**Traffic Violations Analysis & Visualization With Python**

# The objective of the analysis

The object of this analysis is to study the most common behaviors of people who violate traffic rules by answering the following questions:

1- What are the months with the highest violations?  
2- What time do violations occur the most?  
3- What is the most popular violation?  
4- What is the most popular outcome of the violation?  
5- What is the percentage of violators who get arrested?  
6- Which gender commits the most speeding violations?  
7- Which age group is more likely to commit a violation?  
8- What is the most frequent stop duration?

## **About Dataset**

This dataset we found online on Kaggle, the dataset has violations that were recorded by the police. The dataset comes with 65,535 rows and 15 columns including violations’ date, time, and type. Violators’ age, race, gender, etc…

DATASET: <https://drive.google.com/file/d/1N9QXw1PMCr4AFj18hCuEAOgAg0jn9oJF/view?usp=drive_link>

CODE LINK: <https://colab.research.google.com/drive/1OpuPKMojMR7G89r-3kkp4nM6OExhDvHn?usp=sharing>

# Conclusion

As a conclusion of our analysis, we can extract the following:

* **January has the most violations, followed by November and October. Might be related to the weather(further investigation is needed).**
* **Most violations occur between 8 AM and 11 AM, which is when most people start their working hours.**
* **Speeding violations are the most common of all other violation types.**
* **Most violation outcomes end with a Citation.**
* **3.7% of total violators end up getting arrested.**
* **Males occupy most of the speeding violations with 68.6% while females occupy 31.4%.**
* **Violations are most common among people between the ages of 20 and 30.**
* **Most of the people who stop due to violations don’t take longer than 15 minutes although some people may exceed.**