

## School Capital Expenditures, House Prices, and Student Outcomes

Closed to further applications

**Faculty Member:** [Barbara Biasi](#)

This project is eligible for remote work.

### Proposal Description:

This project studies the value of school facility investment for student achievement. Every year, school districts in the U.S. spend more than \$100 billion on maintaining, upgrading, and constructing school facilities, and yet millions of pupils study in facilities that are deemed inadequate for learning. Financing improvements of facilities requires passing voter-approved school bonds in most states, which authorize districts to raise funds to invest into better facilities. But researchers in economics disagree whether these bonds are an effective and efficient means to improve student outcomes.

We contribute to these questions by collecting data on school bonds and student outcomes for dozens of states. To understand which bonds have a high return, it is crucial to learn about what types of investments have been undertaken: for example, were the bond funds spent on new classrooms, computer labs, or sports facilities? To analyze how bonds are used, we seek an RA with a background in computer science, statistics, and/or economics with some familiarity with text analysis (Natural Language Processing) to develop a statistical model based on the texts accompanying bond proposals for voters to consider. Various machine learning techniques will be used to classify tens of thousands of bonds into a few categories. The RA will work closely with a team of professors and other RAs in related tasks.

### Requisite Skills and Qualifications:

The ideal candidate has some prior experience with Natural Language Processing tools, e.g. in Python.

**Award:** Leon Lufkin

**Tobin Application Link:** [Tobin Application](#)

**Project Type:** Tobin RA

**Project Year:** 2021

**Term:** Spring 2021

**Source URL:** <https://economics.yale.edu/undergraduate/tobin-ra/spring-2021/school-capital-expenditures-house-prices-and-student-outcomes>