Broadband Vision

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Likely changes

- Asymmetric (download) → symmetric
  - more uploads (backups, video, other UGC)
  - IPv6 with lots of customer-controlled addresses
- Higher peak-to-average ratio?
  - want quick uploads
  - broadband – more than 10 Mb/s download
- New applications
  - substitution for dedicated services (video)
  - energy management, home safety, medical monitoring
- No substantial distinction between residential and small business
  - LANs, lots of diverse devices, limited technical training
- Some need high reliability
  - even with power outages

New services

- **Multi-homing**
  - business models that allow fail-over to secondary wired or wireless network
- **Content and service hosting close to edge**
  - allows low-cost (shared) access to content
  - non-discriminatory
- **Identity services**
  - certified geo/civic location ($\rightarrow$ needed for NG911)
  - subscriber certificate ($\rightarrow$ user auth, also for NG911)
- **Security services**
  - e.g., botnet prevention