



Analyzing & Interpreting Data with an Equity Lens

In a Yellow Book discussion paper issued April 2021, the Government Accountability Office (GAO) defines the administration of a government program or activity as equitable “when it consistently serves members of the public, distributes public services, and implements public policy in a manner that promotes fairness, justice, and equality.” It provides guidance to analyze data in a performance audit to “illuminate differences” among social groups and “increase understanding of the effects of policies and programs on issues of equity¹.”

Three data analysis tools can help you identify inequities:

- Disaggregate – break down your data down
- Intersect – connect your data together in new ways
- Supplement – add new information

DISAGGREGATE YOUR DATA

Key Question: *What demographic data do I have access to that could provide insights into inequities?*

People’s identities such as race, gender and age affect their experiences in the world and that often means they also experience different outcomes in the programs and services that we audit. If the data is lumped into social groups that are too broad, you may miss important differences among the groups that point to inequities.

Start by brainstorming who may be most impacted by your audit and how. Be as specific as possible, considering racial/ethnic groups, genders, geographic areas, etc. that may be disproportionately impacted.

Next, break your data down by as many demographic categories as are available in the dataset. When possible, include the groups you identified that may be most impacted by the audit area.

The sidebar includes examples of categories to consider. What does the data tell you about the different experiences of the groups?

Tip: *If a dataset includes geographic categories, such as zip codes, you may be able to use this information to approximate other characteristics, such as race/ethnicity, income, and access to a computer, using U.S. Census Bureau data.*

A FEW WAYS TO DISAGGREGATE

- Race/ethnicity
- Income
- Geography
- Citizenship or immigration status
- Age
- Language
- Disability
- Housing status
- Involvement with the justice system
- Access to a computer and/or the internet at home

The most relevant categories depend on your audit and data analysis questions. Make sure you seek to include the groups of people who may be most impacted by your audit.

¹ April 2021, Government Accountability Office. “GAGAS Performance Audits: Discussion of Concepts to Consider When Auditing Public Functions and Services,” pages 4-5. Retrieved from: <https://www.gao.gov/assets/2021-04/Performance-Audit-Discussion.pdf>



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EXAMPLE: LONG BEACH, CA LIBRARY SERVICES PERFORMANCE AUDIT 2021

The City of Long Beach, CA audited whether its public library system provided services equitably. Since Long Beach is linguistically diverse, the auditors identified non-English speakers as a group that may be most impacted by the audit area. Using U.S. Census Bureau demographics, the auditors disaggregated the percentage of people with limited English proficiency across the city and compared the data to library programs and materials offered in languages other than English. This analysis revealed inequities in library services as people with limited English proficiency – nearly 1/3 of people in some neighborhoods - could not access over 95% of what the library system offered.



INTERSECT YOUR DATA

Key Question: *How does the intersection of identities – for example being Black and a woman – impact the analyzed outcomes?*

Once you break the data down into different categories to understand how different groups may have different experiences, the next step is to connect the groups together. People have many identities. A person is not solely defined by their race, gender, or any other single category. How these identities intersect with one another can create an entirely new lived experience². Your data analysis needs to reflect those different experiences to accurately analyze disparities.

Go back to your disaggregated data categories. How can you combine the categories to understand a different group's experience? Whose story can you tell?

Tip: *For statistical analysis, such as making predictive claims (i.e. if you are from X group you are significantly more likely to experience better outcomes), you need to test for an interaction. Your statistical analysis should assess whether the combination of multiple variables leads to different outcomes for the intersectional group.*

² Legal scholar, law professor and civil rights activist, Kimberlé Crenshaw, coined the term 'intersectionality.' It has since been adopted into the [Merriam-Webster dictionary](#) as, "the complex, cumulative way in which the effects of multiple forms of discrimination (such as racism, sexism, and classism) combine, overlap, or intersect especially in the experiences of marginalized individuals or groups."



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EXAMPLE: SAN DIEGO PAY EQUITY AUDIT 2019

The City of San Diego, CA conducted an audit of pay equity of the city's workforce and found substantial earnings differences across both gender and race/ethnicity. Median earnings for female employees were approximately 83% of that of male employees, and employees of color earned 80% of White employees. The auditors took their data analysis a step further by connecting gender with race/ethnicity, using both simple averages and statistical controls. This showed important inequities among intersectional groups. For example, Black or African American female employees earned just 61% of White male employees' earnings.



SUPPLEMENT YOUR DATA

Key Questions: *Am I missing information on groups of people that may be most impacted by the audit? What other data sources can I use to fill in this information?*

If your dataset has gaps on certain populations, you may want to supplement it with external data to make your analysis more inclusive. This is especially important if the data does not include the groups of people most impacted by the area you are auditing. In some cases, you may be able to identify or approximate data on social groups using other data sources. In other situations, you may need to collect your own data to supplement what is available.

If the gap in data is too large or you are unable to supplement it, the lack of data may be a finding. You could consider recommendations to collect or track better data to assess equity impacts.



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EXAMPLE: USING OTHER DATA – KING COUNTY RAPID RIDE TRANSIT AUDIT 2018

King County, WA audited fare enforcement of the county's rapid ride bus system. The auditors hypothesized that people experiencing homelessness or housing instability would likely have the hardest time paying the fare and be the most impacted by fees and legal penalties. They wanted to assess outcomes for this population. However, the auditee's dataset did not include variables on housing status. Instead, the data had addresses for people who were penalized for noncompliance. The auditors collaborated with homeless and housing service providers and were able to match the fare enforcement addresses to the addresses for people who received homeless and housing services. This analysis showed that nearly 1 in 3 people given misdemeanors for fare noncompliance were experiencing homelessness or housing instability. By including this group in their data analysis, the auditors were able to make recommendations to address the equity impacts of the service.

EXAMPLE: COLLECTING ADDITIONAL DATA – KING COUNTY SEX OFFENSE CASES 2020

In an audit of sexual assault investigations, King County wanted to be sure their analysis included victims' perspectives. They supplemented their quantitative data with focus groups with victims' advocates. From these groups, they learned that the court cases often took a long time which often made it difficult for victims to heal. Based on this qualitative data, the auditors decided to evaluate case duration as a key outcome variable and made recommendations to connect victims to support resources earlier in the case process.



INTERPRETING YOUR DATA ANALYSIS RESULTS

You analyzed your data and it shows that there are differences among social groups. Now what? Consider these questions as you interpret the data results:

1. How do the results of the analysis compare to the relevant population?
2. What factors could result in these inequities?

In some audits, simply identifying and reporting the disparities among groups may be sufficient and meaningful findings. In other cases, you may want to do further research to understand why these inequities are occurring so that your recommendations address the root causes. This is consistent with Yellow Book guidance: "often the causes of deficient program performance are complex and involve multiple factors, including fundamental, systematic root causes" (2018 Yellow Book Standard 8.130). While some inequities may be a result of things outside the auditee's control, this information is an important part of complete and clear reporting.



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EXAMPLE: SAN DIEGO PAY EQUITY AUDIT 2019

As described above, the City of San Diego **found pay disparities** by gender and race/ethnicity among city employees. In the report, the auditors summarized research studies on root causes for pay inequities, including “deep-seated societal factors, biases, expectations, and limitations in earnings gap analyses,” as context for understanding their audit results and to inform their recommendations (p. 60). For instance, the auditors referenced research that women often bear the social obligation to care for children and older adults. This can impact the jobs women ‘choose’ or hours worked, which in turn can lead to lower pay. The auditors recommended that the city evaluate models that could help improve gender pay equity, such as re-assessing the use of overtime, and part-time and flexible work policies.

ADDITIONAL RESOURCES

King County Equity and Social Justice Assessment for Audits

King County, WA integrates equity considerations early for every audit. One example of how they do this is by completing an [Equity and Social Justice Assessment](#) for each audit before finalizing the scope and objectives. Some of the questions in this assessment include:

Key Question	Data Tool to Consider
Which racial/ethnic groups, genders, geographic areas, etc. may be disproportionately affected by what you are auditing? How?	Disaggregate, Intersect
In what ways might your planned methodology omit certain perspectives or be biased? For example, who are you interviewing and who are you not interviewing?	Supplement
What data sources are available to help you assess the objectives and sub-questions through an equity lens?	Disaggregate, Intersect, Supplement
Does existing data have bias or leave people out? How can you mitigate these concerns?	Supplement

USEFUL LINKS

- [ACCA Root Cause Analysis for Internal Audit](#)
- [GAO Discussion Paper on auditing equity, issued April 2021](#)
- [We All Count](#)
- [PolicyLink: Equity Profiles of certain cities and counties, along with equity guides and tools](#)
- [National Equity Atlas: Equity data indicators and report card](#)
- [Government Alliance for Racial Equity \(GARE\)](#)
- [King County Equity and Social Justice Assessment for Audits](#)