1 **Region and Domain**
State the region and the domain category that your data sets are about.
Region: *New York State, USA.*
Domain: *Public Health, Youth Tobacco Rates.*

2 Research Question

To what extent is traditional cigarette smoking simply being replaced by e-cigarettes or vaping, and can we assert if a lack of legislation is involved with this trend?

3 Links
You must provide at least two links to publicly accessible datasets. These could be links to files such as CSV or Excel files, or links to websites which might have data in tabular form.
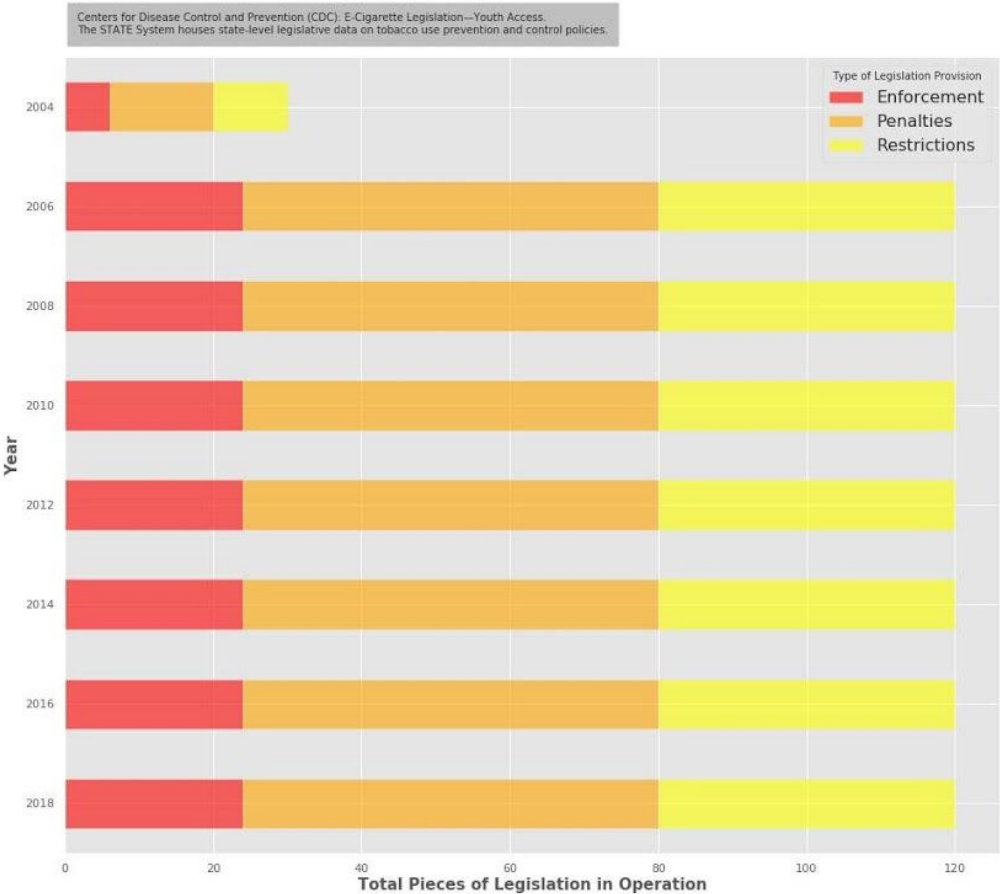
Dataset 1:
https://healthdata.gov/dataset/cdc-state-system-e-cigarette-legislation-youth-access

Dataset 2:
https://health.data.ny.gov/Health/Youth-Tobacco-Survey-Beginning-2000/pbq7-ddg9

4 Image

Context: NY State Youth E-Cigarette (Vaping) Legislation

Type of Legislation Provision
- Enforcement
- Penalties
- Restrictions

Year

2004	
2006	
2008	
2010	
2012	
2014	
2016	
2018	

0   20   40   60   80   100   120

Total Pieces of Legislation in Operation

Comparing Trends of Traditional Smoking and Vaping Among NY State School Students

0   1000   2000   3000   4000   5000   6000   7000   8000

Has Student Ever Smoked (traditional cigarettes)?
- No
- Yes

Year of Survey

2014	
2016	
2018	

No. of respondents

Has Student Ever "Vaped" (e-cigarettes)?
- No
- Yes

Year of Survey

2014	
2016	
2018	

No. of respondents

5 Discussion

This visualization was concerned with answering the question of whether tobacco usage among young people (middle- and high-school students) has changed over the last decade and if legislation is perhaps the issue, given the newness of the vaping market. Data for New York State was accessed from public (government-provided) Open Datasets, in both usage and legislation for the target group.

Although positive inroads have been made with traditional cigarette use reduction among youth in many areas worldwide, vaping or e-cigarette usage among young people is a significant public health concern. Legislation has been instrumental in adjusting prevalence of traditional cigarettes, which are a mature market.

Nicotine, which is found in e-cigarettes as it is in traditional cigarettes, is addictive which affects the brain long-term. Moreover, toxicity and health effects of e-cigarettes are still being researched as they are so new. Going further, there are research indications e-cigarette use among the young is linked to traditional cigarette use at later ages.

The first image plots the amount of legislation to set the context for the reported prevalence of tobacco use by respondents. The second plots show survey results, corrupted values among the survey data were removed to avoid ambiguity and survey responses were made more intuitive for the audience. A comparison of respondents' stated use of traditional cigarettes was plotted and compared with a plot of e-cigarette usage to help the reader identify any trends in prevalence.

We can see that legislation for sales of e-cigarettes to youth has remained static since before 2010, yet the rate of e-cigarette usage is rising steadily in recent years, even though the traditional cigarette usage among young people is in slight decline. This shows that e-cigarettes should be a priority for any legislation and more generally as a public health concern.