

Lending the Internet

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Bridging the Digital Divide with WiFi Hotspots

Oregon Library Association Conference 2021

Welcome and overview

Technical Services Round Table (TSRT)

- open meeting, Wednesday, 4/21, 2:45 pm

Today's presentation:

1. Brief background
2. Stories from three public library systems
3. Q&A/Discussion



Attendee Poll

What comes to mind when you hear
the words “digital divide”?





Maslow's Hierarchy of Needs

Basic human requirements for survival and growth



Maslow's Hierarchy of Needs... for the 21st Century

Connections with:

- Each other
- Education & culture (library services!)
- Employment
- Health care



Elements of digital inclusion

- Digital literacy training
- Devices that meet the needs of the user
- Affordable broadband Internet access



Broadband access - by the numbers

Nationally:

- 21-42 million do not have access^{1,2}
- 157.3 million do not use the Internet at broadband speed³

Oregon⁴

- 85-95% of Oregon residents live in areas with at least basic broadband available...however...
- Hundreds of thousands remain unserved/underserved/unconnected, including almost half of Oregon census blocks

1. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2019-broadband-deployment-report>
2. <https://broadbandnow.com/research/fcc-underestimates-unserved-by-50-percent>
3. <https://blogs.microsoft.com/on-the-issues/2020/03/05/update-connecting-rural-america/>
4. <https://www.oregon4biz.com/assets/docs/SNGStudy2020.pdf>



Broadband barriers



Available \neq Affordable \neq Adequate



1. https://libguides.osl.state.or.us/ld.php?content_id=59445720
Icons from <https://www.freepik.com/>

Starting a hotspot program: Questions to consider

- How will my library fund this program?
- How long should the lending period for the devices last?
- How can I best to catalog and circulate?
- Will patrons need to sign a user agreement?
- How will success be defined for my program?
- Is there a need for dedicated staff to handle the devices?
- Are there issues with cellular service coverage in my community?



	Josephine Community Library District	The Dalles - Wasco County Library District	Jackson County Library Services
Service Area Population	40,771	26,682	220,944
Library Annual Budget	\$1.3 million	\$1.5 million	\$14 million
Hot Spot Budget	\$12,000	\$53,550	\$52,000
Number of Hotspots	30	150	100
Annual Hotspot Circulation	FY19/20 - 124	2,600 Checkouts	1,197 Checkouts
Funding	Grants	Library Budget	Library Budget
Loan Period	10 days	3 Weeks	2 Weeks



	Josephine Community Library District	The Dalles - Wasco County Library District	Jackson County Library Services
Lending Restrictions	Adult full-service library card in good standing.	Library card with Wasco County Residency	Library card with Jackson County residency, 18 or over
User Agreement	Yes	Library card agreement	Yes
Fines/Fees	Replacement cost for device and accessories	Fees for hotspot and/or parts replacement	Fees for hotspot and/or parts replacement
Vendor	Mobile Beacon/ US Cellular	T-Mobile	US Cellular
Speed/Data	4G Unlimited	4G Unlimited data no throttling	4G Unlimited, throttling



Jackson County Library Services

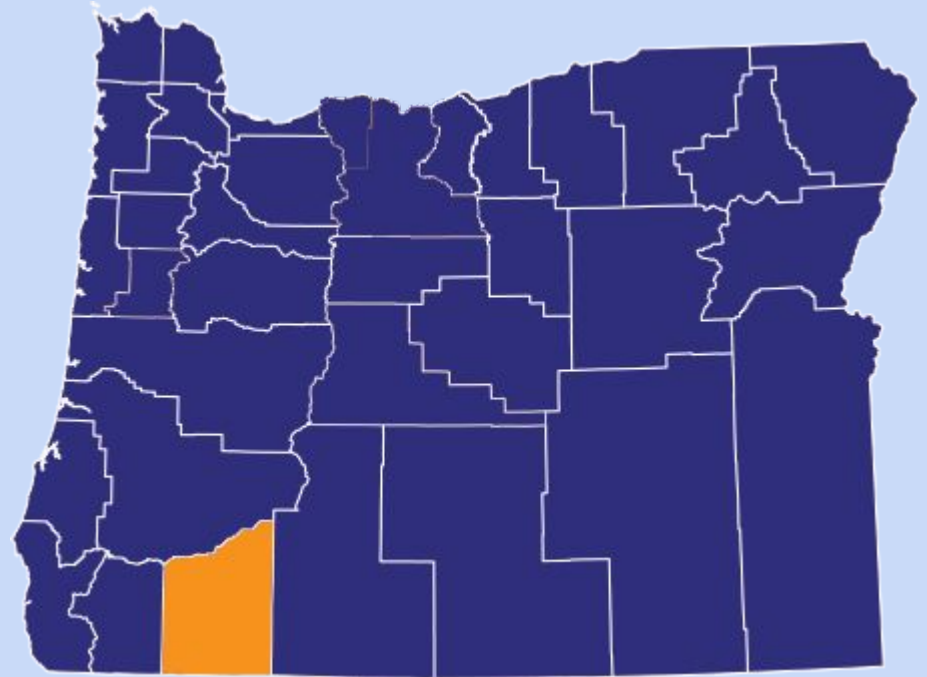
Who we serve

Population: 220,944*

Households: 88,241

Households with no Internet: 13,677

Square Miles: 2,784



*Figures from U.S. Census Bureau 2019



Jackson County Library Services

Devices and service providers/vendors

- Verizon (former)
- US Cellular - Novatel MiFi 7000

Data allocation per checkout

- 20GB/device with throttling
- Increase number of devices, move to unlimited

Circulation

- Hotspots live in two locations, regular catalog and Library of Things software
- 2 week checkout period



Jackson County Library Services

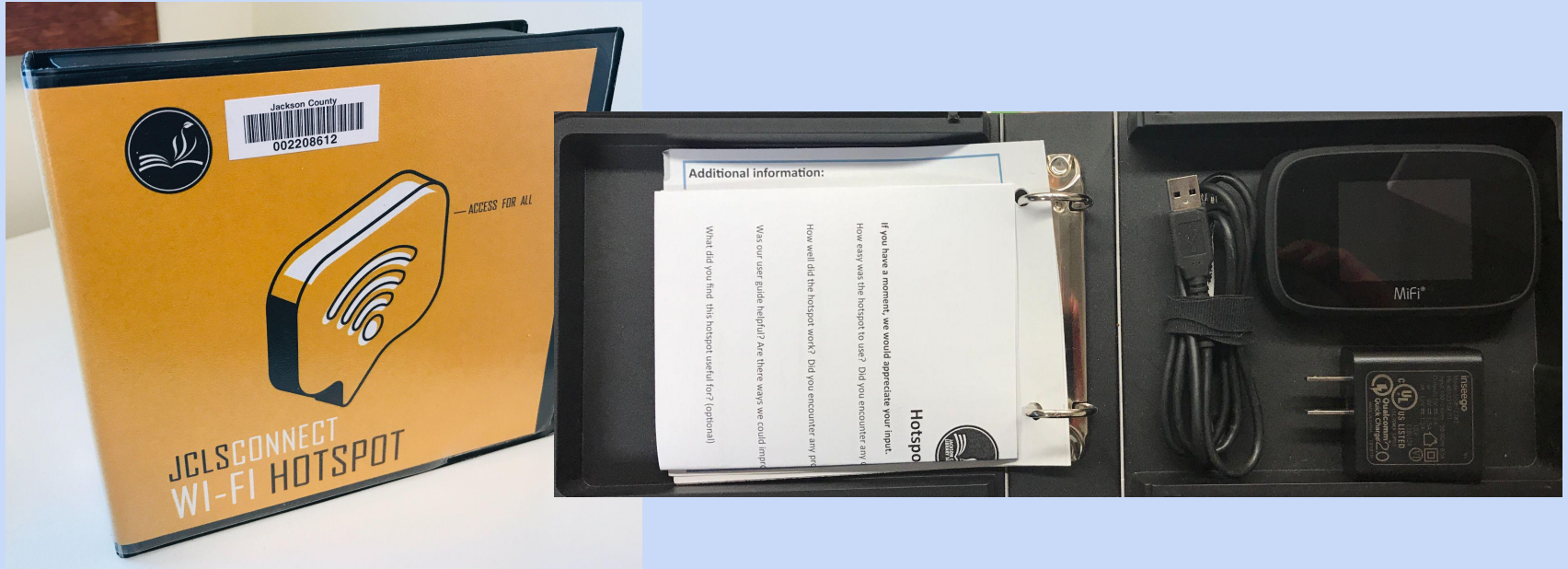
Program Beginnings

- One provider for entire service area
- Two providers covering population centers/rural
- 60 devices originally
- Transitioned to 1 provider, 100 devices



Jackson County Library Services

The nitty gritty - packaging & procedures








Jackson County Library Services

Circulation policies and procedures

- 2-week checkout for maximum usage per device
- Library of Things user agreement
- Check out to 18 and over
- Always return to Digital Services
- \$200 charge for lost device, parts charged individually

User Agreements

☰ All Agreements ☰ Loans ☰ Reservations ☰ Transactions

 Personal Info	Title	Version	Signed	Actions
 Password/PIN	JCLS LoT Lending Agreement_EDITED_1.27.2021	1	2/10/2021 11:25 AM	Details
 Communication	Library of Things Lending Guidelines and Agreement	2	2/19/2020 1:50 PM	Details
 Current Membership	Library of Things Supplement Waiver	1	2/19/2020 1:50 PM	Details
 Agreements				



Jackson County Library Services

Assessment

- Circulation data - 1,197 checkouts FY 19/20
- During COVID - usage declined
- Minimal tech support

Users and Stories

- School (K-12, college)
- Job-seekers
- Entertainment



Get Involved

Careers at the Library

kanopy



Next Steps

- Tablets with cellular connectivity added
- JCLS Tech Van



Josephine Community Library District

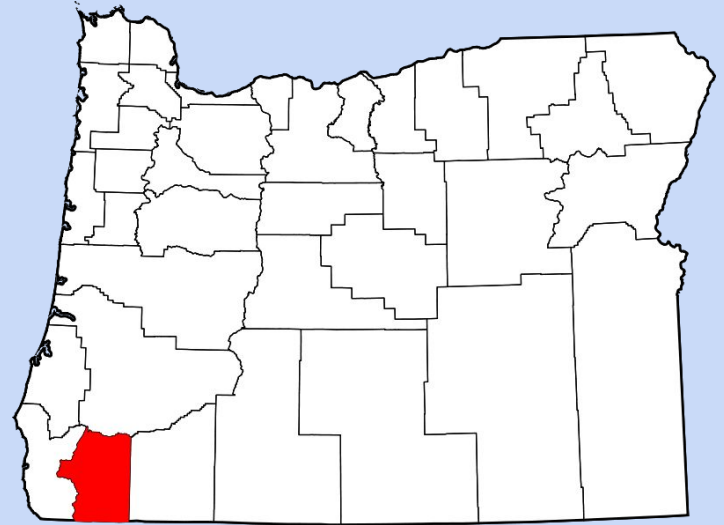
Who we serve

Population: 87,487

Households: 35,206

Households with no Internet: 4,120

Square Miles: 1,642



Josephine County is the traditional home of the Takelma (“Those Along the River”), the Athabaskan-speaking Dakubetede (“Beautiful Place”), the Shasta, and the Taltushtuntude peoples.

*Figures from U.S. Census Bureau 2019



Josephine Community Library District

Pilot project (2019)

- 10 free hotspots (Coolpad Surf) through TechSoup
- Service through Mobile Beacon on the Sprint network
- \$10/month for unlimited 4G data, no throttling

Challenge: Sprint network is limited in rural areas



mobilebeacon.[®]
4G Internet Access. 4 Nonprofits. 4 Less.



Josephine Community Library District

Pandemic expansion

- 20 additional hotspots (MiFi)
- Negotiated with US Cellular for unlimited data (currently \$39/month)
- Better coverage in rural areas
- Covered costs with coronavirus relief funds



Challenge: Funding for sustainability & growth



Josephine Community Library District

Packaging:

- Hard zipper case
- Laminated user guide & legal disclaimer (on back)
- Charger

Cataloging:

- One bib record for each type of hotspot
- Cataloged as a kit - added to “Library of Things”



- **Hotspot will only work in Sprint coverage area.**
- Be sure hotspot is charged. Battery life will depend on use.
- Hold off/on button 3 seconds until green lights appear.
- Be sure the “signal” and “Wi-Fi” lights are green. **If “signal” is red, device will not work in this area.**
- The Hotspot device works on most Wi-Fi enabled devices such as laptops, desktops, smart phones and tablets. To connect your device, find the Wi-Fi network name on your device and connect to it.
- The Wi-Fi network name and password are printed on back of hotspot.
- To preserve battery, turn hotspot off when not in use. Match colored dots when plugging in charger.



Josephine Community Library District

Program setup and management

- Policies
 - User agreements, 10-day check out period
 - Filtering is only necessary if the program is federally funded
- Circulation procedures: check out, check in
 - Semi-lengthy process (user agreement, checking for parts, demo)
 - Offer tutorial at initial check out
- Charges for replacements and parts, no late fees
 - Device: \$100, case \$20, charger \$10, cord \$5. Library cost: \$35
- Device management: data shut off when overdue
 - Run daily report and disable each device remotely
 - Use a spreadsheet to track which devices are disabled
 - Some providers have a web portal



Josephine Community Library District

Mobile Hotspot Activity - 8/19 - 3/21

Year	Active	Lost	Checkouts
FY 19/20	10	4	10/month
FY 20/21	26	5	23/month
Total	30	9	307

Lots of grateful patrons!

People are still finding out about it 18 months later.

Need to factor in device replacement

User survey?



Josephine Community Library District

COVID TIMES

- Increased hotspot use
- Added 20 additional hotspots
- Quarantining devices complicates management
- Not requiring signatures on user agreement
- Added laptop lending

NEXT STEPS

- Doubling number of hotspots



The Dalles - Wasco County Library District

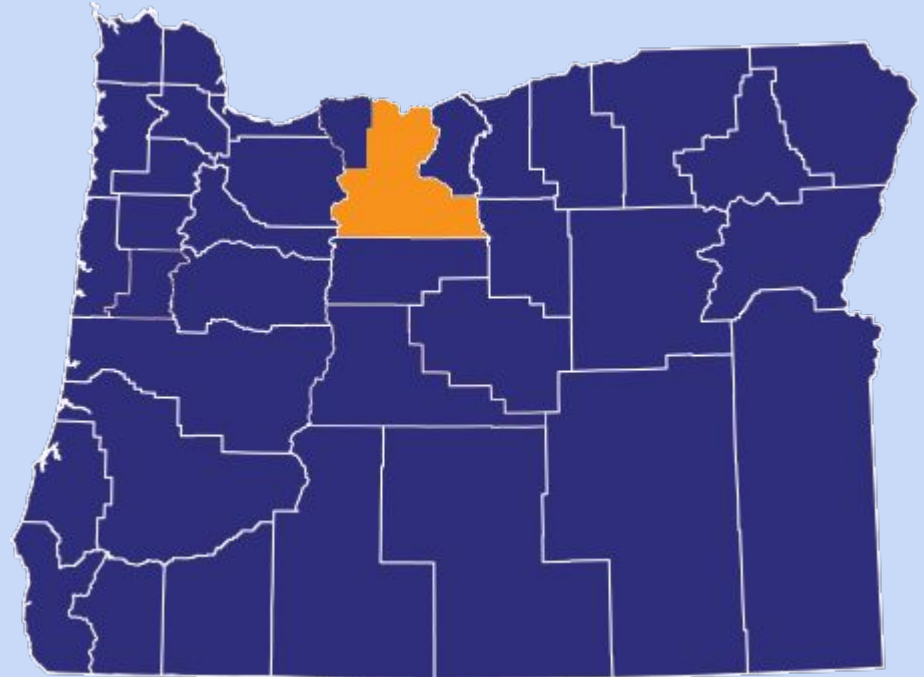
Who we serve

Population: 26,682

Households: 10,305

Households internet: 78.6%

Square Miles: 2,395



*Figures from U.S. Census Bureau 2019



The Dalles - Wasco County Library District

- Device provider(s)
- Service constraints and limits

T Mobile™



verizon✓



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Processing and Packaging



The Dalles - Wasco County Library District

Electronic Waste



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Device Management



The Dalles - Wasco County Library District

When our hotspots are returned circulation staff check for parts. Devices are sometimes returned contaminated with food, liquids or even drugs. And since the Covid era began we are cleaning devices with alcohol.

If parts such as cables or wall transformers, otherwise known as “wall warts,” are missing, we assess a charge of ten dollars. This is a nominal charge so as not to prevent the patron from checking out in the future. If the part is found later, charge will be removed.

The replacement charge for devices has been reduced from \$200 to \$100 in the last couple of months.



The Dalles - Wasco County Library District

Success Stories



Questions?

NEW SEARCH BROWSE

"wifi" AND ["hotspot" OR "hotspots"] AND ["library" OR "libraries"]



Books, Articles & More



Resources (Hotspot Lending Programs)

AzLA Virtual Conference 2018: Starting a Wi-Fi Hotspot Lending Program at Your Library—YouTube. (n.d.). Retrieved March 1, 2020, from <https://www.youtube.com/watch?v=xTpiFMmMEhg&feature=youtu.be>

Building a Rural Library Hotspot Lending Program: Results from a One-Year Pilot. (n.d.). Retrieved March 1, 2020, from <https://joe.org/joe/2019april/a2.php>

Home—WiFi Hotspots Available for Checkout—LibGuides at GateWay Community College. (n.d.). Retrieved March 1, 2020, from <https://libguides.gatewaycc.edu/c.php?g=969119&p=7002385>

Hotspot Playbook: DigitalLead: Rural Libraries Creating New Possibilities | Public Library Association (PLA). (n.d.). Retrieved March 1, 2020, from <http://www.ala.org/pla/initiatives/digitallead/hotspot-playbook>

How to Hot Spot | TechKnowledge | Library Journal. (n.d.). Retrieved March 1, 2020, from <https://www.libraryjournal.com/?detailStory=hot-spot-techknowledge>

How-to-Hotspot.pdf. (n.d.). Retrieved March 1, 2020, from <https://www.maine.gov/msl/libs/tech/How-to-Hotspot.pdf>

Questions Asked When Trying to Start a Hotspot Lending Program | National Digital Inclusion Alliance. (n.d.). Retrieved March 1, 2020, from <https://www.digitalinclusion.org/blog/2017/06/15/questions-asked-when-trying-to-start-a-hotspot-lending-program/>



Resources (Advocacy, Broadband Access, Digital Equity)

BroadbandUSA. (n.d.). Retrieved March 26, 2021, from <https://broadbandusa.ntia.doc.gov/>

Chant, I. (2020, April 1). Libraries connect their communities with wifi, even from closed branches. Retrieved March 1, 2021, from <https://www.libraryjournal.com/?detailStory=libraries-connect-their-communities-with-wifi-even-from-closed-branches>

DigitalLead: Rural libraries creating new possibilities | Public Library Association (PLA). (n.d.). Retrieved March 1, 2021, from <http://www.ala.org/pla/initiatives/digitallead>

EveryoneOn: The digital divide. (n.d.). Retrieved April 18, 2021, from <https://www.everyoneon.org/the-digital-divide/>

National Digital Inclusion Alliance. (n.d.). Retrieved March 26, 2021, from <https://www.digitalinclusion.org/>

Oregon Broadband Office. (n.d.). Retrieved March 1, 2021, from <https://www.oregon4biz.com/Broadband-Office/>

Pun, R. (2021). Understanding the Roles of Public Libraries and Digital Exclusion Through Critical Race Theory: An Exploratory Study of People of Color in California Affected by the Digital Divide and the Pandemic. *Urban Library Journal*, 26(2). Retrieved from <https://academicworks.cuny.edu/ulj/vol26/iss2/1>

Robinson, L., Schulz, J., Dunn, H. S., Casilli, A. A., Tubaro, P., Carvath, R., Chen, W., Wiest, J. B., Dodel, M., Stern, M. J., Ball, C., Huang, K.-T., Blank, G., Ragnedda, M., Ono, H., Hogan, B., Mesch, G. S., Cotten, S. R., Kretchmer, S. B.,... Khilnani, A. (2020). Digital inequalities 3.0: Emergent inequalities in the information age. *First Monday*, 25(7). <https://doi.org/10.5210/fm.v25i7.10844>

Schools, Health & Libraries Broadband (SHLB) Coalition. (n.d.). Retrieved March 26, 2021, from <https://www.shlb.org/>



Questions? Comments? Contact!

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