

# Portland Broadband Strategic Plan

## Executive Summary

---

### Why do a Strategic Plan for Broadband?

Broadband networks power access to global information, economic activity and politics in the same ways that highways provided the transportation corridors for the old economy. The speed by which information can now be shared is creating tremors in many institutions. Just as electricity fundamentally and forever changed our society and economy in unanticipated and disruptive ways, the interconnected web of “the Network” is transforming our ability to participate, educate, inform and compete. A shortage of broadband capacity will cause Portland to lose ground in its economic future. So it is important for us to learn what the Network is and how it impacts society. We must proactively set a strategic course for our economic and social development. This Plan will help guide other plans – in development, transportation, permitting, City code changes, government restructuring, the City’s budget process and the overall Portland Plan. This Plan lays the foundation for understanding, embracing and adapting to the digital economy.

### Scope of the Broadband Strategic Plan

The objectives of the planning effort are:

- **To positively affect** how broadband infrastructure and service is likely to develop in Portland over the next ten years.
- **To plan** for optimal broadband deployment for Portland.
- **To identify** key short (3-year), mid (7-year) and long-term (10-year) broadband policies and initiatives that the City can put in place that coordinate and guide the

actions of City Bureaus, Offices and Committees toward a unified technology policy direction.

- **To lead** the way with the Portland Broadband Strategic Plan in order to positively impact the policies, actions and directions of other Oregon communities and of the state as a whole.

## The City's Technology Future

### Wireless and fiber are essential

The future of telecommunications technology is not wireless or fiber optics—it is a combination of both. These two essential technologies inherently work together and complement each other:

- Fiber offers high bandwidth that wireless cannot
- Wireless offers mobility that fiber cannot

### Fiber is the international standard for broadband

While fiber costs more upfront, it is an infinitely scalable, long-term asset with a lifespan of decades (and, as a result, is very cost-effective in the long run). Fiber to the premises (FTTP) is not on the immediate horizon for Portland, but it is being deployed on a national basis in almost every developed Asian country, as well as in China and our competitor nations and cities across Europe.

### Wireless is essential for mobility but requires fiber to function adequately

A robust wireless broadband network is inconceivable without an extensive fiber network for backhaul throughout the community. In this way, *fiber and wireless support each other and work together to form a world-class communications network.*

## Impacts of Broadband Policy on Key Sectors

### □ Economic Development

- The effectiveness of the City's workforce is dependent on broadband adoption
- Economic and community development requires access to affordable broadband services
- Business decisions to locate in the City are increasingly impacted by the quality and capacity of broadband availability

### □ Inclusion and Equity

- Without better Internet and telecommunications policies, poverty and disparity will grow
- Inequities in access to technology creates a social and economic “digital divide”
- The Network provides unprecedented opportunities to expand inclusion, express activism and create unity for communities

### □ Public Safety

- ▢ Advanced networked technologies can reduce response time in emergencies
  - ▢ The public can truly become the “eyes and ears” of public safety
  - ▢ Network security, privacy and standards issues are essential policy concerns
- ▢ **Transportation, Planning and Sustainability**
- ▢ Intelligent transportation systems and telework will save fossil fuels and lower carbon emissions
  - ▢ Intelligent buildings, intelligent communities and planned neighborhood access centers will foster equity and community while lowering costs
  - ▢ Networks change the structure of communities and their needs for basic infrastructure
- ▢ **Education and Health**
- ▢ Getting a quality education in the twenty-first century increasingly depends on Internet access
  - ▢ Internet use has become essential to health and aging
  - ▢ Our Education and Health systems must modernize and adapt to the networked environment

## Key Themes

- ▢ Portland and its partners must take bold actions to ensure the development of world-class network infrastructure in the City.
- ▢ Affordability and ubiquitous availability is key to adoption.
- ▢ Adoption across all age groups, cultures, races and economic classes is crucial to relieve social and economic inequities
- ▢ Economic and societal health depends on education, training and mentoring to create lifelong learners who can embrace rapid change and work and prosper in the new economy
- ▢ Portland must become a technology-centered economy, attracting innovators, research and development centers and employers seeking a tech-savvy environment. To do so, Portland must improve its broadband infrastructure, and ensure both very high bandwidth and mobile solutions for industry.

## 5 Goals of the Broadband Strategic Plan

Through the strategic planning process, the following five goals were identified for the Broadband Strategic Plan. These goals are consistent with the resolution of the City Council in late 2010. Later in this document these goals are augmented with key action strategies and

recommendations from the workgroups for short, medium and long-term activities to accomplish them.

1. ***Attract innovative broadband-intensive business and institutions that create knowledge jobs in Portland.***
2. ***Eliminate broadband capacity, equity, access and affordability gaps so Portland achieves near universal adoption of broadband services for all residents, small businesses and community-based organizations.***
3. ***Create highly technology-skilled and employable residents, students, small businesses and workforce.***
4. ***Ensure that development and planning activities promote the use and wide-spread adoption of broadband technologies in government, energy conservation, transportation, health and public safety.***
5. ***Create future-oriented broadband policy, modernize government organizations and institutionalize digital inclusion values throughout the region.***

The following Broadband Strategic Plan lays out the key strategies and actions the City can take, with the help of key public sector partners and other local governments, educational institutions, industry and community organizations. Effective policy changes and transformation of the City government and its institutions requires strong and committed leadership. The Broadband Strategic Plan describes sweeping changes in government structures, relationships and technology. These cannot be implemented easily, and the steadfast commitment of the City's elected officials and top managers is necessary throughout the change process.