



5 Analyzing Information: What Does It All Mean?

Overview

Anyone can look at data and make some meaning of it, although working with someone specialized in data analysis will likely help to strengthen your work. We recommend a combination of working with people specialized in data analysis and asking people with lived experiences to talk about the meaning of your results. This section provides a list of different resources you could use to analyze the data you collect about civic health. We provide some tips on how to do this on your own, but it would be better if you can find someone to help you with this important step.

Making Sense of the Data: How to Conduct Analysis or Find Someone to Help

Goal: To help communities make meaning of the data they've collected by sharing analysis tips.

Introduction

Once you have collected data about civic health, the next step is to analyze the information you've collected. While collecting data is a challenge to itself—knowing how to analyze the data is an entirely different issue. Data analysis comes in many shapes and sizes and knowing how to use different data to improve civic health outcomes is a key step.

One aspect of data analysis is sorting the data into categories. Another aspect is interpreting it—which includes making meaning of the data, identifying themes and next steps. Below we have shared some general tips for data analysis as well as some tips on how to find someone who has experience with data analysis to help you out as this is a specialized skill set.

It's probably best to identify someone locally or bring in a data analysis specialist to help you with this step of your work. Data analysis is a specialized skill that takes training and experience to develop. Below we share some resources on how to find people to help you with this step of your work. If you truly can't find anyone to volunteer or have no budget to compensate a specialist, we also briefly provide some general tips for doing data analysis on your own.

If You're Doing It On Your Own

If you don't have this capacity locally either because there's no one in your community who can help or you don't have the funds to hire someone, here are some tips of how to take on data analysis yourself.

It's always better for more than one person to analyze data since people will likely categorize information and interpret it in slightly different ways. The first step may be to look for someone in your community who has some experience working with data to see if they would be willing to volunteer or be paid to analyze the data. You may want to look for a person who has experience such as:

- ▶ Quantitative and/or statistical data analysis
- ▶ Qualitative data analysis



- ▶ Experience working in Excel
- ▶ Someone who has had research methods courses

If you can't find a person like this at the local level, here are some tips for doing your best with data analysis.

- ▶ Assemble a team of about 2 to 4 people to read through the data you've collected and to try to categorize it and identify themes. Consider including people who have different perspectives on civic life in the community, or different lived experiences.
- ▶ Read through all the data once first, then read through it a second or third time to identify categories and themes
- ▶ Do your analysis independently and then share it with your colleagues to see where you agree and where you differ
- ▶ Ask yourself—am I seeing the data in this way because it's what it says, or because I want it to say these things?
- ▶ If you are afraid of bias in your interpretation, you could share preliminary data results with others who may represent different identities or perspectives and see how they interpret the data results.

Resources

Finding Volunteer Data Scientists

Volunteer NH and United Way

The Volunteer Digital Galaxy platform, supported by Volunteer NH and United Way helps to match organizational needs with individuals seeking volunteer opportunities. Organizations can create specific calls for skill sets available in their local community and region.

Catchafire

Catchafire is a network of volunteers, nonprofits, and funders working together to solve urgent problems and lift up communities. Catchafire connects industry expert or pro bono support to projects that are beyond the skillset of your organization. Catchafire will match you with exactly the right professional to get it done. Catchafire recruits volunteers to work on projects related to CRM, program monitoring and evaluation, conducting data analysis, and other data needs.

DataKind

DataKind brings together top data scientists with leading social change organizations to collaborate on cutting-edge analytics and advanced algorithms to maximize social impact. Their programs build upon one another and are designed to meet organizations where they are. From evening or weekend events to multi-month projects, all are designed to provide social organizations with the pro bono data science innovation team they need to tackle critical humanitarian issues in the fields of education, poverty, health, human rights, the environment and cities.

Universities

Local universities may be able to help you with data analysis – professors might take your project on as part of their class to help students learn, or sometimes students are looking for volunteer or paid experiences to grow their data analysis skills. Below are some different departments where university faculty, staff, and students may be able to help you out.

UNH Cooperative Extension

UNH Extension works in four broad topic areas: Youth and Family Development, Community and Economic Development, Natural Resources and Food and Agriculture. While their expertise is not data analytics they do help communities collect data and tell stories through data. They may also be able to connect communities with data partners.

UNH Carsey School of Public Policy

The Carsey School of Public Policy holds a range of expertise in data analysis. These include working with administrative data, census data, demographic information, program evaluation and much more. These services are provided for various fees dependent upon the work request. The Carsey School also has three graduate programs in which students complete applied projects. Working with program directors communities may be able to leverage graduate student expertise to accomplish data needs.

The UNH Center for Business Analytics

Center for Business Analytics brings together the knowledge and expertise of academics and industry professionals working in the business analytics field to address high-level data science/analytics problems. The center serves as the hub for the Business Analytics Initiative serving to coordinate, integrate, and foster diverse research, teaching, experiential learning, and industry engagement activities across the Initiative. The Center steers many initiatives that utilize student talent in communities to provide data analysis services.

Local, Regional and National Partners

Regional Planning Commissions

Regional Planning Commissions support municipalities on any number of planning and community development initiatives. The planning commissions have access to data and analysis expertise that may help a community better understand their civic health. They provide data analysis services to their member communities through geographic information system (GIS) mapping in areas related to transportation, the environment and zoning and tax information.

Data Science for Social Good

The Data Science for Social Good Summer Fellowship is a 12-week program that trains students and recent graduates while giving them the opportunity to work on a data science project with a government or nonprofit partner that will have a meaningful impact on the partner's community. They look for social good organizations (typically but not limited to government agencies and nonprofit organizations) that are ready and eager to collaborate on a data science project with a team of bright, motivated students and recent graduates mentored by a full-time team of senior data scientists, project managers, and other technical staff on a project that will have a meaningful impact on the communities they serve. Their ideal project partners approach them with a high-priority problem, where they have the resources and commitment to make an impact but need data analytics support.

The Data Innovation Project

The Data Innovation Project (DIP) is part of the Cutler Institute at the University of Southern Maine's Muskie School of Public Service and was established in early 2016 with support from the Maine Economic Improvement Fund. Their mission is to increase the capacity of mission-driven organizations to be data-informed by providing expert, accessible guidance and tools to build internal organizational capability to develop, sustain and use data to improve outcomes. They have worked with scores of organizations, nonprofits, foundations, and community collaboratives throughout the state of Maine on a range of projects—from multi-site, multi-year evaluations, to small data collection efforts, to customized capacity building trainings.

DIY Toolkit

GovLaunch

GovLaunch is a free Wiki for governments to “Find the tools, inspiration and resources you need to build a smarter government.” By sharing data tools, projects and stories governments learn from each other to create the change they want in their communities.

Displaying Your Data

There are many ways to display data results, but some common ways to do so include:

- ▶ Creating a bar graph
- ▶ Displaying information in a pie chart
- ▶ Displaying themes in a table



Taking Action

How can you make analysis interesting to the community? Consider having a “data party” where you invite lots of people from different backgrounds to help you sift through the data and make meaning of it.



Conclusion

There are many resources in the state that can help you to categorize your data, identify themes, create graphs, and interpret the information you have collected in meaningful ways. Feel free to reach out to us for suggestions or services. We have staff and faculty who can help and a network of partners and fellows who could also support your work. Remember, the goal of tracking civic health data is to keep track of trends and if you try interventions, to show improvement over time.