Overview of Broadband

Research indicates that connecting our communities and region to broadband will bring remarkable economic, social, cultural, personal, and other benefits to our citizens. Washington communities now have to compete globally as well as regionally for jobs and clean industry. Quality of life is linked not only to natural beauty, great education and opportunities, good housing, but also to access to the digital infrastructure that makes all of these elements possible and sustainable.

Today, high-speed Internet is transforming the landscape of America more rapidly and more pervasively than earlier infrastructure networks. Like railroads and highways, broadband accelerates the velocity of commerce, reducing the costs of distance. Like electricity, it creates a platform for America’s creativity to lead in developing belter ways to solve old problems. Like telephony and broadcasting, it expands our ability to communicate, inform and entertain.

Broadband is the great infrastructure challenge of the early 21st century. But as with electricity and telephony, ubiquitous connections are means, not ends. It is what those connections enable that matters.

Why it Matters

Desire for equal opportunity has long guided our efforts to make access to technologies universal. While broadband adoption has grown steadily, it is still far from universal. It lags considerably among certain demographic groups, including the poor, the elderly, and some racial and ethnic minorities, those who live in rural areas and those with disabilities.

Of course, access to broadband is not enough. People still need to work hard to benefit from these opportunities. But universal broadband, and the skills to use it, can lower barriers of means and distance to help achieve more equal opportunity.

The Internet allows for an online education, working online and searching for jobs online. For those offline, the gap widens. As the Internet becomes a source of political dialogue the comprehensive source of real-time news and information, and the easiest way to contact your political representatives -those offline become increasingly disenfranchised.

Until recently, not having broadband was an inconvenience.

Now, broadband is essential to opportunity and citizenship.
A strategic plan

High-speed, accessible and affordable broadband is essential infrastructure for job creation, education, health care, the enhancement of safe and connected communities, civic engagement, government transparency and responsiveness, reduced carbon emissions, and emergency preparedness. A strategic approach to Broadband will complement the City’s Comprehensive Plan. Establishing the City’s broadband objectives and initiatives will create tools to achieve several of the Comp Plan Goals, specifically, Community and Schools; Urban Development; Business and Industry; and Utilities and Services.

A long term strategic plan for accomplishing the City’s Broadband objectives can guide efforts and investments made throughout the City, both on behalf of City bureaus and with our Local, State, Federal and private sector partners. There are critical strategic fiscal, policy, and planning benefits to the City which will arise through coordinating and leveraging on-going and planned efforts related to improving broadband access for citizens and businesses throughout the City.

The Oregon Broadband Outreach and Strategic Planning Project have developed a process to guide cities as they prepare for Broadband Strategic Planning. They provide a flow chart, template and other resources. [http://www.oregonbroadbandplanning.org/](http://www.oregonbroadbandplanning.org/)

The plan focuses on these core areas:

1. **Economic Development** - Focus on broadband planning to stimulate job creation, develop and nurture new clean industry, and address the broadband needs of business and industry in your community.
   a. Broadband enables regions and industries to compete globally.
   b. Communities without broadband infrastructure will find it more difficult to attract investment and IT-intensive jobs, particularly because they face growing national and international competition.
      i. Example: A major airline expressed interest in developing a customer call center in rural Georgia but ultimately passed for one basic reason: The community lacked adequate broadband infrastructure.
      ii. Local economic developers should view broadband as a part of local infrastructure development and should incorporate it into local economic development strategies
2. **Education and Health - Focus on broadband needs of K-12 as well as higher education in the city; more efficient and integrated healthcare system**

3. **Government: Digital Inclusion and Civic Engagement – Focus on broadband planning for community vitality, digital inclusion strategies (narrowing the “digital divide”, and government transparency through broadband technology use.**

4. Energy, Environment and Transportation – Telework, smart transportation, traffic data

5. Public Safety and Emergency Response – Focus on strategic planning for broadband capability for first responders and emergency preparedness.


City of Portland

The City of Portland began its Strategic Planning for Broadband in late 2010, after the City Council passed a resolution recognizing “high-speed, accessible and affordable broadband is now mission-critical infrastructure for job creation, education, health care, the enhancement of safe and connected communities, civic engagement, government transparency and responsiveness, reduced carbon emissions, and emergency preparedness”.

Some notes:

- Bring carriers to the table to insist on infrastructure upgrade
- Create a fiber map overlay
- We have the advantage of an existing fiber infrastructure
- Work with Saw.net to identify needs
- Website is a good start – need much more. Online bill pay, access to plans, permits. Social media to promote civic involvement
- Digital divide is real – not just citizens but towns

**Previous strategic plans:**

1991 City of Stevenson Wastewater Facilities Plan

2007 City of Stevenson Water System Plan Update

2010 Skamania County Multi-Jurisdictional Natural Hazard Mitigation Plan

Stevenson Capital Facilities Plan
Frustrated over the number of Internet providers that are available to you? If so, you’re like many who are limited to just a handful of broadband companies. But now President Obama wants to change that, arguing that choice and competition are lacking in the U.S. broadband market. On Wednesday, Obama will unveil a series of measures aimed at making high-speed Web connections cheaper and more widely available to millions of Americans. The announcement will focus chiefly on efforts by cities to build their own alternatives to major Internet providers such as Comcast, Verizon or AT&T — a public option for Internet access, you could say.

He'll write to the Federal Communications Commission urging the agency to help neutralize laws, erected by states, that effectively protect large established Internet providers against the threat represented by cities that want to build and offer their own, municipal Internet service. He'll direct federal agencies to expand grants and loans for these projects and for smaller, rural Internet providers. And he'll draw attention to a new coalition of mayors from 50 cities who've committed to spurring choice in the broadband industry.

"When more companies compete for your broadband business, it means lower prices," Jeff Zients, director of Obama's National Economic Council, told reporters Tuesday. "Broadband is no longer a luxury. It's a necessity."

The announcement highlights a growing chorus of small and mid-sized cities that say they've been left behind by some of the country's biggest Internet providers. In many of these places, incumbent companies have delayed network upgrades or offer what customers say is unsatisfactory service because it isn't cost-effective to build new infrastructure. Many cities, such as Cedar Falls, Iowa, have responded by building their own, publicly operated competitors. Obama will travel to Cedar Falls on Wednesday to roll out his initiative.
Oregon Broadband Strategic Planning Project
Planning Template

Note: All materials—request-for-participation letters, templates, drafts, participant role descriptions, meeting agendas, sector discussion instructions—were developed by the Project Management Team to be used, and customized as needed, for each community. Please click on the links in the tool boxes to open the documents. For additional resources and to view other Oregon Community Strategic Broadband Plans please visit the Project Web site.

Step One
Engage Local Broadband Strategic Planning Leadership
Each community will need to engage community leaders to serve in key roles in the Strategic Planning process. It is anticipated that commitment to filling these roles will be made in the initial application. Key roles are:

- **Sponsor**—Mayor, Council Member, County Commissioner, Judge or other honored citizen who can garner interest and participation in the Broadband Strategic Plan. The role of this individual is primarily honorary. Their key responsibility is to invite participation and highlight the civic value of the project.

- **Convener or Co-Convener**—Individual(s) that serve as host for the entire project. May be the Sponsor or another individual(s) with visibility and regard in the community who will be available to attend all meetings.

- **Sector Hosts**—(optional) Individuals that can assist the project manager with identifying and inviting representatives for each sector. The sectors are:
  - Economic Development/Business (large and small business, including home-based business)
  - Community Development (Government and Non-Profit)
  - Education and Healthcare (2 sectors but will meet and be hosted as one)

- **Local Project Manager**—Individual who is responsible for overseeing the project outcomes and producing the strategic plan document drafts and final draft.

- **Local Project Assistant**—Individual who can provide logistical support to the project.

Step Two
Conduct Strategic Planning Pre-Work
Accomplished locally at the direction of the Convener by the Project Manager and Project Assistant.

- Develop and approve a project charter that includes firm dates for sector and plenary group meetings.
- Examine and if needed, update the Briefing Book.
- Identify and assemble any prior reports, plans relative to broadband access, adoption or utilization in the community, or related plans such as Community Master Plans, Economic Development Plans, or Education, Health, Transportation or Public Safety communications plans.

Step Three
Organize the Events
The Project Manager works with the Local Project Assistant to organize logistics e.g., follow-up on participation requests for information create participant lists and contact information, events scheduling, locations, refreshments, etc.

- The Project Manager works with the Convener to issue the invitation to all participants approximately two months before the first scheduled meeting.
- Approximately two weeks before the scheduled sector meetings, send out the workshop packet, containing the meeting agenda and cover letter with instructions on reading briefing book sections.
Step Four
Broadband Planning Sector Workshop Sessions

A 3-hour workshop-format session for each individual sector:

- Work in sector-specific groups, with each sector addressing these deliberative questions:
  - What goals, programs or functions in this sector, (existing, currently in development or envisioned for the future) are dependent on access to and ability to use broadband?
  - Are there constraints to obtaining adequate capacity, innovation and competition in networks, devices and applications? Are barriers anticipated in the future? What are those constraints or barriers?
  - What is at stake? Are there significant risks or costs of broadband inadequacy in this sector?

The Project Manager facilitates the session and the administrative assistant captures the work of each sector in detailed reports so that both sector-specific issues and issues that cut across all sectors can be identified.

Results of Session #1 will be sent to participants for their consideration and comment prior to Session #2. A First Draft Plan will be issued prior to the session for revision at Session #2.

Step Five
Broadband Planning Plenary Session

A 3-hour Summit format session to:

- Recap the results from Session #1.
- Work in sector-specific groups to address these deliberative questions:
  - What primary broadband adoption goals should be addressed in the Broadband Strategic Plan?
  - What specific approaches should be taken to drive those goals?
  - What is the nature of each approach, i.e., Study? Advocate? Legislate? Do? Other?
  - How should these approaches be implemented?
    - Who takes the lead?
    - Who pays/how paid for?
    - Within what timeframe?
  - Do the overarching plan elements (Scope, Goals, Key Strategies, Metrics and Requirements for Success) capture the planner’s priorities?
  - Do the Recommendations/Milestones listed under each Key Strategy lead logically to the achievement of the goals? Are any key pieces missing?

The project manager facilitates the session and the administrative assistant captures the work of the plenary session so that both sector-specific issues and issues that cut across all sectors can be identified.
**Step Six**
**Plan Drafting and Review**
The Project Manager creates a draft final plan that highlights a) sector-specific priorities and b) priorities common among all or most sectors.

Conveners deliver feedback to the project manager. If this review and reveals any conflicting perspectives or priorities, the convener and project manager will conference to resolve issues.

**Step Seven**
**Finalized Broadband Strategic Plan**
A final version of the Broadband Strategic Plan is sent to participants. The Sponsor and/or Convener are encouraged to present the plan for adoption by the local government.

**Step Eight**
**Evaluation**
Participants are sent a survey and asked to evaluate the process and product.
## Strategic Broadband Planning Process Flow

<table>
<thead>
<tr>
<th>WHEN</th>
<th>INPUT</th>
<th>PROCESS</th>
<th>OUTPUT</th>
<th>COMMENTS</th>
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</thead>
<tbody>
<tr>
<td>Month 1</td>
<td>Sample Project Charter</td>
<td>Identify Champion, Convener, Project Manager and Admin support</td>
<td>Identify meeting schedule (worksessions and plenary)</td>
<td>Complete Project Charter and schedule</td>
</tr>
<tr>
<td>Month 2-3</td>
<td>Planning Template (Project Plan &amp; Materials)</td>
<td>Participant Invitations and Acceptances</td>
<td>Convener confirms attendance</td>
<td>Participant Roster for each community completed</td>
</tr>
<tr>
<td>Month 4</td>
<td>Workshop 1 Agenda and Materials</td>
<td>Workshop 1 Agenda and Materials Distributed to Participants</td>
<td>Workshop 1</td>
<td>Workshop Notes Distributed</td>
</tr>
<tr>
<td>Month 5-6</td>
<td>Workshop 2 Agenda and Materials</td>
<td>Plenary Agenda and Materials Distributed to Participants</td>
<td>Plenary Workshop</td>
<td>Plenary Notes Distributed</td>
</tr>
<tr>
<td>Month 6</td>
<td>Final Draft Plan</td>
<td>Process Evaluated</td>
<td>Plan Adopted</td>
<td>Many communities form working committees to begin implementation of the plan strategy</td>
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- **Sample Project Charter**
- **Facilities and support services scheduled**
- **Communities Review Briefing Book**
- **Update Briefing Book as needed – this too helps participants get on the same page about Broadband’s impact**
- **First Draft Plan proposes action agenda and priorities**
- **Plenary Notes provide priorities and Short, Medium and Long Term Actions**
- **Completed Template**

**Month 4: Project Manager completes First Draft Plan**

**Month 5-6: Project Manager completes Plenary Meeting Notes**

**Month 6: Project Manager completes Final Draft Plan**
### Mission Statement:
To participate in the development of a long term strategic plan which identifies the Community Broadband objectives and which can guide efforts and investments made throughout the community, both on behalf local government and with our Local, State, Federal and private sector partners. Each work-group will focus on one of four areas of critical concern. These are:

- **Economic Development/Business Vitality** – Focusing on broadband planning to stimulate job creation, develop and nurture new clean industry, and address the broadband needs of business and industry in the community.
- **Education and Health** – Focusing on broadband needs of K-12, higher education, as well as Healthcare in the community.
- **Government and Public Safety** - Focusing on broadband planning for government transparency through broadband technology, as well as focusing on how technologies associated with enhanced broadband can meet the community’s goals regarding Planning, Public Safety, Transportation and Sustainability.
- **Community Development/Digital Inclusion** - Focusing on strategic planning for digital inclusion and equity.

### Problem Statement:
There are critical strategic fiscal, policy, and planning benefits in each area which can be achieved by coordinating and leveraging on-going and planned efforts related to increasing broadband adoption and utilization throughout the community.

### Goals/Deliverables:
- Planning Symposia to identify Broadband “roadmap” and Broadband strategies from each work-group
- Recommendations for action items from each work-group

### Time commitments

#### Scope & Constraints

<table>
<thead>
<tr>
<th>Scope includes:</th>
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<tr>
<td>Review of Briefing Book to be provided by the project manager in advance of work group symposiums (estimated 4 hours of time to review)</td>
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<tr>
<td>2 half day planning symposiums (three hours per session)</td>
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<tr>
<td>Review of draft reports (estimated 8 hours total over the project period)</td>
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<tr>
<td>Planning effort will focus on identifying broadband inclusion, development or incentive strategies that contribute to the community’s master plans for economic development, transportation, housing, public safety, quality of life, jobs, citizen inclusion and equity, healthcare and education.</td>
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</table>

#### Constraints & Boundary Conditions:
- No independent research required by work-group participants
- Participants do not have to draft reports – these will be drafted by the project management
- Work-group must commit to attendance at scheduled planning symposiums – no proxy or substitute membership

### Decision Ratifier:
Groups will strive for consensus on recommendations.
### Team Processes:

Groups will be led through a facilitated set of exercises and discussions during the workgroup planning symposiums designed to answer the following questions:

**Goals**

- *What goals, programs, or functions in this sector, (existing, currently in development or envisioned for the future) are dependent on access to and ability to use broadband?*

- *Are there constraints to obtaining adequate capacity, innovation and competition in networks, devices and applications? Are barriers anticipated in the future? What are those constraints or barriers?*

- *What is at stake? Are there significant risks or costs of broadband inadequacy in this sector?*

- *What primary broadband adoption goals should be addressed in the Broadband Strategic Plan?*

- *What specific approaches should be taken to drive those goals?*
  - *What is the nature of each approach, i.e. Study? Advocate? Legislate? Do? Other?*

- *How should these approaches be implemented?*
  - *Who takes the lead?*
  - *Who pays / how paid for?*
  - *Within what timeframe?*

**Constraints**

**Priorities**

**Policy Issues**

**Implementation**

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### Team Members

Members will be appointed by Local Champion, Conveners, and Sector Hosts leads on this project.

### Sunset:

TBD

### Schedule:

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<th><strong>Organize Task Forces</strong></th>
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<tr>
<td>Select participants</td>
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<tr>
<td>Develop scheduling and logistics</td>
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<td>Complete planning and logistics</td>
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<tr>
<td>Train on reporting requirements</td>
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<tr>
<th><strong>Planning Efforts</strong></th>
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<tr>
<td>Provide Technical Assistance</td>
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<tr>
<td>Convene Task Forces</td>
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<tr>
<td>Plans written - first draft</td>
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<tr>
<th><strong>Evaluation</strong></th>
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TBD
conservation programs, and on-grid and off-grid renewable energy systems.

Loans are made to corporations, states, territories and subdivisions and agencies such as municipalities, utility districts, and cooperative, non-profit, limited-dividend, or mutual associations that provide retail electric services to rural areas or supply the power needs of distribution borrowers in rural areas.

**Telecommunications Program**
USDA Rural Development’s Telecommunications program creates public-private partnerships to finance the construction of telecommunications infrastructure in rural America. USDA Rural Development makes loans to finance the improvement, expansion, construction, or acquisition of telecommunications facilities in rural areas that will enable subscribers to receive the full range of high speed telecommunications services.

**Broadband Access Loan & Loan Guarantee**
This program provides loans and loan guarantees for the construction, improvement and acquisition of facilities and equipment for broadband service in eligible rural communities. Priority is given to applications that are proposed to serve areas where no residential broadband service currently exists.

**Broadband Community Connect Grants**
The Broadband Community Connect Program, which supplements USDA Rural Development's standard high-speed telecommunications loan program, provides a critical link between essential community facilities in areas where no broadband service currently exists, with the goal to improve public safety, while enabling rural residents to pursue educational opportunities. Under the terms of the grant requirements, each community is required to make at least 10 computers available to members of the public. These grants also enable small business owners participate in the global marketplace.

**Distance Learning & Telemedicine Loan and Grant Program**
The Distance Learning and Telemedicine Grant and Loan program (DLT) was created to encourage, improve, and make affordable the use of telecommunications, computer networks and related technology for rural communities to improve access to educational and/or medical services. USDA Rural Development’s funding helps bring technology into rural America to build strong and vibrant communities.

Telemedicine technology makes it possible for doctors to examine and direct the treatment of patients without being physically present. The distance learning program finances equipment to expand educational resources to students and educational institutions in isolated rural areas.