



CASE STUDY - SAN ANTONIO

“Building Trust, Transparency and Equity with Data amid COVID 19”

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1. Background and concept

The COVID-19 pandemic swiftly escalated the discussion of data governance in the US, making the challenges therein increasingly tangible for local government. Globally, local health authorities are grappling with emergency response and recovery while fielding a constant demand for the sensitive health data they possess from the media, general public, other localities, and third-party service providers.

The power of data has become more visible and salient during this crisis. COVID-19 case data directly informs life-saving decision making and policy, helps residents and businesses assess risk, and unveils emerging trends about the virus itself and its impact on communities. However, this demonstrative value has also augmented societal awareness about privacy, data ownership and the digital divide when it comes to the impact CoVID-19 case data can have on our communities’ collective rights.

2. Goals of the project

In San Antonio, the [Office of Innovation](#) has worked with our [Health Authority](#), our [Equity Office](#), and our Information & Technology department to deliver tools and applications that both determine and support the City’s COVID-19 response. In the process, we learned that the constraints we were presented with spawned some of our most successful innovations.

Balancing those constraints with the needs of our community helped us forge trust and reduce bias. Now, as our curve begins to flatten in what could be the eye of a hurricane, we are briefly able to lift our heads and examine the situation from a bird’s eye view. What follows are four takeaways from our experience navigating data governance in the new normal.

*Applications must Balance **Privacy with Transparency***

A core challenge for working with COVID-19 data in municipal government in the US is striking the balance between protecting patient privacy and providing the public access to critical health information. The primary privacy framework in the U.S. for health data is the Health Insurance Portability and Accountability Act (HIPAA). Under HIPAA, sensitive case data cannot be publicly presented in any way that can [potentially identify individuals](#). Should the identities of individuals with CoVID-19 be revealed in our community, we could be wrongfully subjecting them to targeted discrimination. At the same time, the public should have access to data that can objectively inform them during a time of great anxiety and rapid decision-making. Of greatest demand in our community,



was the same data that was considered most sensitive by HIPAA standards-- where COVID-19 was appearing in our community.

Balancing these competitive demands required innovation. Working with our health authority, we were able to determine ways to provide access to this data that did not violate HIPAA. All identifiers were therefore removed from record-level data. We then de-identified geographic data by providing categories of counts and displaying those by Zip Code-- the most useful geographic identifier for residents of our community.

This is one example of several in our attempt to manage privacy and transparency. But this is precisely the work that should be undertaken by local government. As the steward of both health data and public interest, the responsibility for this work cannot lie elsewhere. Additionally, by developing and presenting these standards, we were able to set the bar for how case data can and should be presented to the community.

*Disaggregating Data by Race as a form of **Data Justice***

San Antonio is one of the few cities in the US to [disaggregate case data by race](#), according to a [database](#) compiled by [Data for Black Lives](#). Doing so allowed our community to identify the disproportionate impact the disease has on our marginalized populations and communities of color. As a majority-minority city, it was critical to determine the case rate and hospitalizations by race. As a result, we learned early on that our Black population was experiencing an [outsized rate of positive COVID -19 cases](#) when normalized for their population than Whites, Latins or Asians. Like so many other cities in the US, as described in Ibram Kendi's recent piece in "[The Atlantic](#)", San Antonio's racial divide was apparent.

This awareness was one factor triggering the development of an intersectional city-wide strategy ensuring that all who are at highest risk are reached with information and testing, including people with disabilities, the medically vulnerable, low wage frontline workers, imprisoned individuals, housing insecure individuals, and seniors, among many others. San Antonio recognized that these populations often intersect with our communities of color and low-income populations, and deliberately recognized these disenfranchised populations as most at-risk due to systems and structures of oppression. There is still much more we can do to continue to identify and bridge our racial divide but disaggregating this case data was an important step.

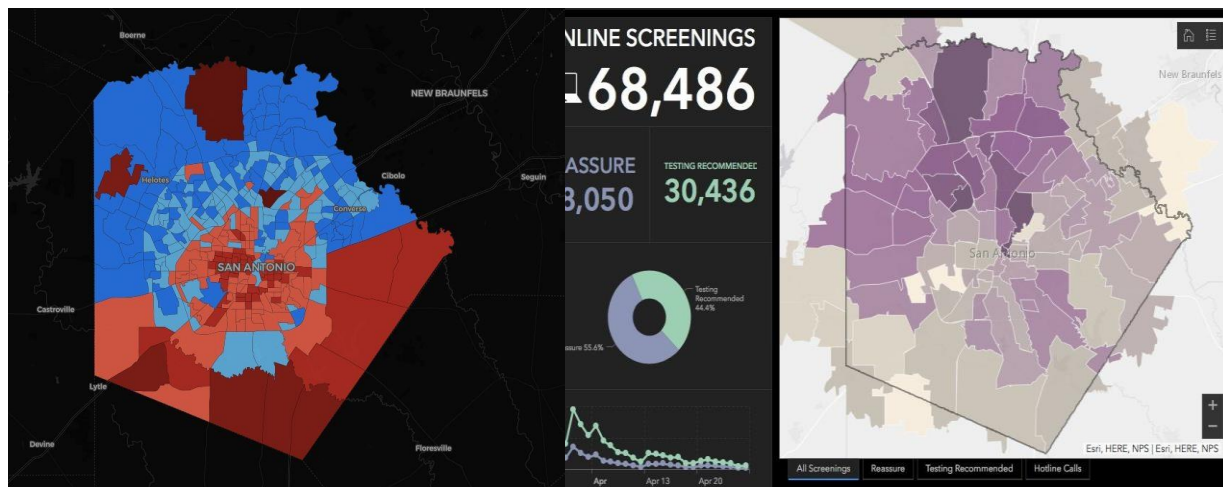
*Open Data Showed our **Digital Divide** and Inspired Action*

Soon after the pandemic arrived, the City of San Antonio delivered a suite of applications, tools and information access points as part of its initial response. One of these applications was an online self-screening tool, allowing residents to take a short survey to determine if they were recommended for testing. One of our public dashboards tracked the use of this tool geographically. When we illustrated

the number of visitors to the online self-screening tool by zip code, a familiar pattern emerged.

The distribution of online visitors mapped very closely to the city’s known digital divide. Clearly, the online resource was being taken advantage of primarily by residents living on the City’s Northwest Side - an area with a higher percentage of White, high-income residents with access to broadband internet in the home. Currently, approximately one in four residents in San Antonio are without fixed, broadband internet in the home.

Figure 1) LEFT: Broadband adoption rates in San Antonio census tracts mapped as the number of connections per 1000 households (2017). Red areas reflect lower rates of internet connectivity, blue areas reflect higher rates of internet connectivity. Higher rates of connectivity occur primarily on the city’s North West side. RIGHT: Number of visits to the Online Self Screening Tool as a percentage of zip code population as of April 2020. Darker purple areas show higher rates of online visits, primarily from residents on the North West side.



Open data visually distilled our community’s digital divide, and helped us understand that we were offering a critical service digitally to residents who simply did not have equal opportunity to access it. It galvanized the coordination of public and private resources to address the effects of the city’s digital divide as well. For example, our health authority responded by creating a team of “block-walkers” to visit individual residences in neighborhoods with lower proportions of internet access, lower incomes, and higher rates of vulnerable populations and people of color. The group dubbed the “Community Health & Preservation Team,” set several missions to provide information to the most vulnerable neighborhoods, prioritizing the highest scoring census tracts on the City’s Equity Index first.

*An Open Data Portal Transformed the Ability for our **Community** to Respond*

Open data must be more than the visual display of data and information. Actionable open data is data that is provided publicly in consumable formats as machine readable APIs and a variety of raw data



formats. Once we recognized we had created several separate COVID-19 applications, a need emerged to group them all together in an easily accessible public platform. This aligned with an opportunity to openly share the data behind these dashboards, giving rise to the COVID-19 Open Data Hub Site.

In one week, over 3 million hits were recorded on our public COVID-19 dashboards, with an average number of 450,920.86 visits per day. The Open Data Hub Site received nearly 20,000 visits two weeks after deployment, averaging over 1,500 visits daily.

The majority of these visits are for informational purposes, but hundreds of applications ping our APIs daily delivering quality, documented data straight to external websites and applications. The value of this is not just in the engagement numbers, but more so in the centralization of data. In the absence of information, local non-profits reported taking screenshots of our dashboards and attempting to count the data visually in order to generate their own data tables. Now, they are able to use official data to power their applications and disseminate critical information to audiences that the City of San Antonio may not be able to reach, thereby expanding awareness and coordination of relief.

3. Conclusion

Data belongs in the hands of our community, but the public also deserves a right to privacy. We must let these constraints, together with a better understanding of data bias, our digital divide and our community's need for and uses of data, drive innovative practices in government while ensuring greater respect for digital rights. COVID-19 however horrible, has created an opportunity to rebuild our governance systems with more equity, transparency and privacy. The examples above show that we can start locally, with data.