2019 Neighborhood Reports User-Centered Design: Findings

A brief overview of findings from research activities

***Research activity: Initial survey***

The purpose of our initial survey was to create an initial path for feedback with our newly-formed user group and identify people who would make for good in-depth interviews. The survey’s questions were mostly open-ended – we looked for insights, not data. Brief results are below.

We learned that:

* Most of our respondents are familiar with the portal, but few are frequent users
* Most use the Neighborhood Reports; those that don’t use them simply don’t know about them
* They commonly use the Reports to communicate with others about a topic – to respond to a data request, to share information with others, etc.
* Respondents reported that the most useful part of the Reports were the better/middle/worse comparisons, and the neighborhood/borough/city comparisons.
* They want more: more interactivity, more context, more explanation, more customization

When asked what enhancements they’d like to see, Respondents identified the following from a list:

* Accessing more information about the data; creating custom reports, connections, or linkages; clicking through for more data; smaller spatial resolutions; more interpretation of the data.

***Research activity: In-depth Interviews***

The survey allowed us to identify user group members who had a lot to say about the Neighborhood Reports, so we held 5 in-depth interviews with people whose job titles or roles included: analyst, researcher, community organizer, public health program planner.

Findings include:

*Data users have a wide range of uses*. Some people are looking for a graphic to paste into a report; others are looking for underlying data and R code. People have very different questions to which they’re seeking answers.

*Reports help users get a powerful overview of a topic:* people look for a “wholistic understanding of an issue,” not just the data. People want the Health Department to state its case – offer a narrative that sets the tone for an issue.

*People are seeking “The Why.”* This comes up in a lot of ways. People want to take a “deep dive” or “drill down” or “dig deeper” into the reports. People want to know “what causes this,” or “why is this the way it is in this neighborhood?” They seek connections and conclusions.

*Reports need to make things easier for people*.Everyone is busy in some capacity. Even the most technical participant said the hardest part of her job is distilling a complex analysis for a wide audience. Several users – even ones we’d consider to be technologically savvy – mentioned user-friendliness being a key component. Given our desire to create clear messages and make a system that’s accessible for users with a wide range of abilities, clarity and user-friendliness are key.

***Research activity: Co-design session***

We convened a co-design session with 7 members of our user group to more deeply explore questions raised in the previous research activities. We collectively reviewed the existing Neighborhood Reports’ strengths and shortcomings; we collaboratively sketched new Reports and brainstormed new features and new designs for existing features. We tried to focus conversation around our participants’ problems, follow those conversations, and brainstorm solutions. Participants tested ideas with each other, and we tested our ideas with them.

Key actionable themes from this session include:

*“It has to be user-friendly.”* This came up often, especially as we brainstormed things to add to the report. Users might want more information, but it needs to be aggressively and clearly organized if they’re to make sense of it.

*Transparency, context, and connection*. People want to know why these indicators are included in this report. Just adding more written narrative isn’t a good strategy. People responded strongly to using indicator descriptions in prototypes.

*Content organization.* People responded positively to more powerful labeling like: “Environmental factors that affect [topic],” “Populations that are vulnerable to [topic],” and “Health outcomes.”

*The right comparison.* Some people want to see “similar neighborhoods” and may want to compare one neighborhood to another, instead of to the borough or city. Others want “threshold values” in the data – context that helps you understand if a value is good or bad.

*Actionability*. Some users encouraged us to consider the “whole person” and their experience of viewing a report for a low-performing indicator. How do we connect data to action? Data and health behaviors are not often appropriately linked; instead we can connect to brief ideas for advocacy, city programs, or others. “This doesn’t need to be an exhaustive list of city resources about a topic,” but frames the reports as more than a data delivery mechanism.

*Supportive material* including a help section or a creative tutorial with an example of how to use the reports; an API with documentation; a technical appendix; the ability to export charts, code, or offer directions to download the dataset.

Additionally, we heard many ideas that we do not think are immediately actionable, including: the ability to draw one’s own neighborhood boundaries and have the system compute values; real-time data; user-submitted data on community services; and others.