Welcome to Traffictelligence — a cutting-edge solution for advanced traffic volume estimation using machine learning.

**Problem Statement**

Traditional traffic monitoring systems rely heavily on costly hardware, manual data collection, or outdated sensor technology. This leads to inaccurate traffic insights, limited scalability, and inefficient urban planning."

**Solution Intro**

Traffictelligence changes the game by leveraging computer vision and machine learning to provide real-time, scalable, and cost-effective traffic volume estimation — all from video footage.

**Architecture Overview**

Here’s how it works: we use roadside cameras or drone footage as input. Frames are processed using a deep learning pipeline — powered by object detection models like YOLO and tracking algorithms such as DeepSORT.

**Volume Estimation Logic**

From this, we estimate vehicle volumes per time unit, broken down by lanes and vehicle types — with up to 95% accuracy, benchmarked against manual counts.

**Live Dashboard Preview**

All data flows into a live analytics dashboard, allowing city planners and traffic authorities to monitor congestion patterns, optimize signal timings, and plan infrastructure improvements with data-driven confidence.

**Edge and Cloud Deployment Options**

Traffictelligence supports both edge and cloud deployment — enabling flexible scaling from a single intersection to an entire smart city grid.

Thank you for watching.