## Thematic Summary of Strengths, Weaknesses, Opportunities and Threats Comments

Lane County Regional Broadband Planning Strategic Worksessions June, 2019

# SWOT

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin attributes of the organization	Strengths	Weaknesses
External origin attributes of the environment	Opportunities	Threats

## Strengths Regional Broadband Strategic Planning Work Session

## **Collaboration (13)**

- Partnerships
- potential to converge
- Public / private model in proof of concept
- Public / Private partnerships
- Public agency partnerships for this are strong
- Public private partnerships
- Regional Planning
- Regions willingness to come together
- Successful collective impact partnerships
- Universities could be utilized strong partner
- Willing to have conversations
- Relatively few players
- More or less in agreement of "the problem" and general direction

## Expertise (11)

- A lot of tech knowledge in the community
- Broadband fiber "tribal knowledge"
- Diversity of group participating in the discussion
- Forward thinking staff
- Map of broadband access covering Oregon
- Solid technical knowledge and understanding
- TAO
- Existence of mature efforts (eg. PAN, RFC)
- Tech hub (knowledge / resources)
- Telecom Legacy
- Awareness of options (metro areas)

#### **Exiting Infrastructure (10)**

- 170 miles EWEB fiber
- EWEB advantages to installation on poles
- Existing infrastructure (IX, conduit)
- Publicly owned utilities
- Some infrastructure in place (backbone, people)
- SUB / EWEB
- There is some infrastructure in and through the metro area
- Public backbone / private service provision (innovation)
- WIX
- WIX and middle mile contracts

## Champions/Support (9)

- Champions with influential government positions
- Congressional / state delegation pro broadband
- Governor's broadband executive order

- Large anchor customers (i.e. Universities)
- LCOG
- No internal resistance to change or moving forward
- Smart city initiatives (Eugene)
- Have a mandate of local officials to make data more open, accessible and available to the public
- Timely education to politicians can promote progress

#### Momentum (9)

- Momentum
- Momentum
- Multiple business models under test
- Numerous agencies, companies and non-Profits all wokring on similar efforts
- Proof of concept completed
- Proof of Concept with EUGNet and WIX
- proof of viability
- Proven success to build on
- Successful track record of similar proof of concept (EUGNet)

## Profile (2)

- Fiber is perceived as safe
- Topology is good in the region (wireless)

#### Demand (2)

Demand from underserved communities Public will and desire

## <u>Weaknesses</u>

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## **Champions/Support (10)**

- Buy-in and support
- Current activity not future oriented enough
- Fear of failure
- Variability of political climate
- Lack of clearly articulated pay off for residents
- Lack of vision
- Political trepidation
- Leadership coordination and commitment
- Network is focused on substations, not buildings / residences
- Some public against progress

#### **Ignorance Complexity (9)**

- Confusion on how it all works together (regulations, assets)
- Hard for consumers to figure out who can serve them
- Lack of solid educational marketing plan
- No clear map of all current fiber infra and how to access it
- Not properly educated the public (whose job is it?)
- Public complacency
- Technological needs vary with application
- The unknown (don't know what we don't know)
- 5G and other tech advancement fears / health concerns

#### Funding (5)

- Cost up front and recurring
- Costs, easements, and regulations are ongoing challenges
- Difficulty of getting common agreement especially regarding funding
- Funding gaps
- Self supporting model on public side not well developed

## Coordination (5)

- Communication
- Complicated historical collaboration
- Lack of clear goals
- Lack of regional plan (localized, not holistic)
- Universities missed opportunities for leveraging underutilized

#### Security/Resilience (5)

- Insufficient security
- Reliance on external parties (asset debt)
- Resiliency / Resistance to change
- Scaling the current architecture
- Tech obsolescence

## Natural (3)

- Lane County size (rural density)
- Local culture, community, climate restrictions
- Relative isolation

## Incumbent (2)

- Incumbents still receiving subsidies
- Rent seeking behavior of corporations and incumbent

#### Infrastructure (1)

• Aging infrastructure

## Demand (1)

• Whether demand is sufficient to support the network

## Tech (1)

• Useful applications have not kept up with popular applications

## **Opportunities**

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## Funding (10)

- Appropriate franchise funds towards telecom construction
- Federal dollars available
- Fiber has a long plant life (better ROI)
- Increase in research innovation dollars
- Most cost effective way of building
- Public money
- Revenue generation
- Success of investment to data creators opening more investment
- University research dollars
- Use mature partnerships to build additional funding

## **Emerging Technologies (7)**

- IOT for traditional industries creating demand
- 5G
- 5G Investments
- Increased demand
- Internet of things (IOT) raises demand for connectivity
- Technologies are matured
- Data heavy networks

#### Political (7)

- Government entities understand the economic value of fiber and can be champions
- Increased political clout from broadband growth
- Legislative advocacy
- Part of the national conversation / trend
- Telecom will enhance existing livability of community
- Educate Public on potential
- Engaging younger people in the process

## Infrastructure (6)

- Expansion of WIX
- Underutilized infrastructure
- Fiber assets available across various industries
- Faster cheaper internet creates hub
- State wide fiber network
- Use existing fiber to backhaul to rural communities -- Public private partnerships

## **Coordination (6)**

- Lane County Public Utility Services
- More opportunities to collaborate to address the rural divide
- Opportunities for oversight efficiencies
- Seize opportunities for construction coordination
- Shared issues possible to leverage generational interests
- Small ISPs collaborate and team up to not overbuild

## Events (4)

- Large events (track and field championships)
- Large visibility events need to be served and are funded
- Promote success by leveraging current network for coming events
- World games (2021)

#### Access/Choice (3)

- Residential connectivity creates demand for greater choice
- Serve underserved communities
- End boundaries for access

#### Training (3)

- Create a training system to create personnel
- Creation of cyber security programs in schools
- Highly educated students from local Universities

#### Economic (2)

- Help area move towards knowledge based economy
- Infrastructure is basic to all areas of economy

#### **Environmental (1)**

• Climate change and keeping people rural

#### Threats Regional Broadband Strategic Planning Work Session

## Ignorance (real or perceived) (15)

- Assumption that 5G will suffice as last mile connection
- Complexity and lack of public understanding
- Decision makers not getting good information
- Insufficient knowledge foresight and understanding of the value of broadband infrastructure
- Lack of base knowledge on broadband by regulators and government officials
- Lack of knowledge about interconnected nature of system
- Lack of public awareness of potential uses / benefits of broadband
- Lack of trained personnel
- Lack of urgency in messaging the need leads to confusion
- Misinformation
- Perception of issues lack of access to info (public officials)
- Technology moves much faster than government adapts
- Public agency reliance on public opinion combined with public fears of wireless
- Unclear messaging leads to confusion and un realistic expectations
- Unintended consequences

## **Business interest (9)**

- Business strategies that focus on profit and long term exclusivity
- Creating new monopolies
- Litigation threat by incumbent
- Needing a business case for expansion
- Non-competitive pricing
- Preference for private sector models to provide cost competitive quality services
- Private sector telecom and incumbents
- Public private relationships and difference in culture and goals
- Private public competition

## **Cooperation (5)**

- Desire to offload problems
- Lack of coordination among potential service providers
- Lack of coordination w/ non broadband seeking rural developments (agricultural, climatologists)
- Polarization (urban vs rural, public vs business)
- Restricted access of high capacity broadband infrastructure within a select few entities

## Political (5)

- Difference of approach / model between local government financing and federal regulators
- Inconsistent public leadership support for telecom projects
- No national or state plan for broadband access
- Political will is weak
- risk aversion for public officials

## Geography/Natural (4)

- Extreme weather and resulting damage to infrastructure
- Geographic / Economic challenges (large area low density)
- Lane County topography
- Unequal population density across Lane County

## Funding (4)

- Consistent sustainable financing
- Cost to bridge backbone to FTTH (Fiber to the home)
- Lack of funding
- Lack of funding / financial planning

#### Infrastructure (4)

- Capacity of underlying infrastructure
- Competition for new infrastructure investments
- Danger that public investment will not be sustained creating a maintenance / replacement backlog like roads
- Renewal of IRU

## Framework (2)

- Public ISP
- Lack of legal framework to share existing municipal conduit