Where is the shade and who has it?

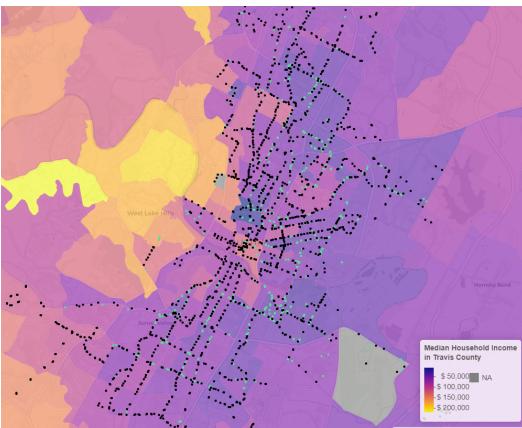
As climate change brings more frequent heat waves we need to take stock of our resources and ensure we are supporting vulnerable populations. "Austin is also seeing an increase in the number of 100-degree days. In the 30-year period between 1981 and 2010, the average number of 100-degree days was 18. From 1990 to 2019, the average was 28 days." - KUT, NPR Station

These maps use U.S. Census, Capital Metro and City of Austin data to explore the topic of shade as it relates to public transit in the city of Austin, Texas.

"Shade is often understood as a luxury amenity. But as deadly heatwaves become commonplace, we have to see it as a civic resource shared by all."

- Sam Bloch

- Bus stops with 1 or more shade structures
- Bus stops without shade structures



Income, Public Transit and Shade

Map showing the median household income by census tract in Travis County. Tracts with a higher income are shown in light orange and yellow. Tracts with lower income are shown in light and dark purple. It's easy to see a clear divide in income levels between the west and east side of the city.

It's interesting that there are so few bus stops in the west more affluent area of the city. Perhaps this could be due to land code. A future map could over lay the bus stops on top of different land development zones.

The gray NA region is the Austin-Bergstrom International airport. The dots represent local bus stops.

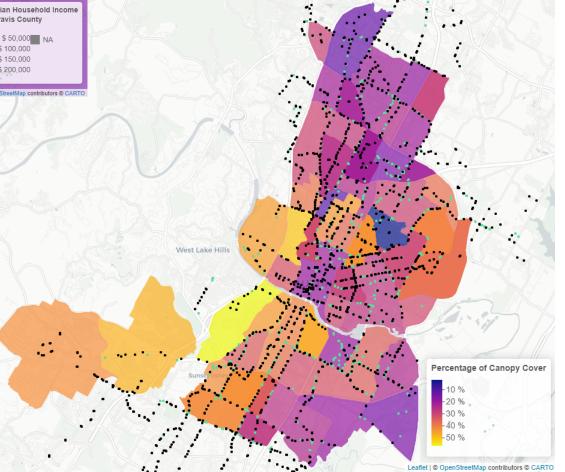
Canopy Cover, Public Transit and Shade

Map showing the percentage of canopy cover across Austin's neighborhood planning areas. "Tree canopy refers to a tree's above ground layer of leaves, branches, and stems." - Neighborhood Canopy Tour (NCT)

The data was gathered by the Austin's Watershed Protection and Development Review Department in the summer of 2006 using aerial images.

The curvy line splitting the colors in the middle is the Colorado River, often referred to Town Lake or Lady Bird Lake. It splits the city into south and central/north Austin.

"Tree canopy covered an estimated 30% of the entire City of Austin jurisdiction" -NCT



Age, Public Transit and Shade

Map showing the number of people age 60 years or older by census tract who take public transportation to work. What's surprising is the high number of people shown in bright yellow near the middle of the map. This is Austin's downtown area.

It's also peculiar to see some ridership represented by light purple tracts in locations without bus stops. People here could be using Capital Metro's CARTS service, "An entity responsible for transit services in a 7200 square mile nine-county area surrounding Austin" - ridecarts.com

Because elderly people are more susceptible to heat exhaustion, it could be worth exploring whether the age of people along a bus route plays a role in determining the installation of amenities such as shade structures.

These maps were put together by Grecia White with the help from various online resources. Code, links and interactive maps are available athttps://rpubs.com/grecia_white/shade_public_transit_austin

