

UBIQUITOUS BROADBAND PAYS FOR ITSELF

Ubiquitous Broadband Attracts Industry and Creates Jobs in communities where employees can have ready access to broadband in their homes.

- Broadband spurs economic growth due to the direct labor associated with deploying, maintaining, and manufacturing broadband infrastructure and premise equipment.
- Additionally, for every direct job involved in deploying broadband, an estimated 4.1 indirect services and application jobs are created.
- Broadband can increase the US economy by \$134 billion annually and create 1.2 million jobs per year.
- Every 1% point increase in state broadband penetration increases employment by 0.2% to 0.3%.

Ubiquitous Broadband Creates Economic Savings Across the Economy: Broadband allows for state-wide savings, by applying recent technological advancements to basic services, such as healthcare, commuting, and construction, to improve efficiencies and reduce costs.

- **TELEMEDICINE** holds the promise of dramatically reducing healthcare costs, and improving access, quality, and delivery of care.
 - **Telemedicine permits electronic monitoring of patients**, allows doctors and hospitals to share and send data and images, provides treatments to patients in remote locations, and simplify and safeguard the ordering of medical supplies and prescriptions.
 - **Broadband is necessary to realize the benefits of a telemedicine program.** For example, transmitting an X-ray over a dial-up connection takes two hours, over a 200 kilobits connection it takes 27 minutes, and with over a 100 megabits connection it takes just 4 seconds.
 - A study by SUNY Stony Brook found that patients using telemedicine to manage Congestive Heart Failure experienced a **reduction in overall healthcare costs of 41%**. Reduced physician office visits alone offered a savings of more than \$115 million annually.
- **TELECOMMUTING** creates savings across the economy:
 - **Increases worker productivity by 20%-25%:** By installing broadband connections at employees's homes, Cisco received one hour of work more per day in place of wasted commute time. AT&T and Merrill Lynch each saved \$10,000/year per employee through lower absenteeism alone
 - **Creates cost savings of \$23 billion annually:** For example, advanced video conferencing eliminates the travel costs of many face-to-face meetings, which cost 7 times more than video conferencing.
 - **Reduces Transit Costs for Public and Government:** Fuel use is reduced 1.2 million gallons per week for every 10% of workers telecommuting. With less congested roads, this reduces costs of building and maintaining highways.
- **SMART BUILDINGS** produce energy savings. By monitoring energy use, wired "smart buildings" reduce energy costs and decreases volatility by allowing utility companies not to have to keep as much wasted reserve power on hand.

Ubiquitous Broadband Increases Opportunities and Improves Quality of Life:

- **DISTANCE LEARNING** enables students from any geographic location and income level to take advantage of educational opportunities and online tools.
- **E-GOVERNMENT** gives citizens access to government meetings; allows citizens and government officials to save travel and wait time by using online services (such as Secretary of State services); reduces local entities need for physical space.
- **NATIONAL SECURITY** is made easier by broadband access. Broadband makes the use of biometrics screening possible at points of entry, facilitates remote surveillance of borders, airports, and communication for first responders; and eases sharing information among agencies.
- **SMALL BUSINESSES and START-UPS** are afforded quick and easy ways to increase their customer base, broader advertising and job recruitment opportunities, and a variety of other front and back office improvement opportunities.