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St Helens, Oregon

Update to Council

December 20, 2023

Digital Needs and Readiness Assessment

	St Helens Top Five Goals	Score	Concordance	Responses
1	Expanded online education and training opportunities	100.0%	100.0%	
2	New opportunities for work and economic growth	100.0%	100.0%	
3	Access to robust and competitive broadband	96.3%	97.8%	
4	Remote and better integrated access to health services	85.2%	94.3%	
5	Improved monitoring and management of clean water and sanitation	63.0%	97.8%	

Goals 1, 2, 4, and 5 are enabled by broadband.
Use DNRA findings to focus community planning on consensus goals and needs.

Digital Needs and Readiness Assessment ../2

St Helens Top Five Issues and Needs	Score	Concordance	Responses
1 Increasing good-paying job opportunities	96.3%	98.7%	
2 Stimulating local business growth and innovation	96.3%	98.7%	
3 Retaining and attracting businesses and population	92.6%	97.8%	
4 Expanding local workforce skills	88.9%	97.1%	
5 Improving the availability and delivery of civic services	74.1%	97.8%	

**For all in St Helens to benefit,
all need affordable, convenient access to broadband.**

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St Helens Broadband Impact and Market Assessment
Oct 2021 – May 2022

Key eCheckup Findings

Demand for Better Broadband

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Households

Household Interest in getting better broadband

- 4.1%
- 7.0%
- 51.5%
- 37.3%

- ■ Want something better now
- ■ Would consider other options
- ■ Happy with what I have
- ■ Have not considered it

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Businesses

Business Interest in getting better broadband

- 3.1%
- 9.2%
- 40.0%
- 47.7%

- ■ Want something better now
- ■ Would consider other options
- ■ Happy with what I have
- ■ Have not thought about it

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A majority of businesses would consider other options for broadband, while most households want better broadband *immediately*

Likelihood of Changing Service Provider

Households

Businesses

Household Likelihood of changing service provider

2.9% 2.9%
18.0%
76.3%

- Very likely
- Somewhat likely
- Not likely
- Not sure

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Business Likelihood of changing service provider

3.1% 1.5%
26.2%
69.2%

- Very likely
- Somewhat likely
- Not likely
- Not sure

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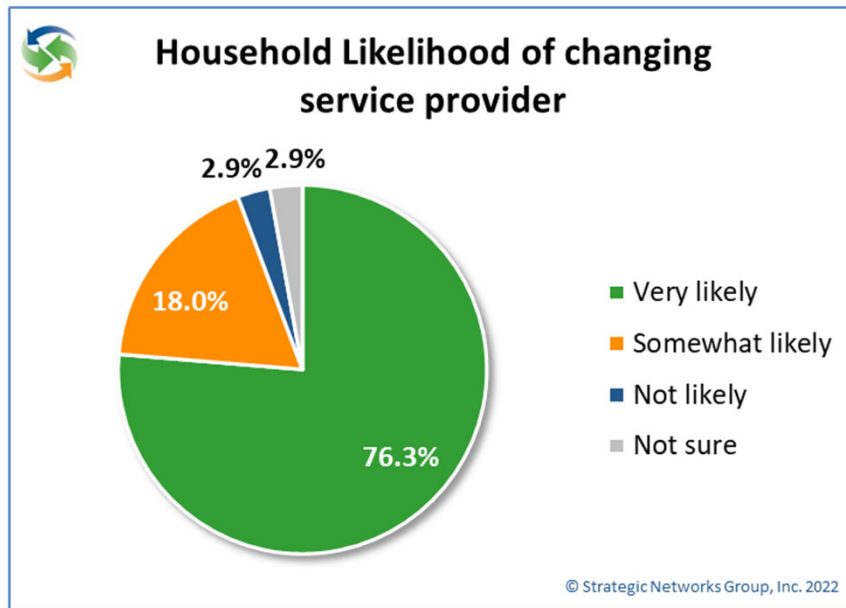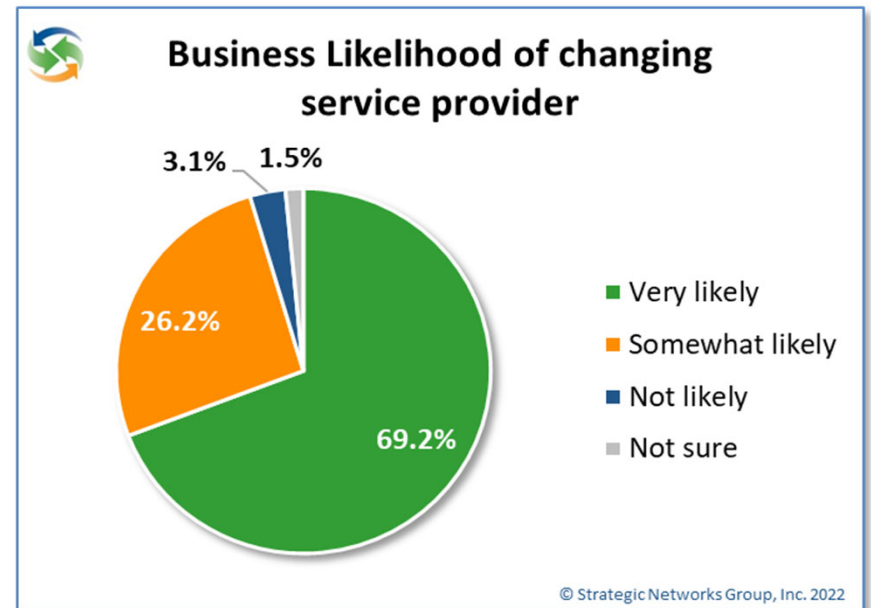
Very high likelihood (willingness) for residents and businesses to change current service provider

Monthly Spending on Internet

Households

Businesses

Monthly spending on internet - Households

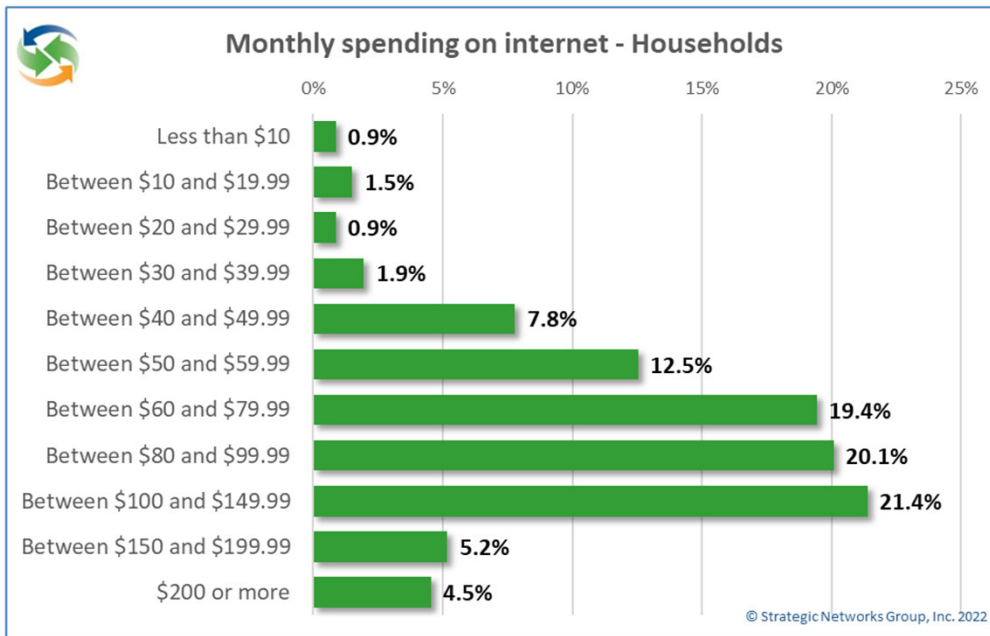| Range	Percent
Less than $10	0.9%
Between $10 and $19.99	1.5%
Between $20 and $29.99	0.9%
Between $30 and $39.99	1.9%
Between $40 and $49.99	7.8%
Between $50 and $59.99	12.5%
Between $60 and $79.99	19.4%
Between $80 and $99.99	20.1%
Between $100 and $149.99	21.4%
Between $150 and $199.99	5.2%
$200 or more	4.5%

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Monthly Internet Spending - Businesses

Range	Percent
Less than $50	6.9%
$50 to $99	24.1%
$100 to $149	27.6%
$150 to $199	3.4%
$200 to $299	20.7%
$300 to $399	6.9%
$400 or more	10.3%

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Most households spend between $100 and $149.99

Over one third of businesses spend more than $200 per month

Broadband Impact on Living Location

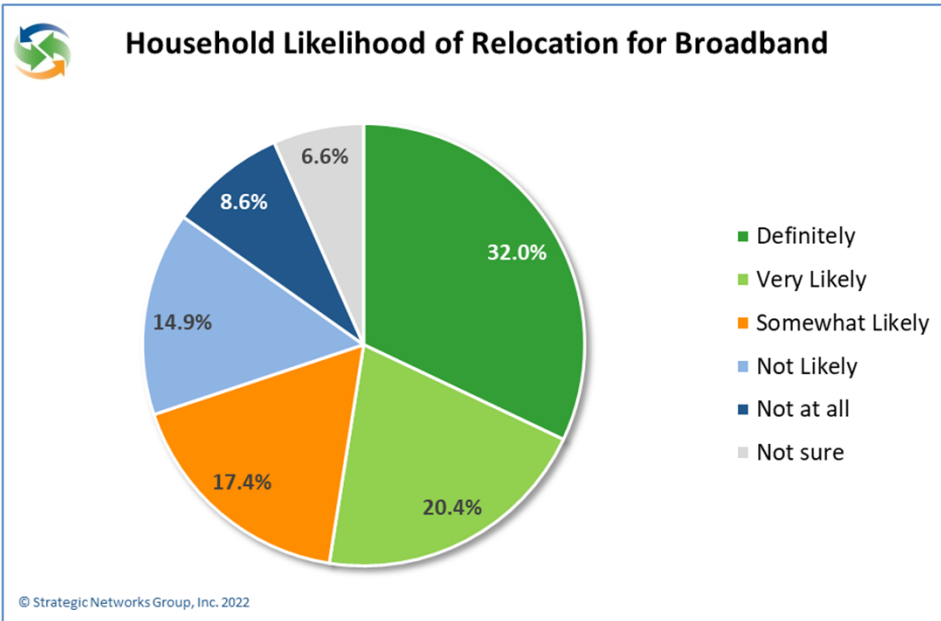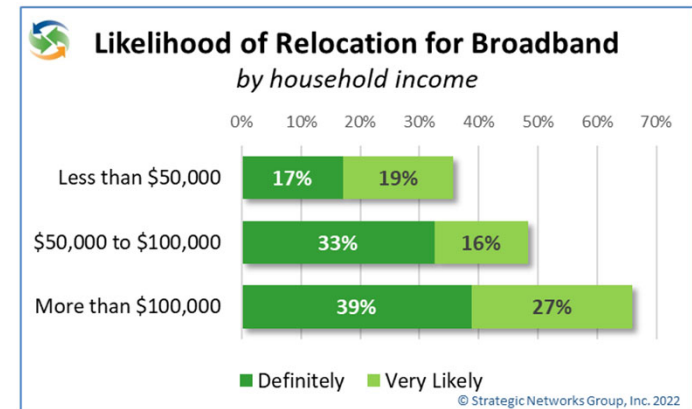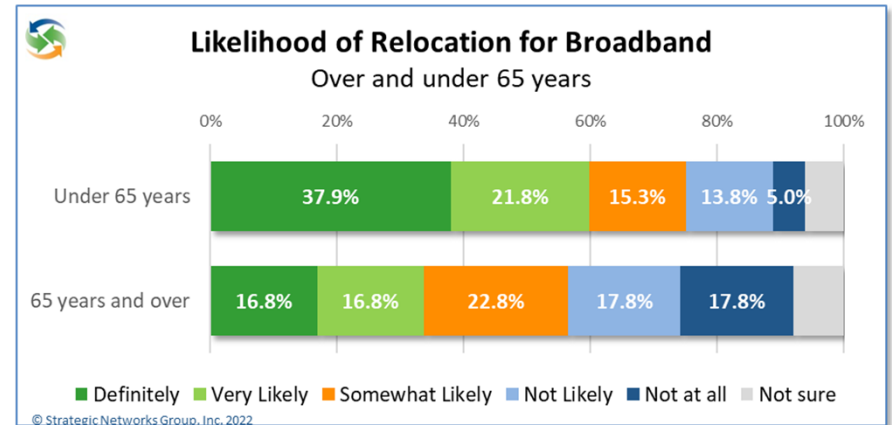## Household Likelihood of Relocation for Broadband

- Definitely — 32.0%
- Very Likely — 20.4%
- Somewhat Likely — 17.4%
- Not Likely — 14.9%
- Not at all — 8.6%
- Not sure — 6.6%

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Likelihood of Relocation for Broadband
Over and under 65 years

	Definitely	Very Likely	Somewhat Likely	Not Likely	Not at all	Not sure
Under 65 years	37.9%	21.8%	15.3%	13.8%	5.0%	
65 years and over	16.8%	16.8%	22.8%	17.8%	17.8%	

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Likelihood of Relocation for Broadband
by household income

	Definitely	Very Likely
Less than $50,000	17%	19%
$50,000 to $100,000	33%	16%
More than $100,000	39%	27%

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Despite overall happiness in the community, over _half_ of all residents would consider relocating for broadband

Importance of Broadband for Business Location

Importance of Broadband for Selecting Location

- Essential — 26.6%
- Very Important — 18.8%
- Somewhat Important — 18.8%
- Not Important — 12.5%
- Not Sure/NA — 23.4%

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Importance of Broadband for Remaining in Location

- Essential — 50.0%
- Very Important — 17.7%
- Somewhat Important — 17.7%
- Not Important — 6.5%
- Not Sure/NA — 8.1%

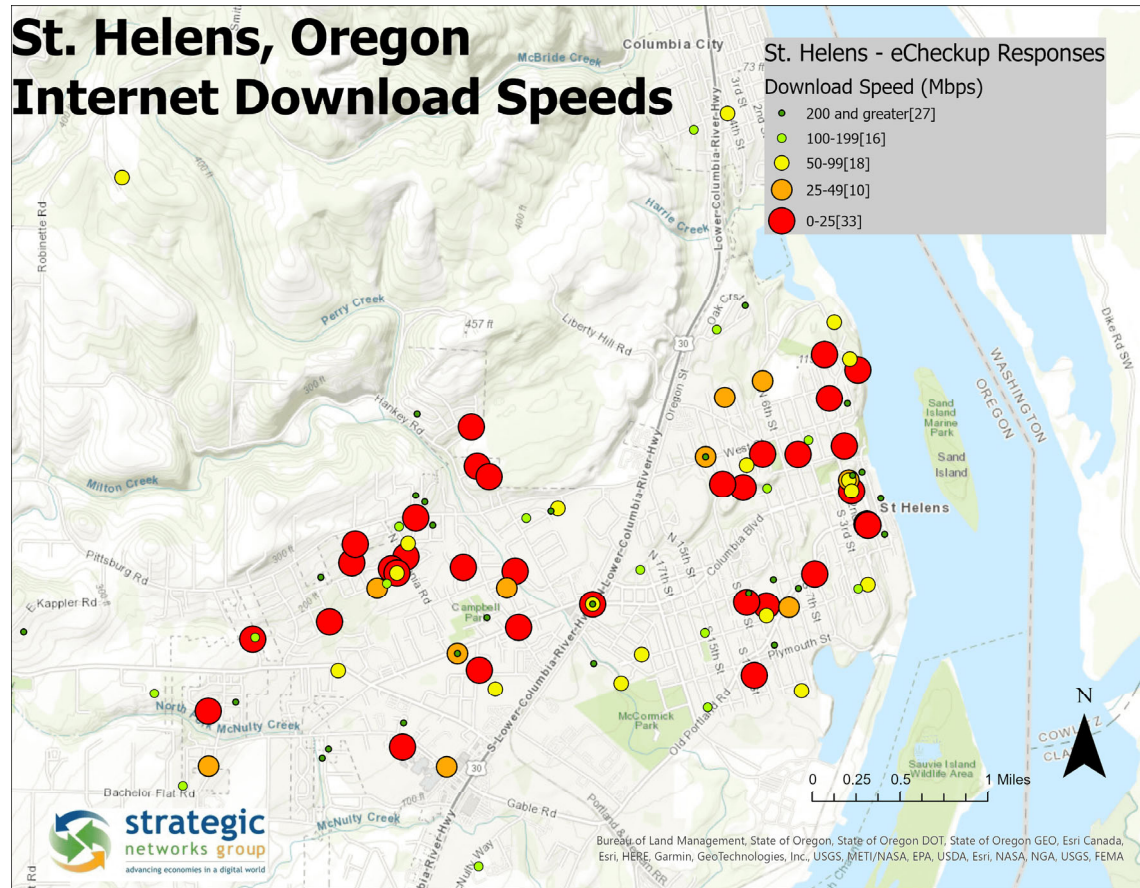© Strategic Networks Group, Inc. 2022
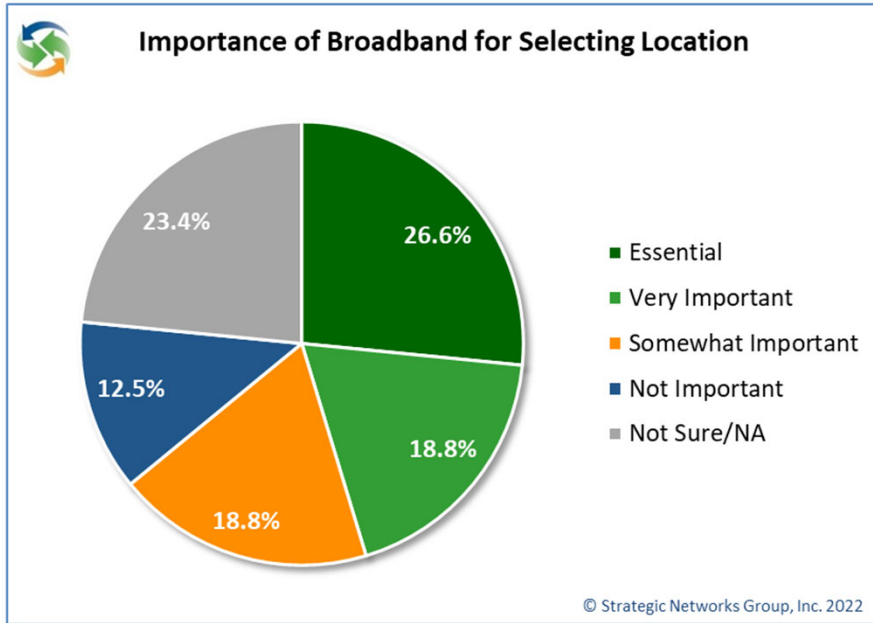
- 45.4% of businesses consider broadband a very important/essential factor in selecting business location
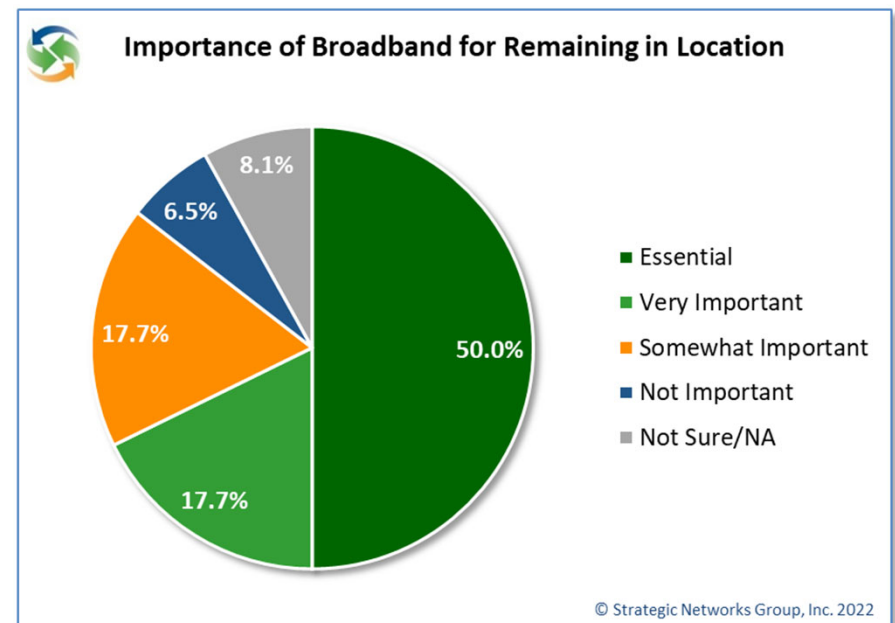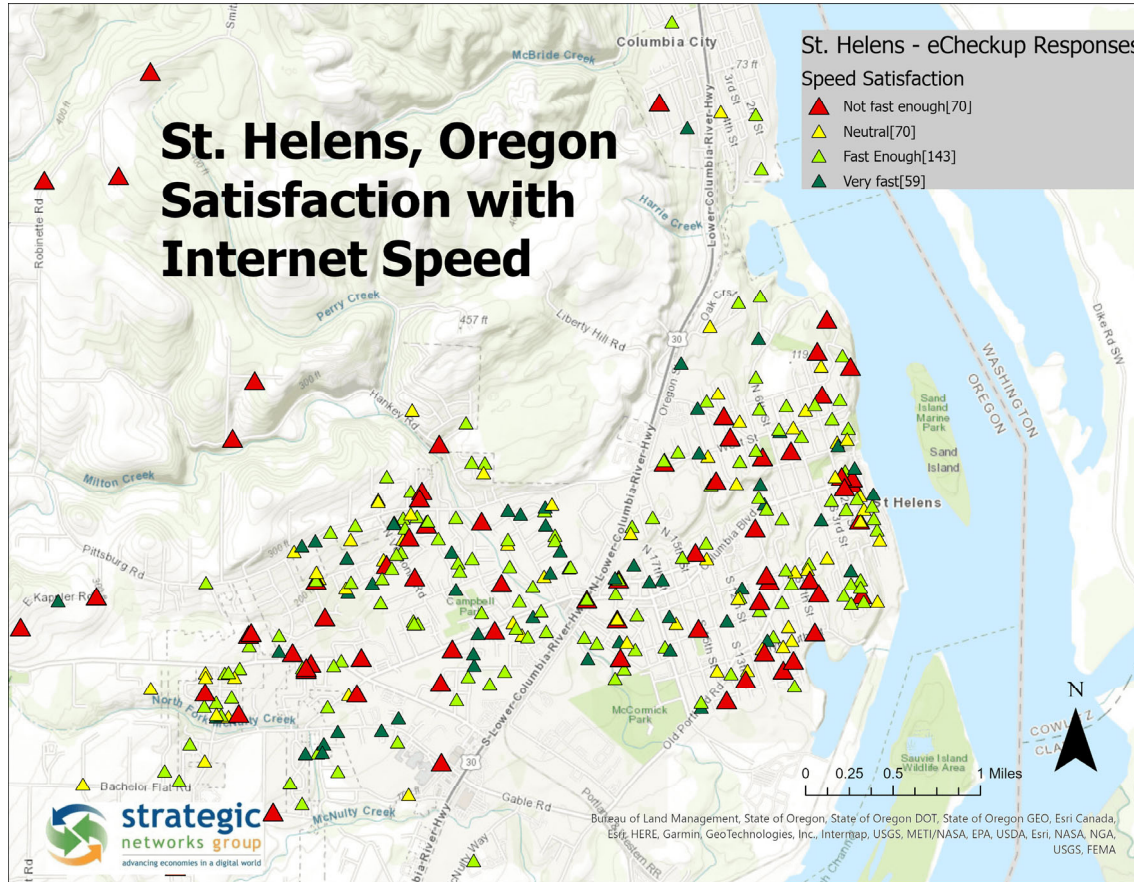
- More than *two-thirds* of businesses consider broadband very important/essential to remaining in their business location

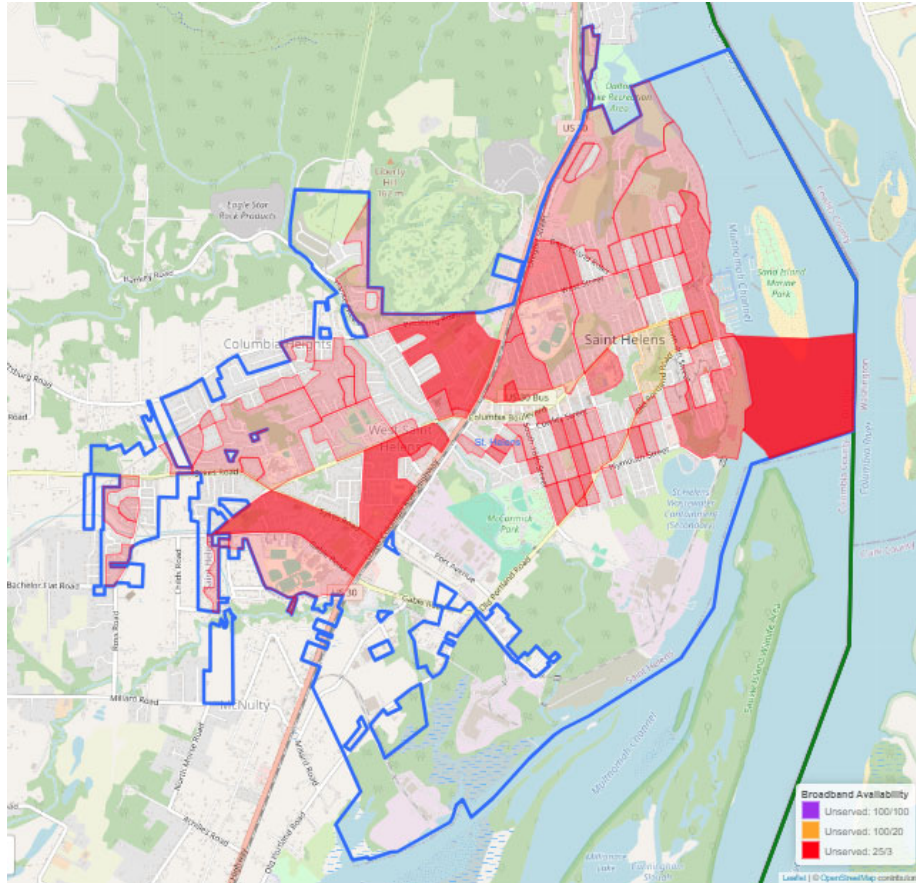**Risk of business relocation out of St. Helens without better broadband**

St. Helens, Oregon
Internet Download Speeds

St. Helens - eCheckup Responses
Download Speed (Mbps)
- 200 and greater[27]
- 100-199[16]
- 50-99[18]
- 25-49[10]
- 0-25[33]

Map of Current Broadband Availability

	BEAD Request	Unserved Households
Fiber	$3 million	1,038
Digital Inclusion	TBD	TBD

- Unserved areas (red) at 25/3 Mbps speed are priority locations to receive BEAD funds
- Current analysis of FCC broadband availability indicates there are 1,038 underserved households covering 80 Census blocks
- Fiber cost analysis based on household density and length from roadways
- Digital inclusion programs such as ACP outreach and tech support at libraries to be determined based on priorities, resource availability, stakeholders, available funding, etc.

AB [2

AB [2]2   The household density analysis used to determine the estimated cost to deploy fiber-to-the-home is based on an intersection of 2020 US Census Tigerline Housing and Population data as of October 2022 and the Tigerline Streets data as of 2022. By calculating the number of linear road miles within each census block, we can determine the number of households per linear road mile within that census block. Traditionally, wireline providers, such as cable and fiber-to-the-home providers, require between 15 and 20 households per linear road mile to make their private sector business case to deploy with no subsidy.

When calculating the costs, a formula was used to determine a mid-range to high-end cost estimate for deploying fiber to the home. This formula takes into consideration two cost factors: the fiber backbone that passes the structures to be served and the lateral connections or "drops" that connect the homes to the backbone. A cost of $75,000 per linear mile is estimated for the backbone. This cost can be as low as $25,000 per mile in the more densely populated areas, but with the areas of lower density can be considerably more expensive to deploy at times exceeding $150,000 per mile. The exact costs can be determined during the engineering phase, and this estimate is best used to determine the cost of the engineering services needed for the project.

The second cost factor is the cost to connect each structure, which is estimated to be $1500 per home passed. We do not assume every structure the fiber passes will become a subscriber. The average cost to connect a structure to fiber backbone is between $3,000 and $4,000 provided the structure is within 250 feet of the backbone. For structures that are more than 250 feet from the backbone, the cost to connect the structure can be significantly higher and potentially as high as $150 per foot or more where trenching is required and conditions are difficult. This factor is an additional reason that the cost to deploy fiber-to-the-home is more costly in rural areas where homes tend to be farther from the road on average.

Andrew Bates, 12/14/2023

Next Steps for Broadband in St Helens

	One-time Action Items	Timeframe
1	**Provide update to St Helens City Council** Prepare an update on the broadband research activities conducted to date, including Digital Needs and Readiness Assessment, Economic Case Analysis, and eCheckup Broadband Assessment. Also present broadband next steps as presented below.	Dec2023
2	**Review draft Oregon Broadband Plan** Review draft of **Oregon Broadband Plan** and prepare Memo for behalf of the City of St Helens can use to submit to the Oregon Broadband Office	Dec2023
3	**Verify Unserved/Underserved Locations Represented for St Helens** To ensure that all unserved/unserved locations are represented in initial proposal State of Oregon datasets, SNG, in conjunction with St Helens, can request a Type 4 License to receive FCC Broadband fabric layer data at no cost, which will allow us to compare the location IDs with addresses • Challenge process will open once state submits BEAD Volume I Proposal in early 2024 • Verify against Oregon Broadband Office provided Volume I unserved and underserved lists, including MDUs and locations currently not listed	Dec2023-Jan2024
4	**Verify 1GB for St Helens Community Anchor Institutions** • The State Broadband office has provided a list of Community Anchor Institutions that currently do not have 1 Gigabit internet connectivity. Obtain contact lists of CAI's and contact each to verify that that are no further facilities that are underserved within St Helens. ([Oregon Community Anchor Institutions FCC List](#)) • St Helens to provide a resource to work with SNG to phone CAI's as needed	Dec2023-Feb2024
5	**Prepare eStrategy Report** Prepare eStrategy Report for St Helens (7-10 pages) that will inform City Council about St Helens broadband status and provide recommend for next steps. This report will be prepared so it can be used in a **Memo to inform the Oregon State Broadband Office** on St Helens funding needs and strategic planning requests, as well as have a say in how public monies are spent in St Helens, including: • Identification of any unserved/underserved locations or CAI facilities currently not included in BEAD Volume I Proposal ([Indicators of need process overview](#)) • Prioritization of areas of need in St Helens (by geography, demographic group, etc.)	eStrategy Report: Jan-Apr2024 Memo to Oregon Broadband Office: Feb2024

Ongoing Action Items	Timeframe
1 **Sitting-in on State Broadband Meetings for St Helens** SNG to sit-in on Oregon Broadband Office meetings to report back to St. Helens on developments and represent the city as needed	Dec2023-Jun2024
2 **Preparing for BEAD Volume II and other funding opportunities** • Drive ACP signup outreach and assistance – increase participation in existing federal funding available by engaging with local stakeholder organizations • Develop partnerships and pilot initiative for helping displaced workers (e.g. Cascades plant) to identify new workforce opportunities and develop the necessary skills • Small Business Growth Program for businesses identified in the eCheckup with utilization gaps, as well as those interested in developing an online presence and adopting online practices.	Prepare and implement plan with St Helens Jan-Apr2024

Broadband Next Steps for St Helens

Digital Navigators for ACP

- Hire through existing local stakeholder organizations with Federal / State funding to help residents access ACP and Lifeline subsidies

- 1,183 eligible households could be receiving ACP benefits, and need to be engaged through community outreach with stakeholder organizations and digital navigation services at St Helens libraries and digital innovation hubs

Digital Economy Management

- Hire full-time to manage grant applications, broadband infrastructure funding and process, collaborations with local service providers, and drive digital transformation through Digital Navigators

Design and Engineering

- Focus on areas identified in study to assess existing assets and where possible leveraging those assets to design digital infrastructure that enables open access so that providers can build a business case to provide future-ready service

Digital Innovation Hubs

- Use State Digital Equity funds and leveraging community stakeholder partnerships

- Deliberate strategy to engage all residents and raise awareness about offerings / opportunities

- Build local capacity and use train the trainer model to deliver resources and technical support onsite

Access and Planning
- Enable affordable, robust, and competitive broadband access for all
- Enhanced services – education, health, smart community, public safety, and household management
- Develop capacity to effectively educate key decision makers through our planning

Digital Inclusion
- Connect to underserved populations with locals taking the lead as a means of building trust, participation, and involvement in future funding and implementation efforts
- Partner with existing resources and capacity that can help guide a thoughtful, thorough, and sustainable plan to expand digital infrastructure and services in the future
  - Ensure access to technology devices (computers, tablets)
  - Telehealth: awareness and technical support for implementation
  - Distance e-learning support through schools
  - Opportunities for entrepreneurship (youth, un/under-employed)
  - Raising awareness and technical support for tourism and recreation, home monitoring / security
  - Workforce development and training for location neutral workers
  - Digital Innovation Hubs that can showcase and help implement digital opportunities

- What aspects are the highest priority?

- With whom should we connect / work with to change people's lives in St Helens?

Thank You

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Partners for Digital Inclusion

Organizations	Broadband and Digital Inclusion Involvement	Tactical Considerations
Public Library	• Train existing staff to become Digital Navigators • ACP outreach and provide individual 1:1 support to community	• Ability to serve all St. Helens residents • Utilizing existing staff or volunteer network • Available to receive Digital Equity Act and other grant funds
St. Helens School District	• Support ongoing distance learning for students and provide outreach for digital equity programs	• Device distribution and needs among school programs
Legacy Medical Group and Columbia Health Services	• Implementing tele-health and digital literacy programs for Seniors	• Existing local organizations that work with Senior populations • Local community facilities to host events
ISPs	• Coordinating community engagement and identifying organizations to support digital inclusion	• Achieve goals for infrastructure by monitoring BEAD program funding to unserved areas in St. Helens • Work in partnership to promote ACP subsidy and affordable broadband plans

Broadband Availability and CAIs
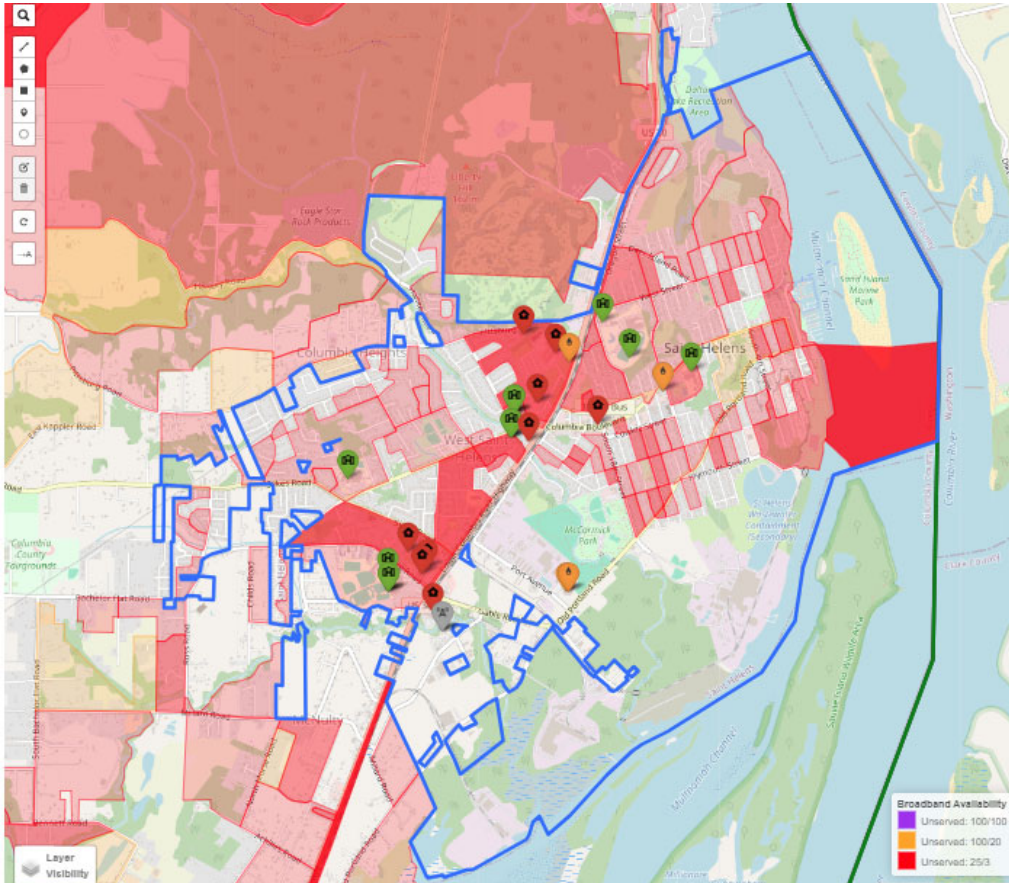
- Broadband availability data from St. Helens and surrounding areas
- Community Anchor Institutions (CAIs) and cell towers displayed
  - Govt Public Safety – Orange
  - Schools and Education – Green
  - Medical and Healthcare – Red
  - FCC Cell Towers - Grey