



Bringing Change Through Trees

Speakers for the Trees

Dylan Morris · Sereniti Johnson · Katelynn Downin · Aya Omar · Sophie Waugh



Our Question

How can the correlation between canopy coverage and income be addressed directly by the community?



Why is canopy coverage a concern?



- Carbon neutrality
- Bringing down temperatures and adding shade
- Longevity and quality of life



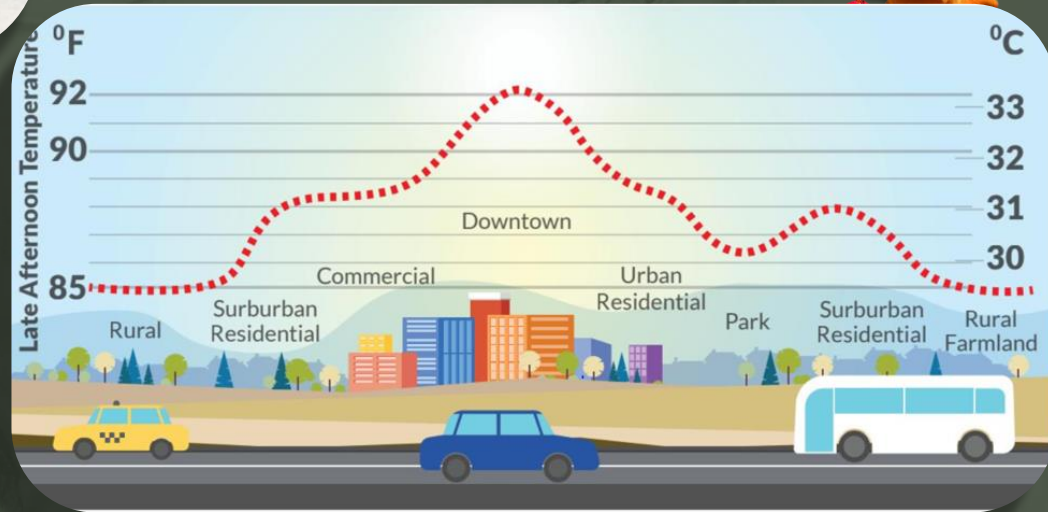
Increased Canopy Coverage Leads To...

- Lower prevalence of lung cancer
- Lower prevalence of asthma among children
- Reduced asthma hospitalization

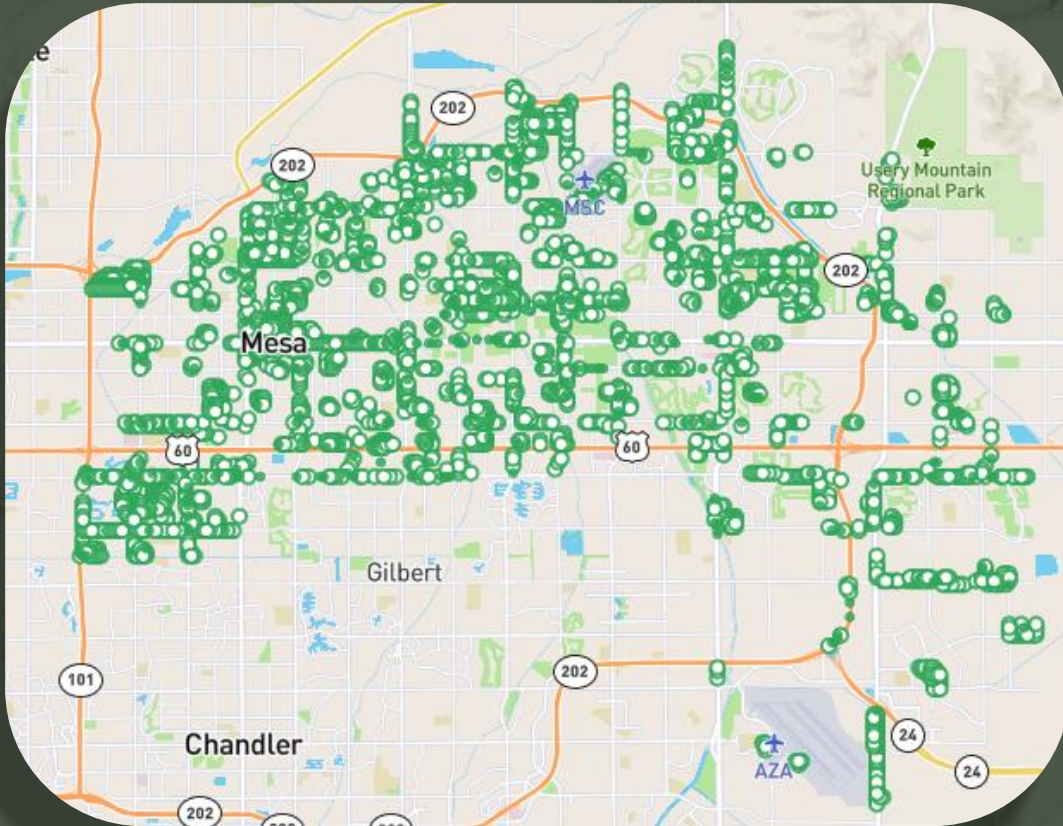


Why is shade important?

In the lower income areas where there are less trees, there are more heat related calls to the fire department.



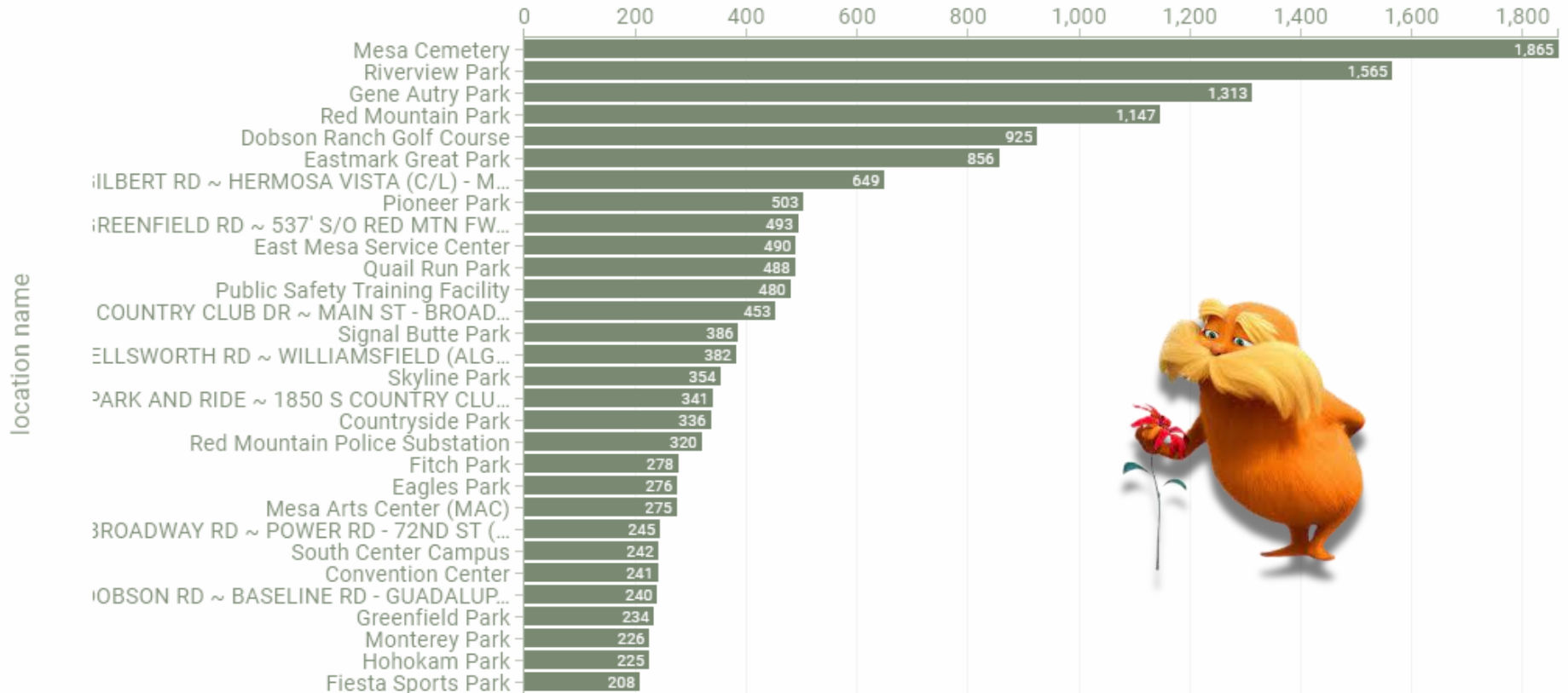
Where are the current trees?



- Among main roads and in the parks
 - Broadway Rd
 - Mesa Dr
 - Country Club Dr
 - Main St
 - Alma School Dr
- low-income=less trees



of trees



Income-Related Map

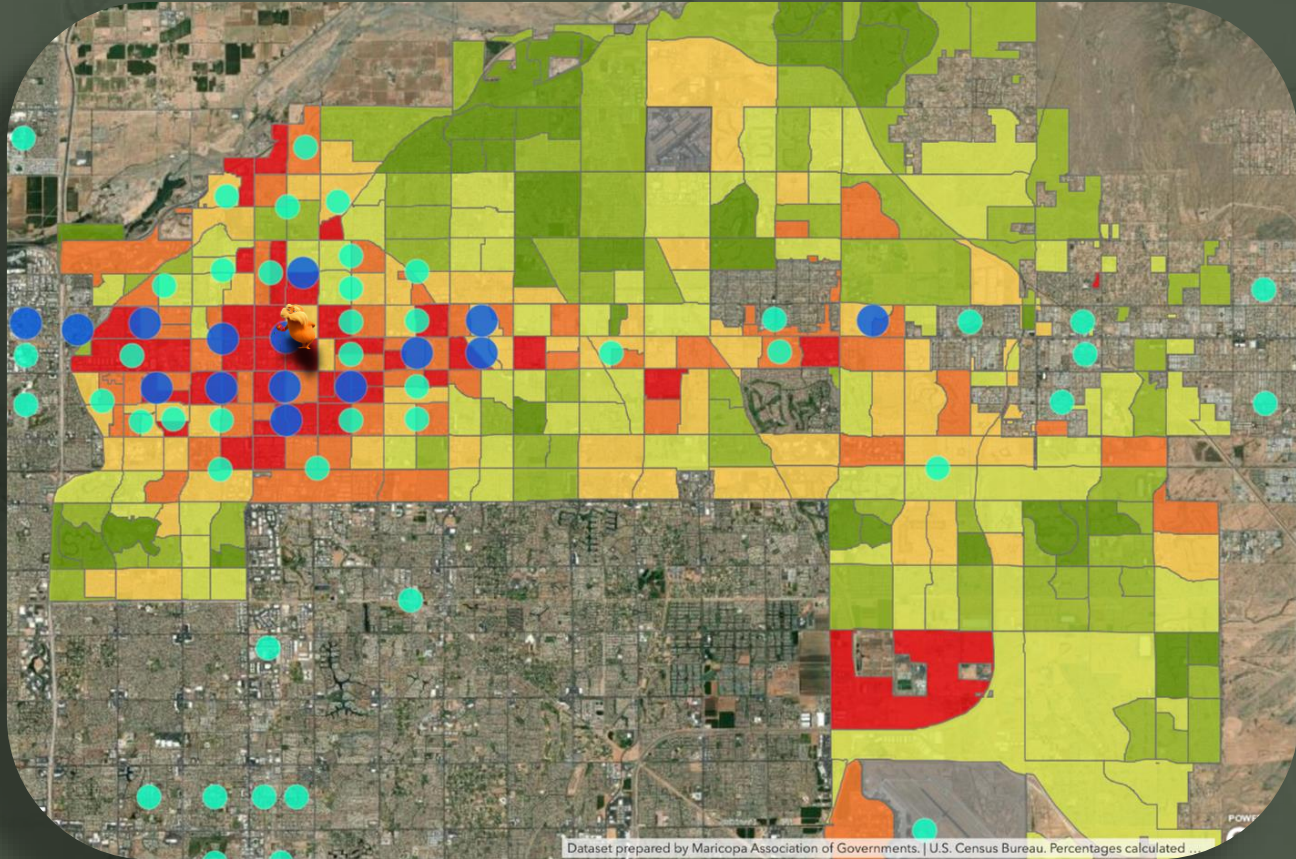
50 - 82% of total population is low income



40 - 50% of total population is low income



TreeEquityCensusBlocks



**What is currently being done to
increase the number of trees?**

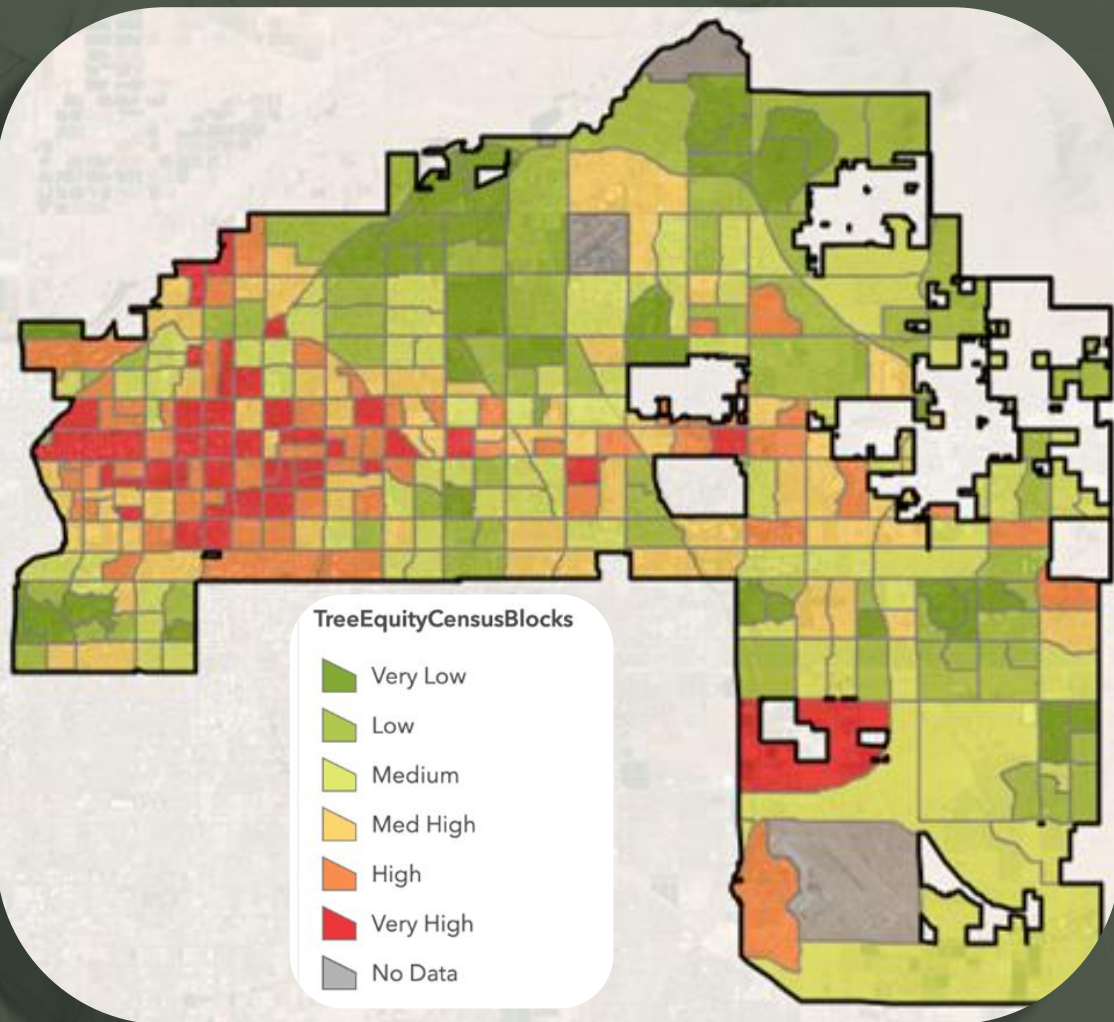


1 MILLION TREES BY 2040



Tree Coverage

“Right now, we have 8–10% tree coverage in Mesa... ideally, we want to obtain at least 18% by 2040” -Donna DeFrancesca



NYC Success in 11 Years

Annual energy cost
reduction: \$28
million

Annual carbon
storage: 1.35 million

tons

Annual pollution
removal: 2,202 ton

For every \$1 invested, New York street trees return
\$5.60 in benefits

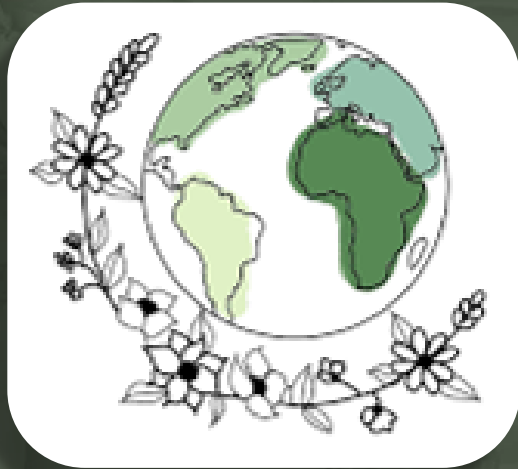
Proposed Solutions

Solution 1 - Community Involvement: Pocket Gardens

- Taking advantage of empty lots and space between buildings
- Community bonding opportunity
- The areas can be used for community events, leisure, and mental safe spaces
- In urban areas, rainfall can be redirected to the gardens via curb cuts, so there is less water waste



Solution 2- Schools Offer a Sustainability Class/Club



- Collaborate with Mesa Public Schools
- Raise money to sponsor trees in lower income areas
- Community outreach
- Students want to be involved



Solution 3- Website With Information for the Community

- Dashboard for people to see what is attainable for them
- Points towards low-income neighborhoods
 - Can ask for resources



Solution 4- Public Awareness Classes



- The city of mesa used to host “Living Green Events”
- Designed to inform the public about ways that they can preserve their earth

Mesa Climate Action Plan Goals Addressed



ASPIRATIONAL GOAL #1:

Carbon Neutrality



ASPIRATIONAL GOAL #4:

Climate Ready Community





Thank you for Your Time!

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**

Works Cited

Alvolio, Meghan et al. "Biodiverse Cities: The Nursery Industry, Homeowners, and Neighborhood ..." *ResearchGate*, 2018, https://www.researchgate.net/publication/323057348_Biodiverse_cities_The_nursery_industry_homeowners_and_neighborhood_differences_drive_urban_tree_composition.

Bryant, J. (2022, October 26). *40% of likely student voters say climate change motivates them in midterms: BestColleges*. BestColleges.com. Retrieved January 25, 2023, from [https://www.bestcolleges.com/news/climate-change-motivates-students-to-vote-in-midterms/#:~:text=The%20majority%20of%20students%20\(92,actions%20to%20address%20climate%20change](https://www.bestcolleges.com/news/climate-change-motivates-students-to-vote-in-midterms/#:~:text=The%20majority%20of%20students%20(92,actions%20to%20address%20climate%20change).

City of Mesa. Green Workshops & Events. (n.d.). Retrieved January 25, 2023, from <https://www.mesaaz.gov/residents/sustainability/green-workshops-events>

Malossi, C. (2016, April 27). Living near greenery may increase your lifespan. *Earth Island Journal*. Retrieved January 25, 2023, from https://www.earthisland.org/journal/index.php/articles/entry/living_near_greenery_may_increase_life_span/

MillionTreesNYC - NYC Tree Facts. (n.d.). [Www.milliontreesnyc.org](http://www.milliontreesnyc.org), https://www.milliontreesnyc.org/html/urban_forest/urban_forest_facts.shtml
Sourced from the New York City Department of Parks & Recreation, United States Forest Service

Wolf, K. L., Lam, S. T., McKeen, J. K., Richardson, G. R. A., van den Bosch, M., & Bardekjian, A. C. (2020). Urban Trees and Human Health: A Scoping Review. *International Journal of Environmental Research and Public Health*, 17(12), 4371. <https://doi.org/10.3390/ijerph17124371>