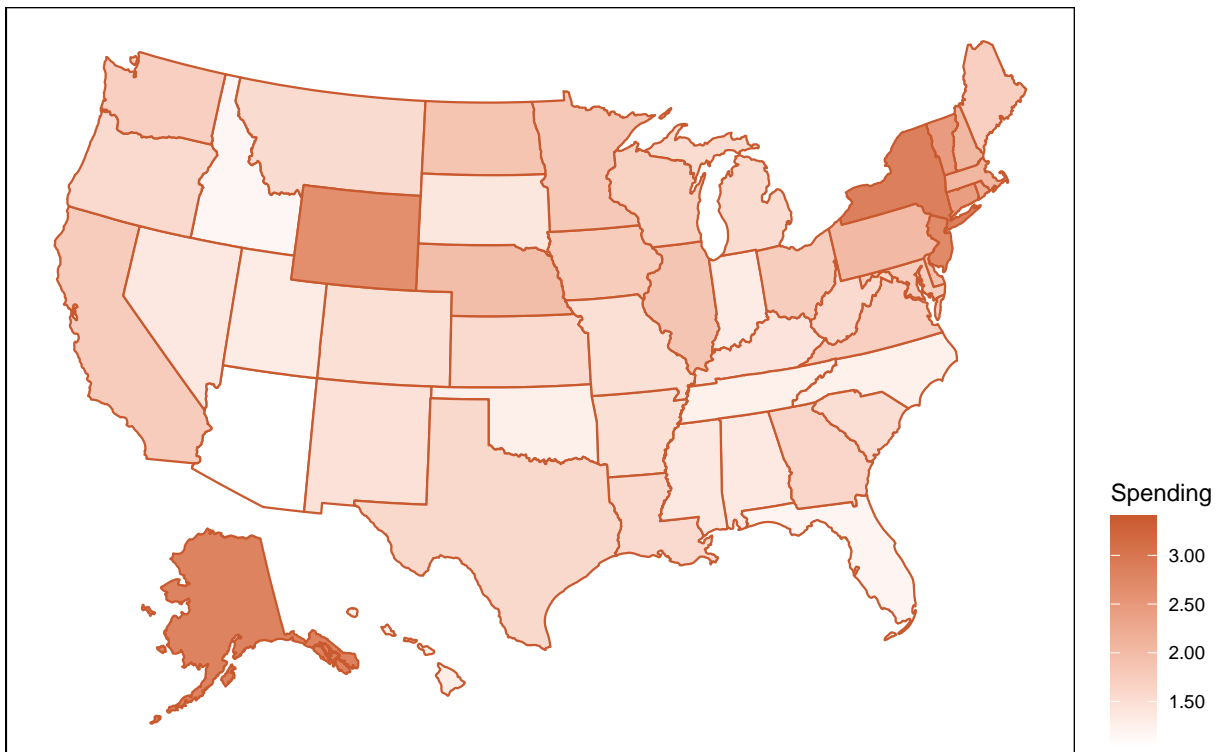# TDI Section 1: Project proposal

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For the TDI project, I'd like to propose an analysis of student educational outcomes. In recent sociological studies of economic stratification and intergenerational mobility, it has now been shown that the best predictor of success in life is education. Looking very briefly at how states allocate and spend on education (https://www.urban.org/), we see a large disparity between key regions. And not only does this have immediate repercussions, but this affects key metrics that measure quality of life over time, such as upward mobility.

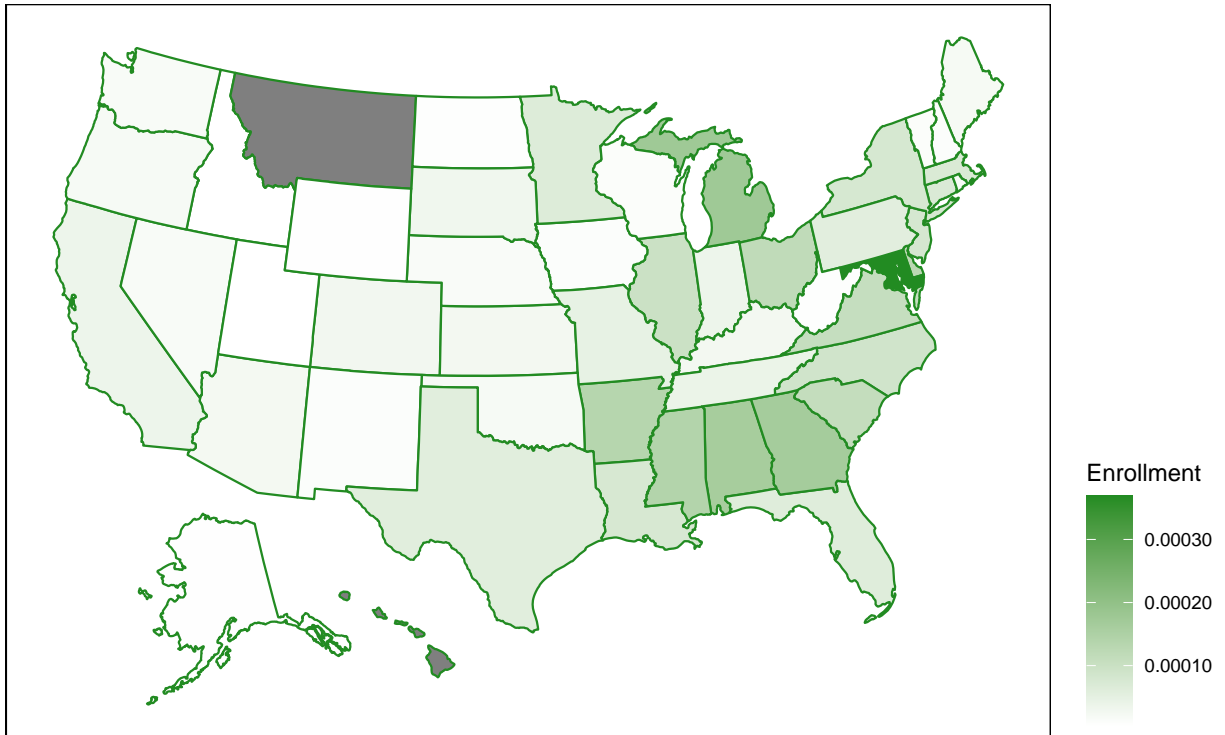## `summarise()` ungrouping output (override with `.groups` argument)

State spending on education per capita

Source: @ayalamars

Given these disparities, it's vital that efforts are allocated appropriately. Developing a live and publicly accessible web-app that visualizes these key disparities will be immediately beneficial to efforts in deploying additional services (such as independent contractors that supplement education, some SaaS companies come to mind), as well as increase efforts in those affected regions.

Using the publicly available Civil Rights Data Collection Datasets (https://www2.ed.gov/about/offices/list/ocr/data.html) we can for instance examine disparities in retention between demographic characteristics, such as race:

```
## Warning: NAs introduced by coercion
```

Hispanic or Latino Student retention

Or even target enrollment information for Calculus for underrepresented groups that can later be compared to the prevalence to the entire US population.

```
## Warning: NAs introduced by coercion
```

Enrollment in Calculus for Black Females

Source: @ayalamars

Together, these findings will help improve student outcomes by improving access to data so that the right services can be targeted to the right demographic, and ultimately improve graduation rates.