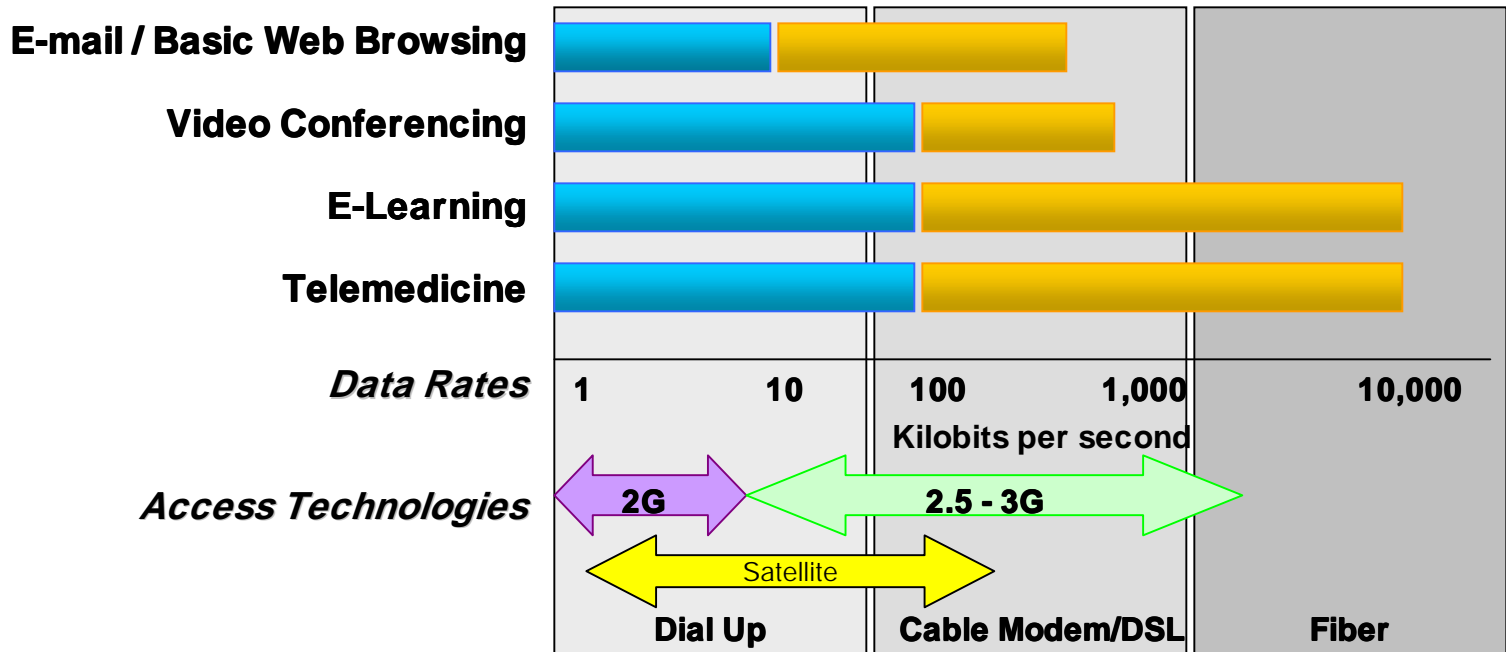
**With the advent of broadband technologies - applications become possible or are enhanced beyond their current capabilities with dial-up Internet access.**

- **Telemedicine**
- **Teleworking**
- **E-Government**
- **Agriculture**
- **Distance Learning**
- **Public Safety**
- **National Security**
- **Applications for Persons with Disabilities**

- **Utility Applications (meter reading, remote monitoring, etc.)**
- **Small Business Assistance**
- **Information Gathering**
- **Tourism**
- **E-Commerce**
- **Entertainment**



# Speeds & Capabilities



Legend
MINIMUM
IDEAL



# Benefits of Broadband

- Broadband is an *accelerator* of economic and social development.
- Current generation technologies do not meet the high bandwidth requirements for emerging applications that combine voice, video and data.
- The introduction of broadband technologies, including but not limited to DSL, fiber, satellite, and fixed and mobile wireless, has enabled traditional and new forms of communication to become a reality throughout the world.



# Benefits of Broadband

- **Increased Worker Productivity**
- **Job Creation**
- **Efficiencies in the Distribution of:**
  - **Goods**
  - **Services**
  - **Information**
- **Can reduce the challenges of low population density and physical remoteness from cities**





# Benefits of Broadband

- **More Efficient / Increased Access to “Basic” Services like Healthcare, Education**
- **Bundled services (voice, video, data) enable operators to offer more services at lower prices**
- **Helps Bridge the Digital Divide!**



# Can Broadband Deliver?

- Using satellite broadband technology, several patients in a remote area in Canada were treated over 900 miles away; without connectivity, the patients would have waited for months until a specialist traveled to their area.
- The Telemedicine Foundation of Russia is focused on using broadband technology to conduct telemedicine consultations between Russia and other countries in Europe and North America, as well as within Russia's vast borders.



# Can Broadband Deliver?

- **In Canada, broadband networks are being used to assist with farm management and electronic livestock auctions. Over sixty percent of beef cattle sold in Quebec is now sold at electronic livestock auctions.**
- **Broadband enables the presentation of information in multiple formats, such as audio, video, and captioning, which is well-suited for people with certain disabilities.**



# Can Broadband Deliver?

- A new “virtual university” in Pakistan provides distance learning using the television, video conferencing and the Internet. The university will train nearly 60,000 computer science graduates so that they can help build an IT industry in Pakistan.
- Broadband enables national and local governments to provide more services to their citizens, such as business registration, filing taxes and getting information on local laws.



# Can Broadband Deliver?

- In Korea, the government plans to help 10,000 agricultural households construct e-commerce homepages by 2005 in order to run farm product shipping support systems, remote agricultural consulting systems, Internet agriculture broadcasting, and a fisherman knowledge share system.
- Public safety and national security applications



# The Role of Government

- **Potential incentives for build-out:**
  - Favorable regulatory policies
  - Tax credits
  - Grants
  - Subsidized or low-interest loans
  - Support for research and development on broadband technologies – particularly for rural and underserved areas
  - Grants for community planning efforts





# The Role of Government

- **Governments can make a commitment at the highest political levels to address their social, economic and other needs by making broadband deployment a priority.**
- **Leadership at the highest levels is necessary to establish a vision and framework for transforming an economy's telecommunications network to full broadband capability.**





# The Role of Government

- **Government can act as a driver of broadband demand and deployment by promoting and adopting the use of broadband in areas such as:**
  - **Government Services**
  - **Security**
  - **Tourism**
  - **Public Safety**
  - **Education**
  - **Agriculture**
  - **Teleworking**
  - **Healthcare**



# The Role of Government

- **Governments can implement policies that encourage investment in new and diverse communications technologies.**
- **Governments can remove disincentives to network build-out and deployment that are inherent in regulatory systems.**



# The Role of Government

- **Government regulation should be limited to addressing specific, critical problems and should minimize disruption to competitive, market forces.**
- **Operator Choice should drive technology deployment.**
  - All broadband access technologies should be given equal consideration, if technologically feasible. These technologies include, but are not limited to, DSL, fiber, satellite and fixed and mobile wireless.



# Conclusions

- **With broadband deployment will come the potential for enormous economic and social benefits.**
- **Regardless of the technology used to deliver the service, broadband will enable opportunities for many applications, particularly for rural and remote communities, as well as lesser developed regions.**
- **Governments can help create an environment that will facilitate broadband deployment**



**Thank You!**

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**<http://www.tiaonline.org/policy/broadband.cfm>**

