Equitable Distribution of Citywide Scholarships – Data Story

Acknowledgements

The Mayor's Office on Technology and Innovation (MOTI), Parks and Recreation Neighborhood Services (PRNS), City Manager's Office (CMO), and Office of Racial Equity (ORE) partnered to assess the equity impact of PRNS Citywide Scholarships by analyzing spatial patterns of how scholarships for three programs—Citywide Scholarships, Camp San José, R.O.C.K. After School—are distributed to residents. The objective was to identify whether scholarship recipients are representative of the scholarship-eligible population within San José.

This analysis would not have been possible without the tireless work of PRNS' frontline operators—the invaluable experiences they shared with us on the day-to-day realities of families in our communities—department staff, and other internal partners and fellows from the Data Equity team (who conducted the brunt of the analysis):

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Introduction

For over a decade the Parks, Recreation & Neighbors Services' (PRNS) Citywide Scholarship Program has allowed low-income residents in San José to access recreational programming and childcare support at a reduced cost. In October 2020, the data equity team at the Mayor's Office of Technology and Innovation (MOTI) partnered with PRNS to look into historical performance for the scholarship program, with a focus on equitable allocation of scholarships. The data equity team's analysis looked at program data from the year 2009 to 2019.*

While some of the team's findings were encouraging—revealing an equal gender split in scholarships granted in recent years and increased program retention between 2013 and 2019, among others—others raised concerns about inequity in scholarship distribution. Particularly, the City has seen a decline in first-time scholarship recipients, with only around 8% of residents who qualify for the scholarship currently receiving it. There is also an unequal distribution of scholarships across family size, income level, and geographical proximity to a PRNS community center.

* **Programmatic changes** that are important to understanding the assessment the data equity team conducted:

Before 2015, there was a centralized scholarship approval process, \$100 annual cap per participant, funds were loaded to customer accounts, and there was a 34% Citywide

Scholarship redemption (2015). The program was restructured and currently scholarship approval is conducted on-site at community centers, there are no individual monetary limits, one application term per year, and a 96% Citywide Scholarship redemption (2018).

Taking these statistics at a glance, the story being told is of immense success following the program restructuring, but our team wanted to look more closely at whether that is truly the case.

Methods & Limitations

Initial Analysis

Data Integrity:

The Camp San José Excel file provided by the department contains payment receipt data for Camp San José as well as other programs. The Rock After School Report contains payment receipt data for R.O.C.K. After School as well as other programs. The Age and DOB fields contained inaccurate values. Age is calculated as the enrollee's age as of January 2021—the time the data was exported from the database—and not the enrollee's age at the time of the transaction.

Camp San José usually records payment data for each week of the camp as a separate entity. Further effort is required to investigate whether all camp locations are stored in an individual week format or if there is a mixture of camps recorded by week and camps recorded for the summer duration. Because of this inconsistency, the calculated figures below suffer from double (roughly 8x) counting. In other words, counts are not an accurate measure of total enrollment over 2010-2019 (they are inflated about 8x), but proportions should be more accurate because the duplication is roughly consistent (there is some variation in camp length.) **Records were dededuplicated (in other words, a unique student was counted once per program) but it took a great deal of time.** This issue is not present in R.O.C.K. After School data-

Questions Answered:

1. We can begin to answer the question of how efficiently resources are being utilized within Council Districts. There are some programs within community centers that attract a lot of out-of-district enrollees. There are some programs that mainly serve enrollees within the district. Insights are confounded by the observation that if a community center lies near a Council District border, children and teens in the neighboring district may cross the district line to attend their nearest community center. The interaction between distance to nearest community center and enrollment is currently being analyzed using latitude and longitude data provided by the City's GIS resources.

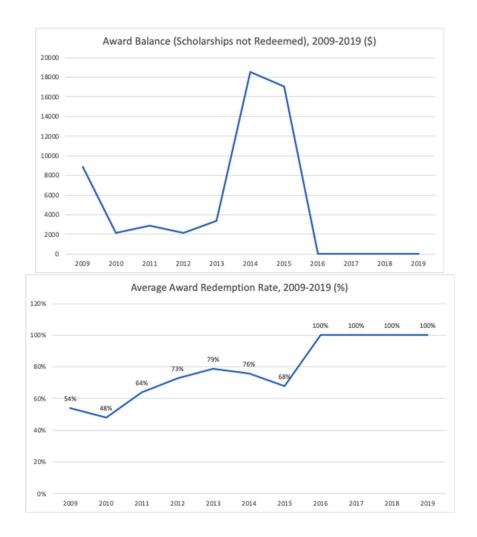
Program	Community Center	Council District	Enrollees from Same District	Enrollees from Out of District	Proportion In District
Camp San Jose	Almaden Community Center	10	1969	853	0.698
Camp San Jose	Bascom Community Center	6	433	398	0.521
Camp San Jose	Berryessa Community Center	4	992	306	0.764
Camp San Jose	Camden Community Center	9	1053	614	0.632
Camp San Jose	Cypress Community & Senior Center	1	166	74	0.692
Camp San Jose	Evergreen Community Center	8	501	236	0.680
Camp San Jose	Mayfair Community Center	5	437	422	0.509
Camp San Jose	Roosevelt Community Center	3	442	596	0.426
Camp San Jose	Seventrees Community Center	7	490	519	0.486
Camp San Jose	Southside Community Center	2	500	225	0.690
Camp San Jose	Willow Glen Community & Senior Center	6	357	695	0.339
R.O.C.K. After School	Almaden Community Center	10	1340	239	0.849

R.O.C.K. After School	Berryessa Community Center	4	1480	163	0.901
R.O.C.K. After School	Camden Community Center	9	895	415	0.683
R.O.C.K. After School	Evergreen Community Center	8	836	70	0.923
R.O.C.K. After School	Southside Community Center	2	469	153	0.754
R.O.C.K. After School	Willow Glen Community & Senior Center	6	93	332	0.219

- 2. About 50% of Citywide Scholarships are awarded to males and 50% to females (data not shown). While the award proportions are equitable, there is insufficient data to determine if males and females win scholarships at equal rates when they apply for one or if it is biased by other factors like race, income, number of previous awards, etc.
- 3. The proportion of program enrollees on scholarship cannot be answered because the relevant scholarship data exists in a non-tabular format and needs to be manually transcribed into a table. Camp San Jose and R.O.C.K. scholarships are not included in Citywide Scholarships.

Visualization & Analysis

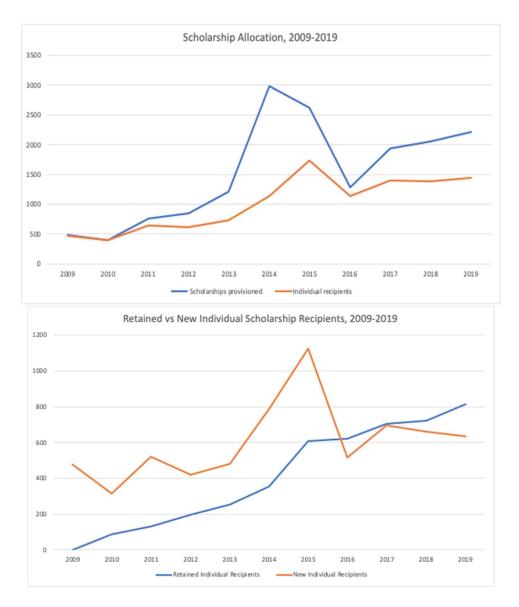
From the program change described previously, we found that changes increased average award redemption rate and decreased award balance. Award balance is scholarship dollars allocated but not redeemed.



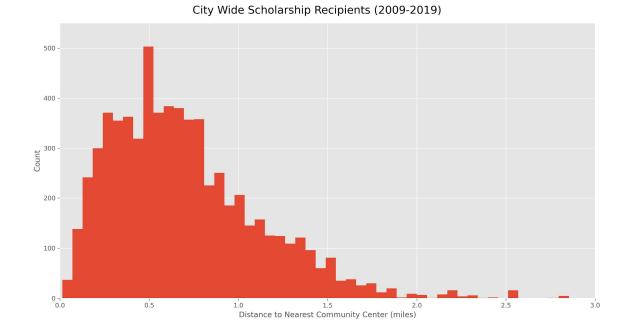
The problem with a single metric—one that focuses on dollars spent—is it misses the more nuanced picture around distribution of those dollars.

While we saw that the current Citywide Scholarship program had strong retention of **past** scholarship recipients, there is a decline in **new** residents served. The number of new, unique individuals served has diminished. **The program changes—which were seen as a success—were** *reinforcing* an equity gap instead of closing it.

What we had was an *incomplete* story of success. The changes made to the Citywide Scholarships program *did* build equity, as measured by scholarship redemption, but they **improved access for the same group of people**. We were serving fewer people better and continuing to lift up groups that already knew about the program—instead of reaching **first-time beneficiaries**.



When it came to our data analysis, we considered factors like location that may affect whether the scholarship program can better serve families in need. The majority of Citywide scholarship recipients live <1.5 miles from the nearest community center; 36% of Citywide scholarship recipients live within 0.5 mile of their nearest community center; 79% within 1 mile, and 96% within 1.5 miles.

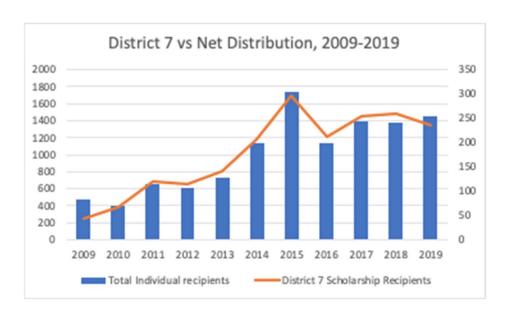


We can't make a broad generalization off of one finding, but residents who live closer to a community center are accessing program benefits at higher rates than those that live further away.

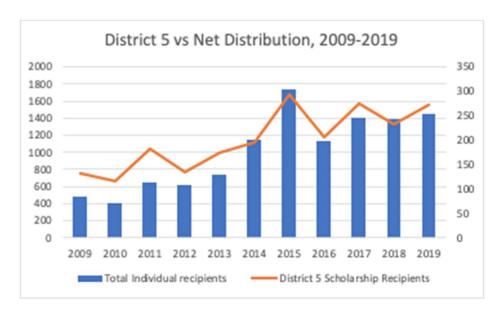
Metrics don't exist in a vacuum and localizing analysis helps us understand how some groups are aware of these programs, and others are not. These insights helped Parks and Recreation iterate on their understanding of equity.

When it came to understanding access to the scholarship program, we found that low income families in **wealthier** low income districts receive scholarships at higher rates than low income families in **poorer** low income districts.

Median income: \$71,121



Median income: \$83, 391



Insights & Hand-off

Culture is what happens when no one is looking. Our impact has been in empowering City staff with the insight and options data can achieve: informing not only big, strategic decisions, but also **improving the thousands of small decisions** that impact residence experience. We've failed if our work ends with a dashboard that doesn't connect to tangible impacts in program design and policy change.

With the help of our SJSU data equity fellows, we created three Tableau dashboards for Citywide Scholarships, Camp San José, and R.O.C.K.. After School. These interactive and easy-

to-use visualizations are meant to be useful for staff with little to no technical background to feel empowered about the insights and trends they're able to present to critical stakeholders.

Dashboards are an expected product of data work, but how are the City staff at the community centers, who run these programs, supposed to use them? We can't just hand off dashboards and say our work is done: City operators need to be trained to understand them and the insights they provide.

Community engagement

Throughout our work with PRNS, we've been able to show the department the power of not only their own data, but also the progress that's possible when we cross check data findings with the community partners who work directly with the families we're trying to reach.

Last summer, our fellows launched a community engagement strategy that presented our quantitative data to individuals and organizations that know San José and collect qualitative insights. While the work of implementing program changes is just starting, our community engagement team already began changing San José residents' experience with Citywide Scholarships:

- Outreach was performed to 300+ community stakeholders, from school administrators to faith-based organizations
- 50+ partner presentations and 3 community roundtables with 20+ community partners
- 1,200 low-income households with flyers; survey translated into 6 languages
- New FAQ section for Citywide Scholarship website; new Scholarship 3-pager
- Policy recommendations Identified by community partners as areas for program improvement: marketing, scholarship structure, application process, transportation, CBO communication

Culture change doesn't happen quickly, but it is the most powerful foundation for lasting change.