CASE STUDY

SAFEGRAPH

Just One Way the Public Sector Uses SafeGraph Data to Understand the Walkability of Urban Areas

THE INDUSTRY: Public Sector

THE PROBLEM: How to determine the accessibility *and* walkability of urban areas

THE SOLUTION: SafeGraph Places

THE RESULT: Using location-based data to inform more effective local response efforts

THE CONTEXT

Leveraging the power of data to answer questions that solve specific problems

Unlike many of the other industries we work with, the public sector has incredible breadth and depth that can't really be encapsulated in a one-size-fits-all way. So much of the data-driven work happening daily in non-profit organizations, academic institutions, and government agencies is specifically focused on answering highly specific questions that aim to address issues occurring within the public sphere. The ultimate goal: Informing the development of new policies that can positively impact people's lives at the national, state, and local levels.

Therefore, it should come as no surprise that the need for high-quality data within the public sector really came to a fever pitch during the first wave of the COVID-19 pandemic. Many researchers and analysts within various public sector organizations were frantically trying to wrap their heads around *how* the pandemic would impact things like access to healthcare services, long-term mental health, shifts in human behavior (i.e. how daily mobility changed), compliance with stay-at-home orders, the resilience of the economy, evolving purchase behaviors, school closures, and the list goes on.

During the pandemic, researchers within the public sector turned to location-based data to understand not only what was happening in real-time but also to identify ways of making the best out of a challenging and unprecedented situation. In many ways, the pandemic shed new light on the importance of comprehensive places data as the key to driving immediately actionable insights.

THE PROBLEM

How to determine the accessibility *and* walkability of urban areas

One of the biggest questions that came up soon after the pandemic began was around the overall accessibility of urban areas. More specifically, one public sector organization we've worked with wanted to get a deeper understanding of which urban areas in the United States could provide people with essentially everything they needed to survive—within a walking distance of their homes. This includes things like hospitals, pharmacies, grocery stores, banks, public transport, and other essential services.

Doing this analysis would, therefore, make it possible for them to pinpoint the urban areas that were inherently less walkable and then use that knowledge to inform new policies or serve as a catalyst for infrastructure development aiming to put more services within easy reach.

One of the key areas of focus for this analysis centered on grocery stores. Not only did this public sector organization want to understand if or how many grocery stores were within a walkable distance for people living in these urban areas but also what kinds of grocery store options existed. For example, was there a big supermarket nearby to fulfill a community's nutritional needs or only small bodegas or mini-marts with limited food options?

© 2022 SafeGraph

Of course, a big part of this research was aimed at identifying so-called “food deserts,” or areas where healthy food options are severely limited, as that makes it a lot easier to build business cases for investing in infrastructure to fill those gaps. But similarly, this research can also shine a spotlight on urban areas that are more prone to public health crises, like obesity for example, and, as a result, have greater potential to place unnecessary stress on local health services.

So, while walkability may have been the primary goal of this analysis, solving the broader accessibility issue can have a cascade effect on other issues pertaining to public health.

THE SOLUTION

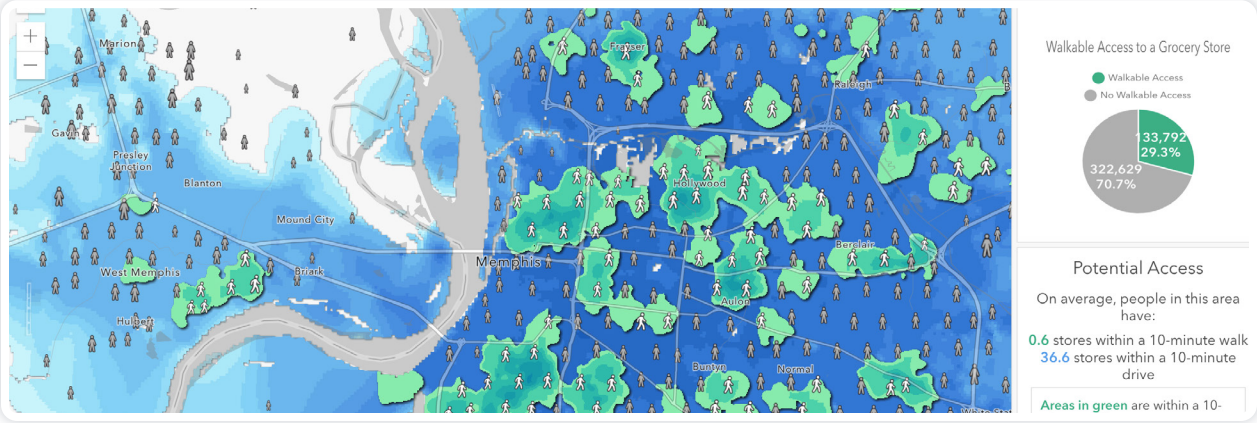
SafeGraph Places

Unfortunately, answering questions like those mentioned above isn’t possible with just any dataset, much less those that are available publicly. What public sector researchers needed was clean, precise, and up-to-date POI and building geometry data that could tell them exactly what grocery store locations existed within a walkable radius and how large of a footprint those stores have. Knowing the latter, for instance, can shed light on the kind of groceries available and, therefore, provide valuable insight into whether or not a specific store location has enough product selection to support a community’s nutritional needs.

This is where the **SafeGraph Places data** stepped in. This powerful dataset, updated monthly, was able to equip the researchers at this public sector organization with what they needed to determine the walkability of urban areas across the country. Then, they were able to publish their findings in research papers to help inform new policies aimed at improving underserved urban areas (i.e. building more public housing adjacent to essential services like hospitals, grocery stores, and public transportation).

This has been especially important in understanding spending behaviors in poverty-stricken neighborhoods. For example, by not having access to affordable, healthy food within a walkable distance from home, the people living in these areas might inadvertently make trade-offs, based on proximity and price, that jeopardize their health. As mentioned above, this can lead to a public health crisis that could otherwise be easily averted simply by having the right services in place to support healthier habits.

See a similar analysis done by Esri on grocery store accessibility using SafeGraph data **here**.



© 2022 SafeGraph

THE RESULT

Using location-based data to inform more effective local response efforts

As you can see, the use case for location-based data in the public sector is far-reaching. How the public sector used this data during the pandemic was just the tip of the iceberg. But it opened researchers' eyes to the importance of working with clean and accurate location-based data and the impact of creating knowledge that can positively influence people's lives in real-time.

Following in COVID's lead, for better or worse, we're seeing many public sector organizations using SafeGraph data to study emergency or disaster responses to events like the big freeze in Texas, rising gas prices, hurricane or earthquake relief, power outages, traffic bottlenecks, and more. In other words, they are leaning into data to learn from these events—including what didn't work so well—and, as a result, be in a better position to work with local authorities to coordinate better response efforts at a hyper-local level in the future.

Ready to see what SafeGraph's POI data can do for your team?

View the data schema or contact sales for more information.