



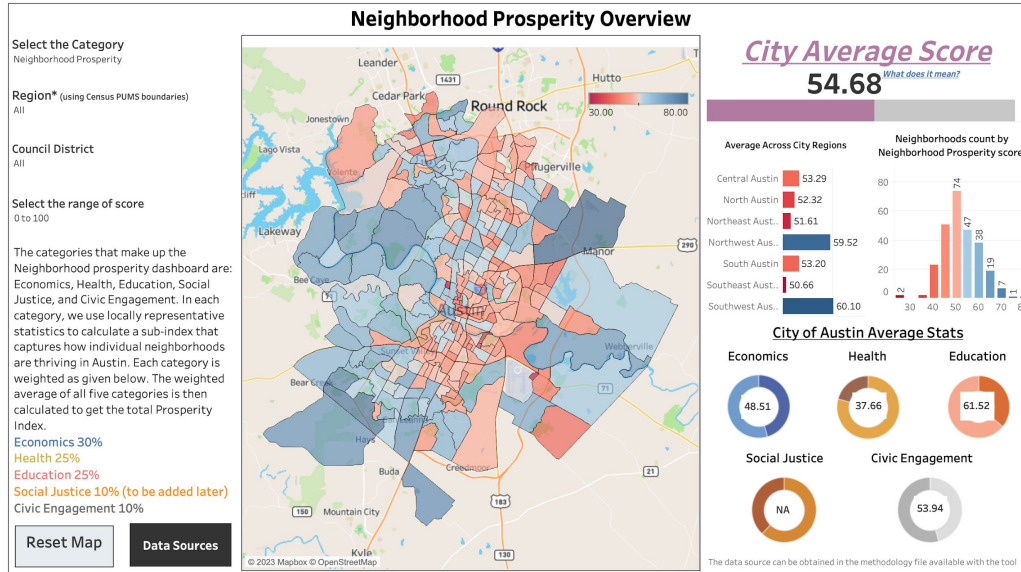
Neighborhood Prosperity Dashboard

A Decision Support Tool for the City of Austin

City of Austin Office of Innovation

Concept

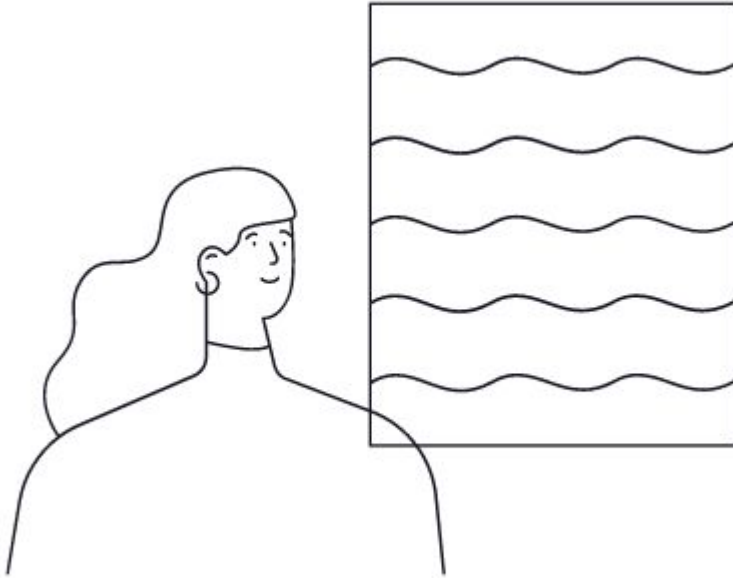
The Neighborhood Prosperity Dashboard



The NPD is a decision support tool that shows the current state of multiple prosperity-related factors on a neighborhood scale. It uses the most recent data available, and automatically updates.

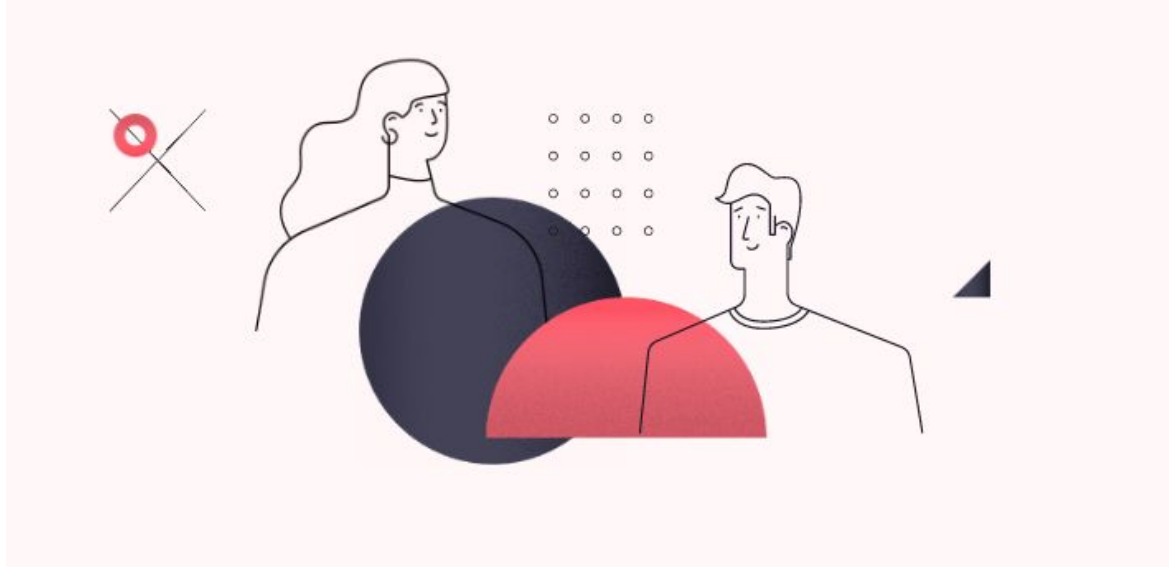
Understanding and comparing these factors on a neighborhood scale supports insights and decisions that are more current, clear, and specific than what is currently available.

Decision Support Tools



Decision Support Tools sharpen our ability to **analyze large amounts of data from disparate data sets** so that the organization can **operate in a data-informed** way. They:

- Use **visuals** to present data in various formats and can include, maps, graphs, charts, icons, toggles, illustrations, animations and more.
- Can be **interactive, dynamic, and automated**.
- Can point us in certain directions, but we **must combine them with practitioner knowledge to address the complexity in our environments of practice**.



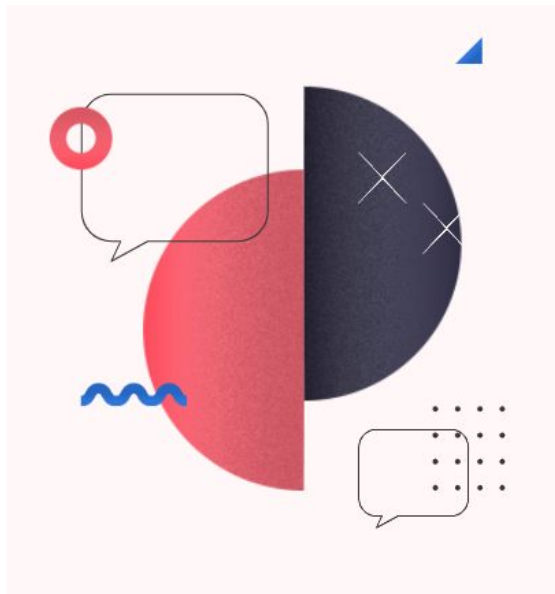
What can COA do with this tool?

The NPD lets decision makers and everyday practitioners view data in a way that helps the City proactively rectify deficits through investments, services, and programming. We gain a view into the state of neighbors and neighborhoods (residents and businesses alike) so that we can operationalize equity. The NPD lets us look at the big picture with nuance appropriate for a robust and modern municipal practice.

COA's Growing Edge for Decision Making

Data often does not cross org silos, but people's life experiences are much more complex than the divisions in our org structure.

Data is often presented at a city-wide or zip code level, but reality at the neighborhood level is often more nuanced.



Without a meaningful way to integrate qualitative inputs, our practice stays superficial and we risk being tone deaf to community sentiment.

It is difficult to see and interpret the complexity of residents' lived experience because our data sets are not combined and sometimes not racially disaggregated.

Data in reports and plans are static snapshots that depend on manual updating, which usually does not occur.

COA's Neighborhood Prosperity Dashboard (NPD)

Holistic. This tool provides us a way to think across four categories of the experience of prosperity: Health, Economics, Education, Civic Engagement, Justice. It incorporates 34 different locally representative statistics.

Precise. The tool allows decision makers to look at neighborhood-level data across categories, and over time.



Addresses Complexity. The NPD incorporates an index of more than 30 measures across the five categories. The NPD index includes additional categories with documented disparities based on race.

Improves Freshness of Data. The NPD incorporates automatically ingests and analyzes new data as it is available.



Methodology Notes

The NPD's index model is inspired by the National Urban League's 'State of Black America' report which looks at gaps in the experience between black and white Americans at a national level, and highlights the United States' racialized history and enduring disparities. The NPD's index includes additional categories with documented disparities based on race.

NPD index scores are calculated using a weighted average method with data collected from publicly available sources including the American Community Survey (ACS), ESRI, CDC PLACES, and others. The NPD includes census tract-level data for the entire Austin MSA region. The data is cleaned and scaled against the highest valued neighborhood to create neighborhood scores. Measures are then combined using a weighted average method.

The NPD pulls ACS data with an in-house web application that uses the Census public API. We also use data sources from the City of Austin's Open Data Portal, and others that City departments provide. The tool performs specific functions for each dataset to produce the final combined dataset. After data preprocessing and feature selection, we import the dataset to Tableau to create visuals that support stakeholders making data-informed policy decisions.

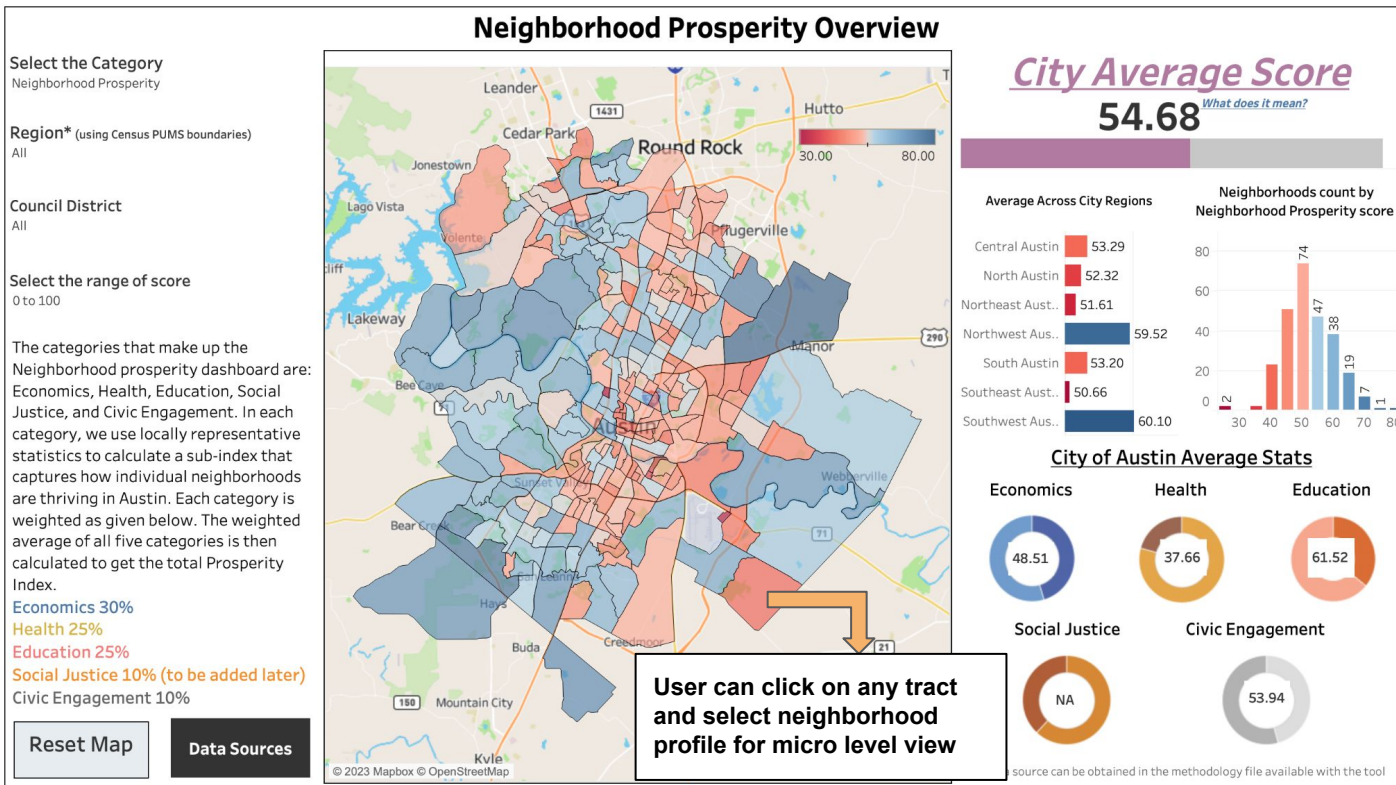


How it Works

Overview

Dropdown filters to select different geographies and prosperity category

Navigate by clicking through tabs to see other dashboards



Count of neighborhood by range of total score

Link to go to methodology and data sources document

Map shows census tract boundaries and total score as a color factor (High score -> Greener Color)

Demo 1: A holistic approach to vulnerability

Commonly used terms like “vulnerable”, “economic mobility”, or “wealth” used across many City publications, programs, service, and resources are often undefined or oversimplified. This makes them difficult to measure.

How can a decision support tool help the City define and measure practice terms toward a more calibrated, data-informed approach?

Prosperity dashboard- a holistic approach

Problem Statement: The City's Strategic Direction does not define “Vulnerability”/we default to income.

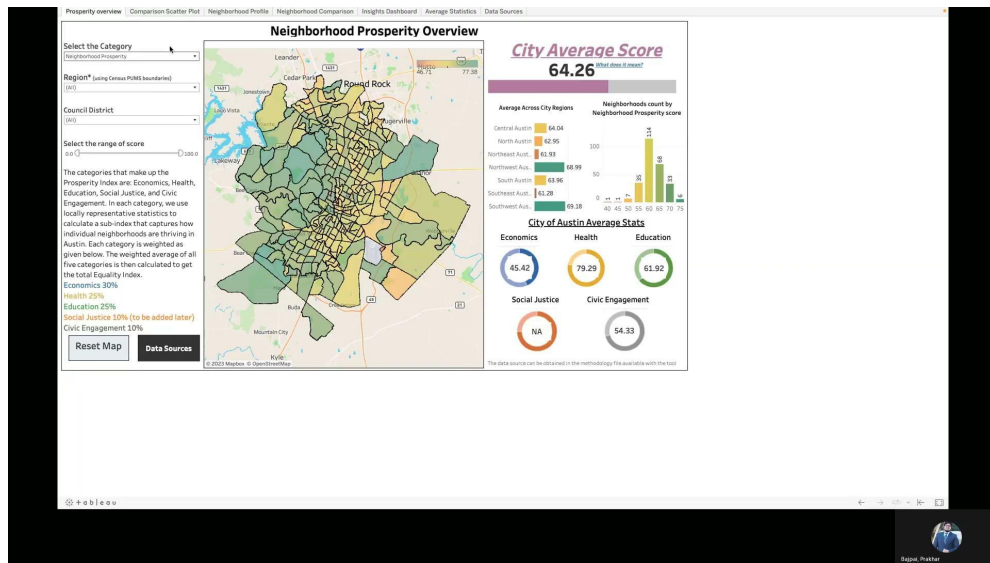
Use Case 1: Holistic approach to defining vulnerability



Demo 2: Index score vs. single indicator

We can miss the full picture of lived experience and even misrepresent it, cause erasure, or exclude people when we use single indicators to determine how we deliver programs and services or to establish selection criteria.

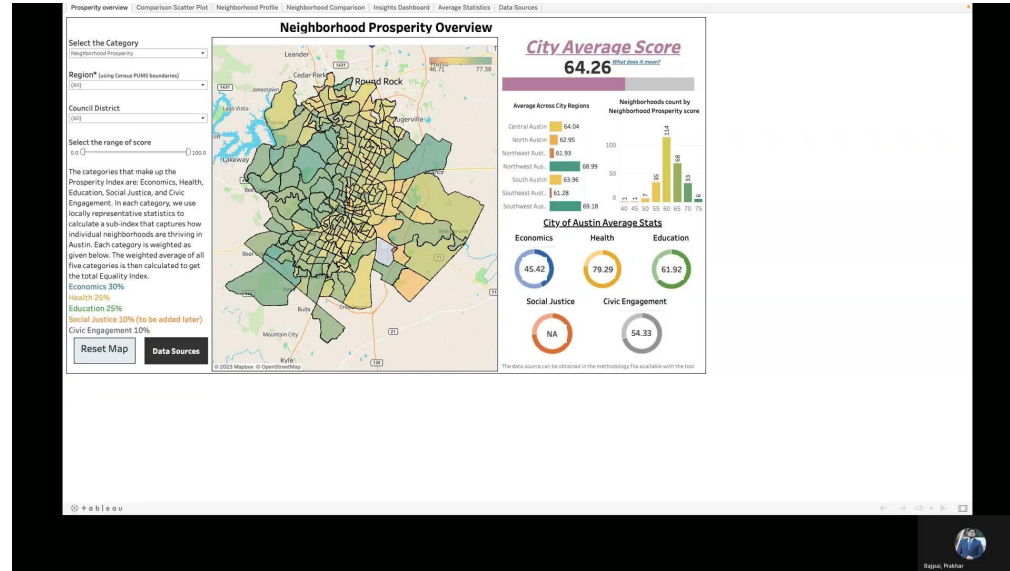
What happens when you consider the prosperity of neighborhoods based on a single indicator like the employment rate vs. looking at a more robust group of indicators together like the Neighborhood Prosperity Index Score?



Demo 3: Make your own insights

Static reports, briefs, and neighborhood profiles don't let the end user interact with data to craft insights; they restrict the user to predetermined insights that may not be useful for their use cases.

What is possible with a Decision Support Tool v. a static offering?



Next Steps



Next Steps: Independent or Guided Use

Independent.

The dashboard can be accessed at this [link](#). Users can independently explore it to suit their specific needs, akin to Austin Finance Online's Open Budget Tool. **Users can adjust geography (census tract, zip code, Council district, Census regions) and select indicators and categories on various views.**

Guided.

Our team can provide a plan for specific use cases and advise on insights-making via the tool. We can answer questions on methodology or including new data. Staff can initiate IO consultations through our [intake form](#). CMO can engage via direct contact with IIO Daniel Culotta or RSIO Alba Sereno.

Questions





Acknowledgements

Innovation Office Team Members on this Project

Prakhar Bajpai
Alba Sereno
Ian Sapp
Daniel Culotta
Vicky Pridgen

Co-Creation Contributors

HPD - Displacement Prevention Team,
Demographer
EDD - Small Business Division
Sustainability - Food Systems Team
APH - Office of Violence Prevention
EMS
Office of Police Oversight

Executive Sponsor

Chief of Staff Jason Alexander

External Collaborators

AISD