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

White Center, WA

SEATTLE ROLL BAKERY
WHOLESALE
RETAIL & DELI

爐 BAKERY
_ALE, RETAIL & DELI

RAPID TAX REFUND

MONEY BACK IN 2 DAYS

IT'S FAST

7-4900

Teriyaki

LÒ BÁNH MÌ SEATTLE ROLL
982 S. 16 TH AVE. SW   (206) 763 - 6435
Espresso, Bubbles Tea, Hambao, Teriyaki, Pastry, Mooc

VIETNAMESE SANDWICHES

RESERVED PARKING

344
357
369

Vinalhaven, ME

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
  Divide assessment into smaller parts
  Eliminate or consolidate repetitive questions

No way to assign sections to individual participants
  Offer multiple completion paths
  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 admins to 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

Broadband Connectivity Assessment Tool

Home   **About**   **Resources**

Washington County Assessment **Jane Doe** Administrator

Last Visited:
Adoption & Digitial Inclusion > Digital Skills > **Digital LIteracy Training- Scope**

ℹ **Approaching Deadline**
Your team's assessment deadline is June 9th, 2018.

Your Assignments

Assigned Path
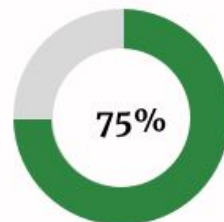**Adoption & Digital Inclusion Assessment**

Download Assessment
10.5Mb 91Kb 10.5Mbs
PDF TXT DOC

| To Do ∧ |
| NEW **Digital Skills** |
| In Progress ∧ |
| **Device Ownership** |
| **Adoption & Use** |
| Completed ∧ |
| ✓ **Digital Inclusion** |
| ✓ **Community Priorities** |
| ✓ **Stakeholder Engagement** |

75%

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.
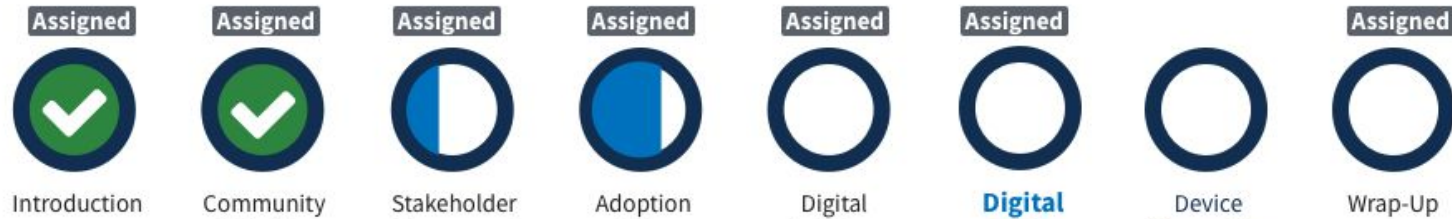
Group Conference Call: Thursday, June 1, 2pm
General check-in call with NTIA, anyone welcome to join in.
1 -823-2839, then 3982# to join call

See More

Adoption & Digital Inclusion

Washington County Assessment

Assigned	Assigned	Assigned	Assigned	Assigned	Assigned		
✓	✓	◐	◑	○	○	○	○
Introduction	Community	Stakeholder	Adoption	Digital	**Digital**	Device	Wrap-Up

< Digital Inclusion   ————————————   Device Ownership >

Digital Literacy Training and Support

Training in Job Force & Workforce Skills

Traning in Collaboration & Content Creation

Digital Skills | Digital Literacy Training and Support

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