



Increasing Transit Ridership and Reducing Carbon Emissions with Automated Bus Lane and Bus Stop Enforcement

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About Hayden AI

- Global leader in vision AI and spatial analytics
- U.S. market leader in mobile automated bus lane and bus stop enforcement
- Privacy-first design
- Named one of America's Top Green Tech Companies in 2024
- 2023 Urban Tech Challenge Winner





Problem



A photograph of a city street during the day. A line of cars is stopped in a bus lane, which is marked with a large white 'B' on the pavement. The cars are in a queue, and the lane is blocked. The background shows a city street with buildings, a sidewalk with bollards, and a bus stop sign. The text 'Blocked bus lanes and bus stops impact riders everyday.' is overlaid on the left side of the image in a large, white, sans-serif font.

**Blocked bus lanes
and bus stops
impact riders
everyday.**

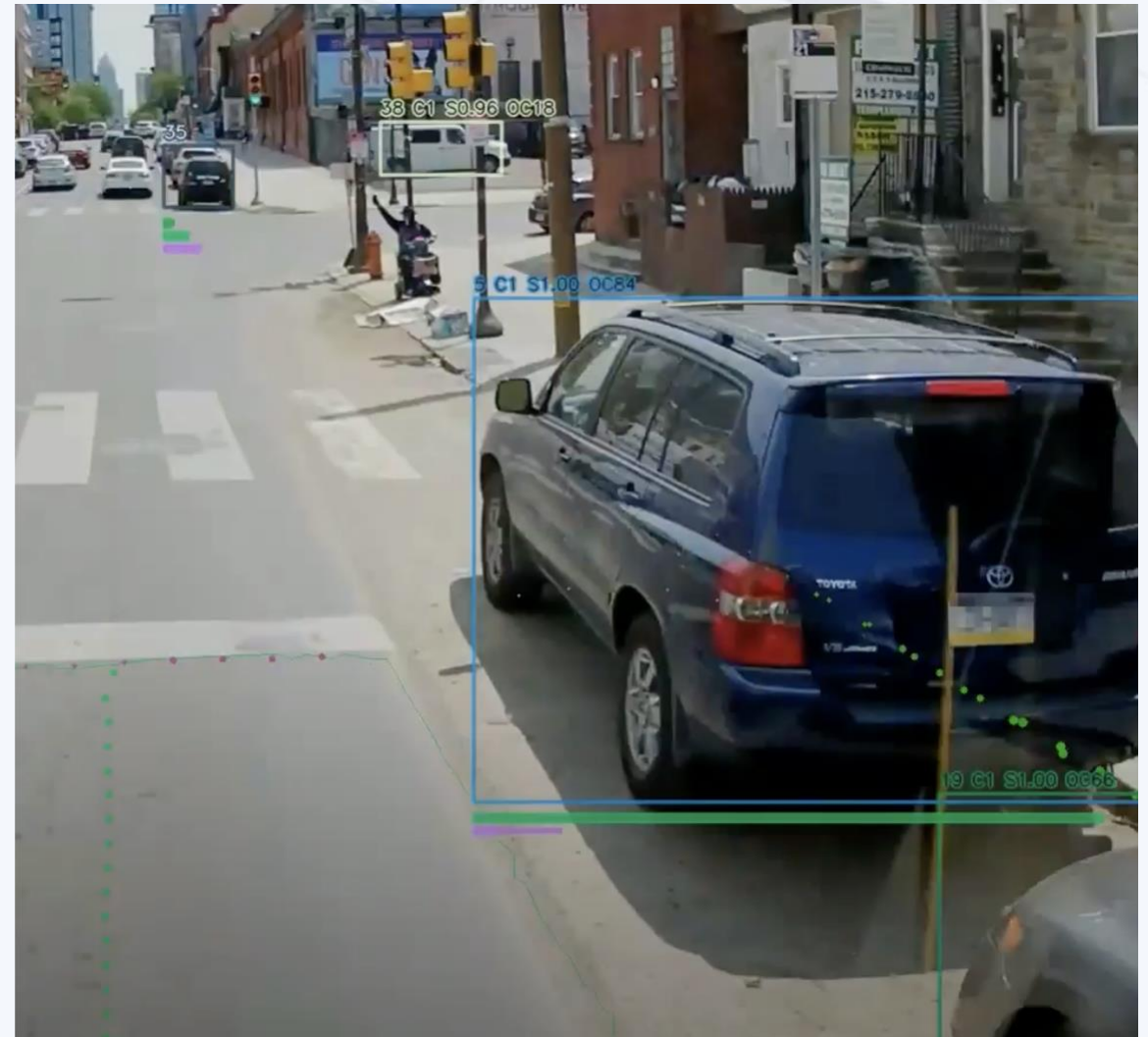
Blocked Bus Lanes Lead to...

- **Slow and unreliable bus service for riders**
- **Safety issues for all road users**
- **Increased greenhouse gas emissions**



Blocked Bus Stops Lead to...

- Dangerous boarding and exiting for riders
- Dangerous and often impossible boarding and exiting for people with disabilities

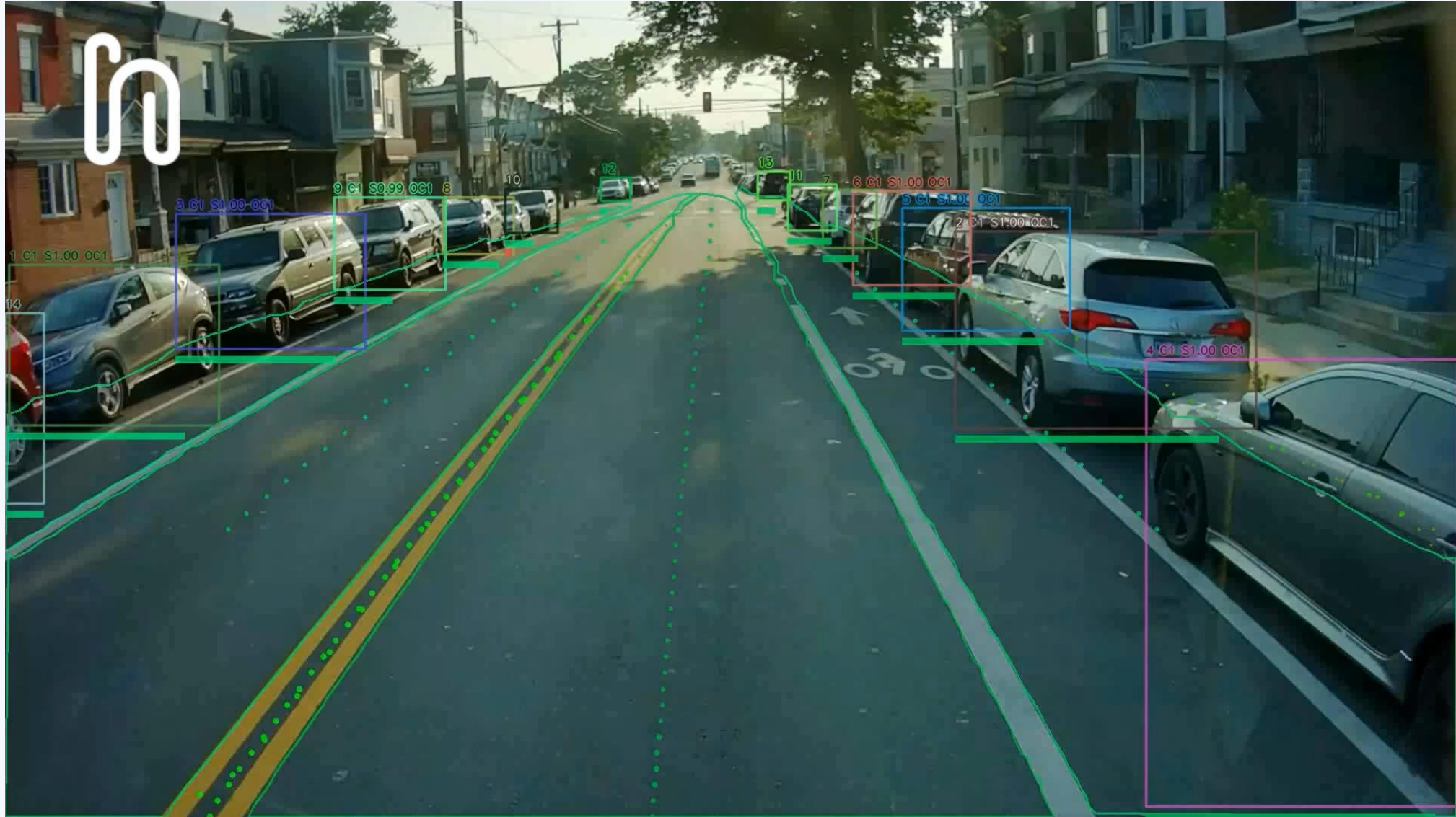




Solution



The Solution: Automated Transit Zone Enforcement



Ability to Detect Multiple Types of Violations



Bike Lane



Double Parking

Automated Enforcement Reduces GHG Emissions

ANNUAL SAVINGS WITH HAYDEN AI TECHNOLOGY ON 100 VEHICLES

65

metric tons of CO₂ emissions/year

(388,235 gallons of diesel fuel annually)

EQUIVALENCE



766

homes' electricity use for
one year



4.4M

pounds of coal burned



480M

smartphones charged



10M

miles driven by an
average gasoline-
powered passenger
vehicle

Hayden AI's mobile perception platform helps transit agencies:

- Speed up transit
- Increase ridership
- Improve transportation access for people with disabilities
- Improve road safety
- Create a more sustainable future



How Our Technology Works

- AI-based system mounted on inside of bus windshield
- Detects parking and moving violations that obstruct public transport and bike lanes
- Objects, not people: Only detects and documents vehicles in violation
- Capability to automatically blur faces and license plates

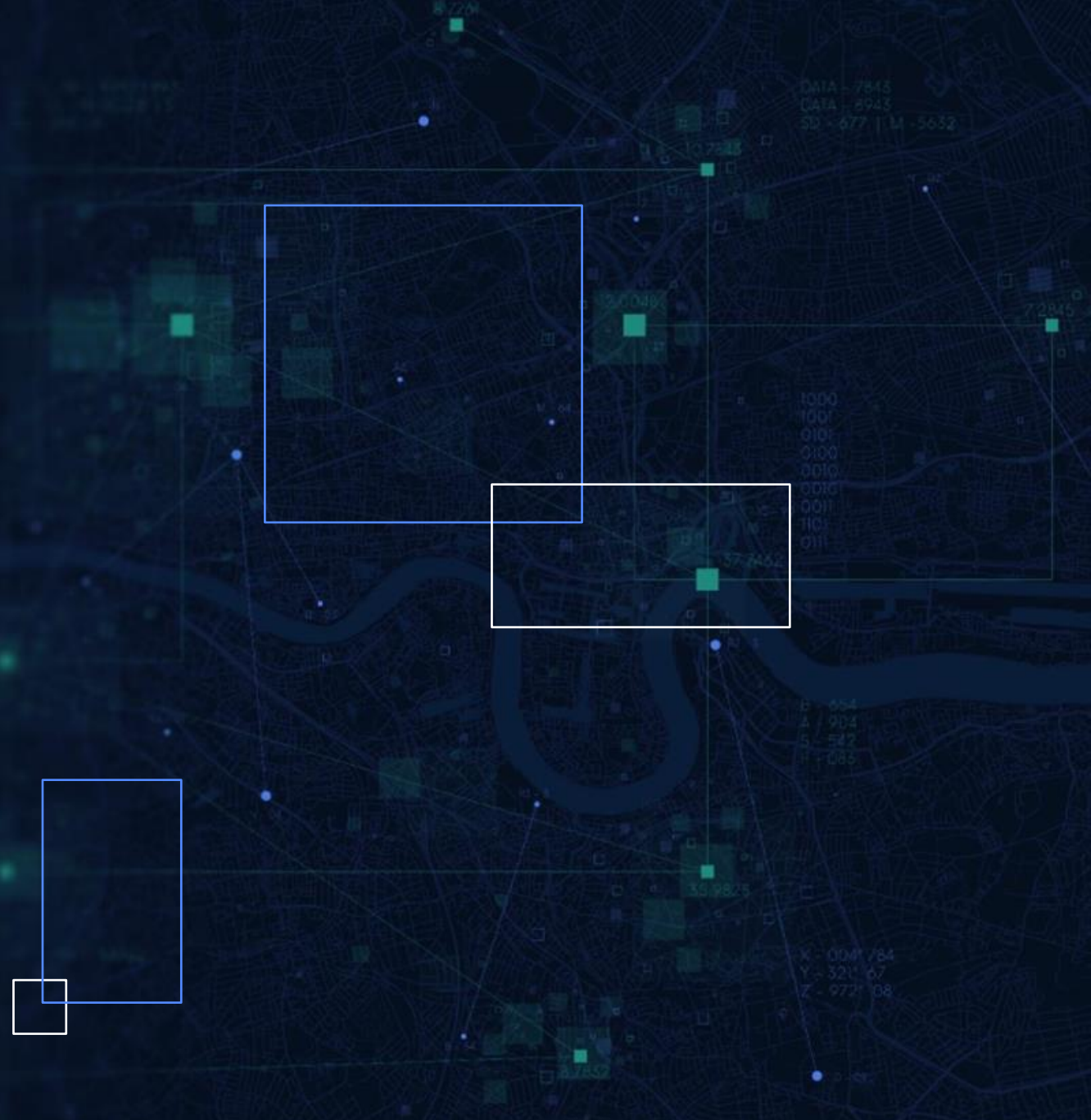


Automated bus lane enforcement delivers results in New York City

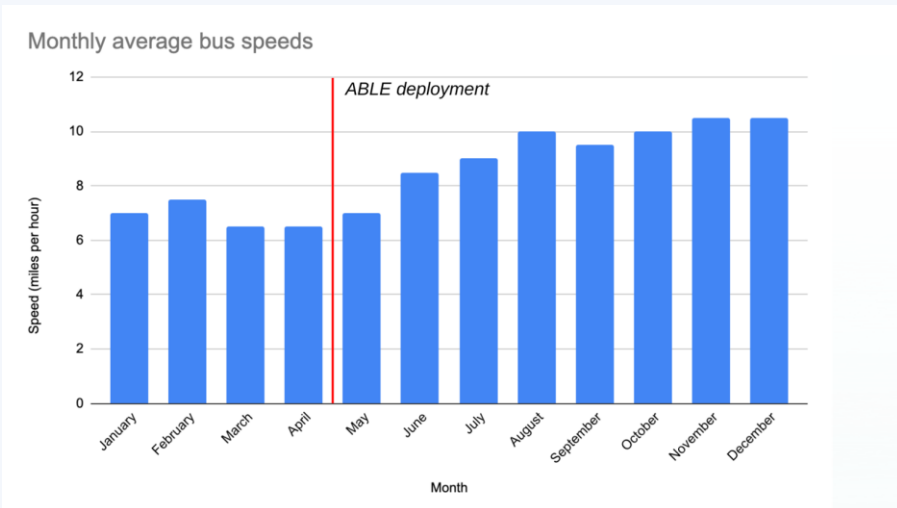
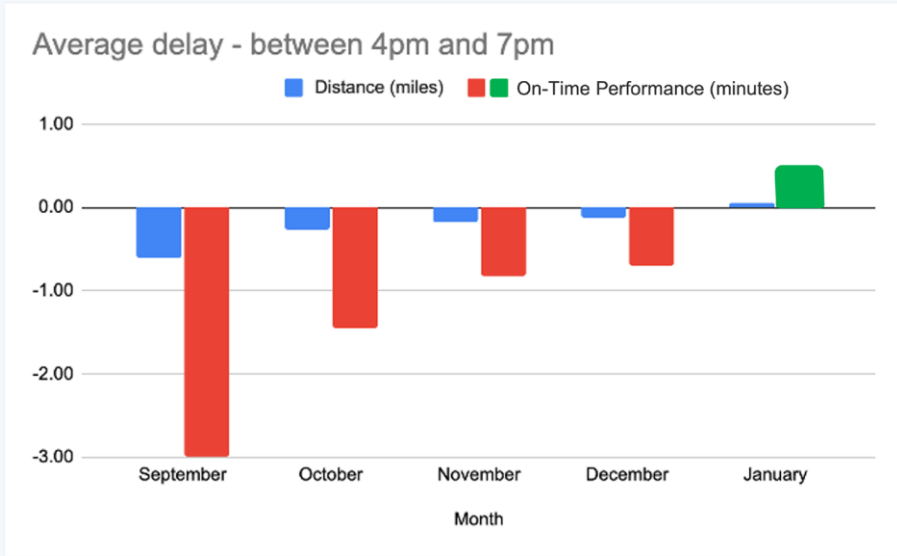
- Up to 36% increase in bus speeds
- 34% fewer collisions on some routes
- 86% of violators only receive one ticket, indicating that **this technology effectively changes driver behavior**



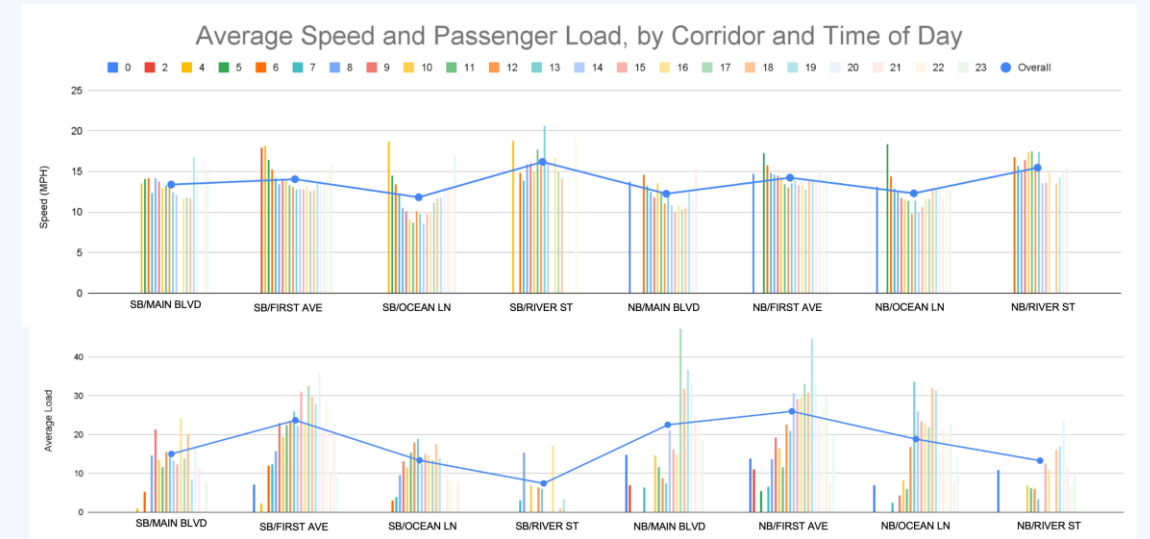
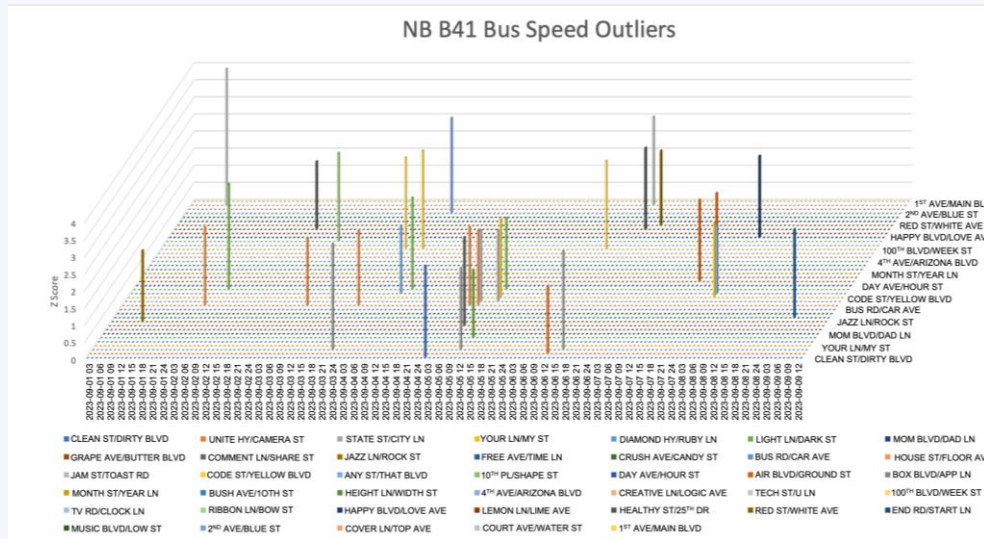
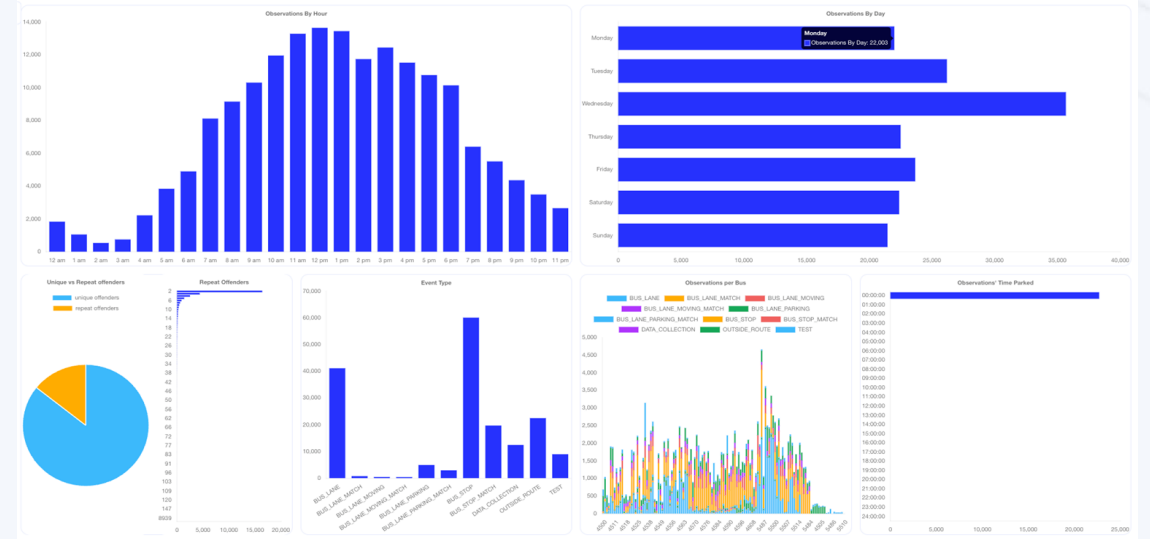
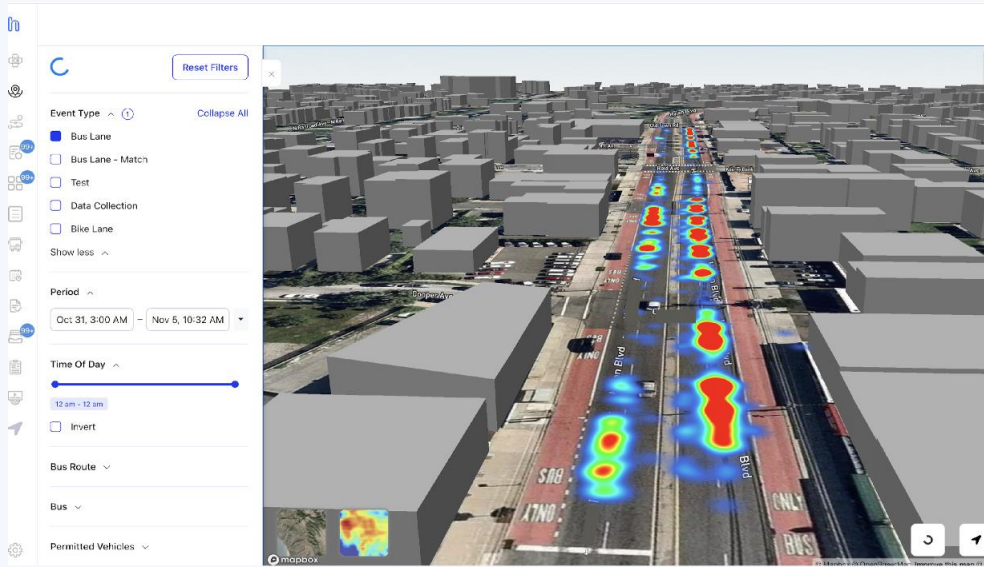
With violation data, including geolocation data, agencies can understand trends impacting service



Unlock Insights on Traffic Patterns Impacting Transit



Unlock Insights on Traffic Patterns Impacting Transit





Questions





**Stop by our office
and say hello.**

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