Equitable Distribution of Citywide Scholarships – Data Article

Project Context

MOTI; Parks, Recreation, and Neighborhood Services (PRNS); City Manager's Office (CMO); and Office of Racial Equity (ORE) are assessing the equity impact of PRNS scholarships, by analyzing spatial patterns of how scholarships for three programs — Citywide Scholarships, Camp San José (a summer day camp), R.O.C.K. After School (an after school program running during the school year)— are distributed to residents. **Our objective was to identify whether scholarship recipients are representative of the scholarship-eligible population within San José.**

Data

Data on scholarship recipients and program enrollments was obtained from PRNS. Data to estimate the size of the eligible population for scholarships was obtained from the U.S. Census Bureau. And geo-data to identify San José regional boundaries including Council Districts was obtained from the San José Open Data portal. Python was used to clean and merge these data sets, including the process of address validation, which is required to associate scholarship recipients and program enrollees with different city regions (council districts, zip codes and census tracts).

Analysis

Tableau dashboards were produced for each of the three scholarship programs analyzed: Citywide Scholarships, Camp San José, and R.O.C.K. After School. Various metrics highlighting how scholarships are distributed across the city were displayed for both council districts and zip codes. The metrics are:

- Total number of scholarships awarded
- Average number of scholarships awarded per recipient
- Retention rate: the proportion of scholarships in a given fiscal year going to individuals who received a scholarship in the previous fiscal year
- Penetration rate: number of scholarships awarded / estimated eligible population
- Proportion of enrollees on scholarship

In addition to producing Tableau dashboards, two ad-hoc analyses were performed:

1. The **household sizes** of scholarship recipients and household sizes among the eligible population were compared. No difference was observed, so scholarships are not disproportionately going to households of a particular size.
2. The **distance** from scholarship recipients to their nearest community center was compared to the distances from program enrollees and their nearest community center. 95% of scholarship recipients live within 1.5 miles of a community center, but a similar proportion of non-scholarship program enrollees also live within 1.5 miles of a

community center. **In general, longer distances from a community center creates a barrier for residents to take advantage of Parks and Recreation programs, regardless of financial need.**

Other positive findings were that scholarships were evenly awarded between males and females, and 50% of scholarships went to residents living in San José's six most vulnerable zip codes (95110, 95111, 95112, 95116, 95122, 95127).

Recommendations

Recommendations were made for expanded data collection in order to answer more questions about scholarship distribution:

- Store data about scholarship applicants who *did not* receive scholarships.
- Collect race information about scholarship applicants *(this recommendation has already been approved in consultation with the Office of Racial Equity)*.
- Collect income information about scholarship applicants.

This additional information will allow PRNS to analyze if scholarships are awarded equitably based on demographic characteristics.

Other technical recommendations for data structuring to ease data analysis were made to inform PRNS' future database system upgrade.

Handoff and Community Engagement

On the data side, our handoff involved delivering Tableau dashboards to PRNS that allow stakeholders to view different equity metrics across zip codes and inform how they allocate resources for future scholarships.

An intense [community engagement](#) effort by a dedicated team over the summer involved a listening tour with over 50 community organizations about their experience applying for and using scholarships. A survey was also developed for PRNS to maintain engagement with the community. Recommendations that were proposed by the team include:

- Raise awareness of PRNS scholarship programs by increasing staff presence at community events, publishing informational materials in more languages, and publishing more information about programs on the City website.
- Considering sliding-scale forms of financial aid to expand scholarship eligibility to the middle class and increase support for larger families.
- Easing the scholarship application process by offering after hours drop-boxes, and allocating scholarships directly to community organizations to reduce uncertainty about application decisions.

- Reducing transportation barriers to attending programs by offering mileage reimbursements, bus vouchers, or providing transportation through partnerships with other organizations.

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