

Connecting to our Future: The Digital Livable City

53th INTERNATIONAL MAKING CITIES LIVABLE CONFERENCE

MARY BETH HENRY

OFFICE FOR COMMUNITY TECHNOLOGY

CITY OF PORTLAND, OREGON

JUNE 2016



City of Portland

**Office for
Community Technology**

- ▲ Broadband & Communications Policy
- ▲ Cable Regulation & Consumer Protection
- ▲ Utility Franchises, Licenses & Wireless

Outline

Role of Local Government

Case Studies: Portland & Sandy, OR

Responsive & Playable Cities

Digital Equity

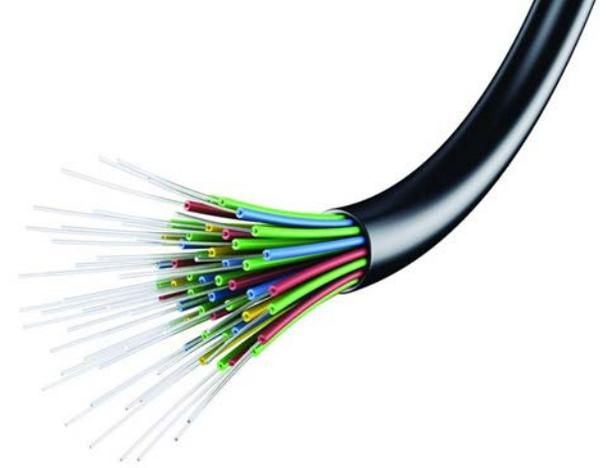
Youth & Internet

Older Adults & Internet

Calm Technology

Connectography

Conclusion



Role of Local Government: smooth processes

Process Efficiency

- ✓ **Build broadband into planning and staffing of all relevant agencies**
- ✓ **Streamline and publicize procedures and timeframes for permitting and inspections**
- ✓ **Allow network operators to contract pre-approved third-party inspectors to speed processes and reduce local burdens**

Role of Local Government: access to information

Information Access

- ✓ **Make data available wherever possible**
 - Make GIS data sets available
- ✓ **Document and publish data regarding available conduit, fiber, and other assets**
 - Document your fiber assets
 - Document your conduit assets

Role of Local Government: grow your assets

Access to Key Assets

- ✓ **Lease public assets such as fiber, conduit, and real estate**
 - Lease middle-mile fiber
 - Lease fiber in hard-to-reach areas
 - Increase existing fiber capacity if insufficient fiber exists
- ✓ **Facilitate underground construction**
 - Develop a “dig-once” policy
 - Maintain future-proof conduit specifications
 - Enable all parties to take advantage of “dig-once”
 - Place conduit banks in congested areas
- ✓ **Facilitate aerial construction through access to utility poles**
 - Facilitate make-ready process to streamline pole access
 - Eliminate the need for make-ready
- ✓ **Facilitate in-building access for wireline infrastructure**
 - Ensure availability of conduit from street to building
 - Ensure installation of in-building pathways and cabling

Local Government Role

Case Study: Portland, OR

Broadband Plan: ...recognizes that high-speed affordable broadband to every home and business represents basic infrastructure in the 21st century and is a key driver of the local economy. Incent Competitive Marketplace.

City-owned Network - IRNE:...serves public institutions

City WiFi:...in most public buildings

Digital Equity Action Plan:...recognizes that affordable access to the internet, a device and knowing how to use it is essential in today's digital world.



Gigabit Fiber and Portland



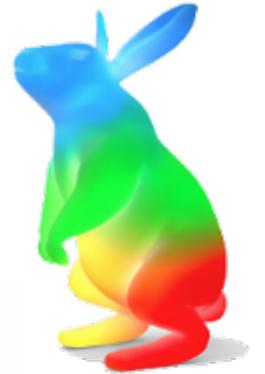
IRNE

- Public-only network

Google

- Portland named a potential expansion city in February 2014
- Franchise granted to Google Fiber in June 2014

Google fiber



CenturyLink

- August 2014 announced plans for FTTP
- May 2015 launched gigabit



CenturyLink™

Comcast

- February 2016 launched gigabit



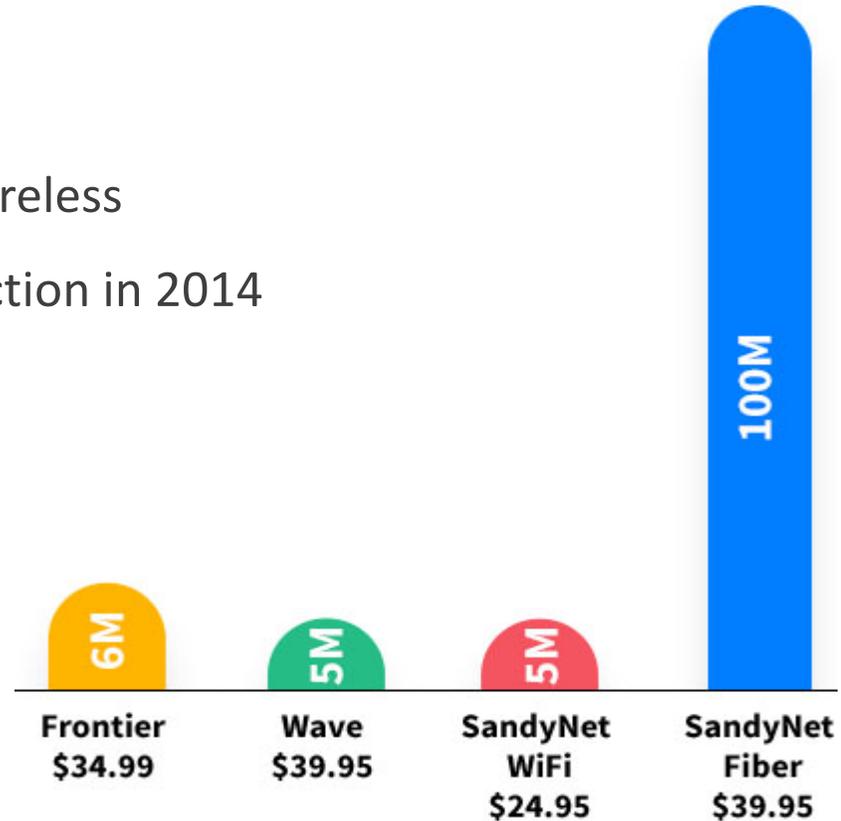
Case Study: SandyNet — Sandy, Oregon

Municipal broadband utility — started with wireless

Partnered with OFS & launched FTTP construction in 2014

Take rate is 60% in first year

Gigabit speeds



Responsive & Playable Cities

“...is an innovative city that uses information and communication technologies...to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring...it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects.” (ITU)

Death and Life of Great Italian Cities: A Mobile Phone Data Perspective: Using Smart City data to prove Jane Jacobs points on what makes a livable city

Changing the way city agencies operate and learning to balance that against security and privacy concerns.

Tilikum Crossing: Largest car-free bridge in US



Murals of “bots” beckon passersby to take a photo and upload the answer to the artist’s website



Youth & Adults & the Internet

Youth:

Youth want connection: in person and digital

It's Complicated: The Social Lives of Networked Teens by danah boyd

Older Adults:

Older Adult Technology Services (OATS) – successful, independent, connected

CareWheels – age in place

Internet mirrors, magnifies, and makes more visible the good, the bad, and the ugly of daily life

Digital Equity



The Divide is the gap between people who have access to the internet, the hardware, and know how to use it and those that don't.

Barriers include access, affordability, a device and digital literacy.

What's Needed to Address Digital Divide?

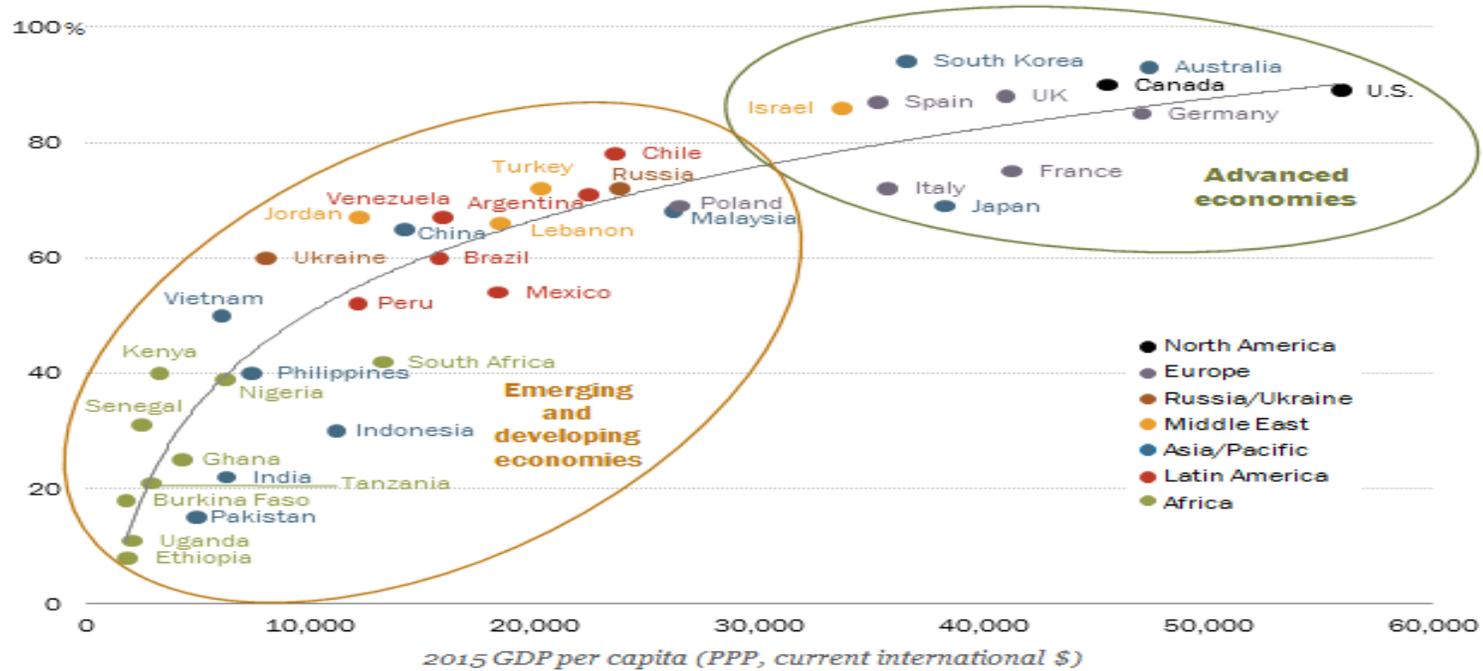
Local Plan:

- Low-cost options, public access locations, devices and local training/support.
- Trusted, local partners with established roots in the community.
- Whole community strategy – non-profits, providers, government, business and citizenry.



The strong relationship between per capita income and internet access

Adults who use the internet at least occasionally or report owning a smartphone



Note: Percentages based on total sample. IMF data not available for Palestinian territories.

Source: Spring 2015 Global Attitudes survey. Q70 & Q72. Data for GDP per capita (PPP) from IMF World Economic Outlook Database, October 2015, accessed Dec. 16, 2015.

PEW RESEARCH CENTER

Calm Technology

The scarce resource in the 21st Century will not be technology.

It will be attention. **Mark Weiser**

Technology shouldn't require all of our attention, only some of it when we need it.

Technology should inform and *encalm*.

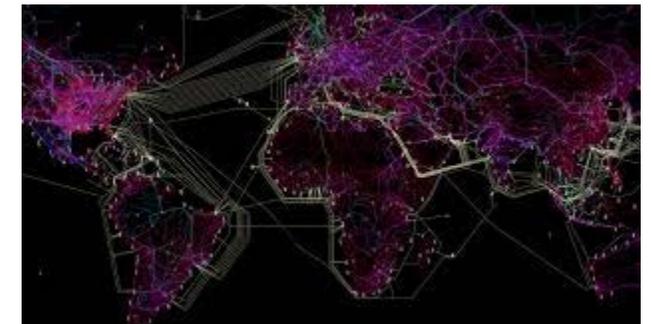
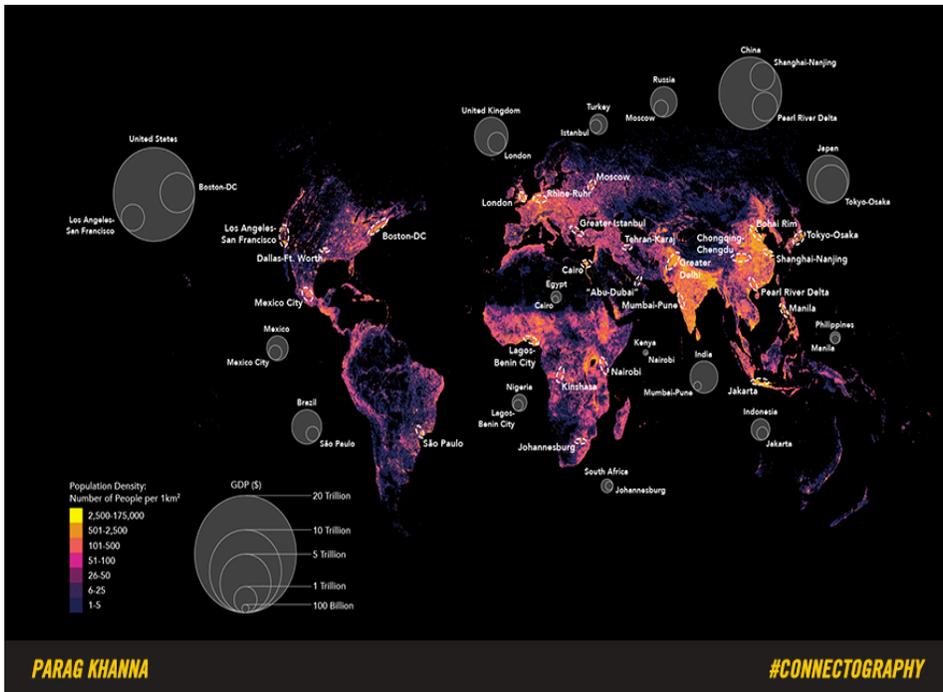
Technology should amplify the best of technology and the best of humanity.

Amber Case

Connectography: Mapping the Global Network Revolution”

Parag Khanna

- **Connectivity is destiny**
- **We’re accelerating into a future shaped less by countries than by connectivity**
- **Cities – concentration of people, economic power and diplomacy**



Conclusion

It's about people, not technology!

Approach may differ by community: targeted, collaborative, whole-community.

Connectivity is destiny...people, places, devices, things.

Calm Technology

Jane Jacobs ***“cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”***

Thank you!



MARY BETH HENRY
OFFICE FOR COMMUNITY TECHNOLOGY
CITY OF PORTLAND, OREGON
JUNE 2016