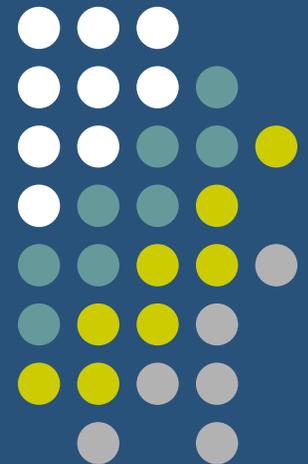


# Joint Commission on Technology & Science

Wireless Broadband Advisory Committee





# What is Broadband?

- FCC Definition:
  - Advanced communications system capable of providing high-speed transmission of services such as data, voice, and video over the Internet and other networks. Transmission is provided by a wide range of technologies, including digital subscriber line and fiber optic cable, coaxial cable, wireless technology, and satellite.
  - “High Speed”: at least 200 kbps, in at least one direction

# Benefits of Broadband



Key driver of economic growth

Important to current and future and prosperity

Broadband is becoming viewed as essential – like water, power, and other utilities

Essential for many key applications:

- Telehealth
- Telework
- Continuity of Operations
- Education
- Electronic Medical Records
- Economic Development

# More Benefits of Broadband



- Higher speed data transfer
- “Always On”
- Low latency (delay) – important for increasingly popular Internet uses, like VoIP, streaming media, and collaborative computing

# New & Improving Technologies



- “Traditional” cable & fiber
- Wireless networks
- WiMax
- Satellite
- Broadband over powerlines

# FCC Reports to Congress



- Having multiple, advanced broadband networks can complement one another and enhance deployment
  - Smaller wireless networks can fill the gaps that might be left in urban & suburban wireline coverage
  - Wireless and satellite can provide coverage to remote areas where wireline is costly

# Some Basic U.S. Statistics



- Roughly half of Internet users in the U.S. have access to broadband
- 1999 (FCC Data): Approximately 2.5 million high-speed lines
- 2006 (FCC Data): Approximately 64.5 million high-speed lines

# Some Basic Virginia Statistics



- FCC reports 62 providers of high-speed lines in Virginia
- Percentage of Virginia zip codes with high-speed lines in service as of June 30, 2006

# of providers	0	1	2	3	4	5	6	7	8	9	10+
%	1	2	6	10	14	10	12	8	7	6	23

# What Do the Numbers Mean?



- Broadband deployment is extensive, but it's hard to assess the extent of gaps in the coverage
- Zip Code info can be misleading – if one customer has broadband service in a given zip code, then it counts in the percentages

# Recent Virginia Legislation



- HB 2381:
  - Clarifies that the Virginia Public-Private Facilities & Infrastructure Act can be used to deploy wireless broadband
  - Wireless broadband equipment, facilities, and infrastructure qualify as projects that may be financed through the Virginia Resources Authority
- HB 2385:
  - Allows localities to classify property owned by certain wireless broadband service providers as a separate class of property for tax purposes

# Broadband Funding in Virginia\*



- Department of Housing & Community Development
- Virginia Tobacco Commission
- Center for Innovative Technology
- USDA-RUS (Federal)
- USAC – Universal Service (Federal) – Rural Health & e-Rate

\*Data provided in 10/31/06 presentation to JCOTS Telework Advisory Committee  
by Karen Jackson, CIT/Office of Telework Promotion & Broadband Assistance



# What needs to be done?

- Develop strategies for identifying gaps
- Develop creative ways to encourage public-private partnerships to fill gaps
- Identify areas that are truly “last mile” and not economically feasible – develop funding mechanisms
- Set policy goals and timelines for universal deployment in Virginia



# Get to Work!