

# Project Draft

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## Data & Source

The data used for this project come from the KIDS COUNT Study, which is conducted by the Annie E. Casey Foundation (<https://datacenter.kidscount.org/>). Data is collected at both the national level and the state level within the US. The KIDS COUNT project contains data related to a number of different aspects of child development and well-being, including education, health, risky behavior, and family/community relationships.

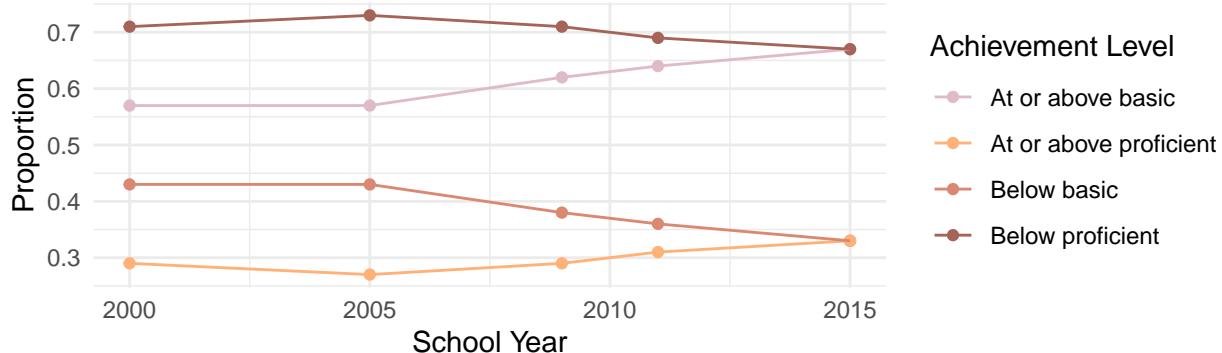
For the specific research questions I'm interested in looking at, achievement data are available for fourth and eighth graders. Data were collected every two years, from 2003-2022 (data were released in 2022 instead of 2021). Data are available per state, and nationally. Achievement data are represented using 4 categories (below basic, at or above basic, below proficient, at or above proficient). The proficient category builds on the basic category, so below basic and at or above basic add up to 100% of students, and below proficient and at or above proficient add up to 100% of students.

The data are available through a data portal, located at <https://datacenter.kidscount.org/>. The data are openly available, and don't require registration to be accessed.

## Research Questions

**Question 1** How has educational achievement in math and science changed over time?

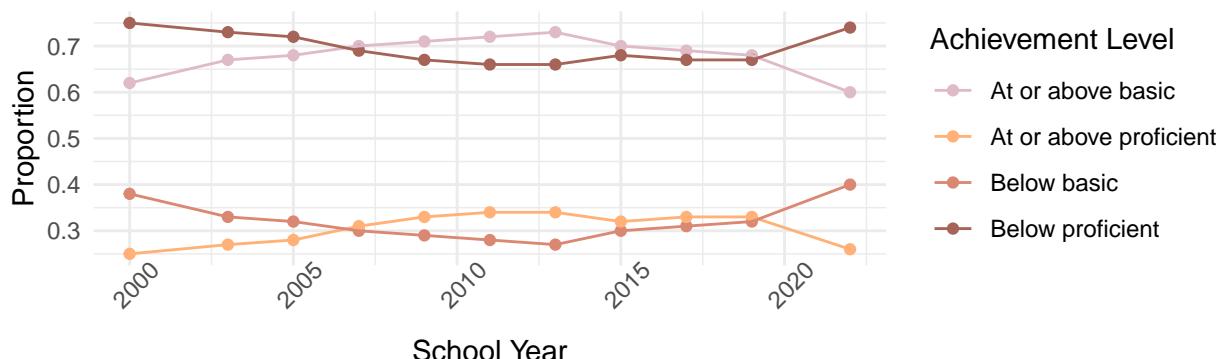
### Science Achievement (US average)



#### Achievement Level

- At or above basic
- At or above proficient
- Below basic
- Below proficient

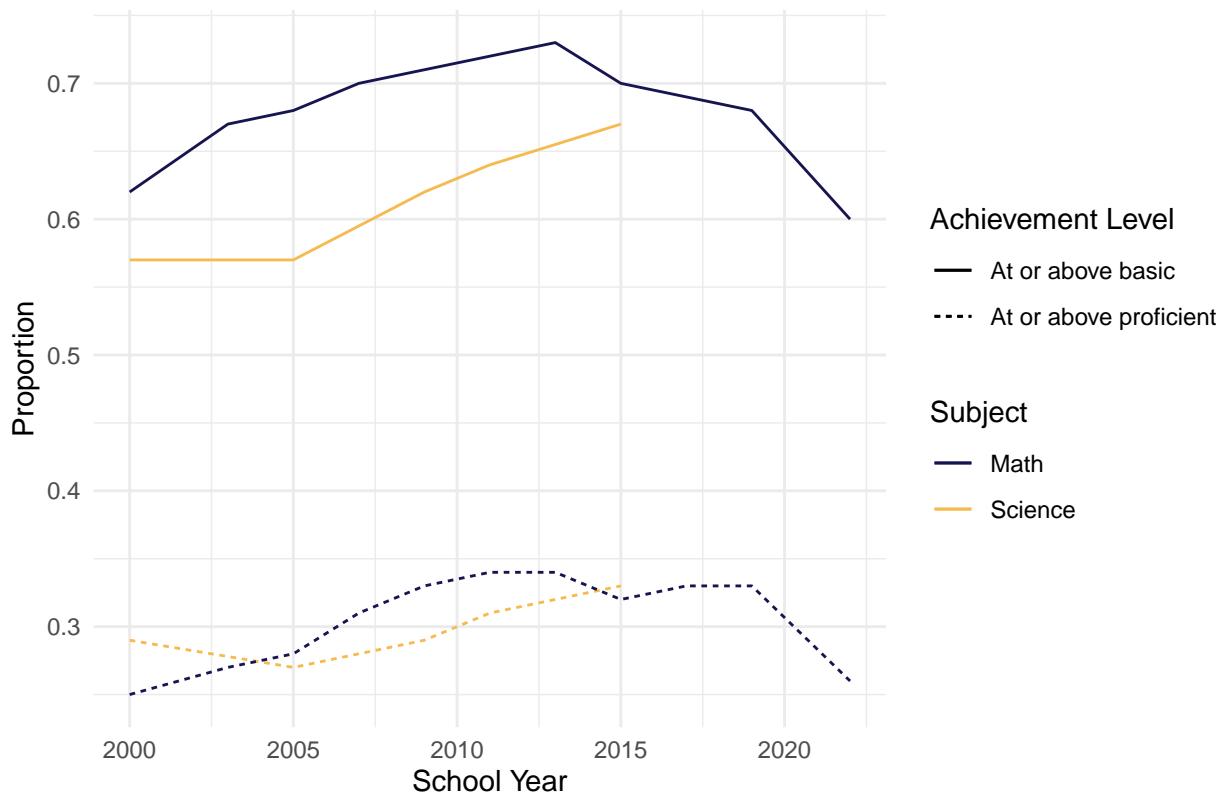
### Math Achievement (US average)



#### Achievement Level

- At or above basic
- At or above proficient
- Below basic
- Below proficient

### 8th Grade Science & Math Achievement (US average)



#### Achievement Level

- At or above basic
- At or above proficient

#### Subject

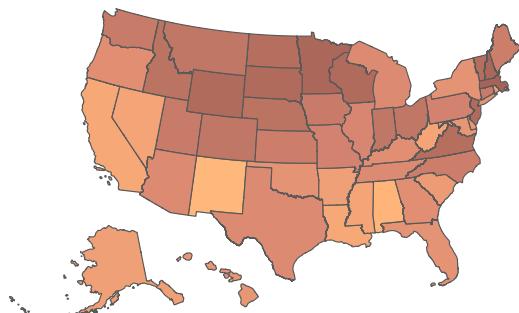
- Math
- Science

**Question 2** How does educational achievement in math and science differ across states?

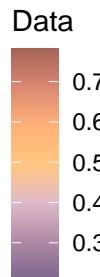
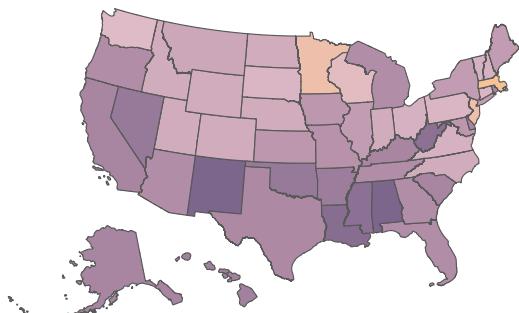
## |

### Math Achievement (2019)

At or above basic

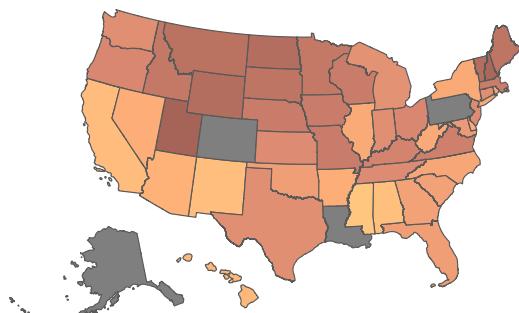


At or above proficient



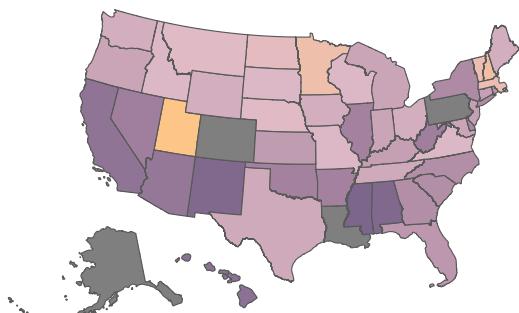
### Science Achievement (2015)

At or above basic



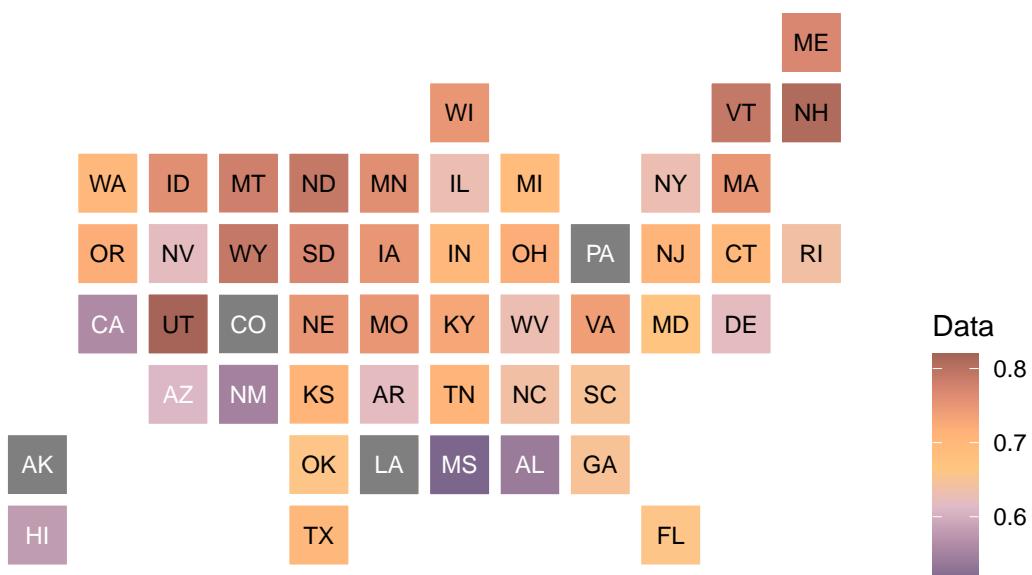
Data from most recent year available

At or above proficient

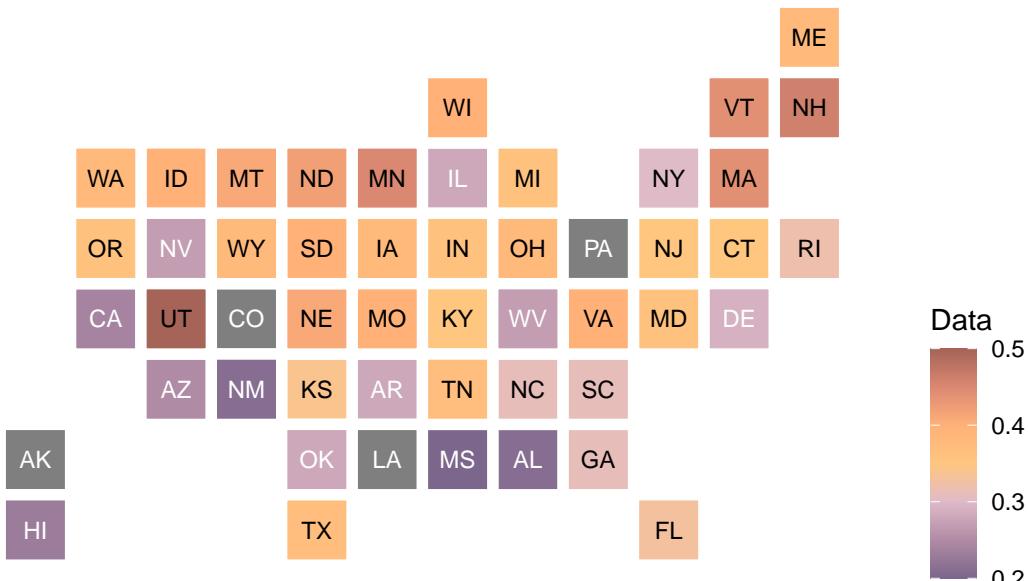


Data from most recent year available

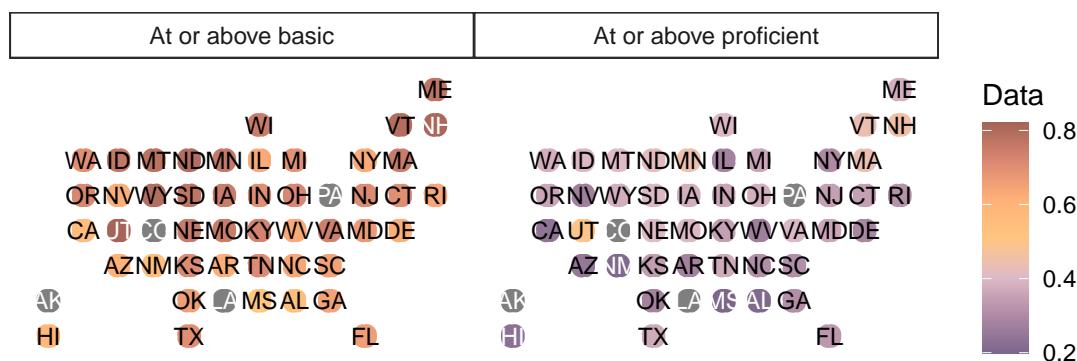
### Science Achievement, Basic (2019)



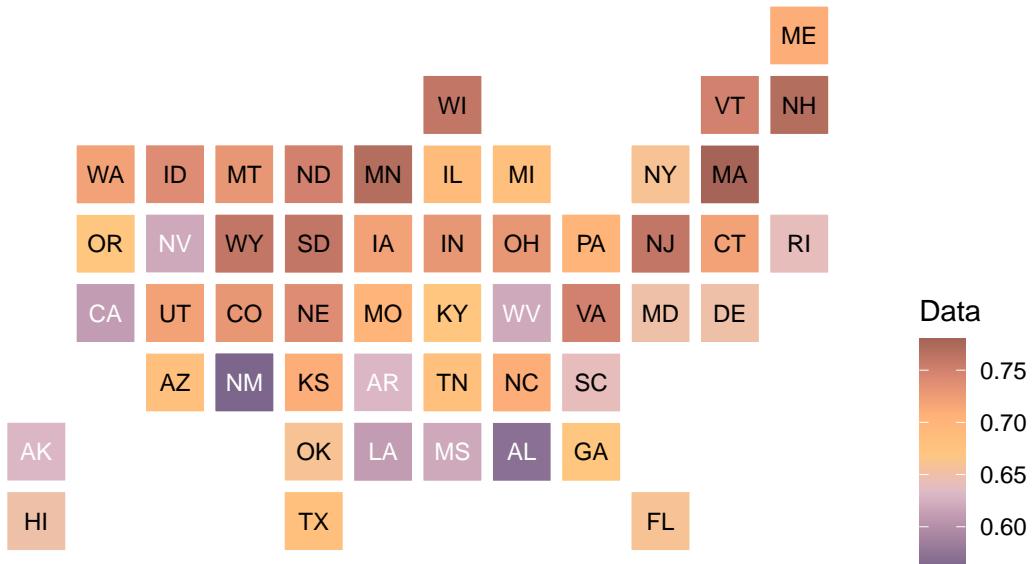
## Science Achievement, Proficient (2019)



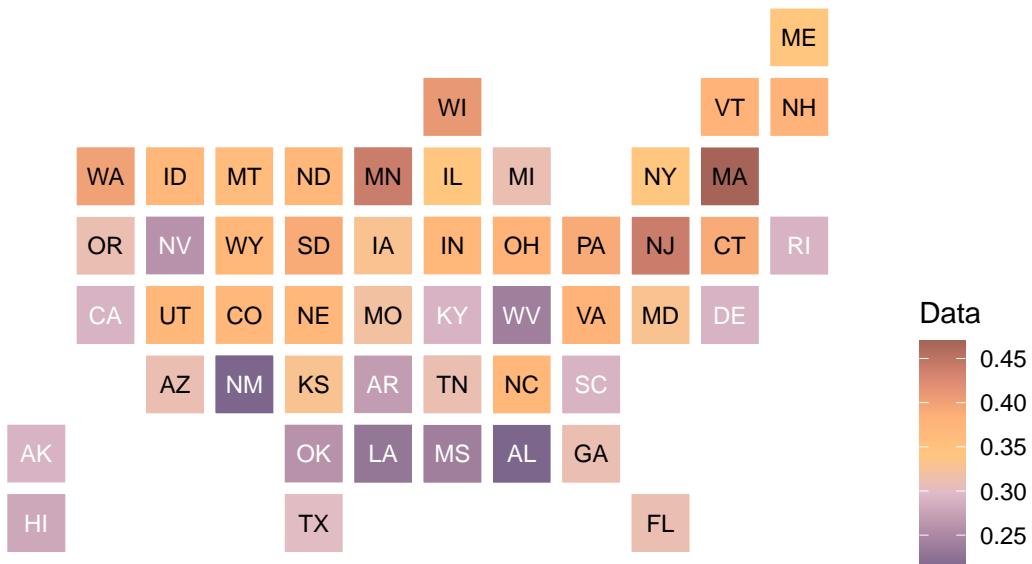
## Science Achievement (2015)



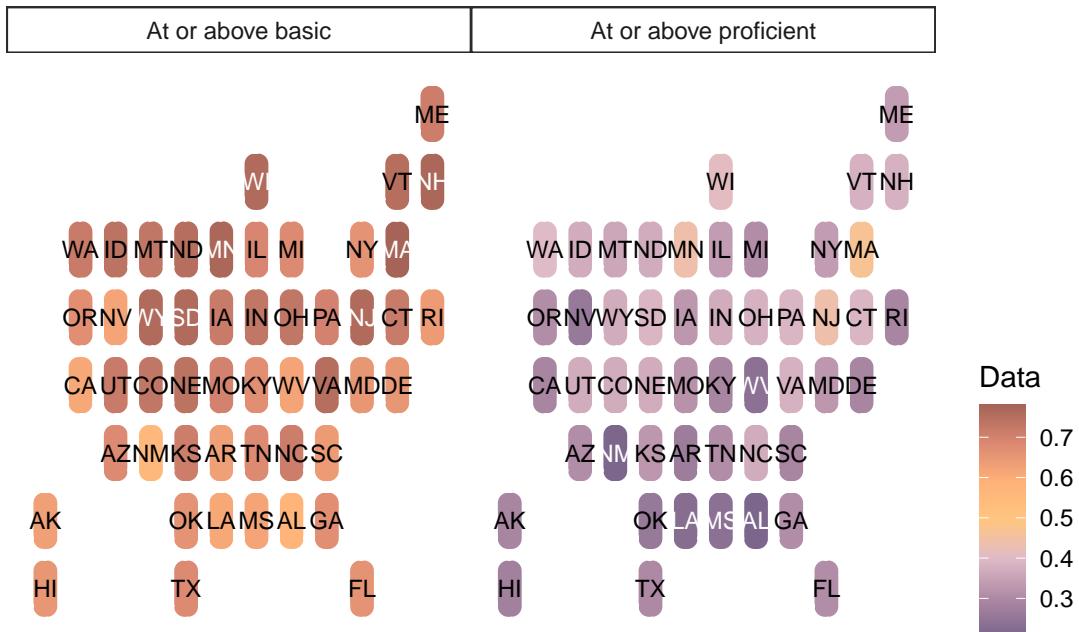
## Math Achievement, Basic (2019)



## Math Achievement, Proficient (2019)



## Math Achievement (2019)

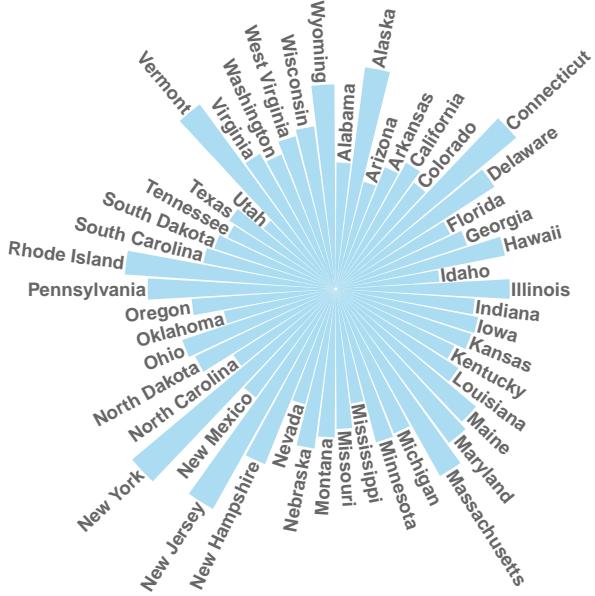


### Question 3

- How has funding for education changed over time?
- How does funding differ between states?
- How have changes in funding differed between states?

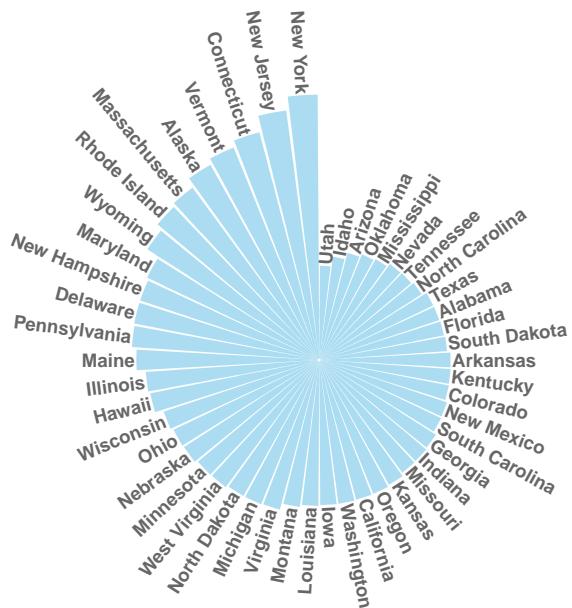
### Per-student expenditures

Averaged over 1999–2019

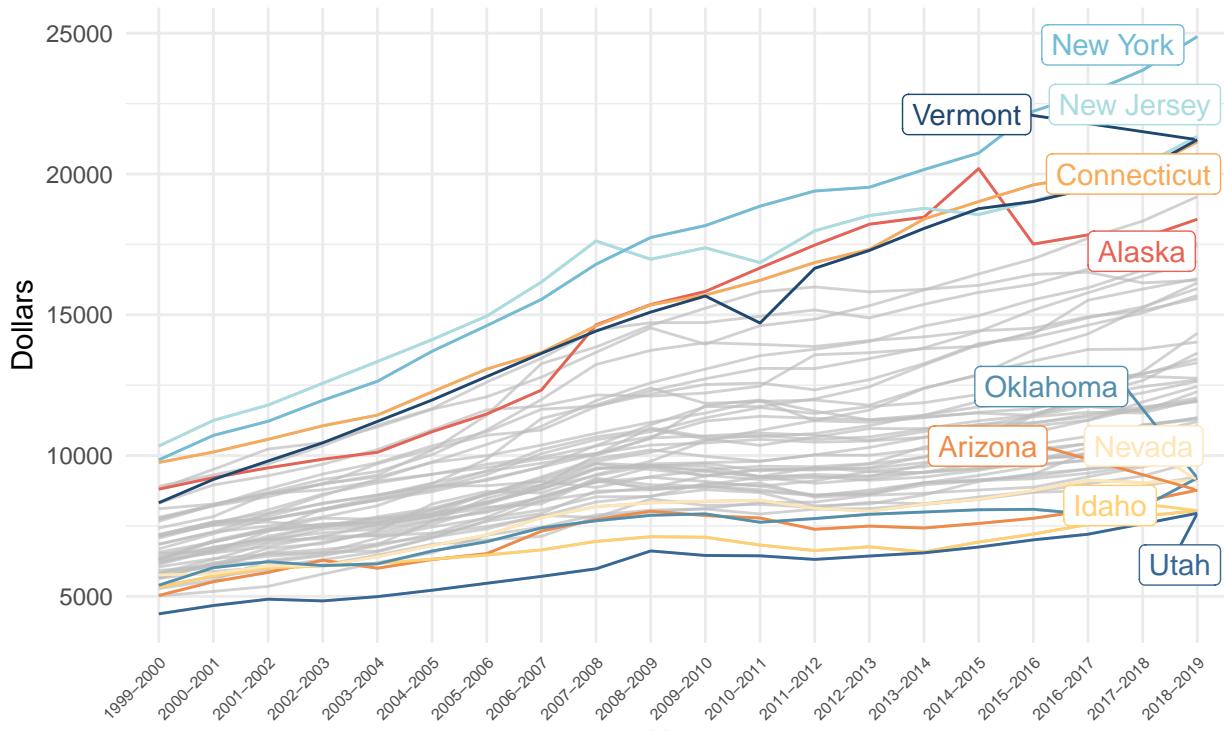


## Per-student expenditures

Averaged over 1999–2019



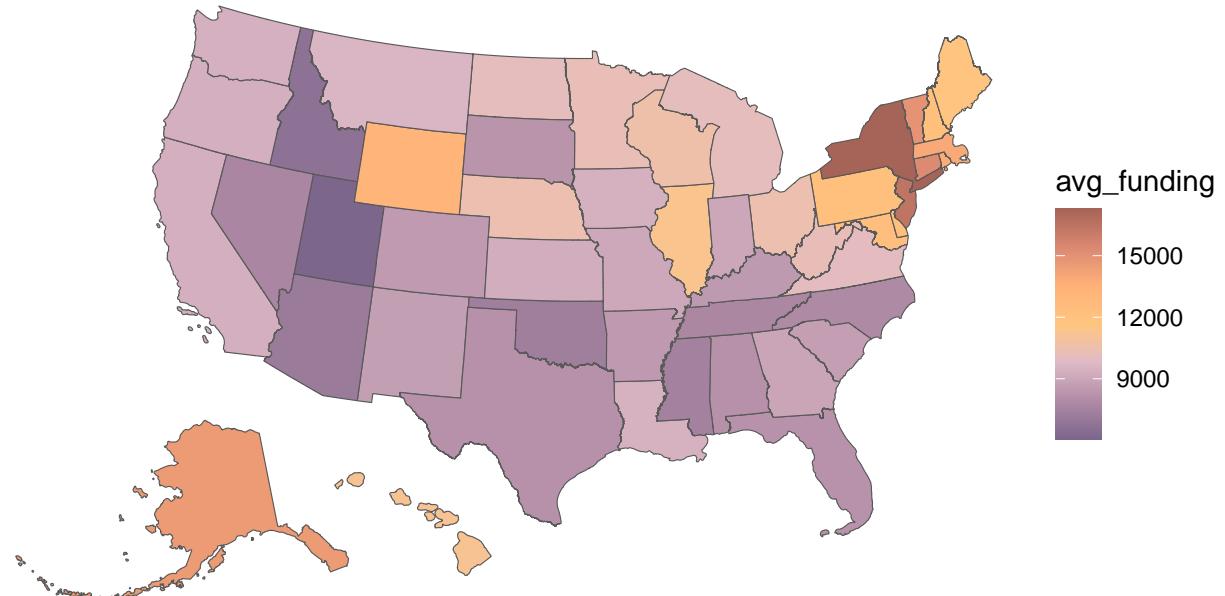
## Per-student spending (US average)



Not adjusted for inflation

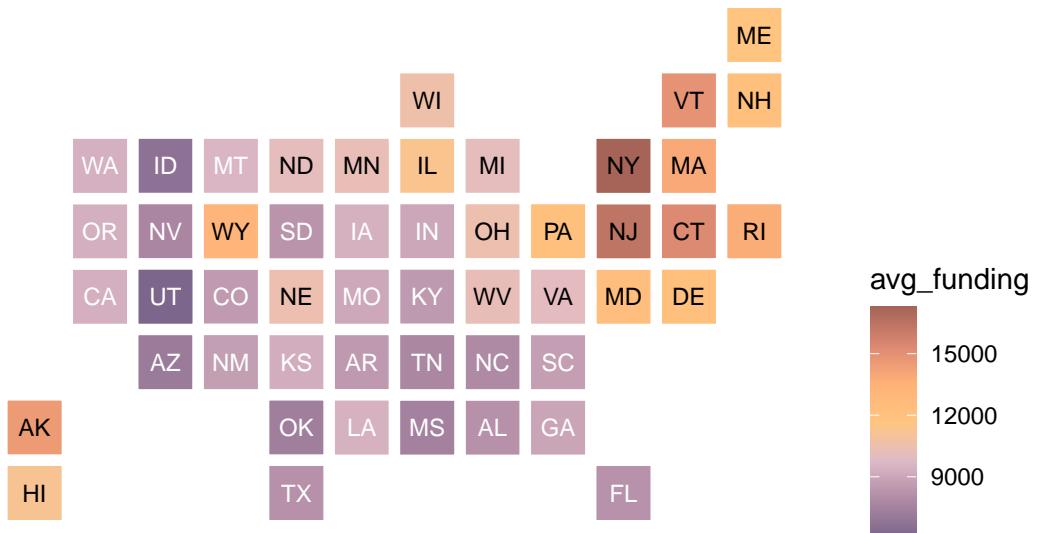
## Per-student expenditures

Averaged across 1999–2019



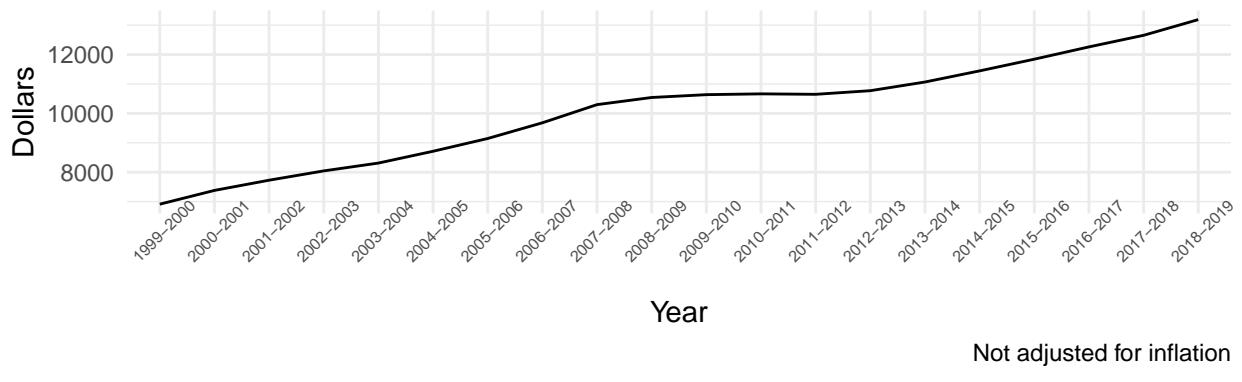
## Per-student expenditures

Averaged over 1999–2019



**Question 4** How does funding track with educational achievement in math and science?

### Per-student spending (US average)



### 8th Grade Science & Math Achievement (US average)

