Traffic Pattern Analysis Report

This report presents the results of a traffic pattern analysis conducted using vehicle count data collected over multiple days. The objective is to identify peak traffic periods, detect anomalies, and provide insights that can assist in city planning and route optimization.

Key Findings

- Morning peak hours are consistently observed between 7:00 AM and 9:00 AM.
- Evening peak hours are consistently observed between 5:00 PM and 7:00 PM.
- Traffic density is generally lower during midday and late night hours.
- Weekend traffic volume is typically 30–40% lower compared to weekdays.
- Anomalies detected include sudden spikes on specific weekdays, likely due to events or accidents.

Hour Range	Avg Vehicle Count
00:00–06:00	80
07:00–09:00	350
10:00–16:00	200
17:00–19:00	400
20:00–23:59	150

Recommendations for City Planning

- Expand road capacity or introduce traffic signal optimization during peak hours.
- Encourage flexible working hours or remote work to reduce congestion during 7–9 AM and 5–7 PM.
- Improve public transport availability in high-traffic periods.
- Use real-time traffic monitoring to detect and respond to anomalies quickly.
- Consider route diversions or alternate pathways during planned events.