Lead contamination in drinking water in schools
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Abstract
Lead is a contaminant in drinking water that affects younger children the most, since lead negatively impacts children's growth, behavior and learning. The Washington State Department of Health initiated lead testing in drinking water at schools although not all schools were analyzed due to lack of funding. The goal of this project was to have the ability to predict which schools are likely to have high lead levels in their drinking water to better allocate water testing based on funding. I analyzed the lead results with Excel, and I used Tableau to visualize and communicate my results. Of the schools that were analyzed, several schools had a level of lead that was far below the safe level.

I. Design
The client is the state department of Health in need to identify schools at risk of lead contaminations

II. Data
- WA School Water Lead Test Data (school year 2018-2019)
- List of public schools in Washington state (county, city, and district information)

III. Algorithms
Thorough exploratory analysis, cleaning and data aggregation in Excel

IV. Tools
- Excel for exploratory analysis and data aggregation
- Tableau for visualization

V. Communication
- In addition to the slides and visuals presented, all information can be found on the following GitHub repo: https://github.com/lee-jin81/metis_project_3_business
- Tableau workbook can be found here: https://public.tableau.com/app/profile/jing4059/viz/Drinkingwaterinschools/Leaddashboard?publish=yes