# Suraksha-Path

## Where Every Second is a Lifeline

Transforming emergency response in India through Al-powered traffic management



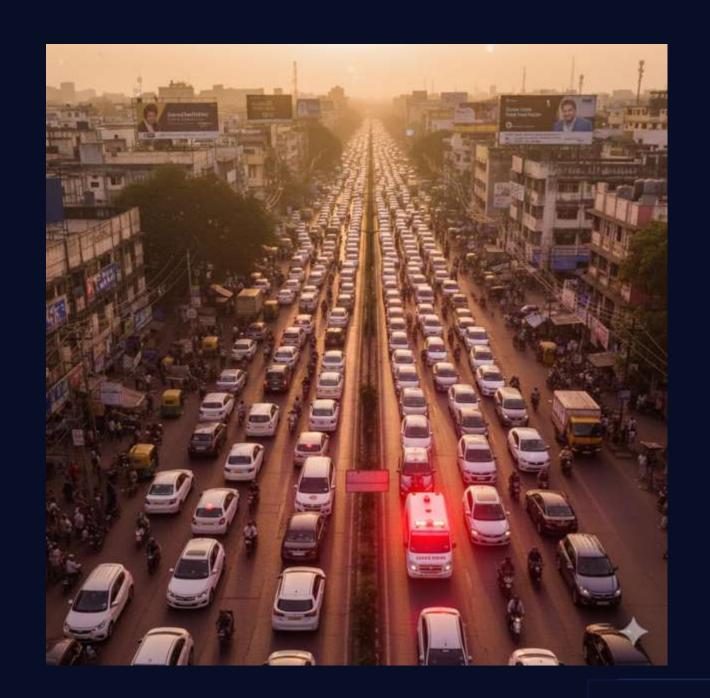
## The Silent Killer on Indian Roads

450

#### **Lives Lost Daily**

Every day in India, 450 people die because ambulances get trapped in traffic. Over 30% of emergency deaths are caused by these preventable delays.

Current solutions are failing us. Manual green corridors are rare and slow. Navigation apps can't control traffic signals. People are dying while help sits motionless in gridlock.



### The Path to Immediate Care

Suraksha-Path is an Al and IoT-powered system that creates automatic green corridors for ambulances. Our intelligent platform combines route optimization, traffic signal control, and hospital coordination to save precious minutes when they matter most.



#### **Ambulance Detection**

DSRC-C/V2X sensors automatically identify emergency vehicles



#### **Smart Traffic Control**

Al instantly creates green corridors by controlling traffic signals



#### **Hospital Coordination**

Real-time patient data transmission ensures readiness upon arrival



## Our Unfair Advantage

1

#### **Fully Automatic**

DSRC-C/V2X sensors detect ambulances from 1.5km away and automatically trigger green signals. No manual intervention needed.

2

#### **AI-Powered Precision**

Our Al predicts traffic patterns 5 minutes ahead and updates routes every 10 seconds—3x faster than existing apps.

7

#### **Seamless Hospital Integration**

Secure app transmits patient vitals directly to emergency rooms, reducing preparation time and improving outcomes.

While competitors offer basic navigation or manual systems, Suraksha-Path delivers end-to-end automation that works without human intervention.

## The Brain Behind the Operation: OpenAI APIs



#### GPT-40: Intelligent Reasoning

Acts as the core brain for real-time reasoning and generating personalized, context-aware instructions for drivers, such as "Move left, ambulance 200m behind you." It also provides crucial multilanguage support for local drivers, ensuring clear communication.



#### Whisper: Voice-to-Command

Enables hands-free voice commands from ambulance staff (e.g., "patient is critical"), converting them into structured, actionable commands for the system. This allows responders to focus on patient care without manual input.



# DALL-E: Visual Communication

Generates dynamic visual route
heatmaps for traffic analysis and
creates impactful alert posters
for public awareness campaigns.
This helps communicate critical
information clearly and
effectively to both authorities
and the public.



# How It Works: The Tech Stack

#### **Ambulance Detection**

DSRC-C/V2X sensors identify emergency vehicles up to 1.5km away, instantly alerting our central system

#### AI Route Optimization

Machine learning algorithms analyze real-time traffic data, predicting optimal paths and updating every 10 seconds

#### **Signal Coordination**

loT controllers automatically synchronize traffic lights to create green corridors along the optimized route

#### **Hospital Preparation**

End-to-end encrypted app transmits critical patient vitals to hospitals, ensuring readiness upon arrival



## A Life-Saving Investment

10K+

50%

₹5L

#### **Lives Saved Annually**

Nationwide adoption could save 8,000-10,000 lives per year through reduced ambulance delays

#### **Delay Reduction**

Cut ambulance response times in half, increasing survival rates by 7-10% per minute saved

#### **Cost Per City**

90% cheaper than Western alternatives, making large-scale deployment financially viable

Revenue Model: Hospital subscriptions (₹3K-5K monthly) for real-time patient updates, plus municipal partnerships for system deployment and maintenance.



## The Path to a Safer Nation

1 Year 1: Pilot Launch

Deploy in Pune/Nashik with 5 major hospitals and 50 Alequipped ambulances. Prove concept and gather performance data.

Years 2-3: Metro Expansion

Scale to Mumbai and Delhi. Establish strategic partnerships with NHAI and state transport authorities.

**Years 4-5: National Adoption** 

Integration with PM-JAY healthcare scheme. Deployment across 100+ cities nationwide.

Our phased approach ensures sustainable growth while building the infrastructure for nationwide emergency response transformation.

## Market Opportunity

#### **Massive Addressable Market**

India's emergency medical services market is worth ₹2,400 crores and growing at 15% annually. With over 700 cities requiring modernization, the opportunity is unprecedented.

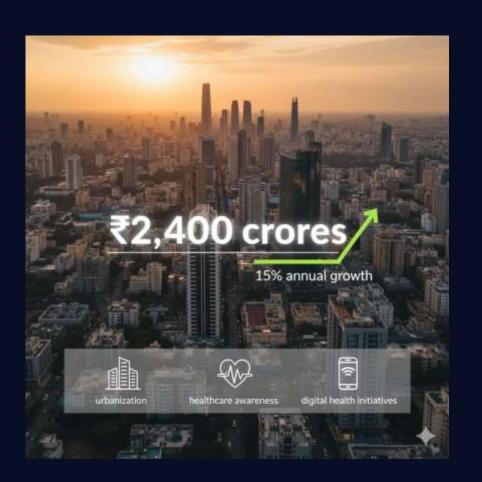
Key drivers: Rising urbanization, increasing healthcare awareness, and government digital health initiatives create perfect conditions for adoption.







Cities Need Modernization



## Why Now? The Perfect Storm



#### **Policy Support**

National Digital Health Mission and Smart Cities initiative provide regulatory backing and funding opportunities



#### **Tech Infrastructure Ready**

5G rollout and IoT adoption make advanced traffic management systems finally feasible at scale



#### **Healthcare Crisis**

COVID-19 highlighted critical gaps in emergency response, creating urgency for systematic solutions

The convergence of technology readiness, policy support, and urgent need creates an unprecedented window for Suraksha-Path to revolutionize emergency response across India.

# Smarter Roads, Faster Help, Saved

## Lives

Every second matters in an emergency. Suraksha-Path transforms those seconds from obstacles into lifelines, ensuring that help reaches those who need it most—when they need it most.

Join us in building the emergency response system India

Team Suraksha-PathReady to save lives through technology

deserves.

