PORTLAND BROADBAND PLAN STRATEGIC PLAN: Workshop #1
Summary Discussion Results – All 5 Groups

Broadband: "What's at Stake?" BROADBAND-RELATED NEEDS

Key: ✗: Needs cited per group
***Red italic:* City Vision/Goals-related**

		Economic Development	Digital Inclusion	Education & Health Care	Planning, Trans, Sustain.	Public Safety
a	**Broadband is essential to Portland's *Vision* and its Economic Development, Civic Participation, Public Safety. Education and Land Use *Goals.***	✗	✗	✗	✗	✗
b	**Broadband is an engine for *access and equity*.** ▪ "Inclusion maximizes externalities." ▪ Barriers to access and equity include affordability, lack of computers or broadband access in the home, lack of ability to use digital tools, lack of adoption by specific demographic groups, most notably the older generation. ▪ "There is a digital divide in Portland. A significant percentage of Portland Public Schools students are without access."	✗	✗	✗	✗	
c	**Video - growing exponentially as the key means of communication for work, *civic participation*, and individual expression – requires abundant high capacity broadband.** ▪ "The trend is for all digital users – people and organizations – to be content producers as well as consumers." ▪ "Video is anticipated to put significant stress on education networks within 3 years." ▪ "Two-way video is of high value in Law Enforcement as a tool for improving response, service delivery and efficiency."	✗	✗	✗		✗
d	**"Everything is going mobile." People want and need to access services on-line where and when they want them, e.g. city services, distance learning and remote heath care.** ▪ Users are migrating to mobile and expect access to services and information via mobile devices, supported by the trend toward cloud computing and storage. ▪ Essential services such as education and healthcare are improved via the use of broadband-dependent mobile digital tools. ▪ Broadband must be ubiquitous regionally/seamlessly to meet needs and expectations. ▪ "Broadband is a utility service" – a necessity. One characteristic of any utility is ubiquity – broadband is no different."		✗	✗	✗	✗
e	**Broadband is an engine for *job creation* and job seeking. Broadband enhances Portland's competiveness and attractiveness to industry.** ▪ "Big broadband is critical to where people / business / jobs will locate. Fiber-based big bandwidth nodes are just like a freeway interchange in terms of spurring development." ▪ Having "a particular competence in broadband" attracts industry. ▪ "Portland lags behind San Francisco and Seattle in broadband resources, decreasing competitiveness."	✗	✗		✗	
f	**Broadband is an engine of *sustainability* and is critical if Portland is to maintain its worldwide leadership in sustainability.** ▪ "The businesses we most want to attract have extraordinary broadband demand." Examples include film, animation, design, health care industries. ▪ Use of energy conservation tools is broadband-dependent, including Smart Grid applications. ▪ "Extracting energy efficiencies requires monitoring tools for all homes. Energy efficiency planning is broadband-dependent. Other planning initiatives are broadband dependent as well."	✗		✗	✗	
g	**Cost savings, efficiencies and *improved outcomes* are anticipated via migration of services to digital access and delivery methods.** Examples include Education (e.g. distance learning), Healthcare (e.g. home health monitoring for aging in place), City functions (e.g. traffic signalization), Public Safety functions (e.g. elimination of duplicative/complex entry and transmission processes; reduction of response time and risk, ASAP life safety information to treatment facilities) and conduct of business (e.g. banking, shopping). ▪ "Planning and proceeding without adequate broadband will drive more cost."			✗	✗	✗
h	**Telework and other workforce mobility options that *decrease dependence on vehicular travel* and provide options for workers and employers require high broadband capacity.**	✗		✗	✗	
i	**Broadband is essential to Portland's capacity for *innovation* and readiness for the future.** ▪ "New innovation is in the works that can't be foreseen and broadband allows readiness to adopt as innovations come on-line." ▪ "Broadband is essential to our readiness for the unforeseeable "next big thing." ▪ "The businesses of the future need broadband as lifeblood and we need broadband assets to draw them." ▪ "Hardware available today to Law Enforcement and Public Safety is already much more capable than the 800 MHz radio system can support."	✗			✗	✗

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	Broadband: "What's at Stake?" BROADBAND-RELATED NEEDS **Key: X: Needs cited per group** ***Red italic:* City Vision/Goals-related**	Economic Development	Digital Inclusion	Education & Health Care	Planning, Trans, Sustain.	Public Safety
j	**Opportunities *for civic engagement and public input into public policy* are migrating to digital forums/formats.** "**The expectation is online participation – and not always in real time.** " ▪ "In-person means of civic engagement no longer secure sufficient participation to be considered relevant or representative. Digital participation is the new paradigm." ▪ "The City has got to use digital tools, or those who use and expect those tools will not participate."		X			
k	**Broadband is an engine for *neighborhood revitalization*** by supporting small and home-based business needs and participation in civic life at neighborhood level.	X				
l	**People expect transparency in government and expect online access to documents.**		X			
m	**Broadband can facilitate partnerships among the City and the Health Care and Education sectors.**			X		
n	**Broadband is essential to management of Public Safety information.** ▪ "Public Safety and Law Enforcement are inundated with information that can only be managed if there is adequate bandwidth. Note that public safety is enhanced by information so "inundation" is desirable."					X
o	**Public Safety uses require extraordinary connectivity, reliability and redundancy.**					X

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Broadband: BARRIERS, ISSUES, CONSTRAINTS

Key: X = Barriers, issues and constraints cited per group

		Economic Development	Digital Inclusion	Education & Health Care	Planning, Trans, Sustain.	Public Safety
a	**Cost of / lack of funding for build-out and maintenance of infrastructure.**	X	X	X	X	X
b	**Policies and regulation.** Examples include: ▪ City policies and the City web interface are not user-friendly / are barriers to transparency and access to public information. ▪ Copyrighting policing requirements in Higher Education. ▪ K-12 filtering requirements. ▪ State of Oregon DAS constraints on Higher Education. ▪ The role of local government (Build? Incentivize? Partner? Trust the market?) is not clear. ▪ Inadequate policies for how to handle Law Enforcement's inundation with information. ▪ Lack of standardized data sets. ▪ Need for a philosophy on open source.	X	X	X	X	X
c	**Resistance to /slowness to transition to new paradigms.** ▪ Broadband policy framework has not kept with the new paradigm of broadband as an essential "utility-type" service. ▪ Pole resistance in neighborhoods. ▪ Physician resistance to new E-medicine paradigms. ▪ Anachronistic City bureau's policies on mobility. ▪ Management resistance to telework: "There is no barrier to telework except management culture." ▪ "Broadband and IT are rapidly driving changes in land mobile radio systems" used by Public Safety.		X	X	X	X
d	**Perception that broadband provision is solely the purview of private companies and subject to market forces alone.** ▪ "Broadband is a utility-like commodity but is completely in the hands of the private sector." ▪ Leased broadband cannot provide all Public Safety requirements such as reliability, interoperability. ▪ "There is no utility-style rate–of-return framework for broadband. "		X	X	X	X
e	**Lack of access based on affordability of existing broadband service.**	X	X			X
f	**Lack of access/availability/sufficient private or public/private infrastructure and affordability/high cost of entry in cases in which infrastructure is unavailable.** Examples include: ▪ Film industry. ▪ Lack of end points from the downtown core -> out. ▪ Industry is finding procurement of broadband "difficult, frustrating and expensive." ▪ Lack of "an efficient way to relay in-home sensor data to first responders." ▪ Failure to plan for broadband needs in Comprehensive and Land Use plans.	X			X	X
g	**Practices that contribute to higher cost.** ▪ Bundled service increases cost. ▪ Lack of infrastructure standards contributes to high cost.	X	X			X
h	**Lack of competition** that would serve to keep costs and restrictive terms of service in check and drive innovation. Lack of competitive necessity / incentive / critical mass to upgrade private infrastructure.	X	X			
i	**Insufficient digital literacy.** ▪ Barriers due to age, language, skills, ADA, other demographic issues (other than affordability). ▪ "Not just literacy, but "super-literacy is needed." ▪ "The issue isn't solving itself generationally as predicted. Younger people use digital technology a lot but not well/ smart."		X	X		
j	**Scarce staffing resources** necessary to develop and maintain electronic systems, information and networks, due to cost and difficulty of finding the talent. ▪ Expected to be significant during the transition to all digital.		X	X		

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	Broadband: BARRIERS, ISSUES, CONSTRAINTS **Key: X = Barriers, issues and constraints cited per group**	Economic Development	Digital Inclusion	Education & Health Care	Planning, Trans, Sustain.	Public Safety
k	**Adoption is not ubiquitous in the population.** There may be a variety of barriers, including individuals who don't perceive a need. ▪ This requires parallel systems (digital and not) for public information and participation.		X		X	
l	**High cost of video storage.**		X			X
m	**Lack of a vision that includes broadband.** ▪ "Portland's self concept is that of a 2nd tier city with 2nd tier investment. We need to see that our scale does enable a manageable level of investment." ▪ "There is no Public Safety vision for broadband."				X	X
n	**The "organizing principle" for data/content management has not emerged.** It is currently unknown whether this will be a centralized or decentralized function.		X			
o	**Lack of open data is a barrier to the development of applications.** ▪ "A policy shift to have transparency that goes beyond just FOIA standards is needed." ▪ Examples include lack of open data for applications such as energy conservation, government documents in unsearchable formats.		X			
p	**Lack of predictable availability of hot spots / insufficient hot spots / lack of hot spot mapping.**			X		
q	**Public resistance to / lack of acceptance of the inundation of information to Law Enforcement** - privacy concerns.					X
r	**Data is not always available in real time.**					X
s	**Too little mobile data entry creates inefficiency, cost, and reduces accuracy.**					X
t	**Different layers for Law Enforcement and Fire creates a complicated entry and transmission process.**					X
u	**100% reliability standard for Law Enforcement and Public Safety networks.**					X
v	**Lack of a valid cost/benefit analysis, including lost opportunity costs, for broadband.**					X

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Broadband: OPPORTUNITIES

Key: X = Opportunities cited per group

		Economic Development	Digital Inclusion	Education & Health Care	Planning, Trans, Sustain.	Public Safety
a	**Plan for and support segments of users with varying needs.**	X	X	X	X	X
a1	Establish a "Cluster Strategy" that clusters high use industry in specific geographic areas. Could be prioritized by type-of-industry cluster.	X			X	
a2	Establish a strategy for ubiquity that serves the residential and small business segments. ▪ Could include partnering with providers as "good community citizens". o Maximize programs like Comcast's $9.95 for 3-yrs for reduced lunch families. ▪ Could start with small pilot projects.	X	X		X	
a3	Consider District Planning to capitalize on existing assets for small and micro businesses, i.e. Central Eastside., concentrating firms such as digital media that need Class B office space.	X				
a4	Seek Economic Development funding or the utility compensation model to support a cogent broadband strategy such as the Cluster Strategy. Consider incentivized private investment or public/private partnerships.	X			X	X
a5	Gather data to clearly understand the needs of small businesses. ▪ The need may be more at utilization level, requiring information, training and assistance.	X				
a6	Create anchor tenancy / critical mass to the Cluster Strategy by bringing in large institutional users such as education and health care.	X				
a7	Focus engagement efforts on youth and underserved communities.		X			
a8	The Broadband Strategy needs to address the unique needs of Public Safety: ▪ Reliability. ▪ Regional interoperability. ▪ Coverage. ▪ Gating ability. ▪ Constant availability. ▪ Security.					X
b	**Consider and seek funds (most likely federal funds) for pilot projects.** ▪ For high-use industry broadband service. ▪ For residential broadband service. ▪ For remote health care. ▪ For public safety public/private partnerships.	X	X	X	X	X
c	**Leverage the city's existing authorities and publicly-owned resources for broadband infrastructure, access, for digital tools and training, for energy efficiency and for public safety.** ▪ Continue to assert the regulatory authority of the City. ▪ "Push the envelope" to fully utilize IRNE and the I-Net. ▪ Seek to enhance and make broader use of existing City grant programs. ▪ Better market and leverage PCM and other public digital tools and training programs. ▪ K-12 / Higher Ed / library partnerships for digital literacy and workforce development. ▪ Link buildings to climate control for real-time weather data. ▪ Find ways that City assets and policies might incentivize and enable commercial entities to serve Public Safety. ▪ Be a leader on telework and off-peak travel.		X	X	X	X
d	**Explore the potential for innovative partnerships.** ▪ Seek public/private partnerships, e.g. with Portland tech companies, as a means of establishing a degree of public ownership in infrastructure. ▪ Create innovative local government partnerships, e.g. extending K-12 wireless service to Parks and Community Centers. ▪ Seek to participate with existing partnerships and programs. Examples of such partnerships could include OHSU and Intel, the Oregon Health Network, and Continua Health Alliance. ▪ Convene utilities to explore opportunities via Smart Grid. ▪ Partner with public spaces to provide wifi tied to the broadband backbone that already exists. ▪ Seek ways to partner with commercial entities for Public Safety uses. ▪ Explore the potential to partner with LTE providers/Intel on a 2012 pilot with Public Safety.		X	X	X	X

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	Broadband: OPPORTUNITIES **Key: 𝒳 = Opportunities cited per group**	**Economic Development**	**Digital Inclusion**	**Education & Health Care**	**Planning, Trans, Sustain.**	**Public Safety**
e	**Align policies in support of broadband goals.** ▪ Philosophy on open source, and resources for innovation. ▪ Establish policies that support wifi availability, e.g. wifi access points and electrical outlets in all public buildings. ▪ Require conduit in all trenches. ▪ Reform City IT policies o Deploy wifi in all City buildings. o "Computer-on" access requirement. o Cloud computing. o Monitoring to reduce energy consumption. o Overcome the City's "lockdown mode" for IT. Adopt best practices already pioneered. ▪ Reform city policies on telework and off-peak commuting in a way that will model the way for the private sector, e.g. a "Telework-One-Day-Per-Week program and design of the workday to encourage off-peak travel. ▪ Identify limiting language that may inhibit public/private partnership, particularly around Public Safety uses. ▪ Privacy. ▪ Cyber-security. ▪ Energy footprint.	𝒳	𝒳		𝒳	𝒳
f	**Establish an "equity lens" on broadband issues at City government and in schools.** ▪ Adopt a "Right to Digital Access" as a City value/goal. ▪ Consider access alternatives, including a % of franchise fees for community grants to address inequities. ▪ "As a community, providing for those who can't afford $80 per month broadband." ▪ "Establish a digital corollary to Driver's Ed" to insure that K-12 education includes digital competency."		𝒳	𝒳		
g	**Seek ways to grow competition, including non-corporate alternatives like co-ops.** The City should play a coordinating and facilitating role.		𝒳			
h	**Seek grants that support innovation and improved outcomes.** ▪ Foster "Rx Broadband" via a cost/benefit and improved outcomes-based approach that can qualify for federal incentives for reduced readmission rates. ▪ E-rate funding for wireless-sharing e.g. shared infrastructure.			𝒳		
i	**Consider the potential to use next generation wireless infrastructure to provide city and schools services.** ▪ Could possibly leverage City-owned roof real estate.			𝒳		
j	**Have a broadband component to all planning efforts so that when communities are planned broadband is explicitly recognized.** ▪ Residential broadband to support energy efficiency becomes an expectation in new construction and as a home sales feature. ▪ "Broadband can be expected to generate economic development and jobs. There is a nexus of economic development and planning to which broadband is essential and enables better planning about where to put people and jobs."				𝒳	
k	**Illustrate how a competency in broadband can follow the "Initiation, Economies of Scale, Spin-off, Common Practice" trajectory achieved with Green Building policy.** ▪ Integrate broadband into the LEED process.				𝒳	