

- **Broadband**
- **Connectivity**
- **Assessment**
- **Tool**

User Research and Experience Design

Ashley Lindsey & Nina Showell

UW Information School

Sponsors: Karen Perry and Will Saunders

[About Us]



Ashley Lindsey

- MS Information Management Student at the University of Washington Information School
- Summer 2017 Digital Studio Intern, UX Design at Avanade
- Specializing in User Experience



Nina Showell

- MS Information Management Student at the University of Washington Information School
- Summer 2017 Open Data Program Intern, City of Seattle
- Specializing in Information Architecture

[BCAT 1.0]

- Broadband Connectivity Assessment Tool
- Developed by National Telecommunication and Information Administration/BroadbandUSA with input from broadband leaders, advocates, and industry members
- Helps communities understand and assess needs; prepares them for advocacy

[BCAT 1.0]

12 modules with 3 themes:

- Access:
Infrastructure and Availability
- Adoption:
Inclusion and Skills
- Community:
Leadership and Context



[BCAT 1.0 Beta]

Launched May 2017

Teams of up to twelve people in fifteen locations around the country

Roughly half the teams successfully completed the assessment

Note: Teams define their own goals

[User Research]

Conducted semi-structured interviews

10 interviews: 11 participants from 7 communities

Sample questions:

- *What were you hoping to achieve? What was your goal in completing the assessment?*
- *How did the BCAT tool fit into the work you were already doing? Was your community already working on broadband efforts?*
- *Have you been able to take action because of the BCAT?*

Stakeholder Analysis

Direct Stakeholders:

- NITA/Broadband USA
- BCAT participants:
 - Government employees
 - Librarians
 - Local ISPs
 - Business Leaders
 - Educators
 - Emergency Responders
 - Medical Professionals

Indirect Stakeholders:

- Broadband customers
- Employers
- Rural populations
- Low income households
- ISPs
- Policymakers

Lincoln Co, WA



White Center, WA

SEATTLE
ROLL
BAKERY
WHOLESALE
RETAIL & DELI




Teriyaki
LÒ BÁNH MÌ SEATTLE ROLL
9828 16TH AVE SW (206) 763-6435
Espresso, Bubbles Tea, Hambao, Teriyaki, Pastries, Miso

**RAPID
TAX
REFUND**
**MONEY
BACK
IN
2DAYS**

IT'S FAST
7-4900



344
357
369

Vinalhaven, ME



Stevens Co, WA



Key Takeaways

- All of the users we interviewed believed in the goals of the project
- They think the work is important
- They felt participation was worthwhile and said they would do it again

What Worked Well

- Helped communities build broadband teams
- Tool was comprehensive
- Revealed gaps in knowledge
- Created a starting benchmark to help gauge future progress
- Provided information that could be shared with policymakers

Design Recommendations

Bandwidth intensive

Make assessment downloadable (.doc, .pdf, .txt)

FCC data does not match participants' experiences

Help communities gather their own data

Final report was too long, repetitive

Help team leaders create an executive summary

More Design Recommendations

Assessment was too long, repetitive

- Group related questions together on one page

- Offer multiple completion paths

- Eliminate or consolidate repetitive questions

No way to assign sections to individual participants

- Multiple completion path options

- Give team leads the ability to assign modules

More Design Recommendations

Questions are difficult to understand

- Determine target audience for each question

- Decrease the reading level

Team leader has to 'nag' participants

- Automate reminders

- Make it easier to monitor progress

- Celebrate completion of each section

More Design Recommendations

No way to gather feedback from members outside of the main team

- Allow team leader to determine team size

- Leader can send questions via email

- Create a way for users to upload data

Rural vs. urban communities have different priorities

- Create multiple assessment pathways

- Allow teams to choose their focus

More Design Recommendations

Want to be able to compare to similar communities

Add additional column for data comparison

Provide case studies

Use cohort model for participation

Interface aesthetics need work

Use the *U.S. Web Design System Style Guide*

Broadband Connectivity Assessment Tool

Gathering community knowledge to support local broadband efforts

A comprehensive assessment to better understand your community's strengths and weaknesses, and turn that information into action.

What is it?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis dictum est eros, nec blandit velit feugiat nec. Suspendisse potenti. Donec sit amet metus urna. Phasellus quis est vitae massa consequat rutrum. Aliquam felis risus, volutpat tempor tempus a, vestibulum non velit. Donec convallis, tortor in tincidunt ultrices, erat enim dictum est, eget pulvinar risus justo nec mi.

[Get started](#)[Join a team](#)

Sign in

Username or email address

Password

[Show password](#)[Sign in](#)[Forgot username?](#)[Forgot password?](#)

Features of the BCAT



**Resources to
guide your
work**



**Easy
download for
offline access**



**Simple
progress
tracking**



**Guide to
building your
team**



**Understand
federal data**



**Different
paths for
different
needs**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis dictum est eros, nec blandit velit feugiat nec. Suspendisse potenti. Donec sit amet metus urna. Phasellus quis est vitae massa consequat rutrum. Aliquam felis risus, volutpat tempor tempus a, vestibulum non velit. Donec convallis, tortor in tincidunt ultrices, erat enim dictum est, eget pulvinar risus justo

Washington County Assessment

Jane Doe

Administrator

Last Visited:

[Adoption & Digital Inclusion](#) > [Digital Skills](#) > [Digital Literacy Training- Scope](#)



Approaching Deadline

Your team's assessment deadline is June 9th, 2018.

Your Assignments

Assigned Path

[Adoption & Digital Inclusion](#)
[Assessment](#)

Download Assessment



To Do ^

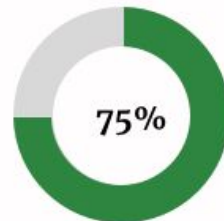
NEW [Digital Skills](#)

In Progress ^

[Device Ownership](#)
[Adoption & Use](#)

Completed ^

- ✓ [Digital Inclusion](#)
- ✓ [Community Priorities](#)
- ✓ [Stakeholder Engagement](#)



Announcements

Group Conference Call: Monday, May 29th, 4pm

General check-in call with NTIA, anyone welcome to join in.
1 -823-2839, then 3982# to join call

New Assignment

Hi Tom, I assigned an additional section, Digital Skills, for you to complete. Thanks, Jane.

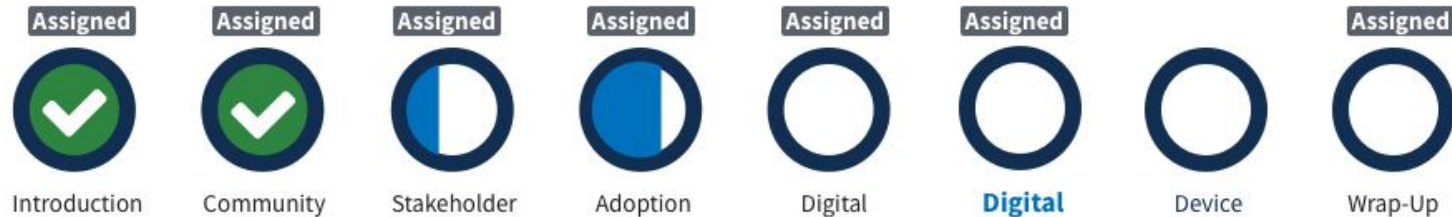
Group Conference Call: Thursday, June 1, 2pm

General check-in call with NTIA, anyone welcome to join in.
1 -823-2839, then 3982# to join call

[See More](#)

Adoption & Digital Inclusion

Washington County Assessment



< Digital Inclusion

Device Ownership >

Digital Skills | Digital Literacy Training and Support

Digital Literacy Training and Support

Training in Job Force & Workforce Skills

Traning in Collaboration & Content Creation

Digital literacy training and support – scale

Does your community provide digital literacy training and support?

1 = Poor 5 = Excellent N/A or Don't Know

☐ ☐ ☐ ☐ ☐

Digital literacy training and support – scope

Does your community provide digital literacy training and support?

Please check all that apply:

☐ Stakeholders, such as libraries or other institutions, offer one-on-one

(Deliverables)

- Interview summaries
- User stories & development requirements
- Wireframes
- Reading level edits / survey questions
- Written report

[Conclusion]

- Communities think this work is important
- Some changes are needed to ensure participant success
- Prepares communities for self-advocacy

Thank you!

Ashley Lindsey - aml2291@uw.edu

Nina Showell - showelln@uw.edu