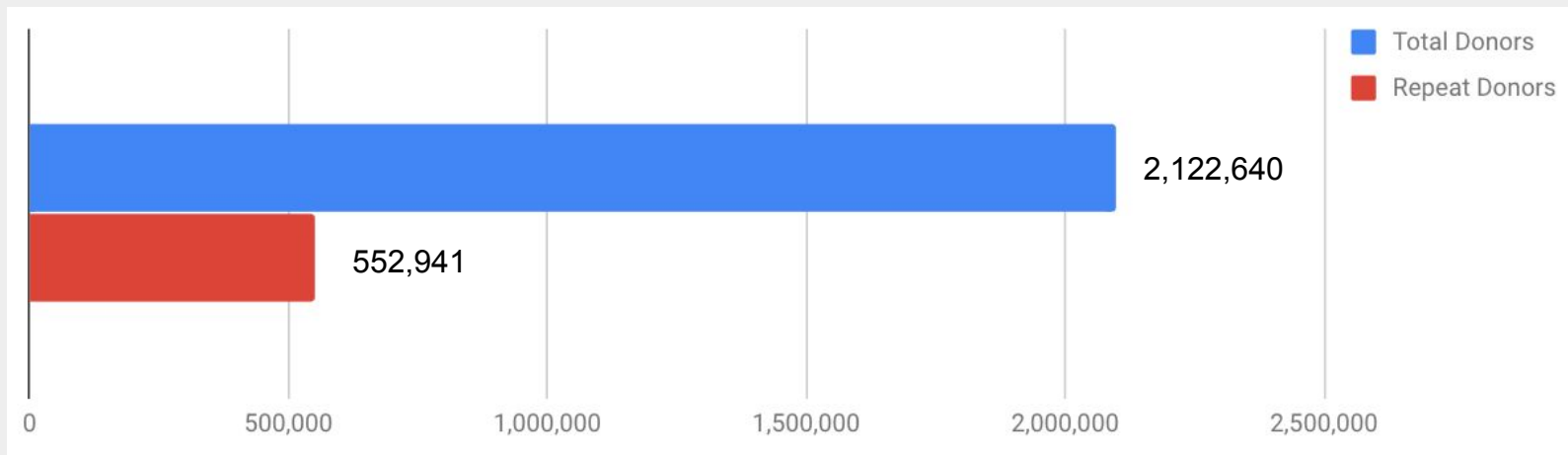


DonorChoose

# Objective:

*How might we increase the number of repeat donors (i.e., those donors that make more than a single donation).*

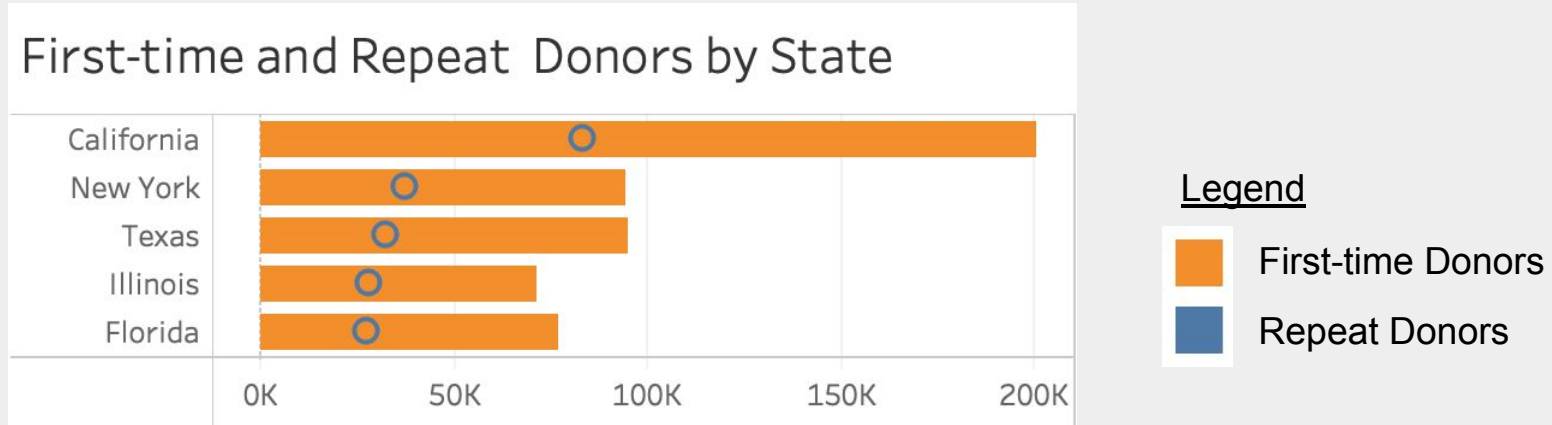
*Total number of donors vs. total number of repeat donors*



# *Recommendation*

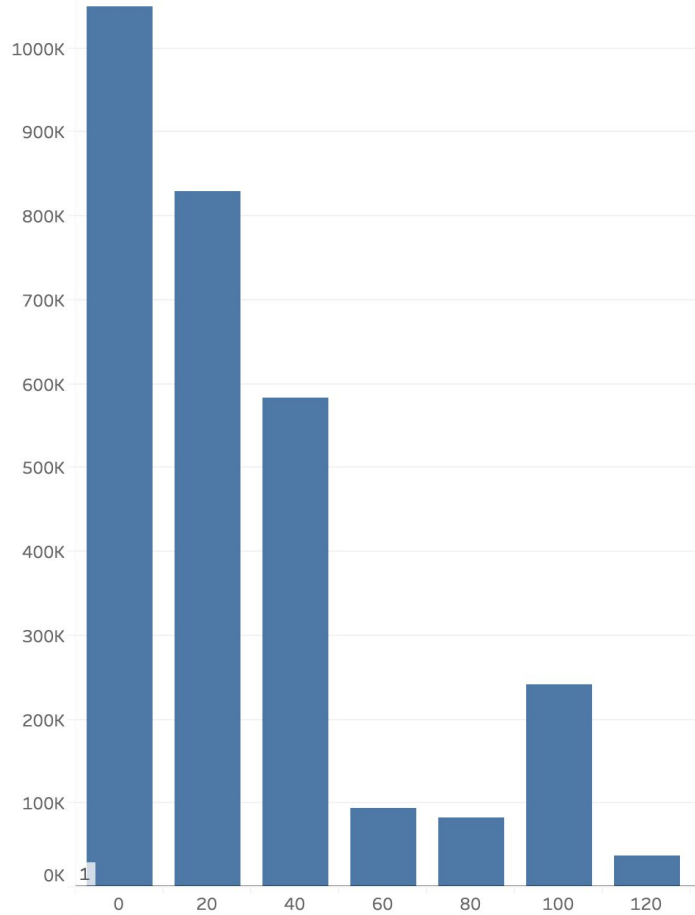
- Target promotional activity at first-time donors that are likely to make subsequent donations based on characteristics shared amongst repeat donors.

# *Where do Repeat Donors Live?*



The state with the largest population of repeat donors is California with a total of 83,123. The above listed states present large opportunities to convert first-time donors (into repeat donors) based on their high frequency of repeat donors and high volume of total donors.

*Histogram: Frequency of donation by donation size*



## How Much do Repeat Donors Donate?

Mean  
Donation:

**\$63.99**

Median  
Donation:

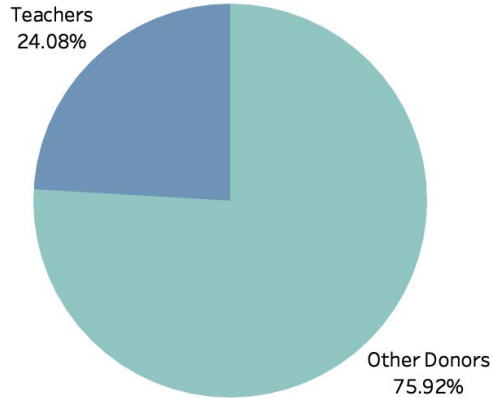
**\$25.00**

As evidenced by the right skew in the distribution of the histogram (pictured left) and the excess of the mean over the median, we know that - in general - most repeat donors spend modest sums of less than \$100 but occasionally make much larger donations.

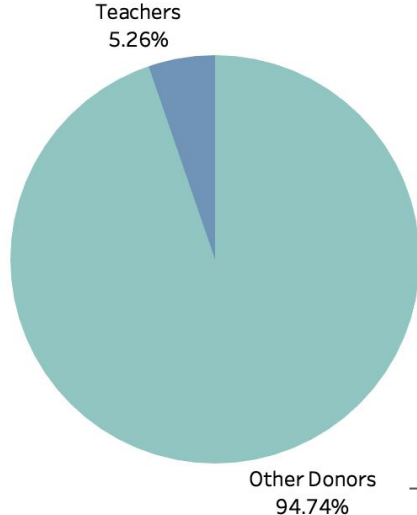
# Are Repeat Donors More Likely to be Teachers?

*Teachers Amongst Repeat Donors and First Time Donors:*

## Repeat Donors



## First-Time Donors



A repeat donor is approximately 4.6 times more likely to be a teacher than a first-time donor is.

# What do Repeat Donors Tend to Fund?

*This graphic compares frequency of words that describe categories of projects donated to by repeat donors. Only projects posted in 2018 were included to highlight the relevant project types for recent donors.*

**Projects pertaining to Literacy, Language, Science, and Math are popular amongst repeat donors.**



A word cloud of project categories. The words are arranged in a roughly rectangular shape, with 'Literacy' and 'Language' being the largest. Other prominent words include 'Science', 'Math', 'Applied', 'Special', 'Needs', 'Learning', 'Arts', 'Warmth,', 'Sports,', 'Civics', 'The', 'History', 'Sports', 'Health', 'Music', 'Science,', 'Care', 'Hunger', 'Arts,', and 'Learning,'.

Learning Arts Warmth,  
Needs Special Needs, Science Sports,  
Civics  
Applied Literacy Language  
Arts, Hunger  
Language, Music Science, Care  
Math  
Health History Sports The  
Learning,

## **Key Takeaways**

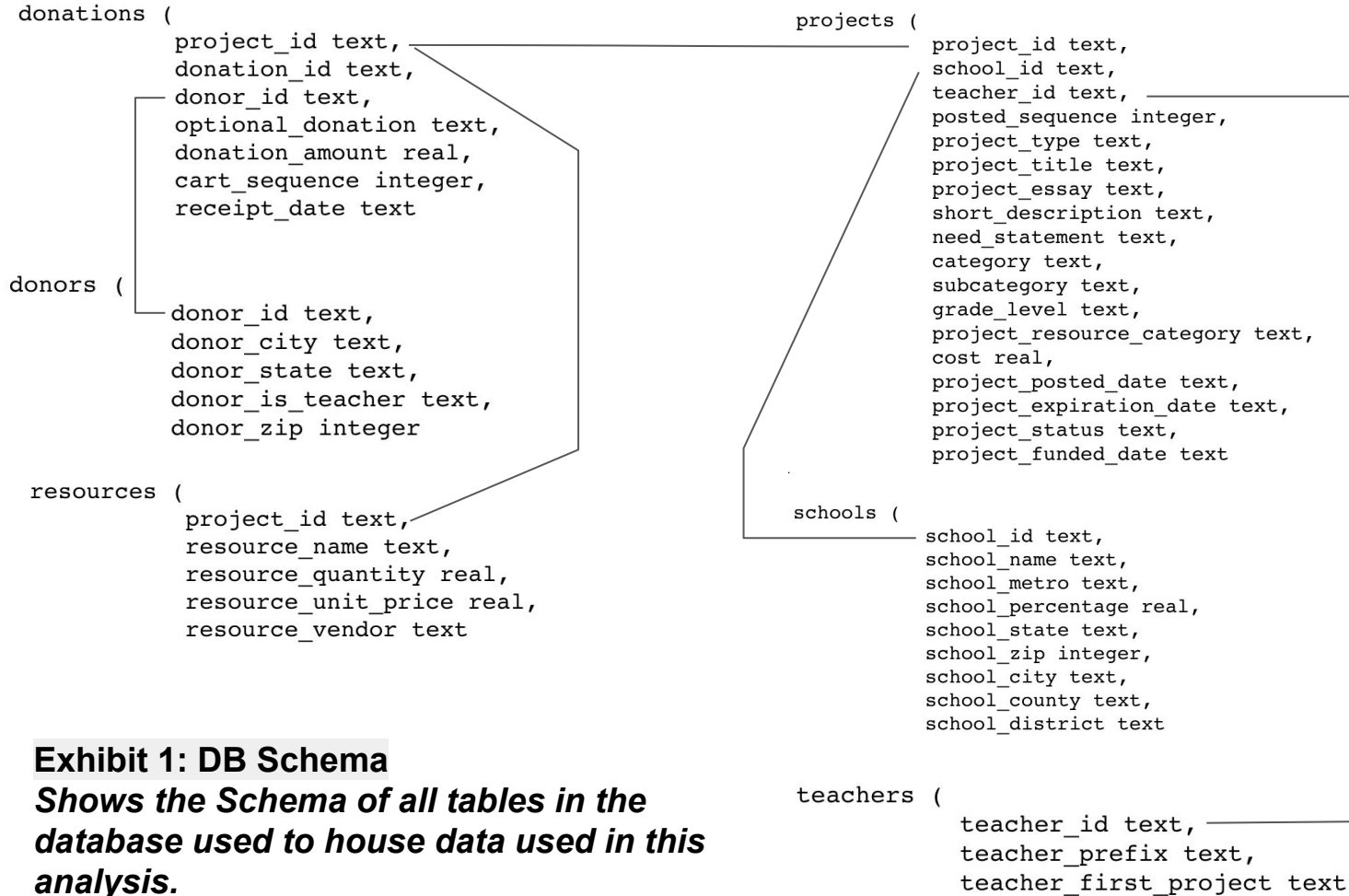
We have identified the states with the highest volumes of repeat donors and the project types which attract the greatest number of repeat donors. It was determined that repeat donors are much more likely to be teachers than their first-time donor counterparts and that the majority of repeat donor donations are of a modest amount usually below \$100.

## **Next Steps**

1. Based on budget available for promotional activity and cost of promotional activity, determine target market of first-time donors according to combination of characteristics identified in this exploratory data analysis,
2. Execute promotion, and;
3. (Optional) Research/Experiment ML Classification Model that identifies donors that are likely to make subsequent donation if targeted with specific marketing material.



# **Appendix**



## Exhibit 1: DB Schema

***Shows the Schema of all tables in the database used to house data used in this analysis.***