

Business Impact & Key Benefits

1. Time Savings

- Current situation: 20–30 mins wasted at major junctions during peak .
- Citizen avoid peak hours or choose alternate junctions, **~30–40% travel time reduction**.
- Example:
 - Before: 60 min average trip.
 - After: ~40 min (saving ~20 min per trip).

For **1,000 daily deliveries**, that's **~20,000 minutes (~333 hours)** saved per day.

2. Fuel Savings

- Stop-go traffic reduces mileage by ~40% .
- If prediction avoids congested routes → at least **15–20% improvement in fuel efficiency**.
- Example:
 - Before: 10 km/l in jam.
 - After: 12 km/l with smoother routes.
 - For 100 delivery bikes running 50 km/day → saving **~80 liters/day** (~₹8,000/day at ₹100/litre).

3. Delivery Efficiency

- Nationwide, ~60% of delivery delays are due to traffic .
- If AI routing reduces delays by even **25%**, then:
 - Before: 100 delayed deliveries/day.
 - After: 75 delayed deliveries/day.
 - **25 more deliveries completed daily** = faster service & higher throughput.

4. Economic Cost Reduction

- Studies show congestion costs Indian cities millions of rupees daily.
- Even a **10% reduction in congestion costs** in Indore could save **₹5–7 lakh per day** (₹18–25 crore per year).

5. Customer Satisfaction

- 98% of buyers value delivery experience .
- By improving on-time delivery by **20–30%**, customer churn (84% leave after bad delivery) is reduced.
- This leads to **repeat orders and brand loyalty** for delivery companies.

• Before vs After (Business Impact Snapshot)

Metric	Before AI Prediction	After AI Prediction	Improvement
Avg. trip time	60 min	40 min	~33% faster
Fuel efficiency	10 km/l	12 km/l	+20% better
Delayed deliveries/day	100	75	-25% delays
Economic cost of congestion	₹50–70 lakh/day	₹45–63 lakh/day	10% savings
Customer repeat orders	Baseline	+20–30%	Higher loyalty

Key Business Benefits

- **Citizens** → Save 15–20 minutes per trip.
- **Delivery Companies** → Save ~80 liters of fuel/day per 100 vehicles (₹8,000/day).
- **Businesses** → Cut congestion costs by **₹5–7 lakh/day**.
- **Customers** → Get **faster, reliable deliveries** → more repeat orders.
- **City** → Achieves **Smart City efficiency** with reduced congestion & emissions.