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Measuring the Broadband Footprint – The CRTC Experience

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Measuring the Broadband Footprint – The CRTC Experience

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Conseil de la radiodiffusion et des
télécommunications canadiennes

Canadian Radio-television and
Telecommunications Commission

Agenda



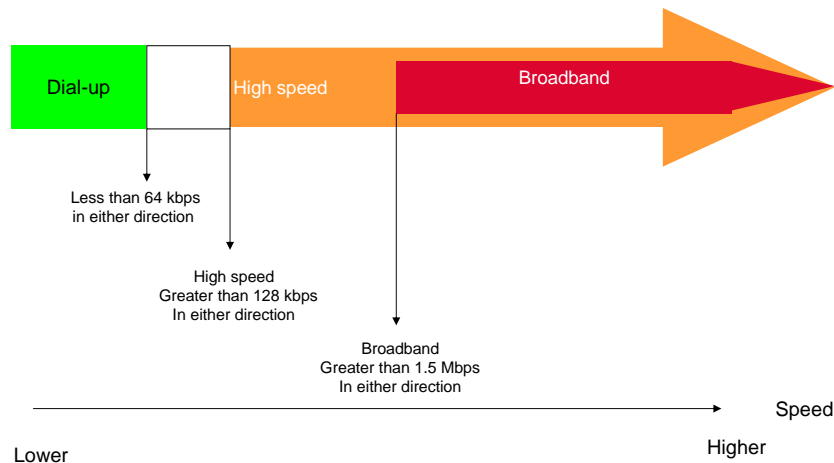
- Purpose of this presentation
- Canada's broadband definition
- Principles of data collection
- What do we need to measure
- How we obtain our required information
- Broadband availability in Canada

Purpose of this presentation



- The deployment of broadband is seen as an economic enabler by governments.
- Many governments are interested in knowing the extent of broadband deployment as a result of market forces with the intent of addressing any shortfall where it may not be economically feasible to deploy it.
- This presentation will provide an outline of the CRTC's practices, efforts and results regarding broadband measurement.

Canada's Broadband Definition



Principles of data collection



Supply side – The companies (Internet Service Providers)

- Minimize regulatory burden on the industry
 - Collect only what is required for policy making purposes
 - Collect policy relevant data that dovetails or is part of what the companies use internally
- Use standard generally accepted geographic definitions
 - Postal codes
 - Statistics Canada census blocks
- Coordination / cooperation
 - Other federal departments/agencies
 - Provincial departments

Demand side – the consumer

- Annual consumer behaviour surveys
 - Consumer surveys to address specific issues
 - Syndicated consumer reports
- Publicly available information
 - ISP websites to identify services offered

What do we need to measure



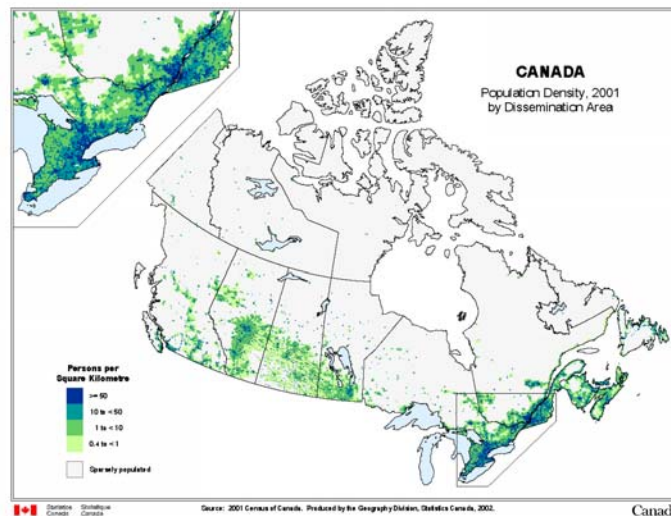
- The broadband footprint by technology
 - ▶ Identifies Competitive presence
 - ▶ Identifies availability of Broadband
- The speeds or capacity deployed and what are the potential applications for the varying speeds
- Subscribers information
 - ▶ Number of subscribers by:
 - Technology (cablemodem, DSL, Fixed Wireless and satellite)
 - Speed/ Capacity
 - ▶ Why households don't subscribe
 - ▶ Common uses of broadband connections/speeds
 - Low bandwidth requirements (Voice, e-mails, etc.)
 - Higher bandwidth (videos, etc.)

How we obtain our required information



- Annual survey of service providers to obtain:
 - ▶ Geographic/mapping details
 - Mapping details of serviced areas (wireline/wireless)
 - Location of broadband enabled facilities to estimate the served areas (when mapping details are not available):
 - Central Offices and remotes (telephone companies)
 - Cable headends (cable companies)
 - Number of broadband subscribers by postal code
 - ▶ Availability of residential Internet access pricing plans
 - ▶ Number of Internet subscribers by:
 - Technology (Geographic basis)
 - Speed/plan (National level)
- Consumer surveys
 - ▶ Addressing specific issues (price, speed, etc.)
 - ▶ Understand why households don't subscribe
- Analysis
 - ▶ Locate broadband enabled facilities on the map
 - ▶ Identify potential broadband served areas
 - ▶ Overlay postal code broadband subscriber data
 - ▶ Areas that encompass broadband facilities and subscribers are considered served

Broadband availability in Canada - Canada's population density



Broadband Availability in Canada



- The Broadband Challenge in Canada
 - ▶ Canada's size, geography and climate
 - ▶ Population density (50 people per km to less than 1)
 - ▶ Canada stretches over 5,000 km from coast to coast

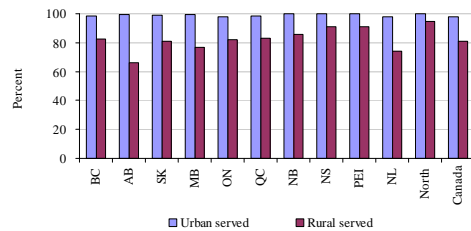
- Broadband footprint encompasses 93% of Canadian households

- Technology deployed
 - ▶ DSL/cable modem
 - Generally in higher population areas
 - Rides on twisted pair, coax, fibre
 - Over 85% of Canadian households have a choice between DSL and Cable modem
 - ▶ Fixed wireless
 - In addition to urban centres, fixed wireless used in higher cost serving areas
 - ▶ Satellite
 - Used in more remote areas

Broadband availability in Canada – the rural / urban split

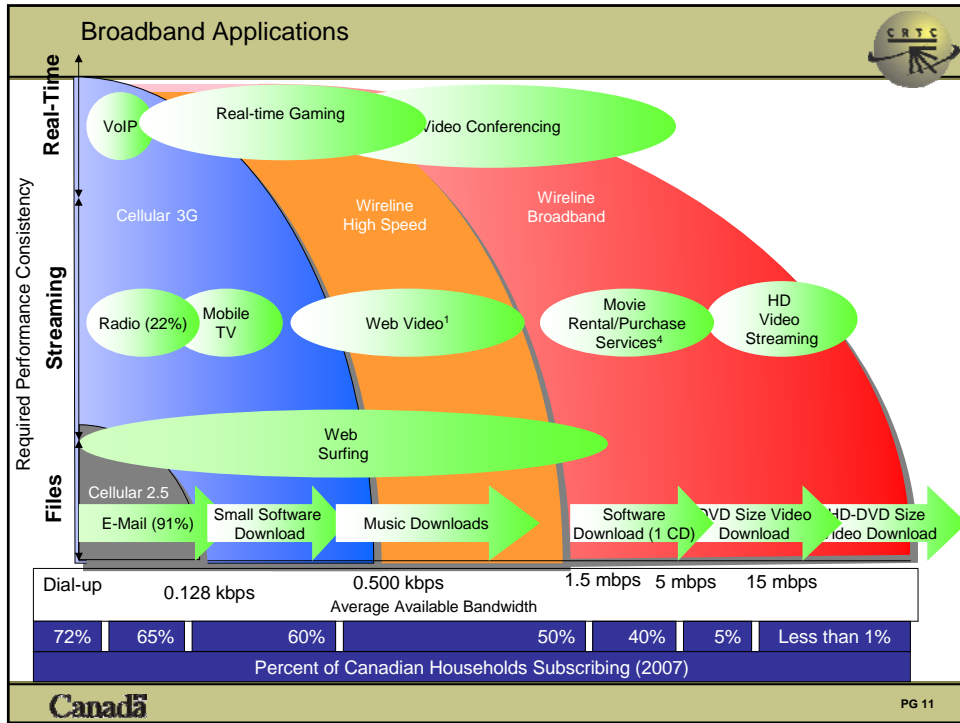


● Broadband availability – Urban v. rural (Percent of households) (2007)



Source: Industry Canada and CRTC data collection

- Rural broadband availability lags that of urban
- Rural communities generally have lower speeds compare to urban communities
- Rural subscriber take rates :
 - ▶ Exceed ISP business plan projections
 - ▶ Generally lag that of urban communities – this may be attributable to:
 - Price (Installation cost and monthly charges generally higher in rural areas)
 - Quality (generally lower speeds in rural areas)
 - Demographics (Younger individuals who generally embrace the Internet tend to migrate to urban centers)
- Mobile high speed (3G) –
 - ▶ Auction completed (July 2008)
 - ▶ Deployment underway



Broadband deployment in Canada

Thank you

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