Discussion on PPP Model for ITMS

Delhi Traffic Facts

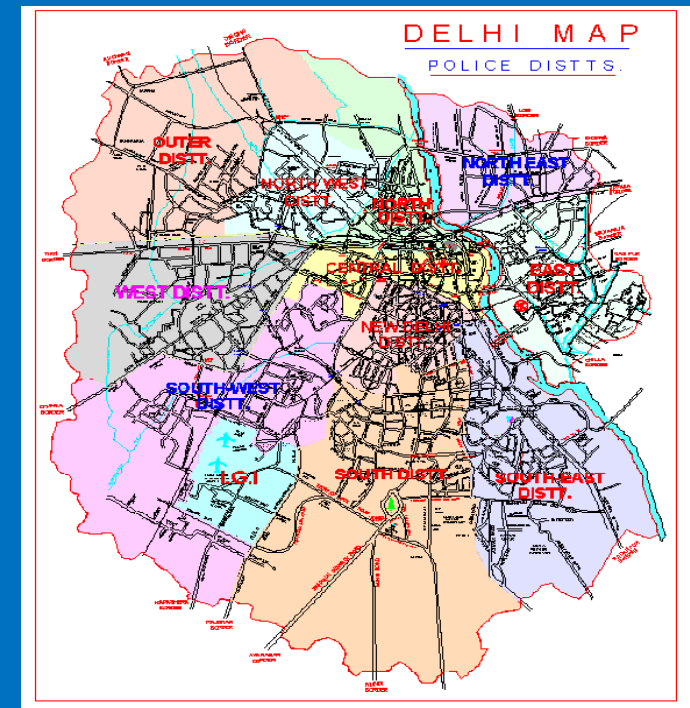|	
Population →	**Over 1.7 Cr**
Roads Available →	**32,648. Kms**
Vehicles →	**74 Lacs**
Type of Vehicles →	**40 +**
Traffic Circles →	**43**
Police Personnel →	**Over 6000**

Delhi Safe City – ITMS Project Overview

Project Description

The Project envisages setting up a comprehensive city wide Intelligent Traffic Management System (ITMS) for better enforcement, regulation and information dissemination.

Project Objectives

- ➢ Regulate and manage traffic in the city
- ➢ Promote Road Safety
- ➢ Instill better Road Discipline
- ➢ Enforce traffic laws
- ➢ Better traffic information dissemination to citizens
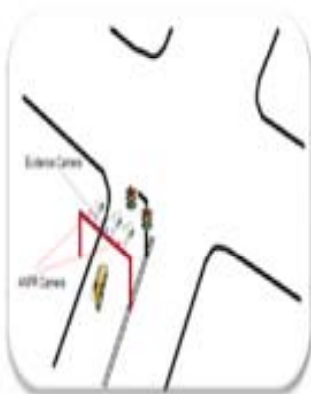
Project Initiated

Phase I: 2009
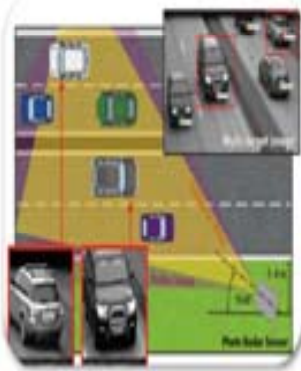Phase II: 2013

Project Status

Project is in the Design Stage

ITMS Solution Highlights

ITMS Primary Components

Red Light Violation Detection System

Speed Detection System

Variable Message Signs

Speed Control Signs

Adaptive Traffic Signal Control

Public Address System

Expected Outcomes

- Reduction in road accidents
- Reduction in traffic congestion
- Detection of red light violations, lane changes and over speeding
- Decrease in overall travel time
- Decrease in Fuel Consumption and Emissions
- Better Information Dissemination to road users
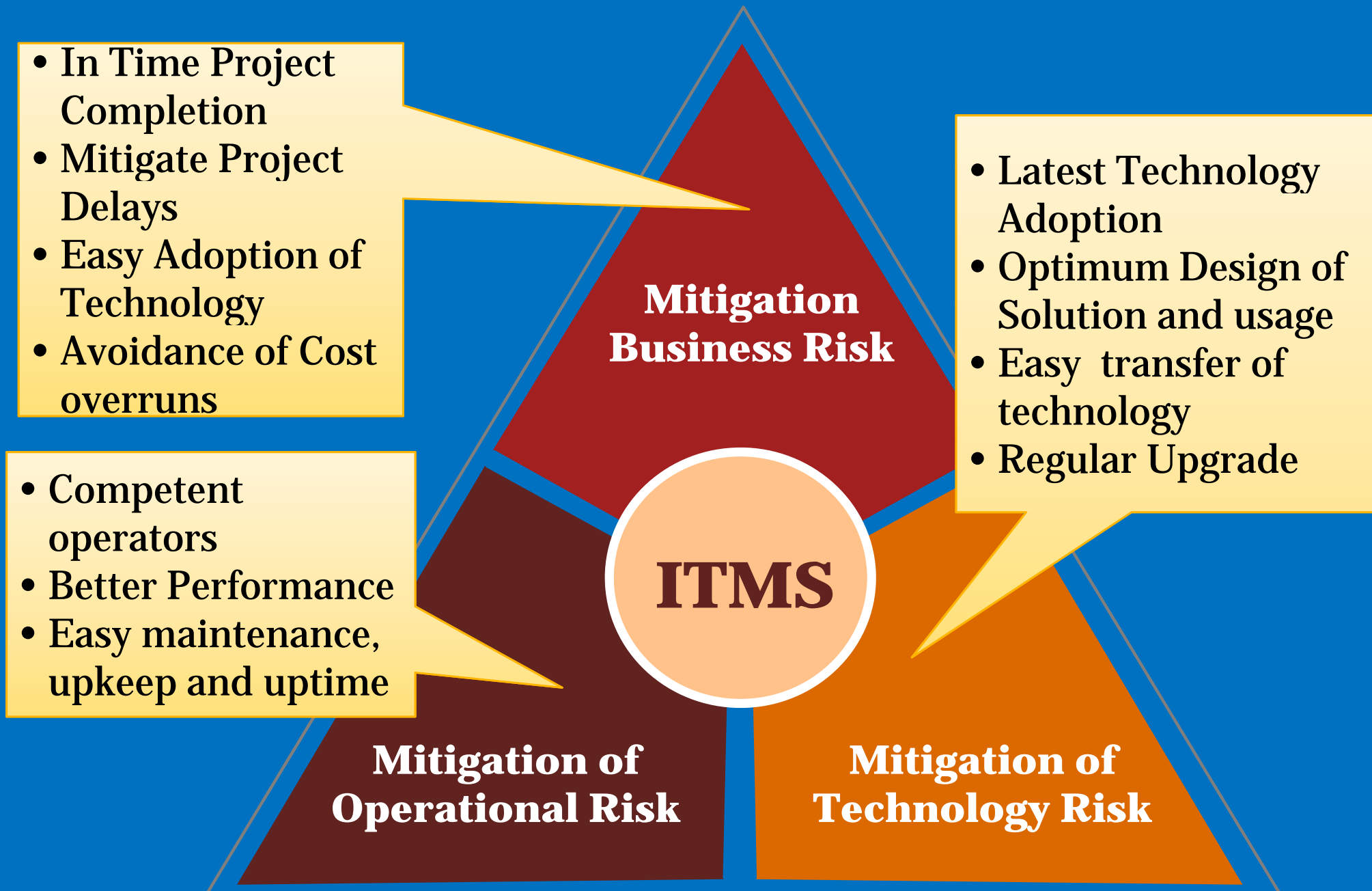- Parking Management

Public Private Partnership (PPP) Concept

Public –Private Partnership

PPP

Public–Private partnership (**PPP**) is a government service which is funded and operated through a partnership of **government** and one or more **private sector** companies

Why PPP for ITMS

- In Time Project Completion
- Mitigate Project Delays
- Easy Adoption of Technology
- Avoidance of Cost overruns

- Latest Technology Adoption
- Optimum Design of Solution and usage
- Easy transfer of technology
- Regular Upgrade

- Competent operators
- Better Performance
- Easy maintenance, upkeep and uptime

Mitigation Business Risk

ITMS

Mitigation of Operational Risk

Mitigation of Technology Risk

Principles of PPP

Transparency	➢ Evidence of Traffic Violation for every infringement ➢ Acceptance of Evidence in Court and by violators
Fairness	➢ Automatic Detection ➢ No opportunity for Misjudgment or Mal practices by officers
Reliability	➢ Project Designed for a maximum uptime ➢ Violation detection and monitoring during non-policing hours as well
Efficiency	➢ Lesser manpower required for on ground Enforcement ➢ Better resource utilization for Traffic Regulation

PPP – ITMS Statistics

- Total Violation Detections Per Day

  1 10,500

- Total Annual revenue collected form Violations

  2 ~ 45 Cr INR

- Estimated Actual Violations Per day

  3 ~ 1 Lakhs

- Possible Detection through Automated Systems Per Day

  4 ~ 0.5 Lakh

PPP Solution Economics

EXPECTED CHANGES

- Rs 100/- As per fine as per current MV Act
- Rs. 50 Crores Annually

CURRENT REALISATION

- Revision of fine under MV Act
- Commissioning of Electronic Enforcement system

- 50,000 Violation detection per day
- Multi fold Increase in revenue generation

ESTIMATED BENEFIT

Current Collections from Fines

Rs. 50 Crores Annually

Increased Collections by 2015

Rs. 800-1000 Crores Annually

Law compliance & stabilized learning curve by 2020

Rs. 300-400 Crores Annually

Possible Solution Coverage – PPP ITMS Project

Over Speed

Red Light Jumping

One Way Violation

Stop Line Crossing

Yellow Line Violation

Improper Parking

Not Driving Proper Lane

Stop without Bus Stop

Park/Wait in Bus Lane

Dangerous Driving

Delhi Traffic Police Command & Control Center

PPP Project Design

Key Responsibilities Envisaged

Management of Intelligent Traffic Management Project				
Program plan	Solution design	Build	Maintain	Project support services
				Facility management, operations & services
Project finance, capital & operating expenditure				
Own building				
Own land				
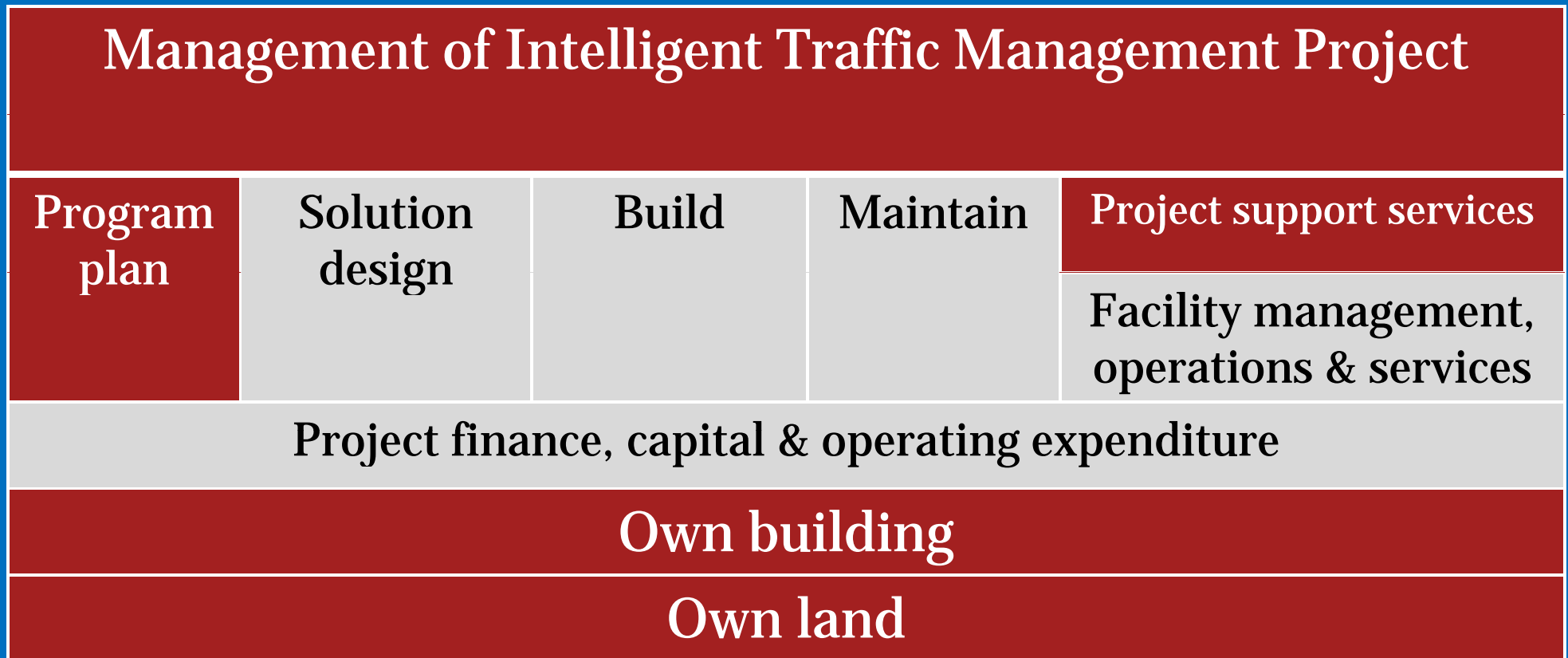
■ **Delhi Police**   ☐ **Concessionaire**

Challenges With ITMS Solutions

1. Exposed equipments and edge devices on streets

- Force majeure
- Element of weather
- Breakdown due to road accidents
- Renovation and Up-gradation of roads
- Thefts and Mischief

2. Installation & upkeep of expensive technology - a challenge

Challenges With ITMS Solutions

3. Redundancy and Uptime a challenge

- **Network Outage**
- **System Outage**
- **Equipment Outage**

4. Capacity Building within the organization

- **Change Management**
- **System Training**
- **IT experts**

The Way Forward

Studies

- **Analysis for Traffic conditions**
- **Various violation category identification**
- **Global best practices**

Alternative PPP Models

- **Transaction based payments**
- **Monthly fixed payments**
- **BOT – Build Operate and Transfer**
- **Partly Government Funded**

Phased Approach

- **Start with Pilots**
- **Scale Subsequently**
- **Enhance Scope**

Thank You...