

DIGITAL MAPPING TECHNIQUES 2020

The following was presented at DMT'20
(June 8 - 10, 2020 - A Virtual Event)

The contents of this document are provisional

See Presentations and Proceedings
from the DMT Meetings (1997-2020)

<http://ngmdb.usgs.gov/info/dmt/>

Geologic Information For All

Serving Geologic Data to a Broad User Base

DMT June 2020



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**
WASHINGTON
GEOLOGICAL SURVEY

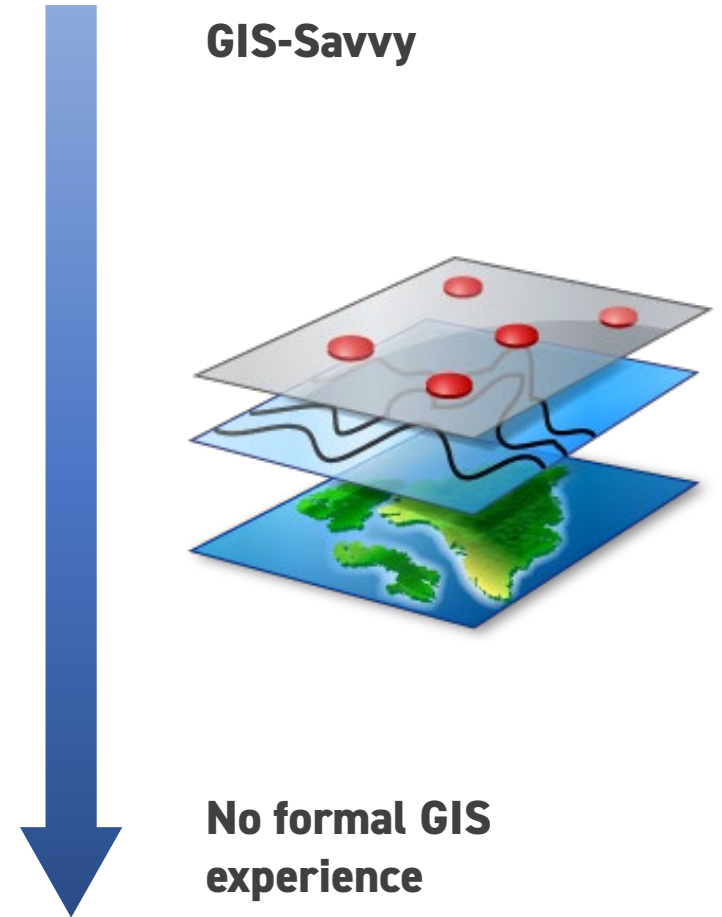
Susan Schnur
Publications Group Manager
Washington Geological Survey

As state geological surveys we publish geologic information for the benefit of the citizens of our state.

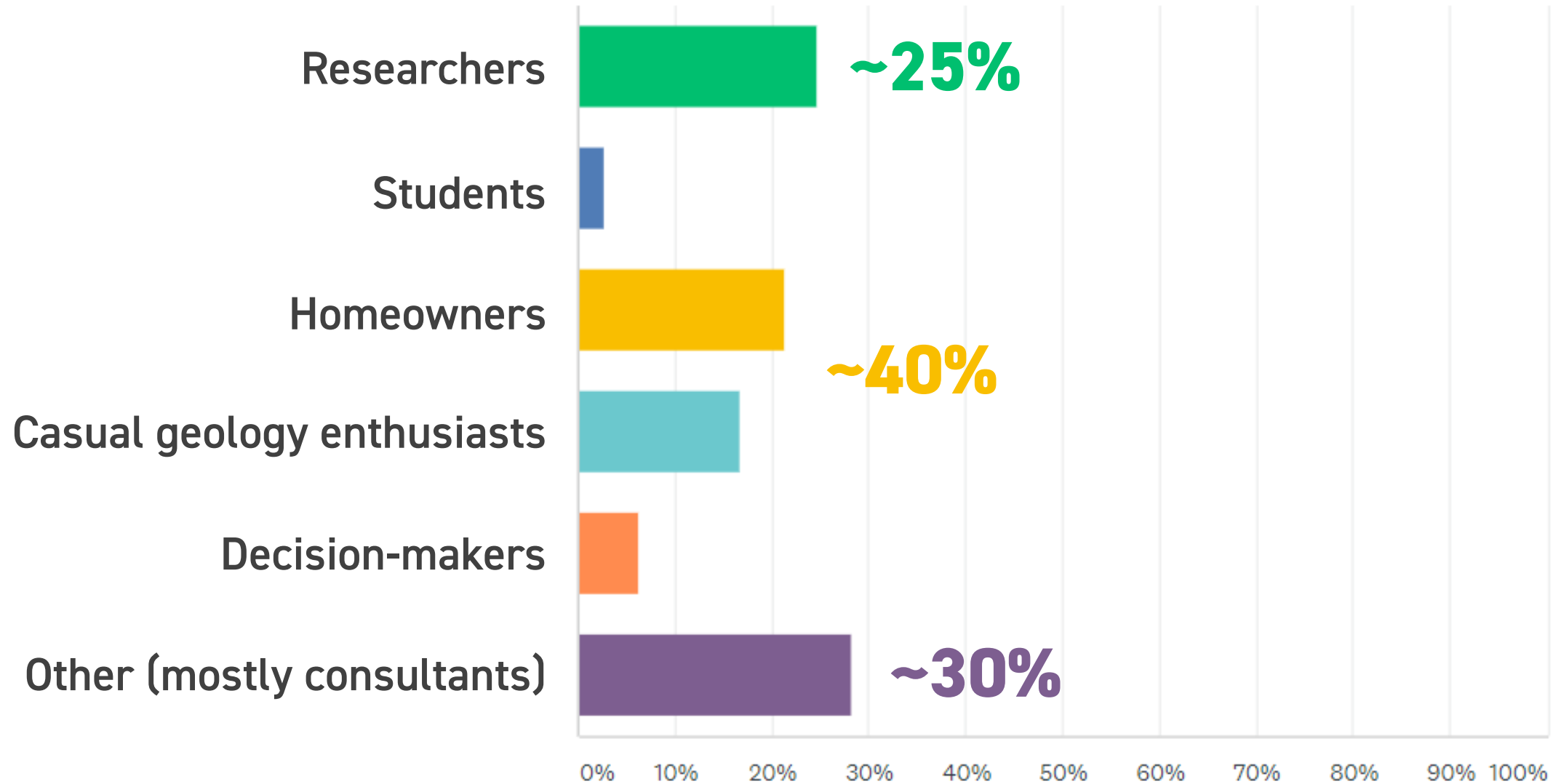


We serve many different user groups

- Government cartographers and GIS specialists
- Geologic mappers
- Geotechnical and environmental consultants
- County and city planners
- Emergency managers
- University researchers and professors
- Students
- Policy makers
- K-12 Teachers
- Homeowners

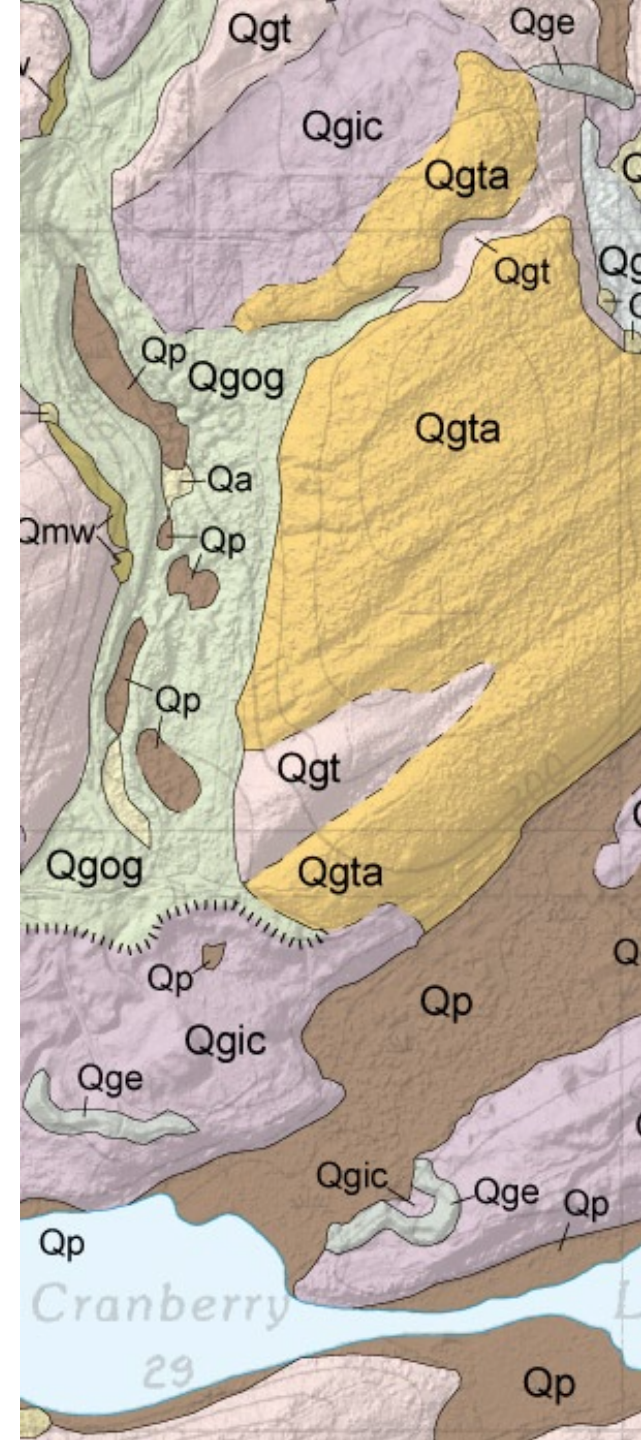


We have had 133 respondents to our anonymous online survey since 2017



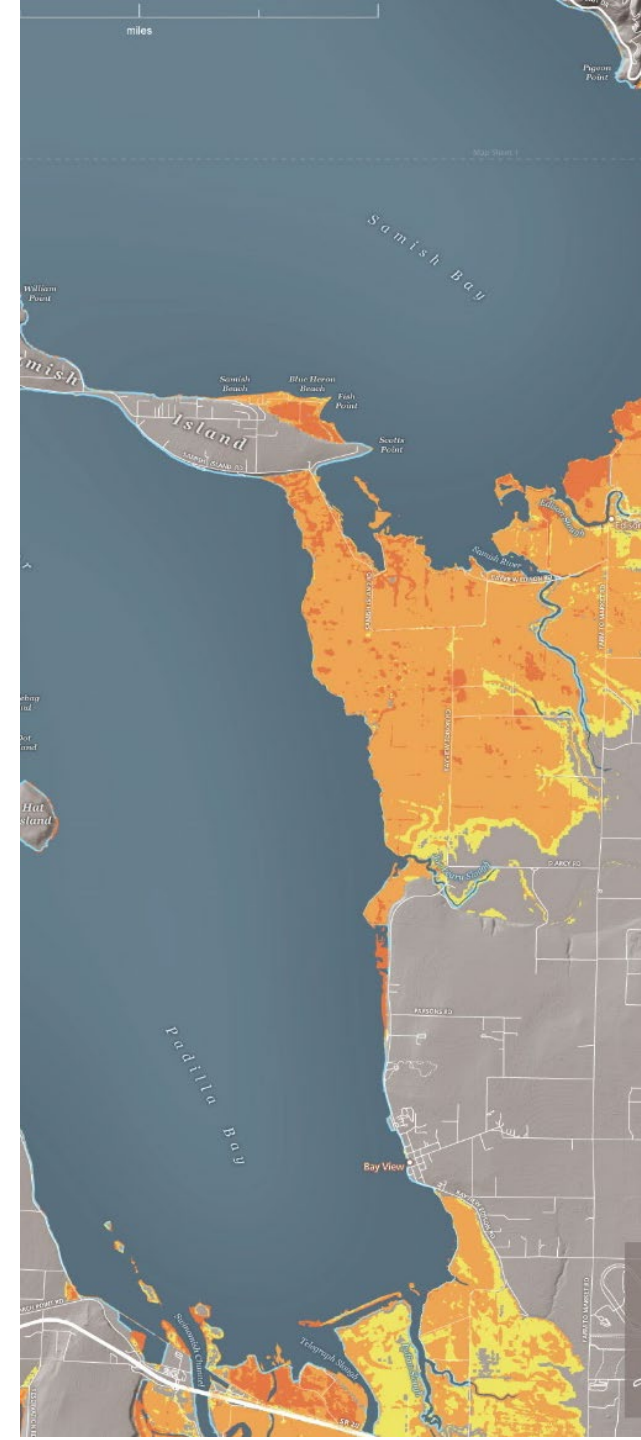
Our users have many different reasons for browsing our data

- Looking for well logs and geophysical data for geotechnical assessments
- Looking for surface geologic mapping to support environmental assessments
- Making planning and zoning decisions based on geologic hazard mapping
- Buying a home and wanting to know whether the property could be at risk from geologic hazards

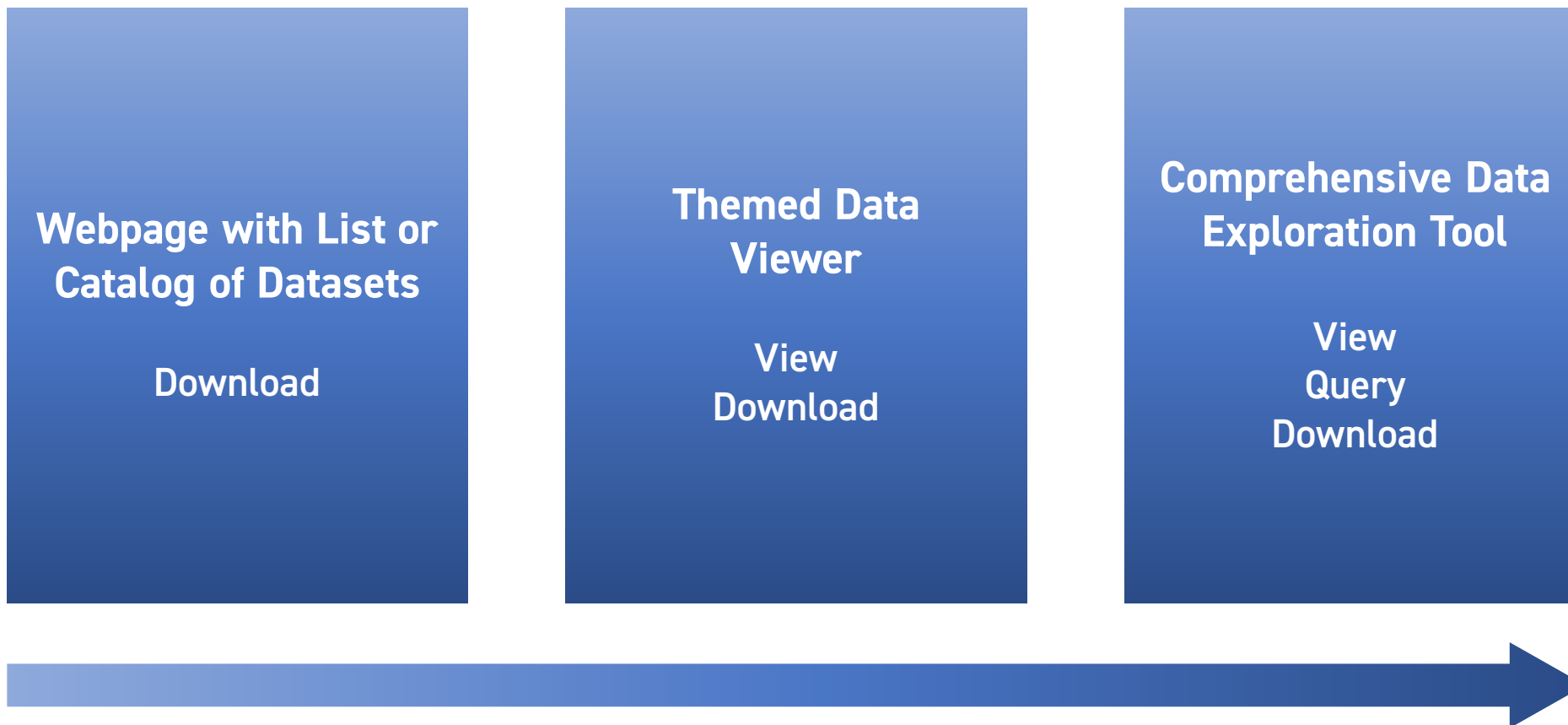


They have different needs and wants in terms of data access

- I know what I'm looking for and what format I need it in. I just want to download the data.
- I think I know what I'm looking for but I want to see it before I download, just to make sure.
- I know I want geologic data, but I don't know which dataset I need. I want to look at a variety of datasets to compare them before I download anything.
- I don't have any GIS skills. I just want to see whether I'm inside a tsunami inundation zone.

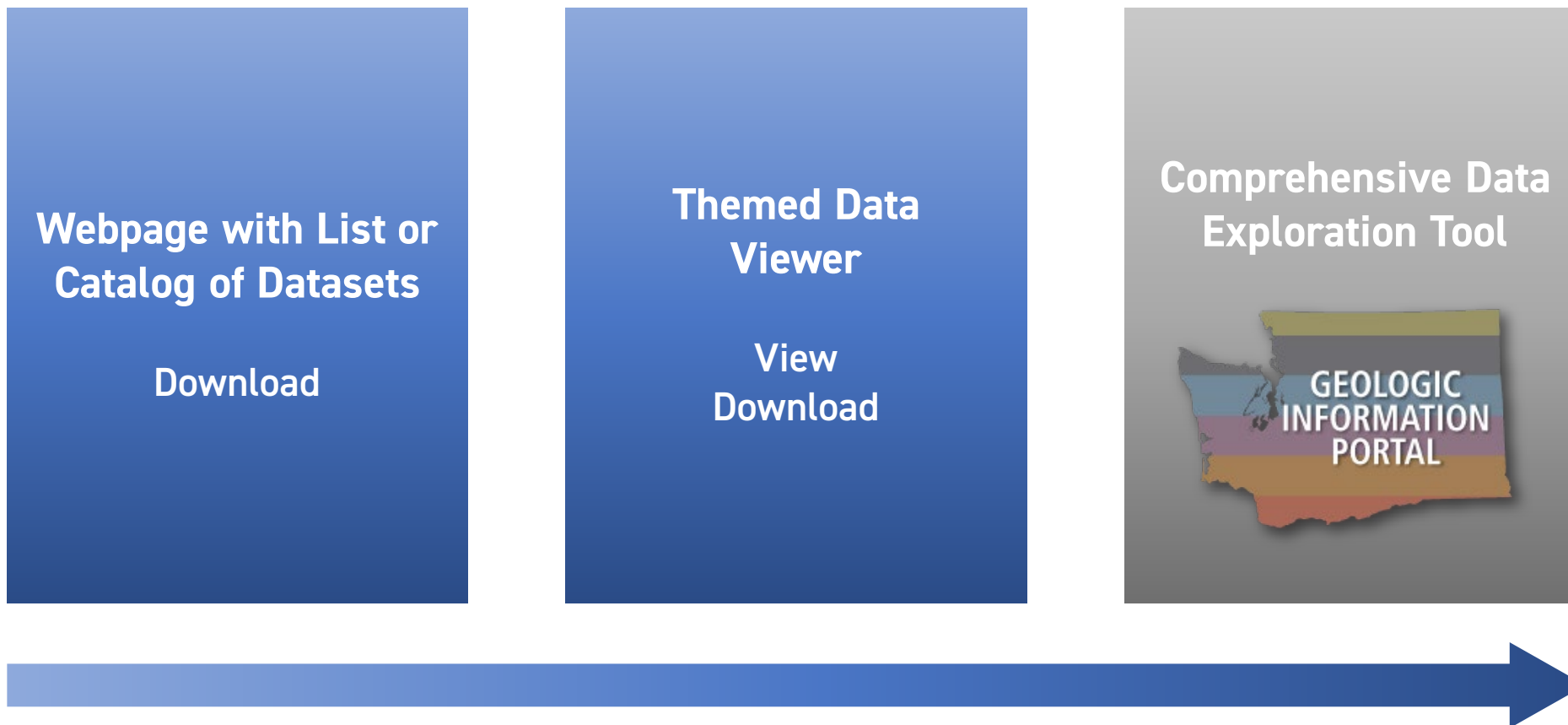


How can we best meet the needs of such a broad audience?



Resources: staff, equipment, knowledge, and time needed to build and maintain

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The Washington Geologic Information Portal

The screenshot displays the Washington Geologic Information Portal interface. At the top left is the logo of the Washington Department of Natural Resources. The main header includes the text "Washington Geologic Information Portal" and a search bar with the placeholder "Find address or place". A blue arrow points from the search bar to the text "Zoom to location".

On the left side, there is a "Table of Contents" panel. It features a search bar for layers and a list of categories. Under "Geologic Mapping", several scales are listed, with "1:500,000-scale Geologic Mapping" selected. Other categories include "Geologic Units 500k", "Contacts 500k", "Faults 500k", and "Folds 500k". Below this, there are buttons for "Earthquake", "Seismic Scenarios", "Landslide", "Tsunami", "Volcanoes", "Subsurface", "Earth Resources Permit Locations", "Geothermal", "Minerals", and "Coal". A blue arrow points from this panel to the text "All datasets in table of contents".

The main area is a map of Washington state showing various geologic units in different colors. A blue arrow points from the bottom right of the map to the text "Interactive tools".

At the bottom of the map, there is a toolbar with various icons for map navigation and interaction. A scale bar shows 40 km and 20 mi. Below the scale bar, the text "Scale: 1:2,311,162" and "Lat: 49.0266 Long: -118.1523" is displayed.

How do we know if our tools are meeting the needs of our users?

- Can they quickly find the information they need?
- Can non-GIS users figure out the interface and know what they're looking at?
- Is it clear how to download the data?
- Are the metadata adequate for the intended purpose?



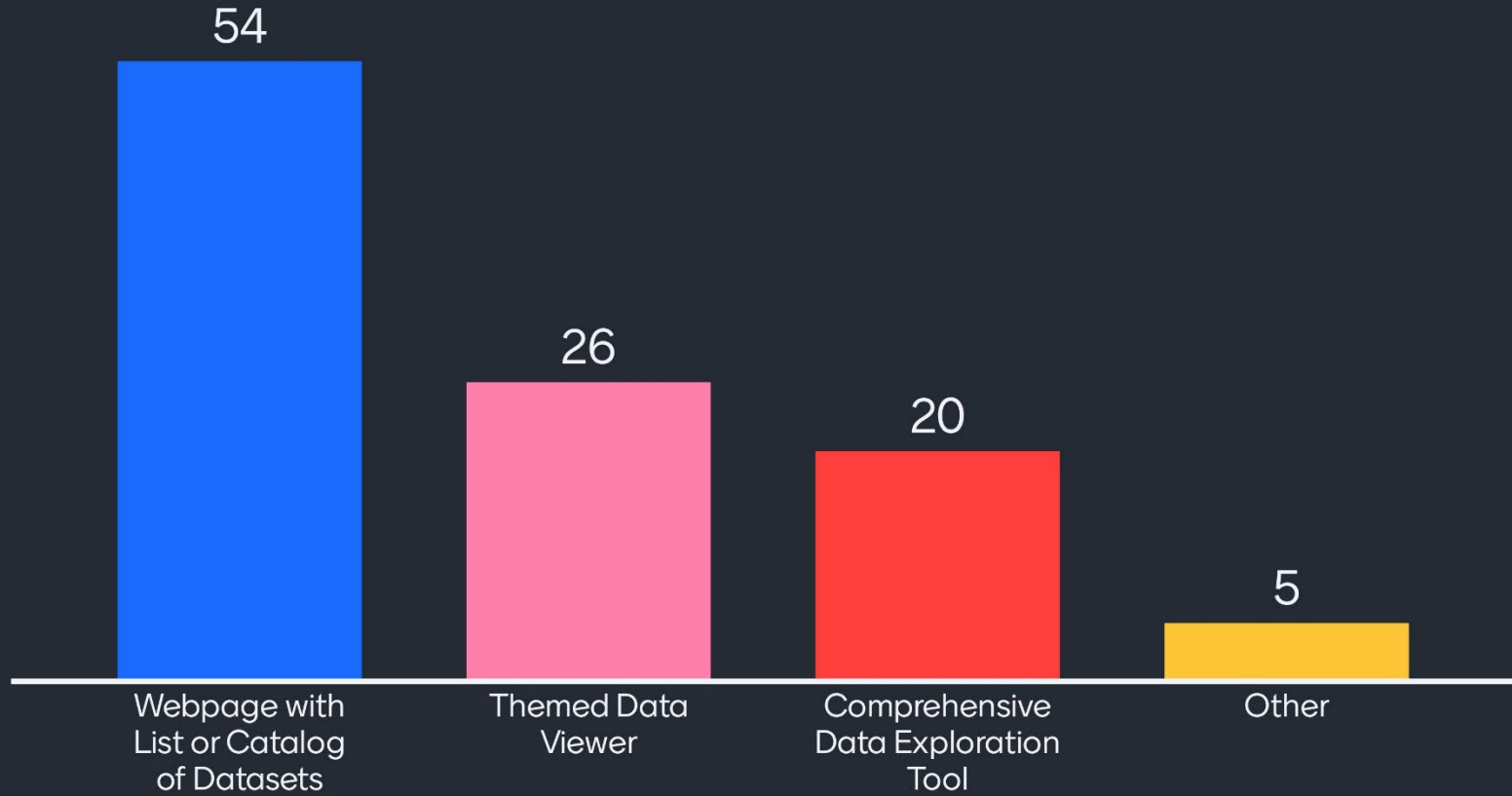
FEEDBACK!

Let's try an experiment!

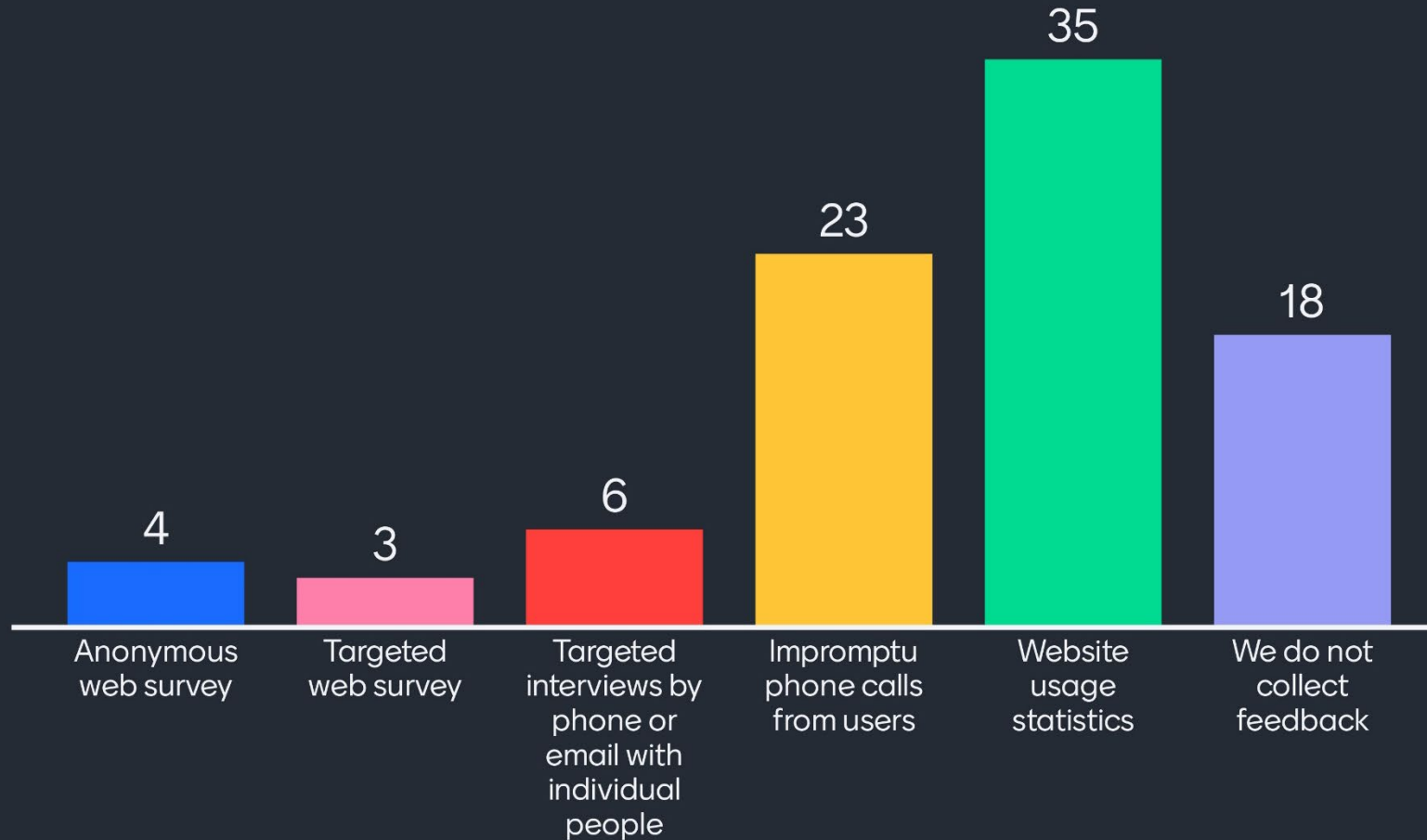
I want to use Mentimeter to run a quick real-time survey.



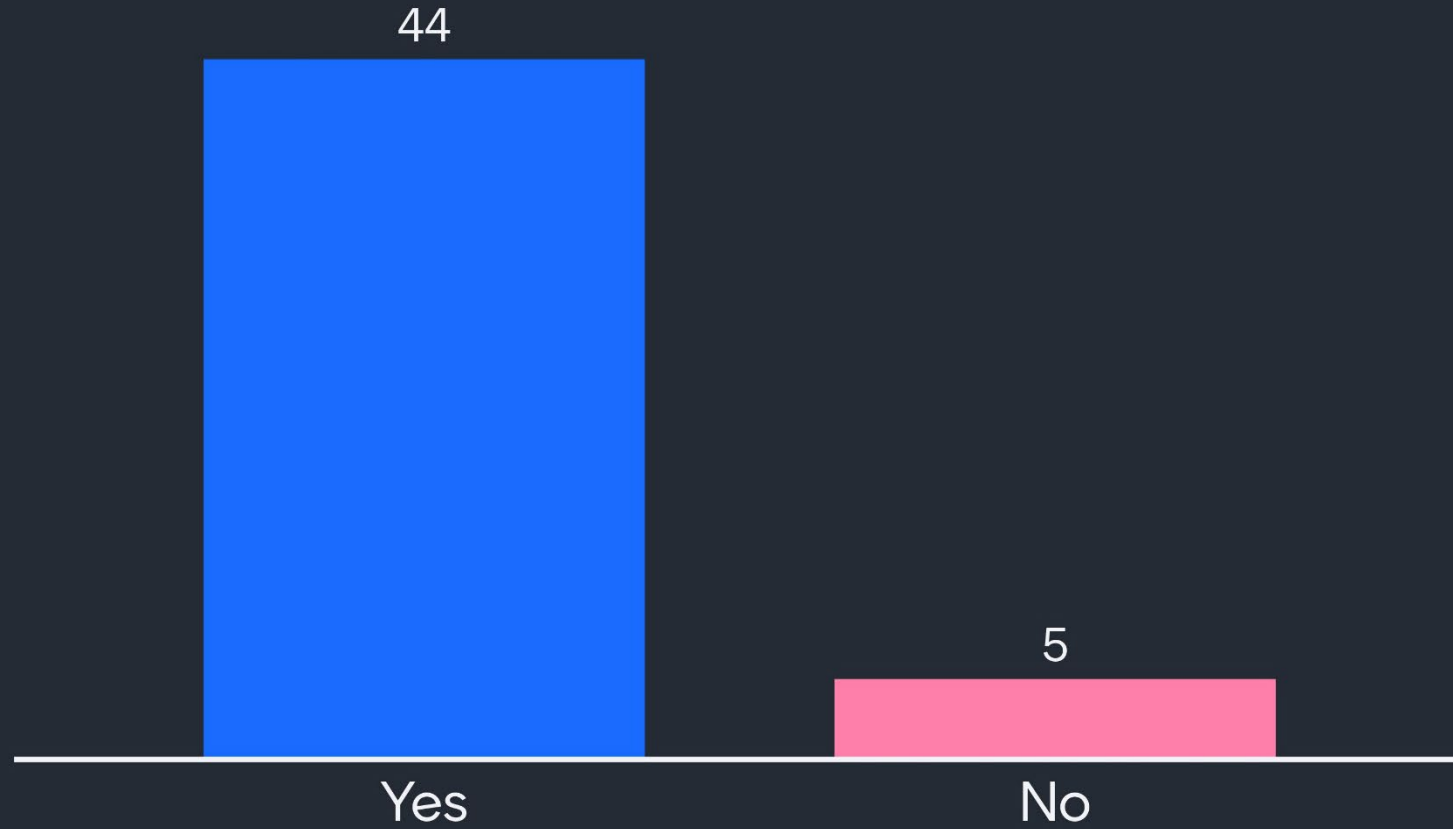
How do you provide your data to your users?



How do you get feedback from your users?



Have you ever made changes to your data services in direct response to feedback from users?



**I would love to talk with you about this
and hear your success stories!**

Tell me about a time you got feedback that helped you tailor your data services.

Please send me an e-mail and we can set up a time to chat.



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