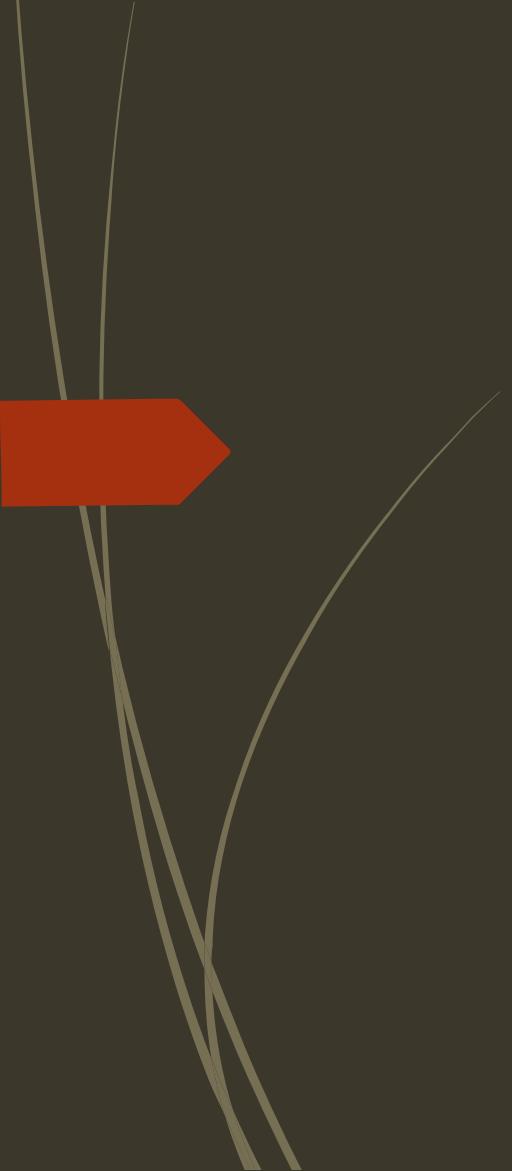


College Education Earning

By: Asteway Kebede

Feb, 2022





Client

**Department of
Education**

Need

**Provide Data-Driven
Student Earnings Analysis**

Problem Impact

Cost of living is the money one needs to pay basic bills

Students are not earning enough to meet cost of living

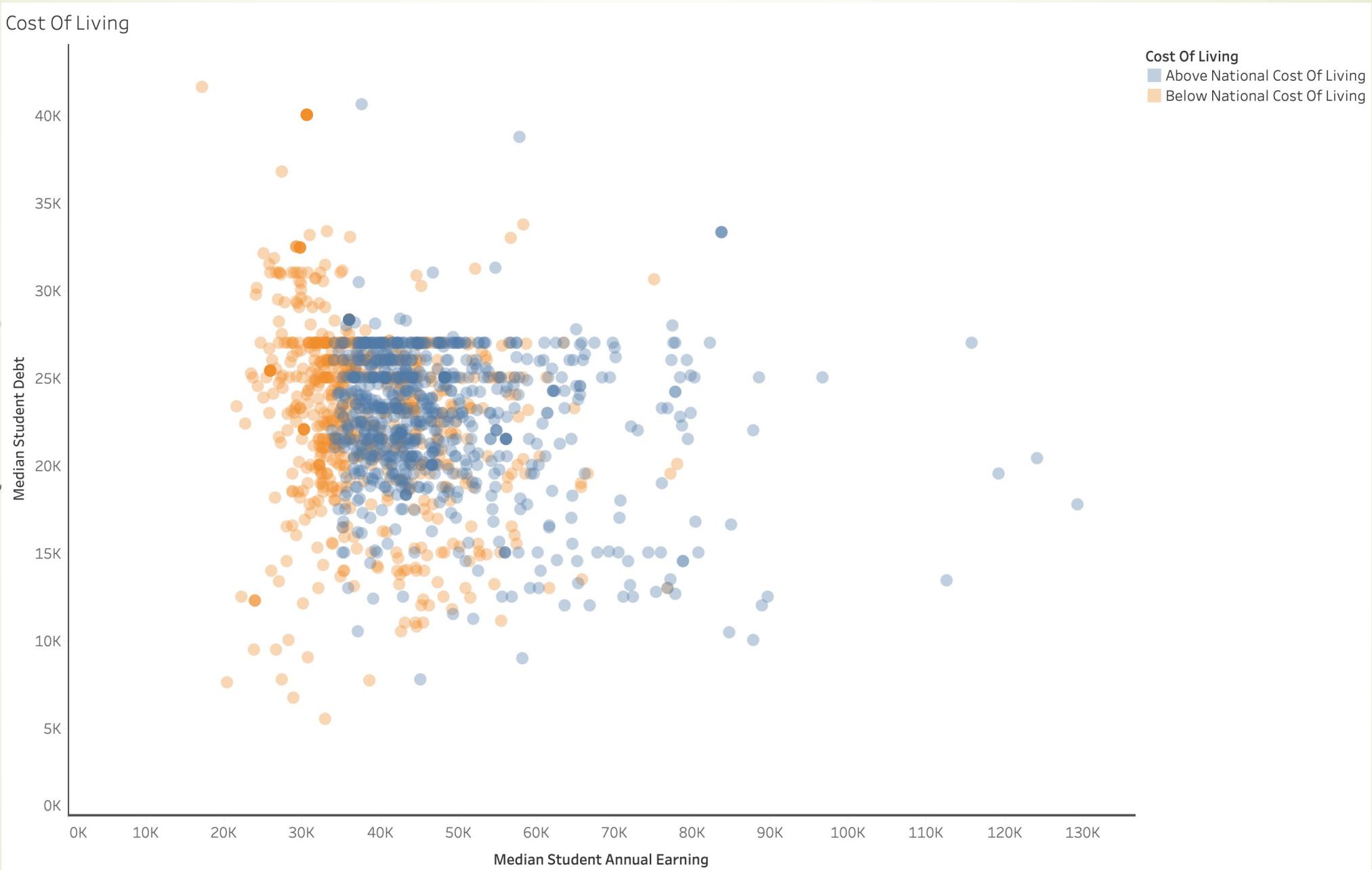


Success Measurement

National cost of living
average of \$3,200

Plus or Minus
state of study
Cost Index

Success Measurement





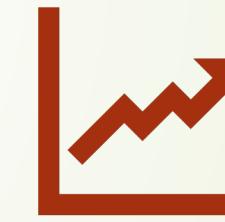
Success Measurement

Increase the number of schools above the national cost of living standard

Data Science Solution



Build a linear
regression model



To forecast future
earnings



Impact Hypothesis

By
forecasting
future
earnings

Using a Regression Model

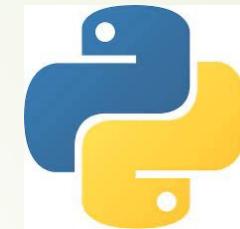


students
will make
better
informed
decisions
by:

Understanding their future earnings to
decide

How much debt to take on

Data Collection using
API



Exploratory Data
Analysis



Visualization



Process & Tools



The Data

**U.S. Dept.
of
Education**

Website - <https://collegescorecard.ed.gov/data/>

Contains institution-level data
for accredited institutions

**U.S.
Bureau Of
Labor
Statistics**

Website - <https://www.bls.gov/bls/blswage.htm>

Provides occupational wage
data



The Data

List of
Universities

Education
Expenses

Student Debt
Balances

Earnings after
6 years from
Graduation

Admissions &
Records

Obtained from direct reporting from institutions, federal financial aid, and tax information

Methodology

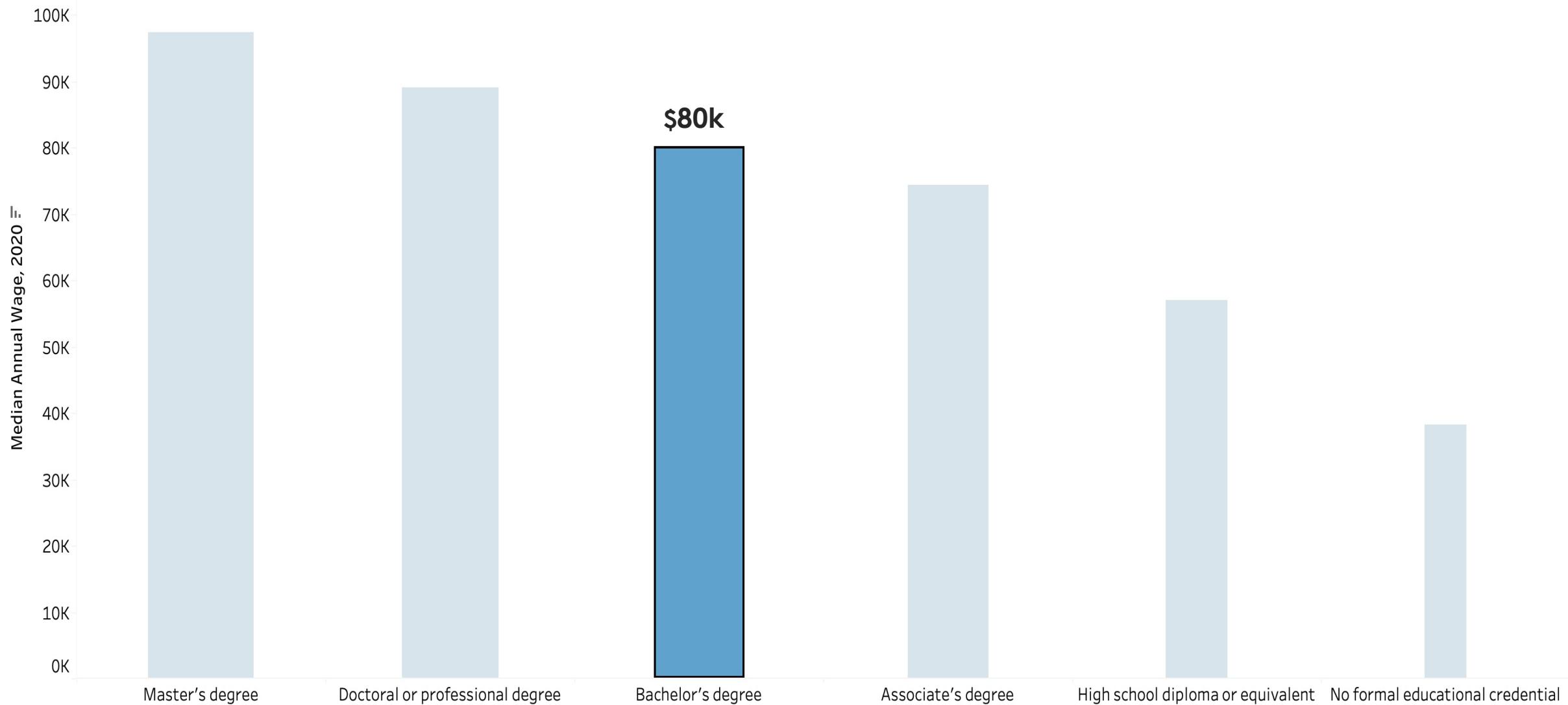
Quality of School

The cost

The expected future earnings

The amount of debt to be taken on

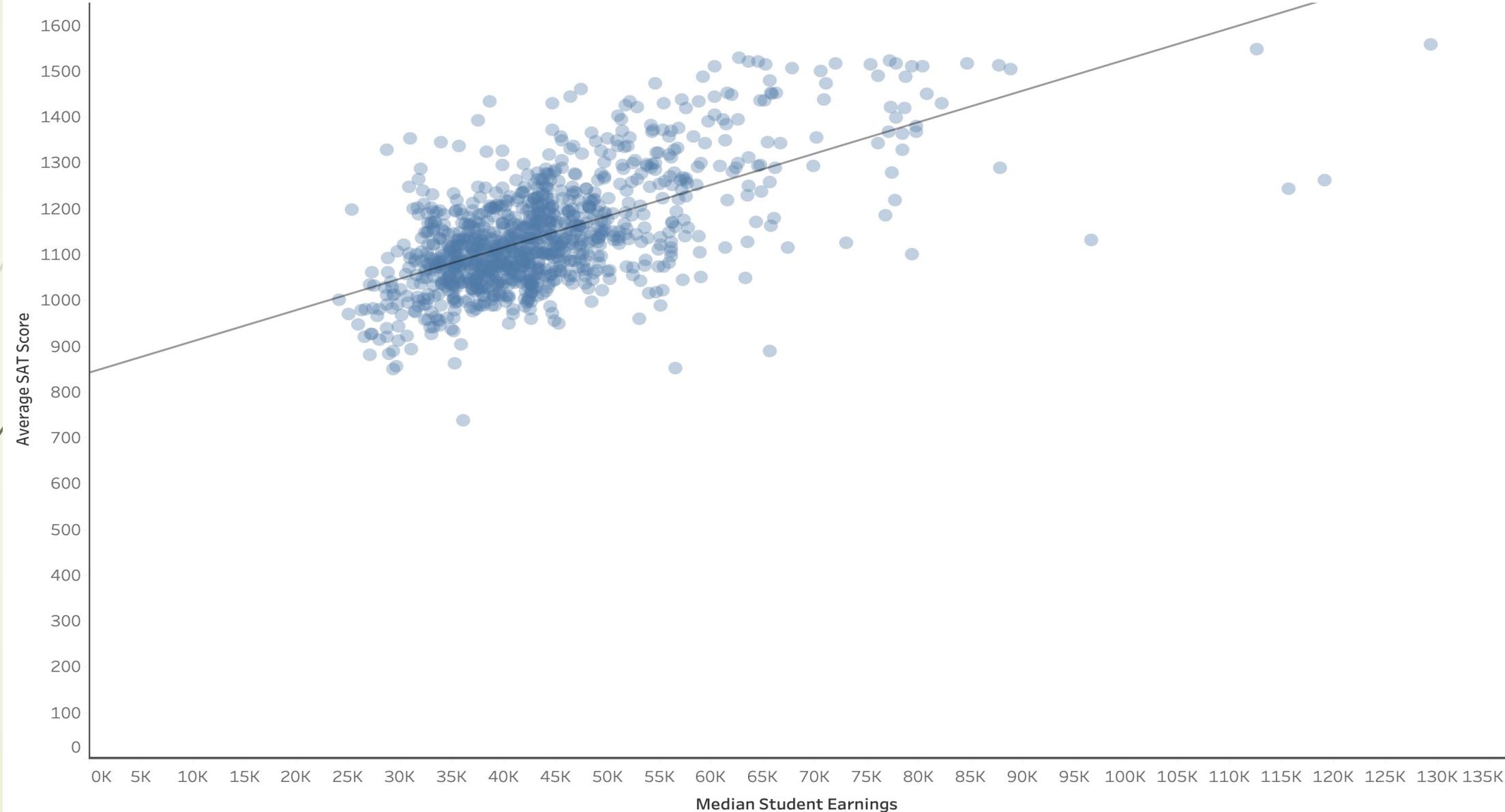
Earnings By Education Degree Type



National Income by Degree Type

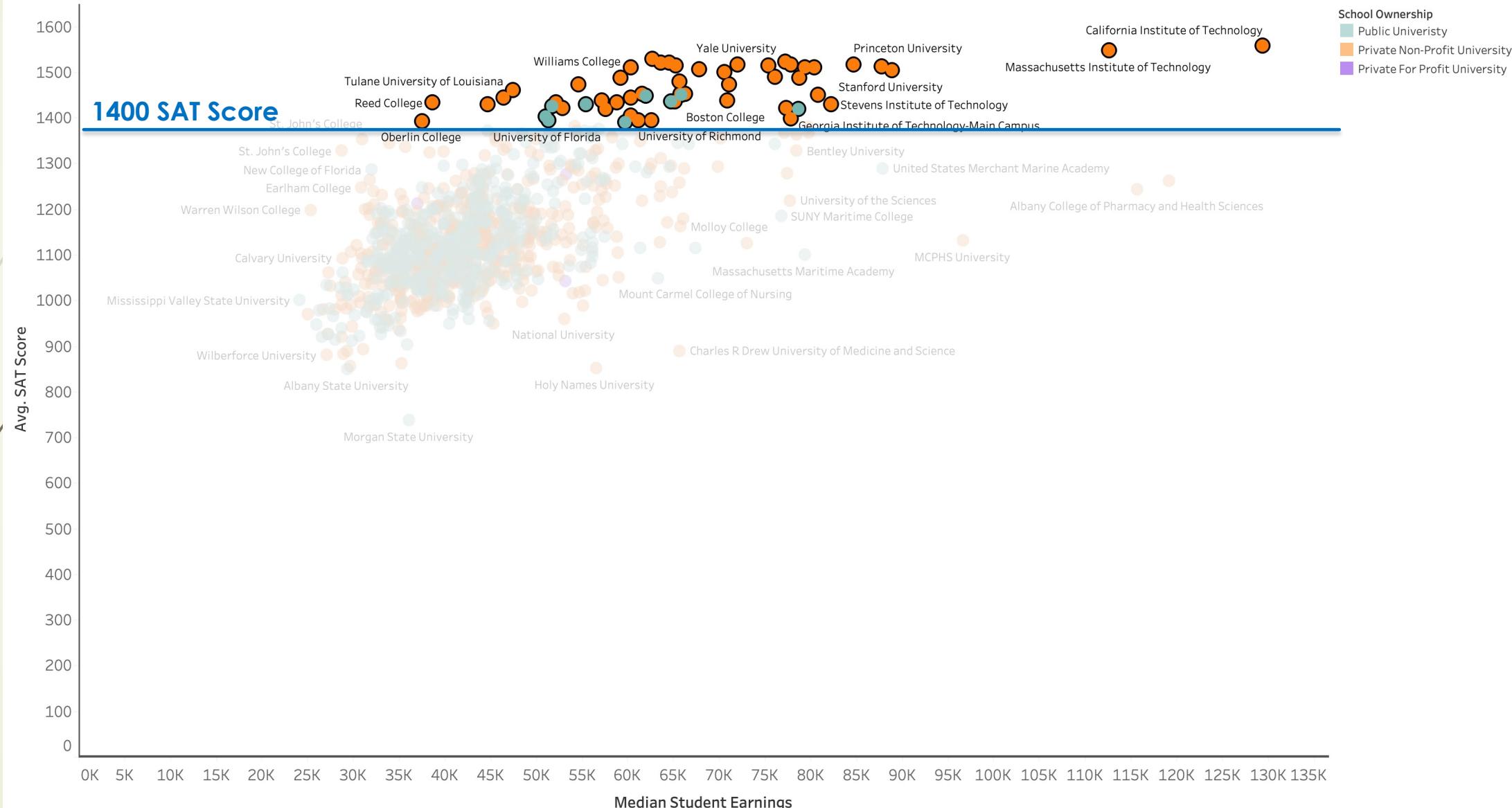
School Acceptance Standard by SAT

Admission By Avg SAT Score

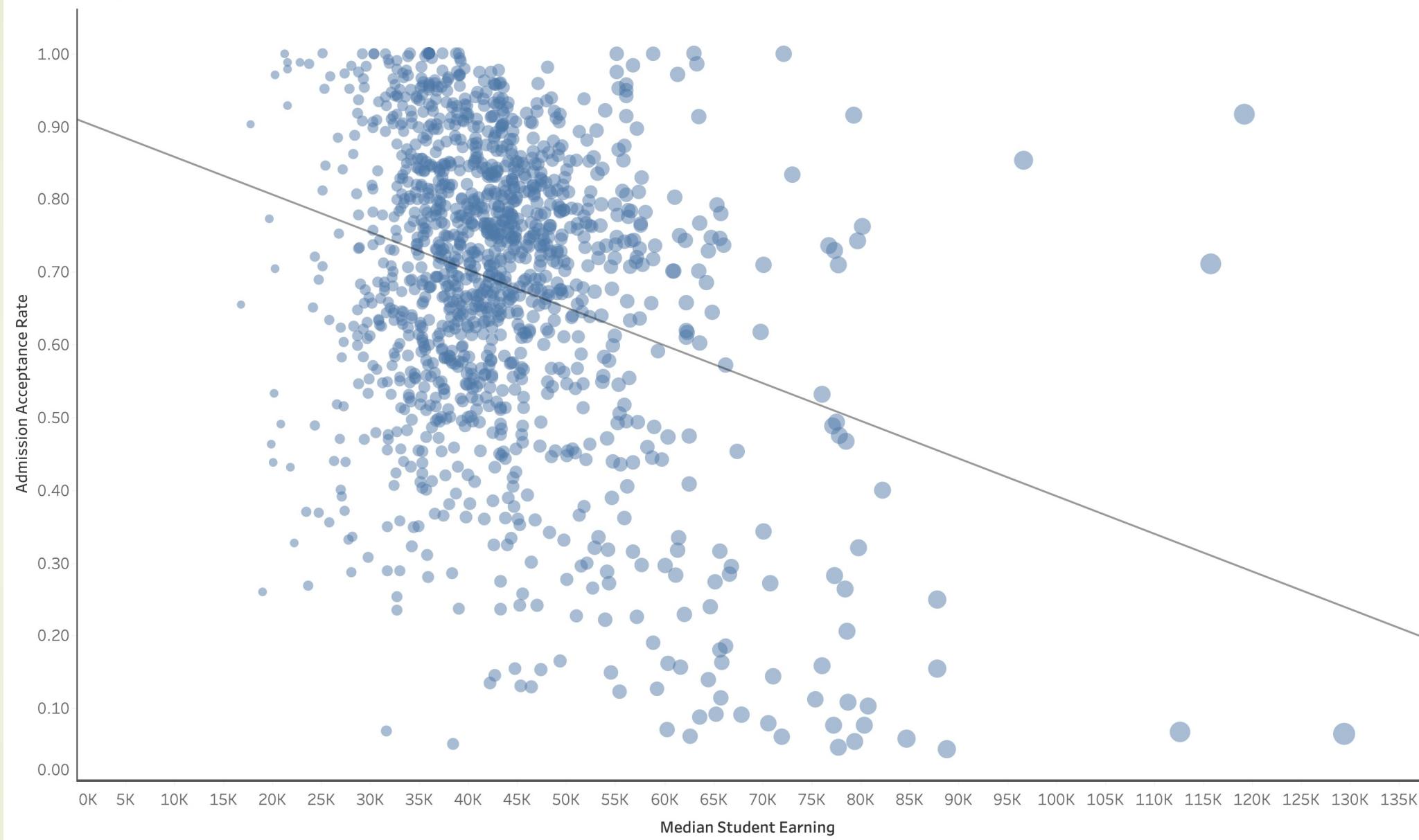


School Acceptance Standard by SAT

High SAT Score Admission Schools

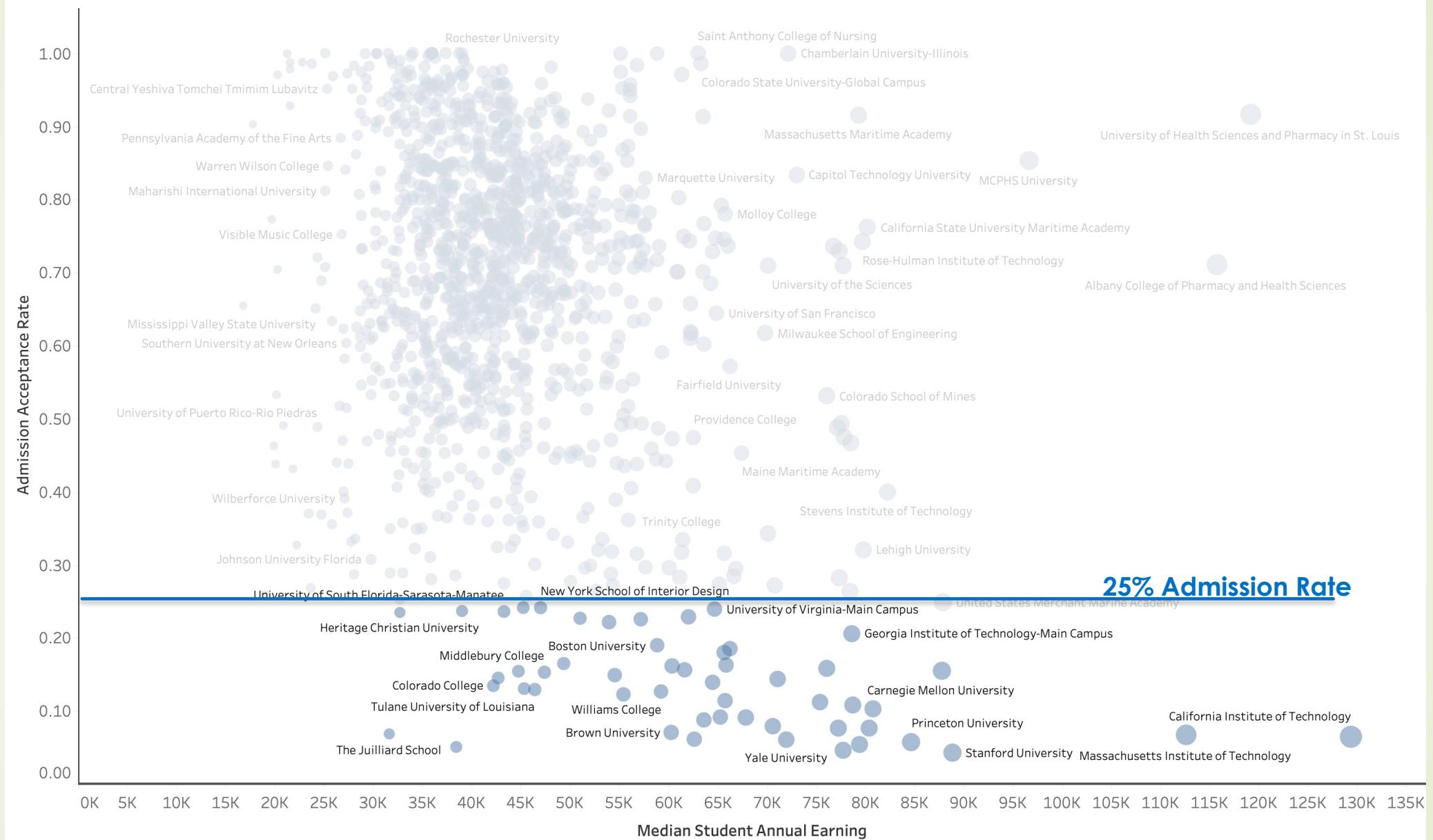


Admission by School Acceptance Rate



School Acceptance Standard By Admission Rate

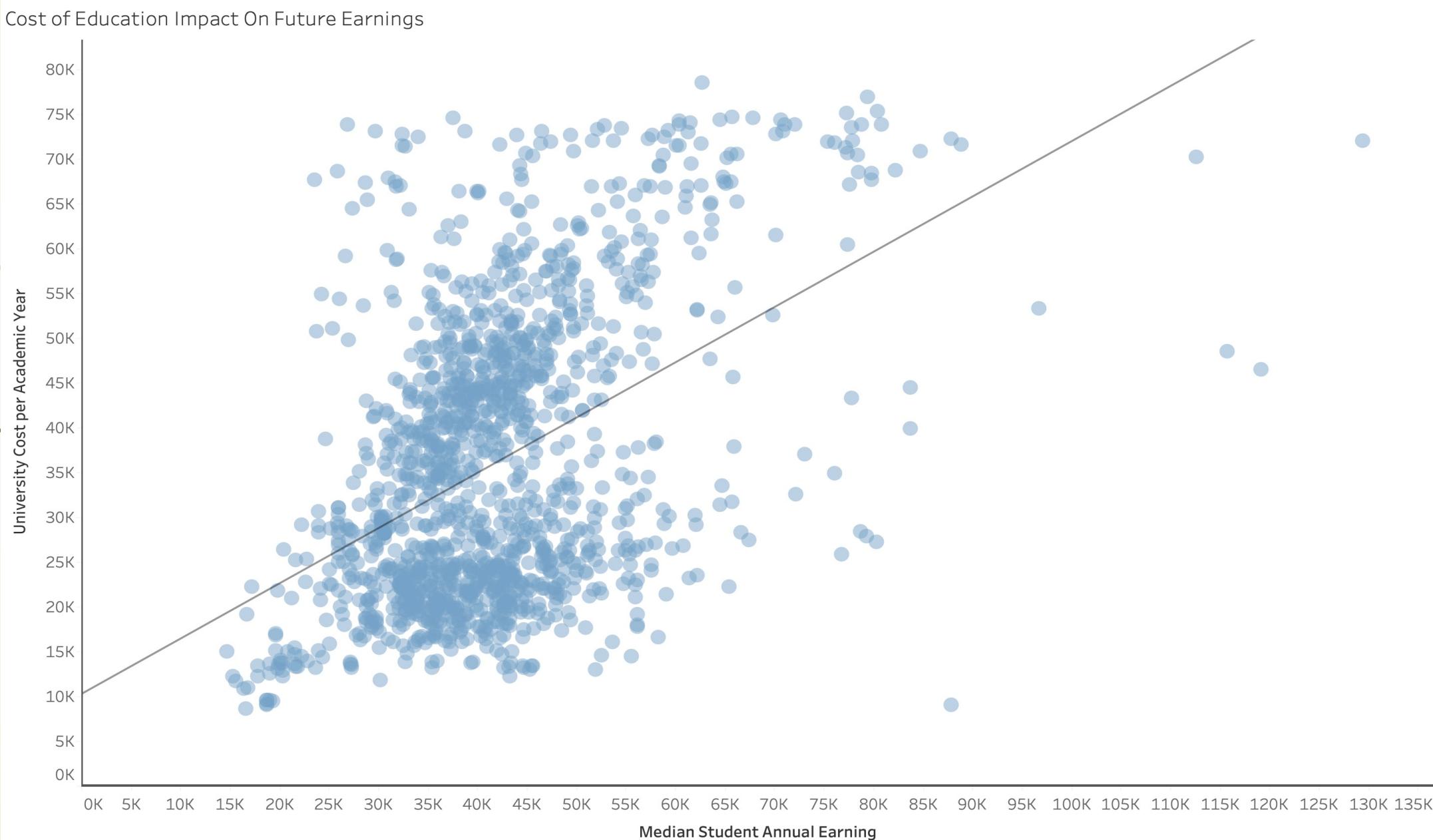
Top Admission Acceptance Rate Schools



25% Admission Rate

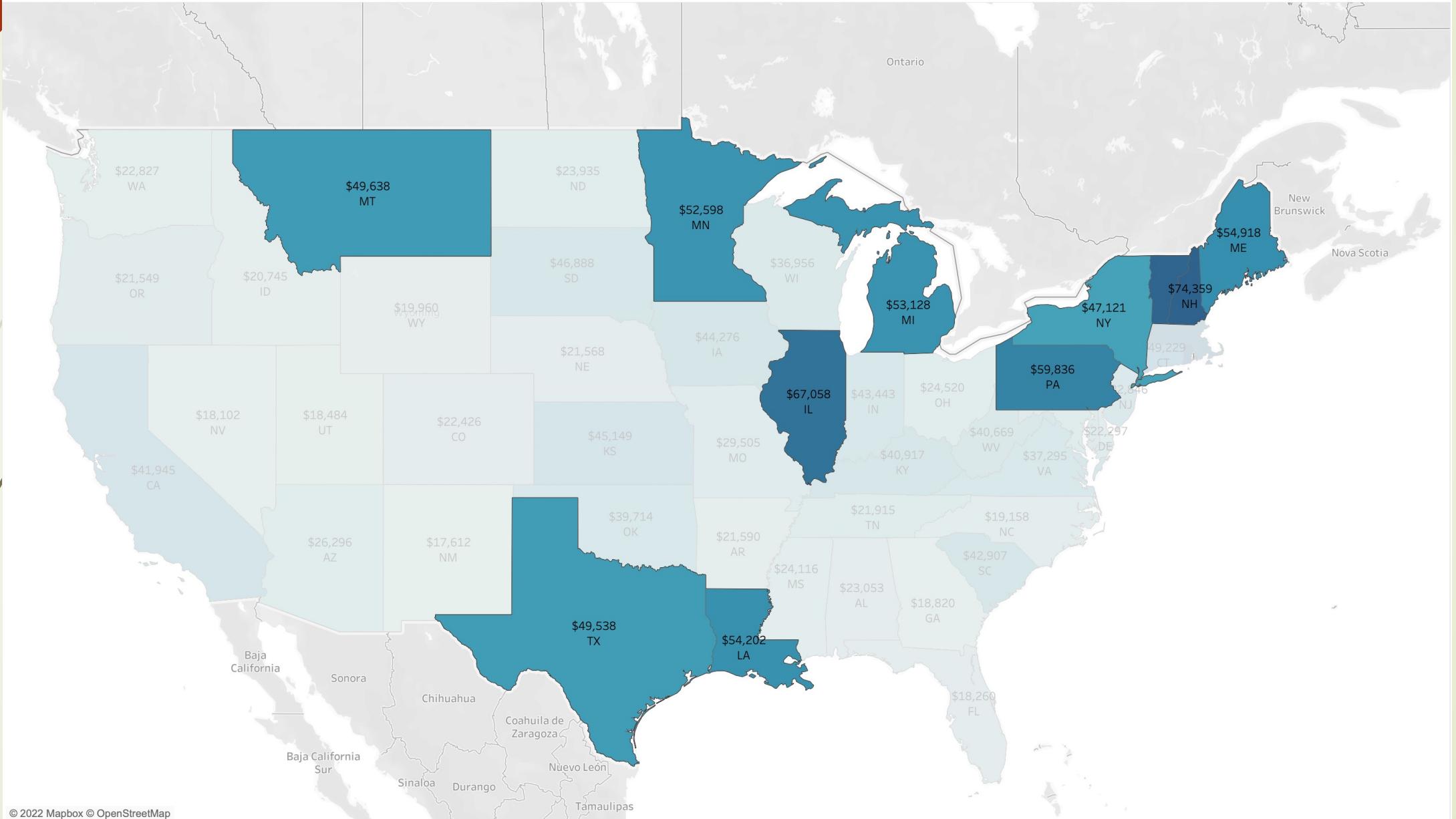
School Acceptance Standard By Admission Rate

Cost of School vs Earnings

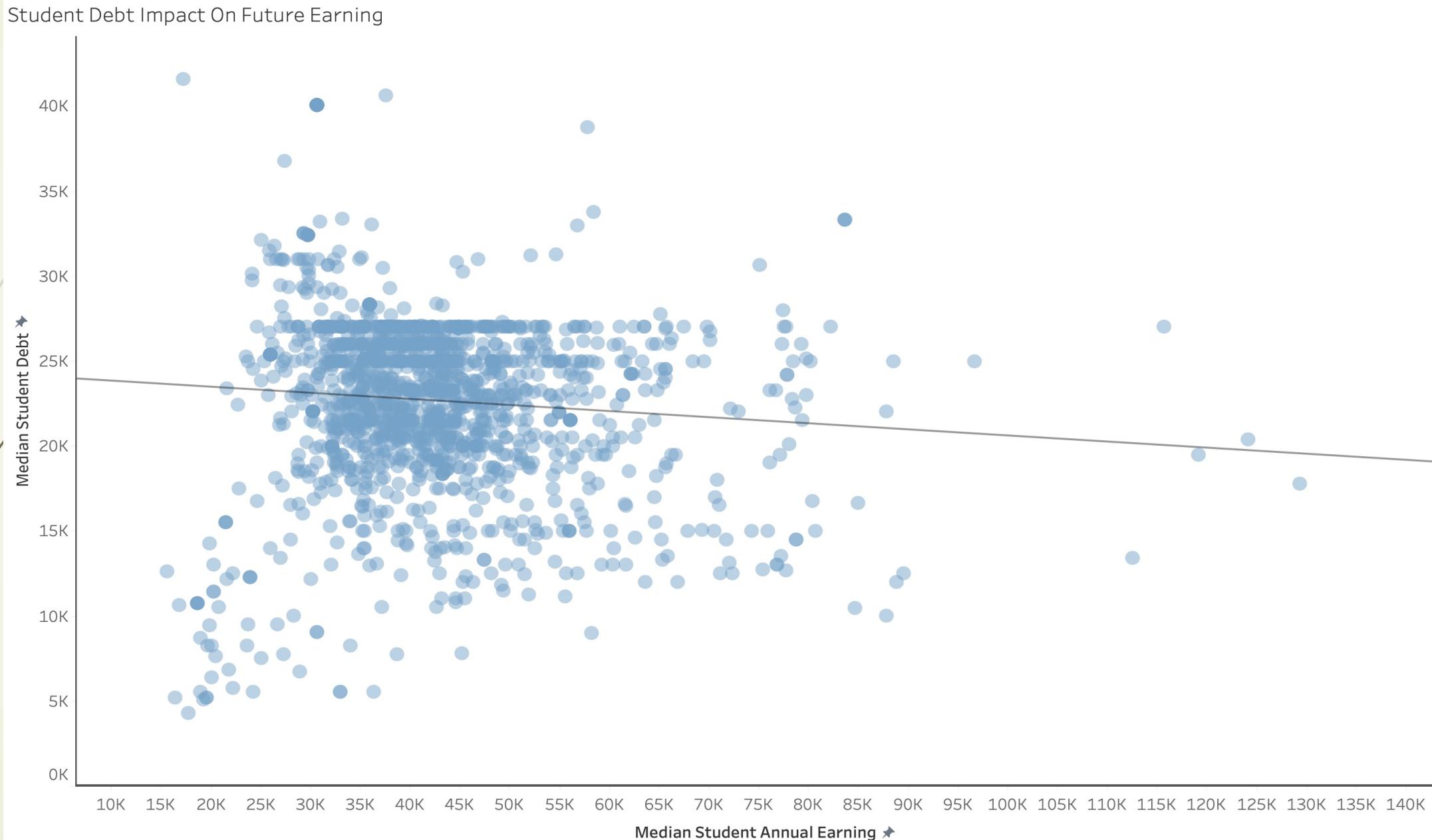


Cost of School

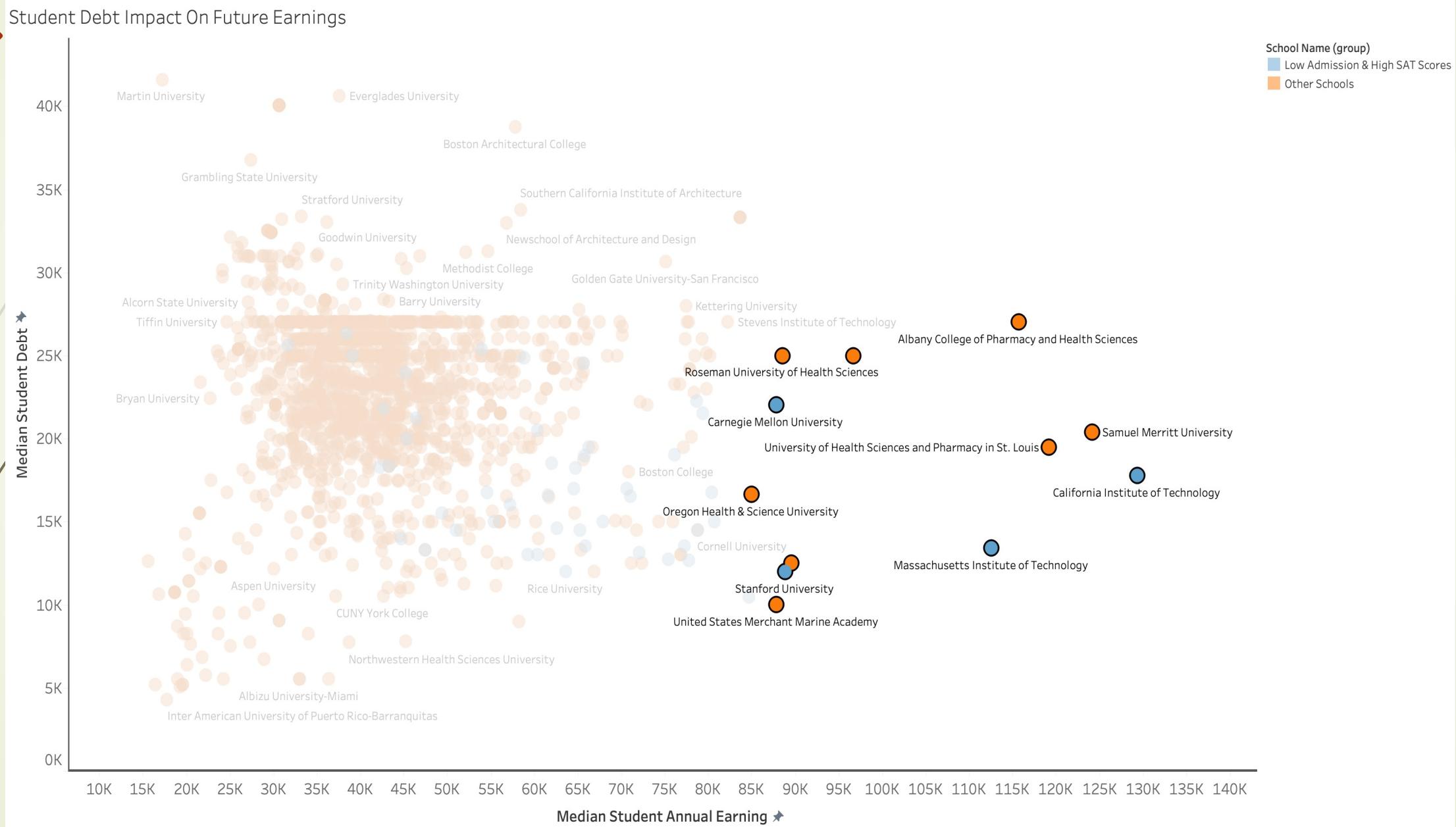
Education Cost by State



Student Debt vs Earnings

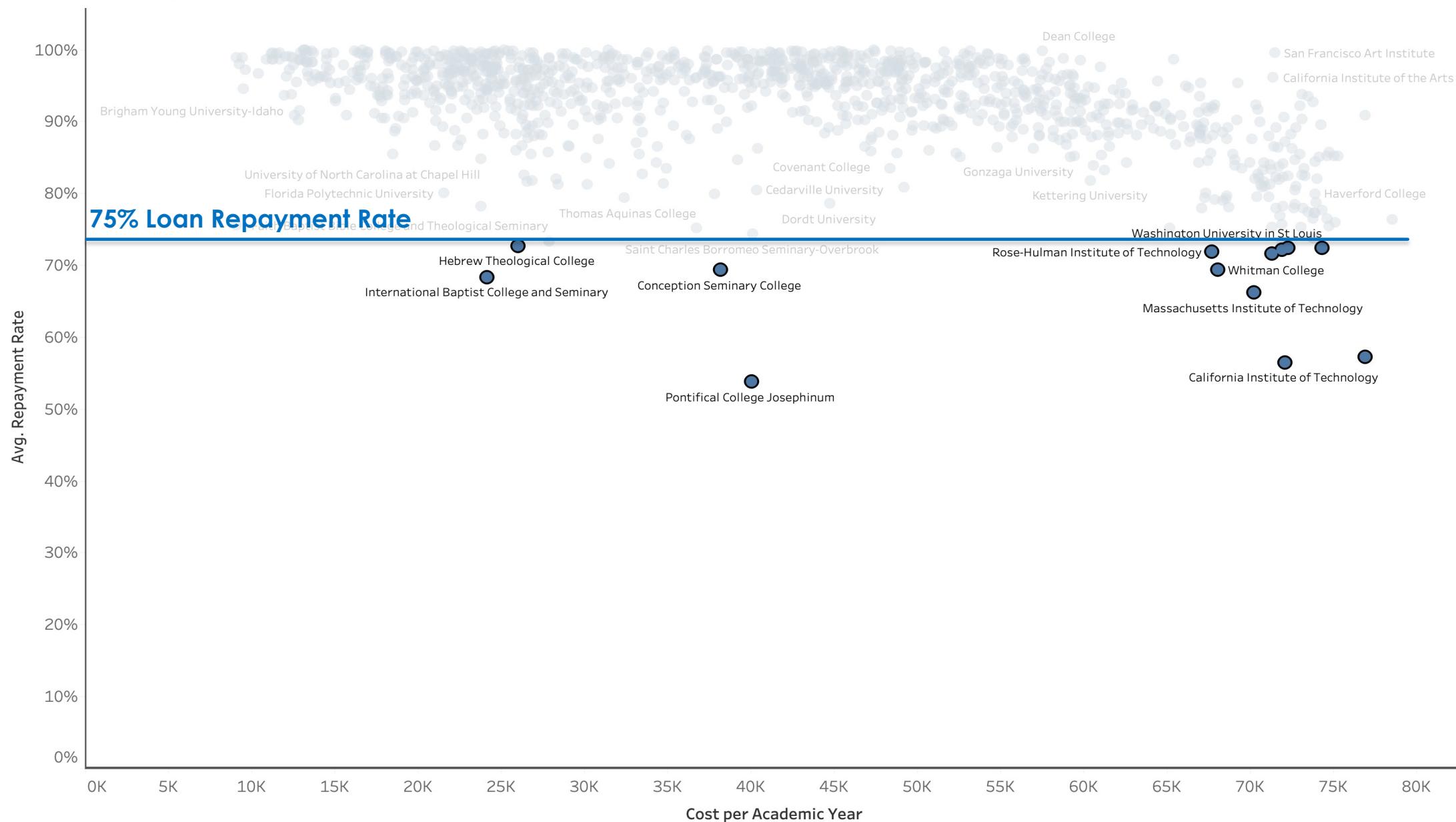


Student Debt vs Earnings



Debt Repayment

Cost vs Debt Repayment Rate



Conclusion

- ▶ Financial advantage to attending a more selective school rather than just looking at top schools with:
 - ▶ Low Admission
 - ▶ High SAT Scores