

New York State Dashboard: Uncover Insights That Matter



IST 737: Visual Analytic Dashboards

**Arunava Das, Atharva Gadiwan, Mansi Santosh Jagdale,
Mrunmai Prakash Musale, Md Jami Bin Mosharf Navid**

Project Description

"New York State: A land of promise or compromise? Let's uncover the story..."

Through this tableau project, we explore whether New York State lives up to its reputation as a land of opportunity or if compromises must be made. From energy and sustainability to public safety and economic opportunities, each dashboard tells a part of this story. The **Solar Energy Incentives** and **Energy Price Dashboards** shed light on the state's commitment to renewable energy and the affordability of energy costs. The **Hospital Dashboard** examines healthcare accessibility and affordability, while the **Crime** and **Hate Crime Dashboards** highlight safety concerns and regional crime patterns. Finally, the **Employment Insights Dashboard** reveals trends in job growth, regional opportunities, and educational requirements. Together, these dashboards provide a data-driven narrative to assess whether New York offers a life of promise or compromise.

Dataset Links

Solar Dataset:

<https://data.ny.gov/Energy-Environment/Solar-Electric-Programs-Reported-by-NYSERDA-Beginn/3x8r-34rs/data>

- Data Cleaning Notebook attached in the zip file

Energy Dataset:

https://data.ny.gov/Energy-Environment/Energy-Prices-Dollars-per-Million-Btu-Beginning-19/pzgr-wqm5/about_data

- Data Cleaning Notebook was not required

Hospital Dataset:

https://health.data.ny.gov/Health/Hospital-Inpatient-Discharges-SPARCS-De-Identified/5dtw-tffi/about_data

- Created on a subset of data of 40k rows as there were 21 million records
- Data Cleaning Notebook attached in the zip file

Crime Dataset:

https://data.ny.gov/Public-Safety/Index-Crimes-by-County-and-Agency-Beginning-1990/ca8h-8gjq/about_data

- Data Cleaning Notebook attached in the zip file

Hate Crime Dataset:

https://data.ny.gov/Public-Safety/Hate-Crimes-by-County-and-Bias-Type-Beginning-2010/6xda-q7ev/about_data

- Data Cleaning was not required

Employment Dataset:

<https://dol.ny.gov/employment-projections> (On this page there is [Regional projections](#) cover the 2020-2030 time period) This Regional Projection is the dataset used.

Dashboard Visualization Insights:

Solar Energy Incentives Dashboard:

This dashboard showcases New York State's commitment to renewable energy through its solar energy incentive programs. It provides a detailed view of completed and pipeline solar electric projects, expected energy production, and the financial impact of these initiatives, including total project costs and incentives paid.

Energy Prices Dashboard:

Focused on the economic aspect of energy consumption, this dashboard analyzes historical and inflation-adjusted energy prices for different fuel types (electricity, propane, coal, and natural gas) across residential, commercial, industrial, and transportation sectors. Viewers can explore how energy prices have fluctuated over time and their correlation with economic factors like inflation.

Hospital Dashboard:

The hospital dashboard delves into healthcare costs and accessibility in New York State. It provides insights into mean hospital charges, average length of stays, and variations by age, gender, and ethnicity. Visualizations of hospital distributions by county and admission types offer a regional perspective on healthcare facilities and services.

Crime Dashboard:

This dashboard provides a comprehensive overview of crime statistics in New York State, covering both violent and property crimes. It visualizes crime trends, geographic distribution, and county-level statistics, such as burglary, robbery, and aggravated assault incidents.

Hate Crime Dashboard:

This dashboard highlights offenses committed based on biases related to race, religion, gender, sexual orientation, and other factors. It provides a year-by-year analysis of hate crimes against individuals and property, showing trends by type and bias motivation.

Employment Insights Dashboard:

This dashboard examines the state's labor market, offering insights into future job openings, net changes in employment, and educational requirements for various occupations. It provides regional comparisons, showing which areas and sectors have the highest job growth. Additionally, viewers can explore trends in employment by sector and analyze the educational qualifications needed for different roles.

Key Stakeholders:

1. Policy Makers and Government Agencies: To assess the effectiveness of policies, improve energy and crime control strategies, and forecast job market trends.

2. Businesses and Investors: To evaluate economic opportunities, understand energy costs, and identify areas for investment.

3.Residents and Potential Movers: To decide on living in New York State based on safety, healthcare costs, and employment prospects.

4.Researchers and Analysts: To study trends in energy, healthcare, crime, and employment for academic and professional research.

5.Non-Governmental Organizations (NGOs): To advocate for initiatives related to renewable energy, public safety, and equitable job opportunities.

6.Educational Institutions: To use the data for academic purposes, such as teaching and policy simulations.

Tableau Public Link:

<https://public.tableau.com/app/profile/arunavadas005/viz/NewYorkStateInsightsDashboard/HomePage>