

Turf Rebates:

- Water rebate programs differ in the state, but turf rebates are among the most contentious rebate programs.
- Typically water savings results are highly variable with turf rebates.
- *By using the statistical analysis program SAS, this research demonstrates the results of the turf rebate program in Scottsdale (aggregated at the zip code level).*
- This project was designed to better understand how the turf rebate program can be improved to better suit all residents in Scottsdale, regardless of income or home value.

The Analysis:

1. Water use data for about 150 homes in Scottsdale who took advantage of the rebate program were used.
2. Water savings was evaluated as the difference between water use before and after a rebate was received. These data were compared with income and home values of these residents.
3. SAS was used for the analysis. Additional data was gathered from other sources (the US Census and NorthStar: a customer billing system used by the city).

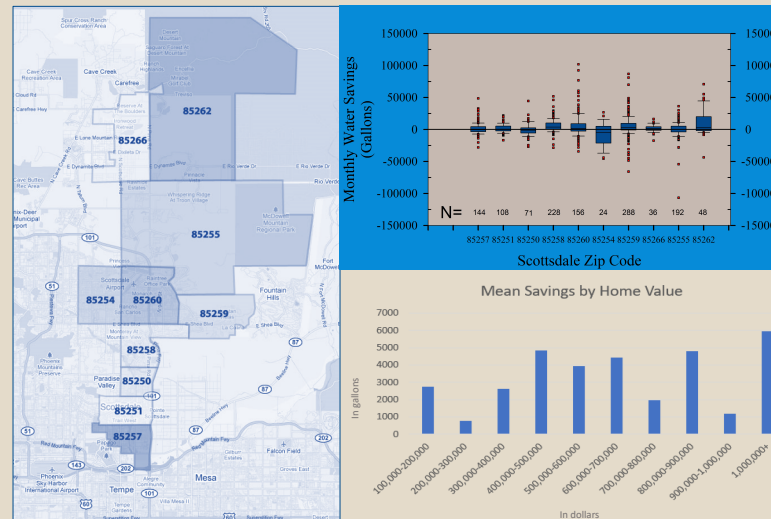


Additional Knowledge:

Previous iterations of the rebate program have included xeriscaping requirements, but as of 2002, these no longer are in the ordinance. For analysis, the data is split between 2014-2016 and 2016-2018 because of 2016 changes.

Motivating Question:

How does socioeconomic status impact water use and monetary savings following turf removal rebates in the City of Scottsdale?



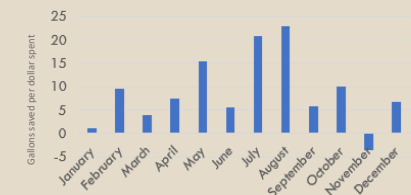
Findings With a Grain of Salt:

Effectiveness is defined in this project as gallons of water saved per dollar spent on the turf rebate program. Finding the most effective rebate months is useful, even while not always statistically significant.

Indicators considered:

- Home values
- Income
- Square feet removed
- Effectiveness and savings
- Months/ seasons

Effectiveness By Month 14-16



Conversion Examples



All Photos from Scottsdale Water

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An Inconclusive Conclusion:

- The question of how socioeconomic status impacts water use and monetary savings following turf rebates in Scottsdale was difficult to answer because there was no statistical significance in these data.
- Home value and income indicators did not show a statistically significant impact on savings or effectiveness of water.
- Regardless, this information can be used to market to the more successful areas, or to update the program accordingly.