



# A Vision for Fiberizing and Un-Fiberizing America

## *The National Broadband Plan*



Bill Schrier, Chief Technology Officer  
City of Seattle, Washington, USA

The Association of Public Safety Communications Officials  
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# Summary



- America's Networks Lack Sufficient Bandwidth
- A goal: a fiber optic network to every home and business in the nation, coupled with
- Widespread private and public safety 4<sup>th</sup> Generation Wireless broadband networks





# History



- Telegraph
- Electricity
- Telephone
- Public safety radio
- Cellular Telephone



Lesson: We've built national networks before and they've made us more safe and secure



# New Technologies have Potential



- Internet plus Web and E-Mail
- HD Television, video-sharing
- Cell phone SMS, Video, Photo
- Facebook, Twitter

Problem: This tech not harnessed  
for public safety;  
insufficient bandwidth





# 911 and 311 Potential



- Video calls, HDTVs, cameras – HDTVs in many homes, linked with cameras, improve PSAP calls
- Photos and Video from cell phones, mobile cameras to PSAPs, field officers
- SMS feeds – texting from people at scene



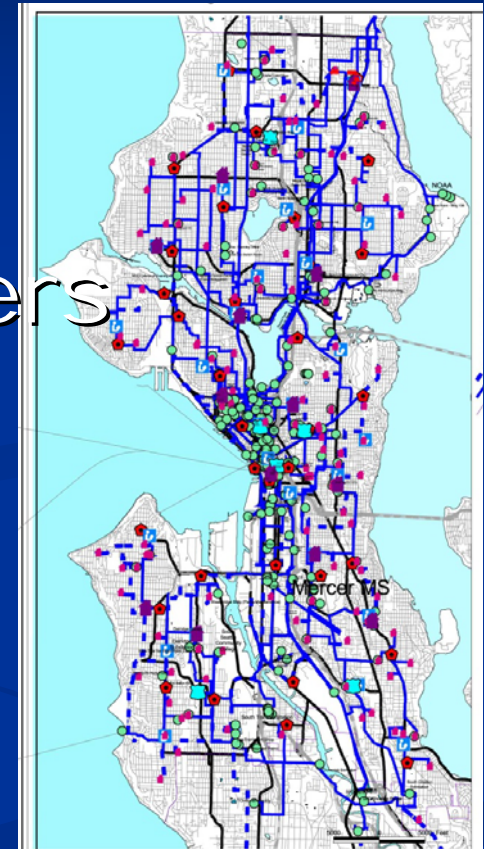




# The Recommendation



- Build fiber to every home and premise
- Fiber to PSAPs, 911 Centers
- With fiber, build 4G wireless networks for residents, public safety units, field officers



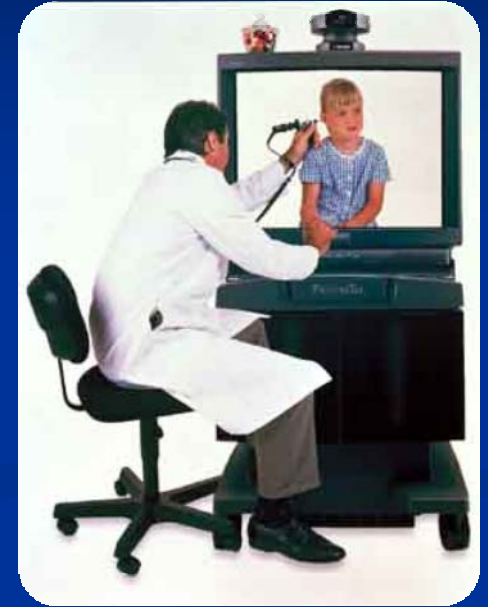
Seattle Fiber Map



# Multipurpose Fiber, 4G



- Telemedicine
- Tele-education
- Improve in quality of life through HD video
- True telecommuting
- Every home or business a potential video source, creating jobs, spurring innovation





# Environment, Security



- Reduce auto trips, traffic jams
- Reduce lost productivity in commuting and traveling, e.g this panel to Washington, DC
- Reduce greenhouse gas emissions
- Less dependence on foreign oil - improved homeland security







# A Daunting Task

- A daunting task and goal
- Many phones, TVs ...
- Many households, businesses ...
- But the technology is here
- Leadership, bold vision
- Pilot projects
- National fiber, 4G wireless networks

