

# Traffic Analysis Report

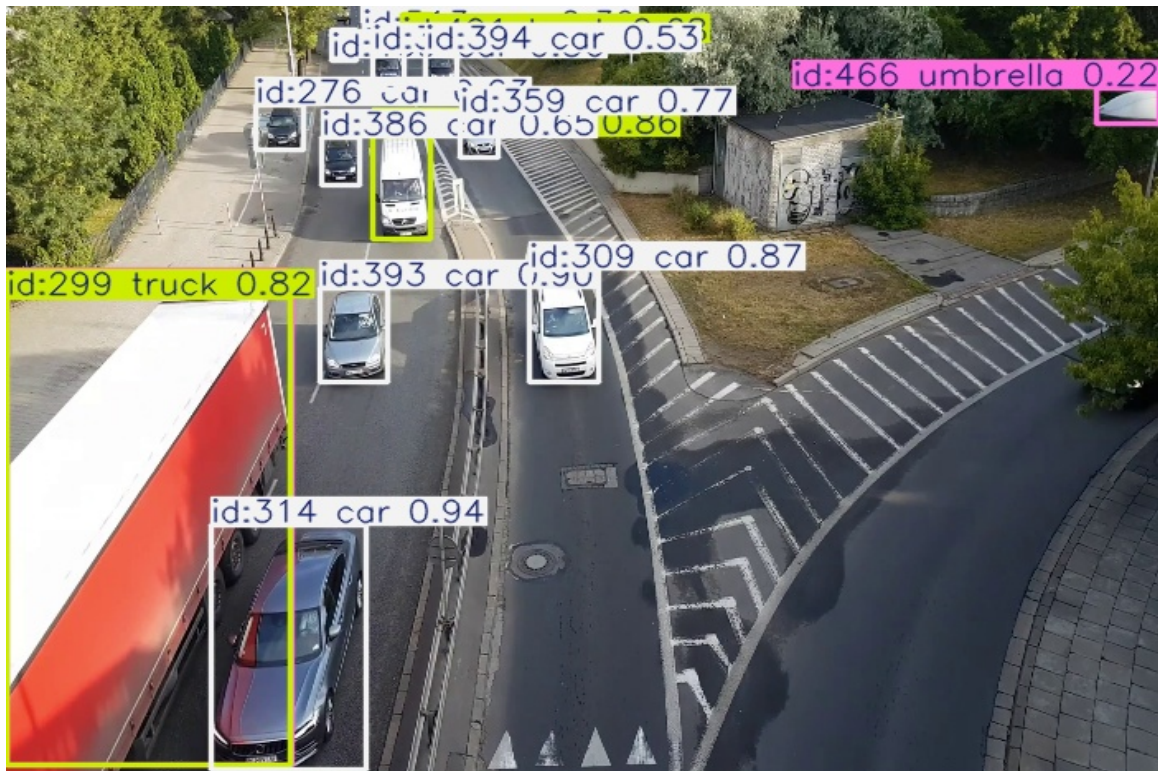
Generated on: April 20, 2025

Analysis of: test\_30\_Multi - Made with Clipchamp.mp4

Duration: 30.00 seconds

Total unique vehicles detected: 64

## Peak Traffic Frame:



Peak traffic occurred at 27.73 seconds with 12 vehicles

# Table of Contents

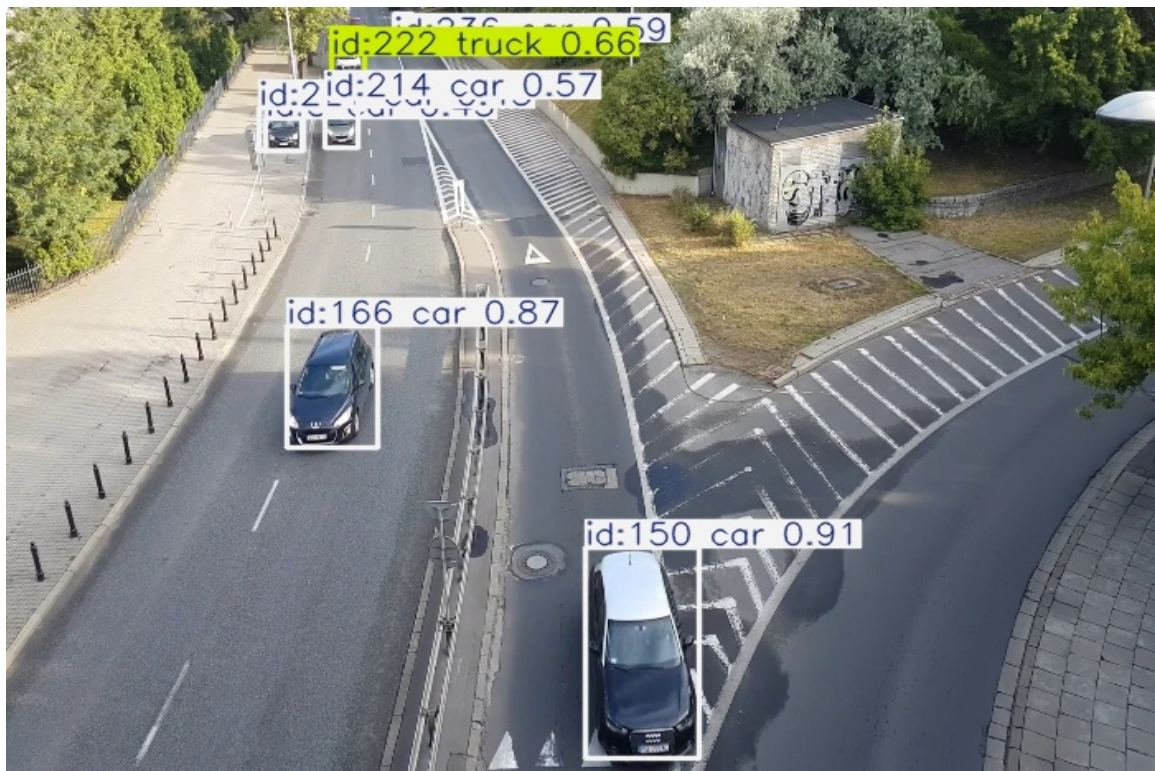
1. Executive Summary	3
2. Traffic Flow Analysis	4
3. Vehicle Behavior	5
4. Key Insights	6
5. Visualizations	7
6. Statistical Summary	9
7. Recommendations	10

# 1. Executive Summary

---

The video shows traffic with 64 unique vehicles over 30.00 seconds. At 15.00 seconds, there are 4 car(s), 1 truck(s). Peak traffic occurs at 27.73 seconds with 12 vehicles. Vehicle distribution: 51 car(s), 9 truck(s), 4 bus(s).

## Representative Frame (Middle of Video):



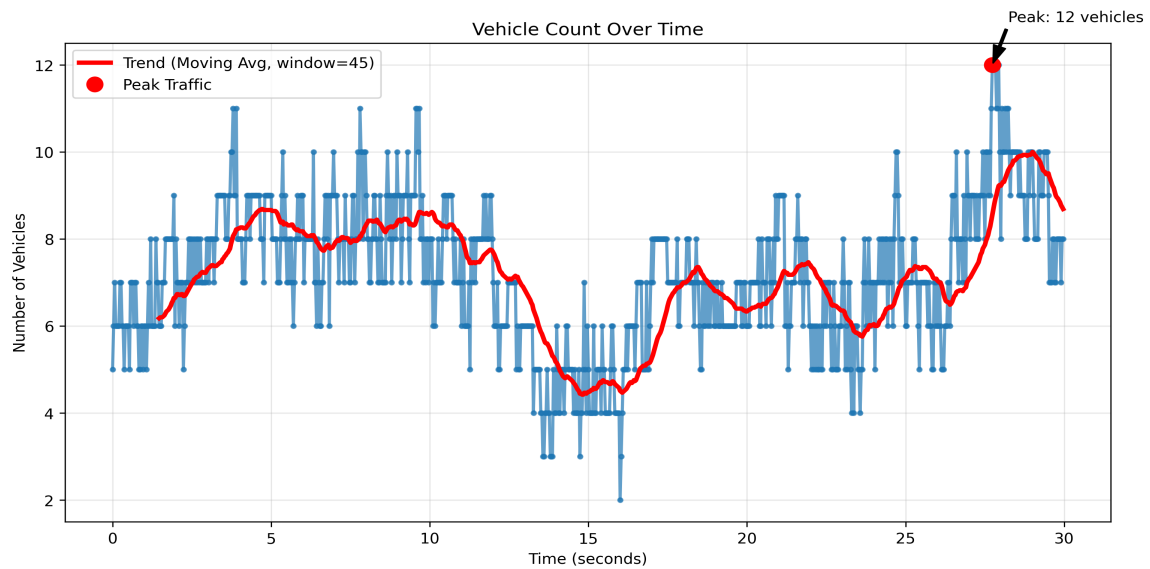
Frame captured at 15.00 seconds

## 2. Traffic Flow Analysis

---

The traffic flow analysis reveals a high number of vehicles and a low number of trucks and buses.

### Vehicle Count Over Time:



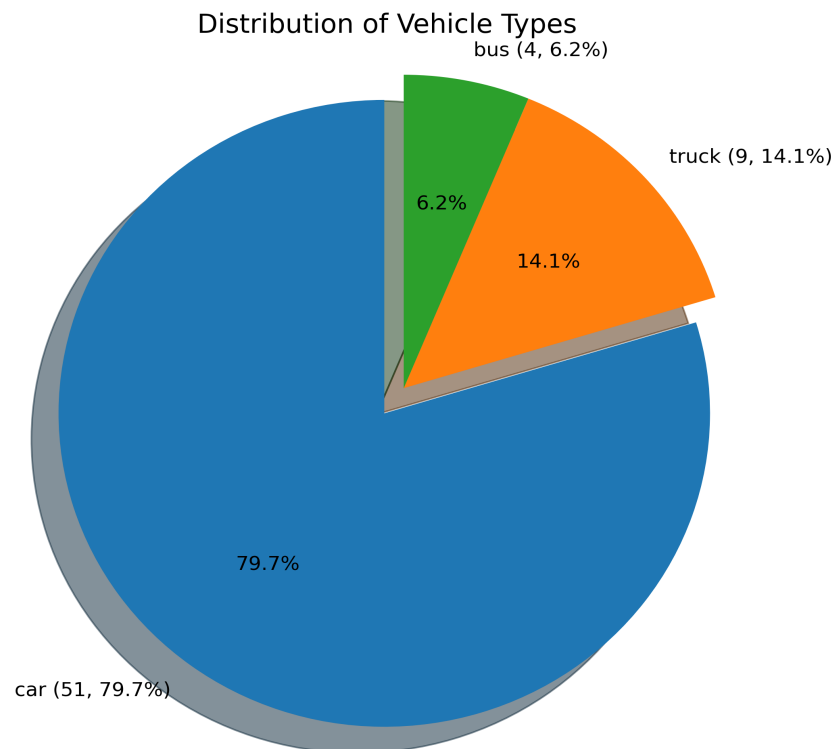
This graph shows how the number of vehicles changes throughout the video duration

### 3. Vehicle Behavior

---

The video was taken in 2003 and shows the traffic patterns on the road in the western United States. The video shows the most common vehicle types and has the most unusual behavior.

#### Vehicle Type Distribution:



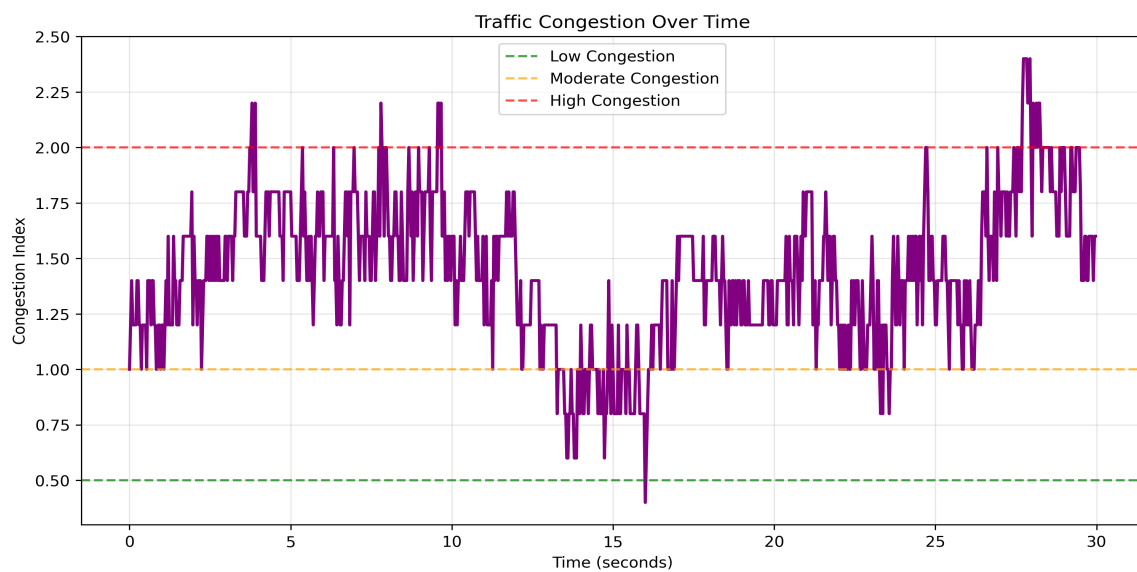
Distribution of different vehicle types detected in the video

## 4. Key Insights

---

- Video Analysis of Traffic in the North Carolina region - Drivers, trucks, bus, and cars. The video, taken from the NCCA's Traffic Video Center in Raleigh, North Carolina, shows traffic patterns, anomalies, and notable observations.

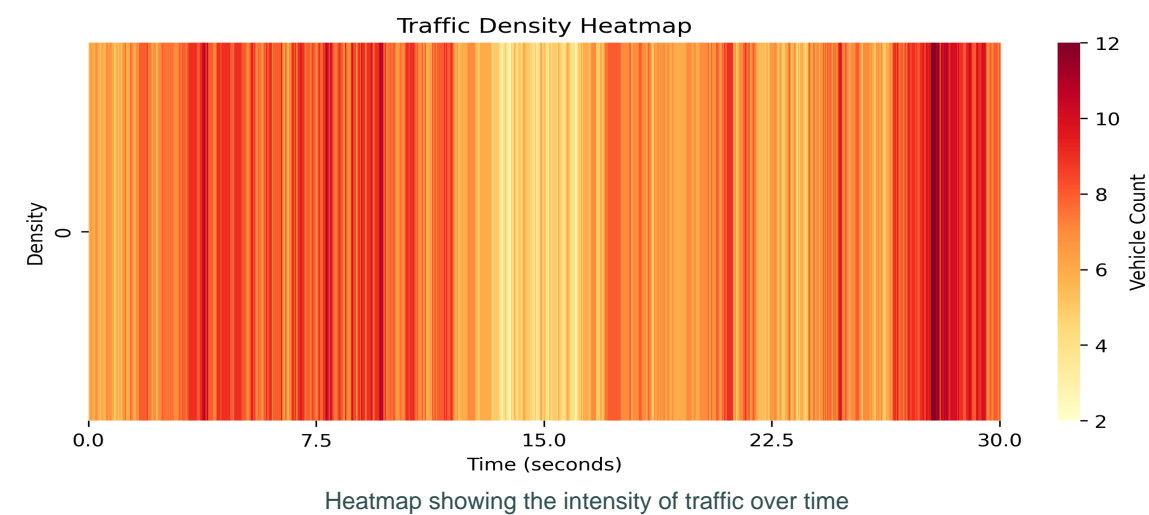
### Traffic Congestion Over Time:



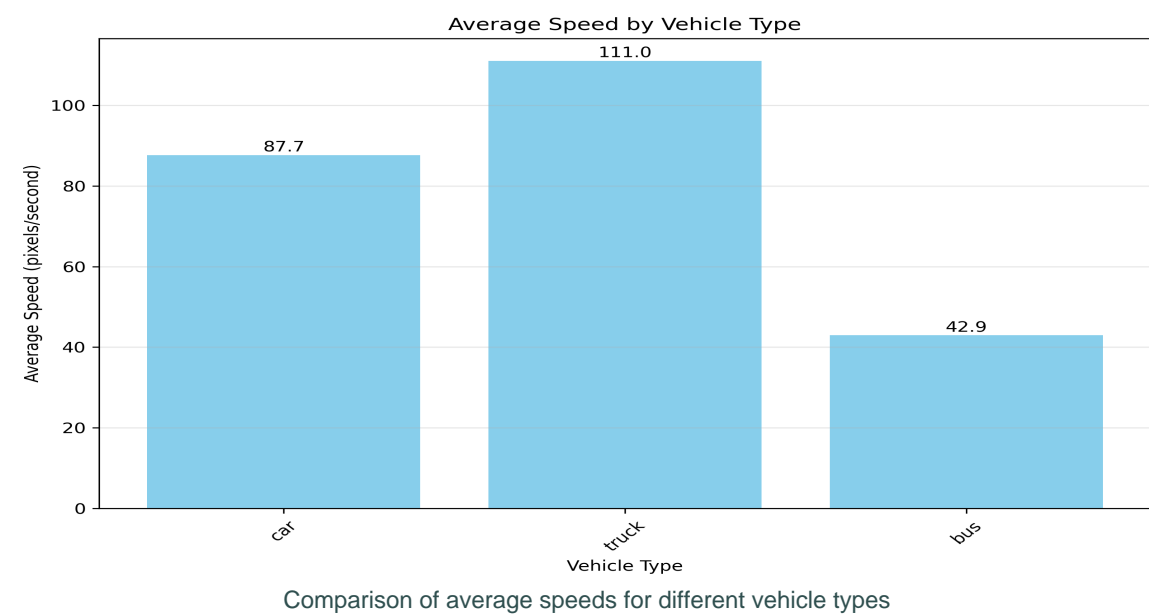
This graph shows how traffic congestion varies throughout the video

## 5. Visualizations

### Traffic Density Heatmap:



### Average Speed by Vehicle Type:



## 6. Statistical Summary

---

### Vehicle Counts:

Vehicle Type	Unique Count	Avg. per Frame	Avg. Speed (px/s)
car	51	6.29	87.65
truck	9	0.82	111.03
bus	4	0.08	42.94
Total	64	7.19	N/A

### Key Metrics:

Metric	Value
Video Duration	30.00 seconds
Peak Traffic Time	27.73 seconds
Peak Vehicle Count	12 vehicles
Average Congestion Index	1.44/5.0
Emergency Alerts	0



## 7. Recommendations

---

Traffic management is the key to avoid unnecessary congestion and high speed.