"Fast tracking Road Safety Through 5 Es"
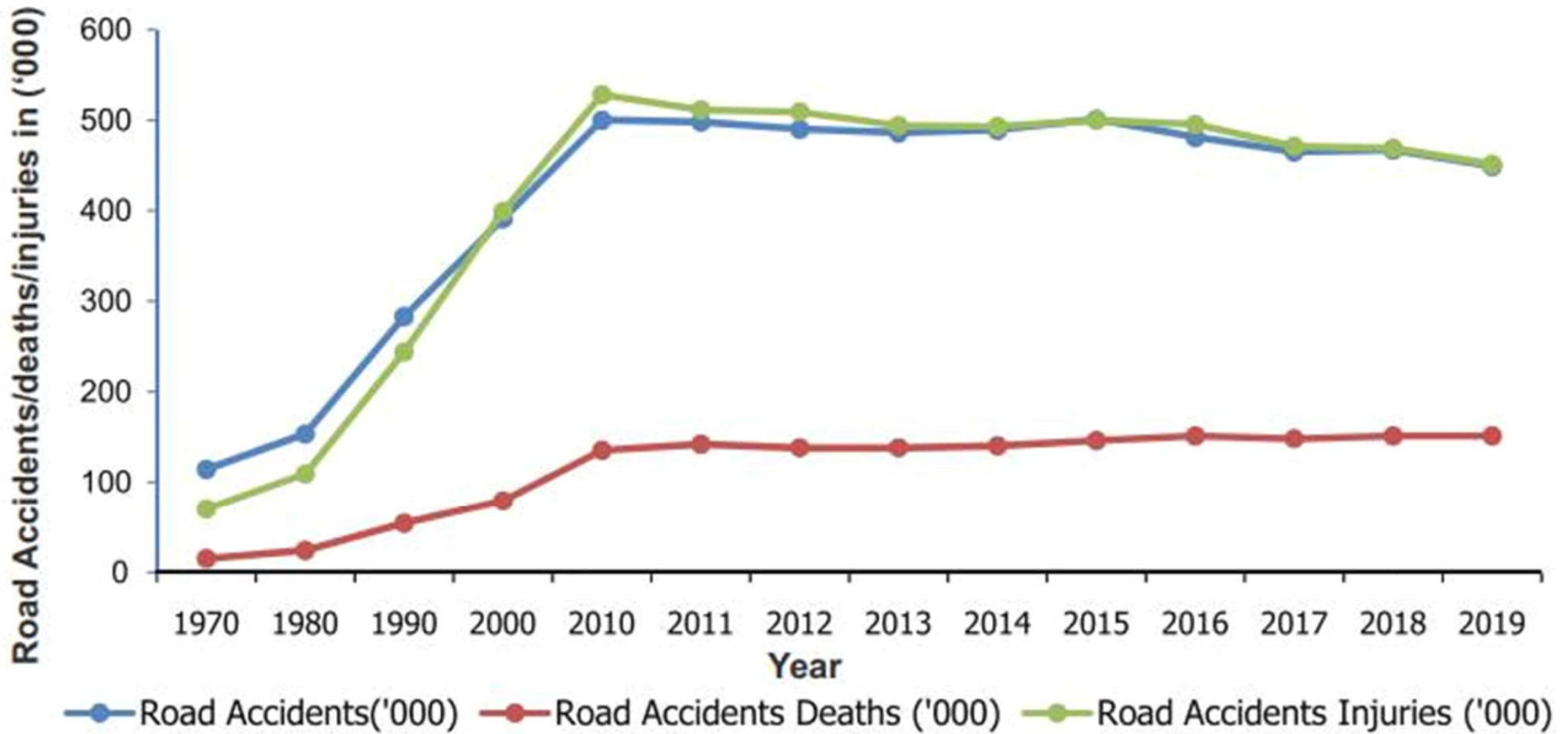
Ashish Chutani
Maruti Suzuki India

"We are not safe on Indian roads and we need to do something about it"
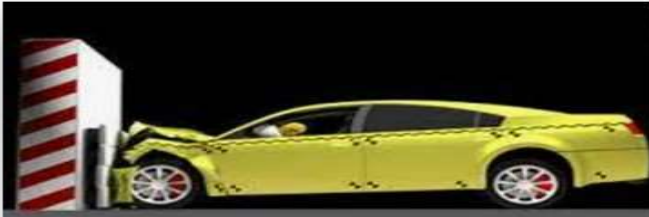
1st

17/50

55%

High road accidents, high fatalities
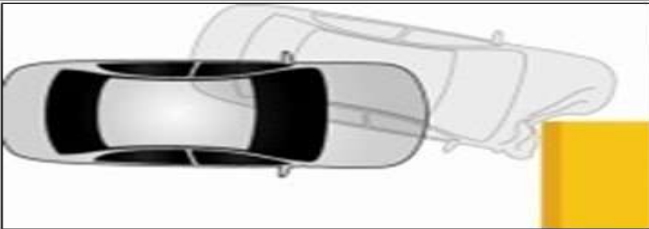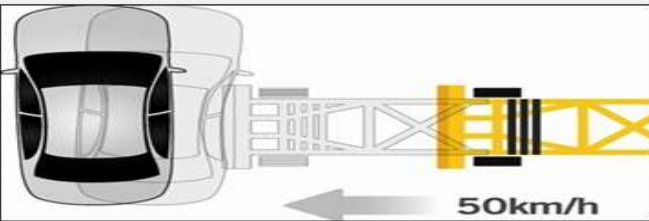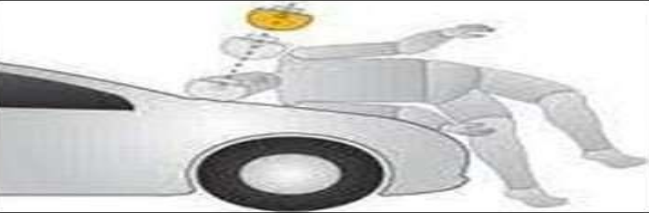
NEARLY A FLAT LINE FOR OVER A DECADE

5E: Pillars of Road Safety

1 Engineering of Vehicle

2 Engineering of Roads

5 Emergency Response

3 Education

4 Enforcement

Sustainable Road Safety
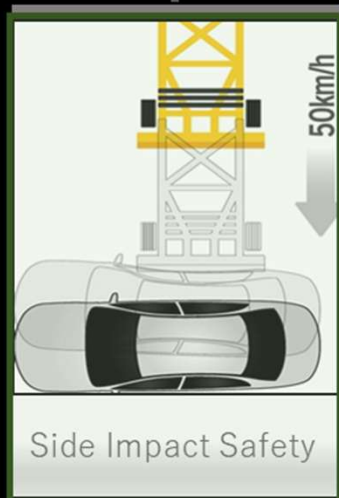
...need comprehensive solution with EQUAL participation of all

Vehicle Engineering

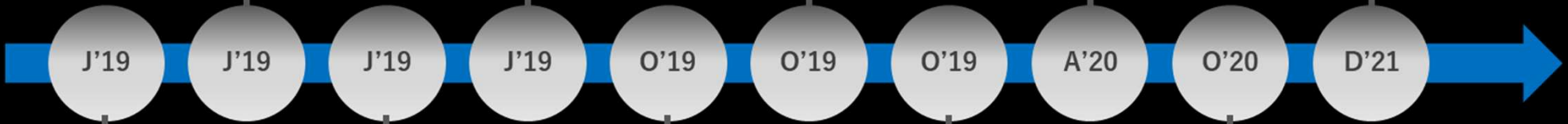| Crash Test	Test Pattern	Regulation	
		India	Europe
Full Frontal Impact		AIS: 096	ECE R 12
Offset Frontal Impact		AIS:98	ECE R 94
Side Impact		AIS:99	ECE R 95
Pedestrian Protection		AIS:100	GTR 9

India's Crash Safety Norms at Par with Europe

Vehicle Engineering

Reverse Parking Alert	Driver Airbag	Offset Frontal Impact Safety	Mandatory ABS	Co-Driver Side Mandatory Airbag

J'19 — J'19 — J'19 — J'19 — O'19 — O'19 — O'19 — A'20 — O'20 — D'21

Overspeed Alert	Seatbelt Alert	Full Frontal impact Safety	Side Impact Safety	Pedestrian Protection Safety

?
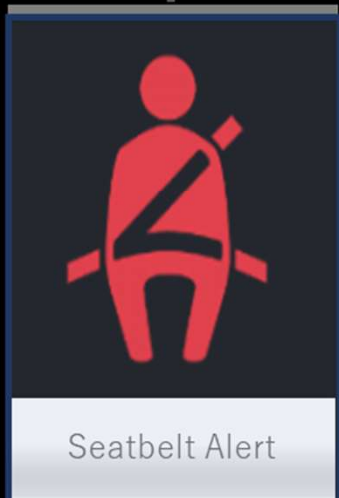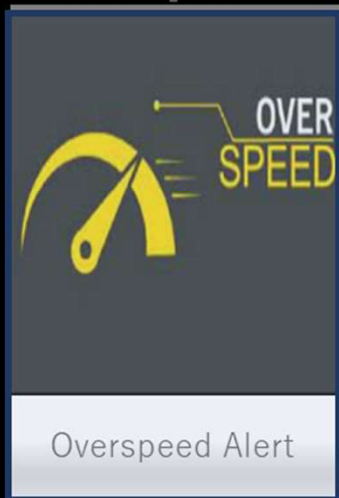
Critical Statistics on Fatalities

VRU (Pedestrian + Bicycle + 2W)

43% (2015) ... 64% (2020)

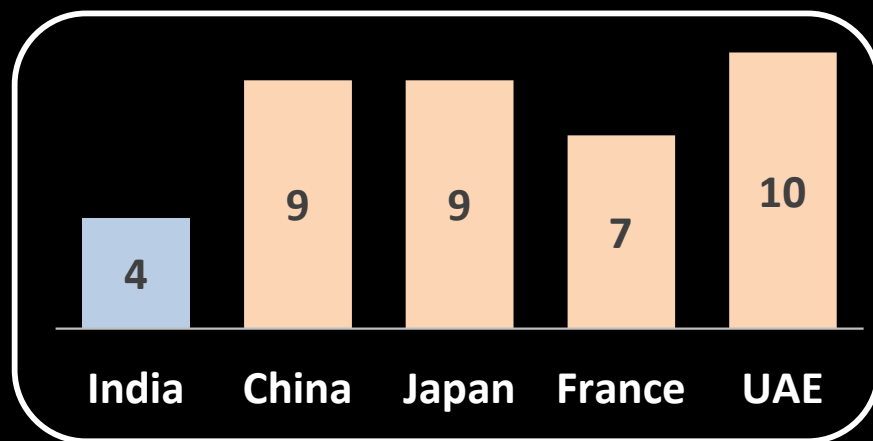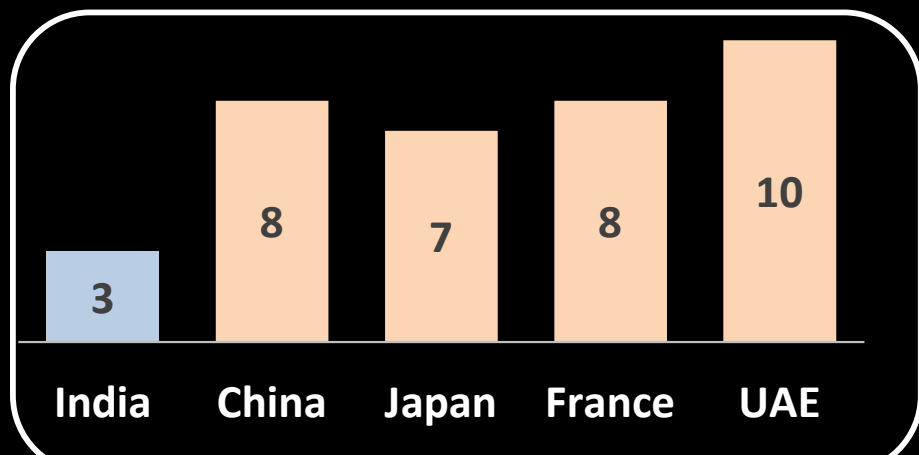In metropolitan cities, the Vulnerable Road Users (VRUs) accounts for as high as 89%
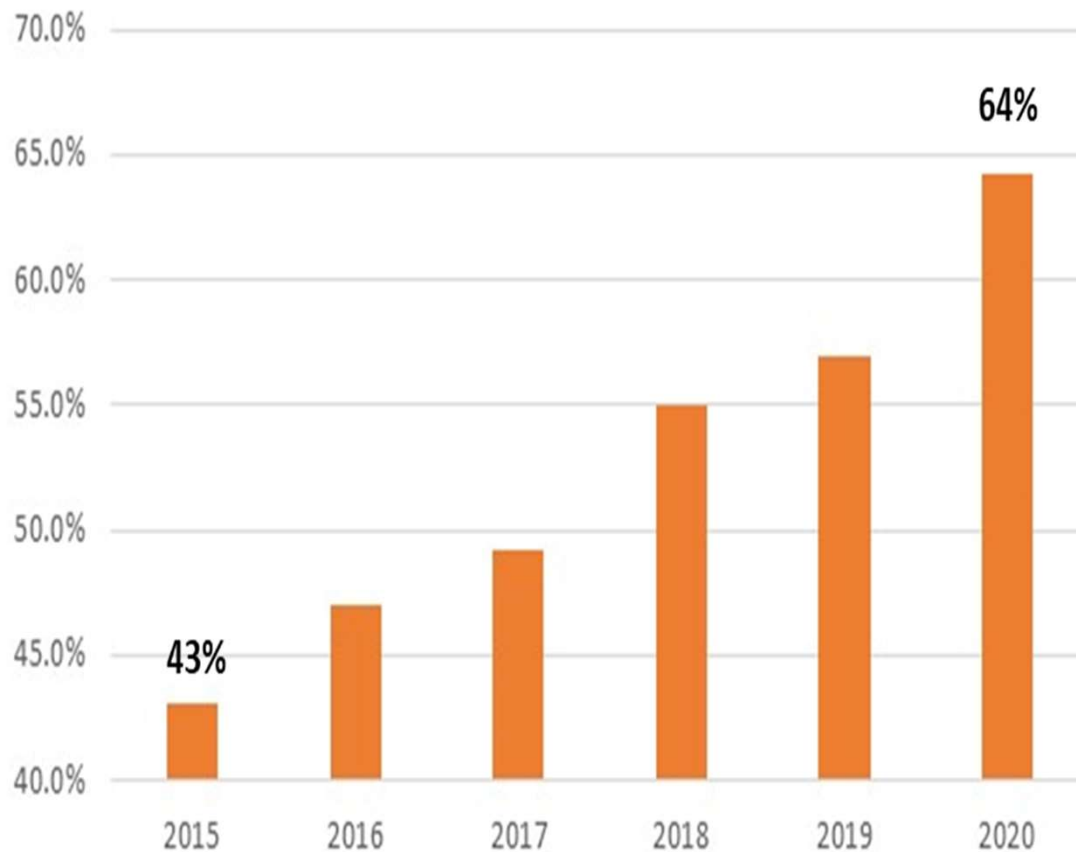
1. In **~87%** of fatalities in 4-wheelers, Seat-Belts were not worn.

2. In **70%** of fatalities in 2-wheelers, Helmets were not worn.

3. ~**68%** of the fatalities are due to over-speeding.

Enforcement Rating for Road Safety Laws (out of 10)

Top-left chart:
India 3, China 8, Japan 7, France 8, UAE 10

Top-right chart:
India 4, China 9, Japan 9, France 7, UAE 10
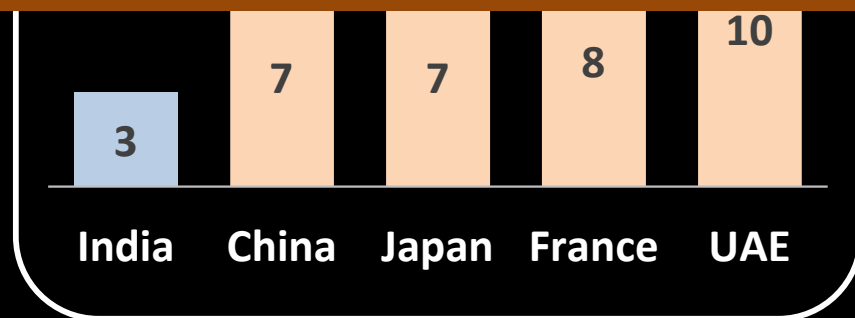
ENFORCEMENT: Not just Government's Responsibility

It is a shared responsibility of we all
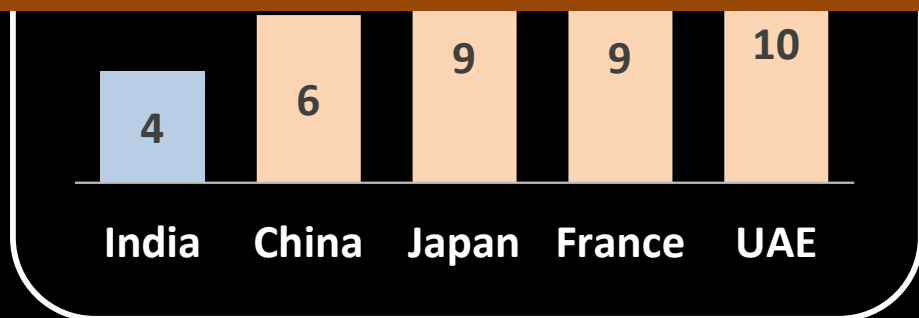
Enforcement drunk driving
India 4, China 6, Japan 9, France 9, UAE 10

Enforcement of use of seat belts
India 3, China 7, Japan 7, France 8, UAE 10

Source: Global Status Report on Road Safety, 2018

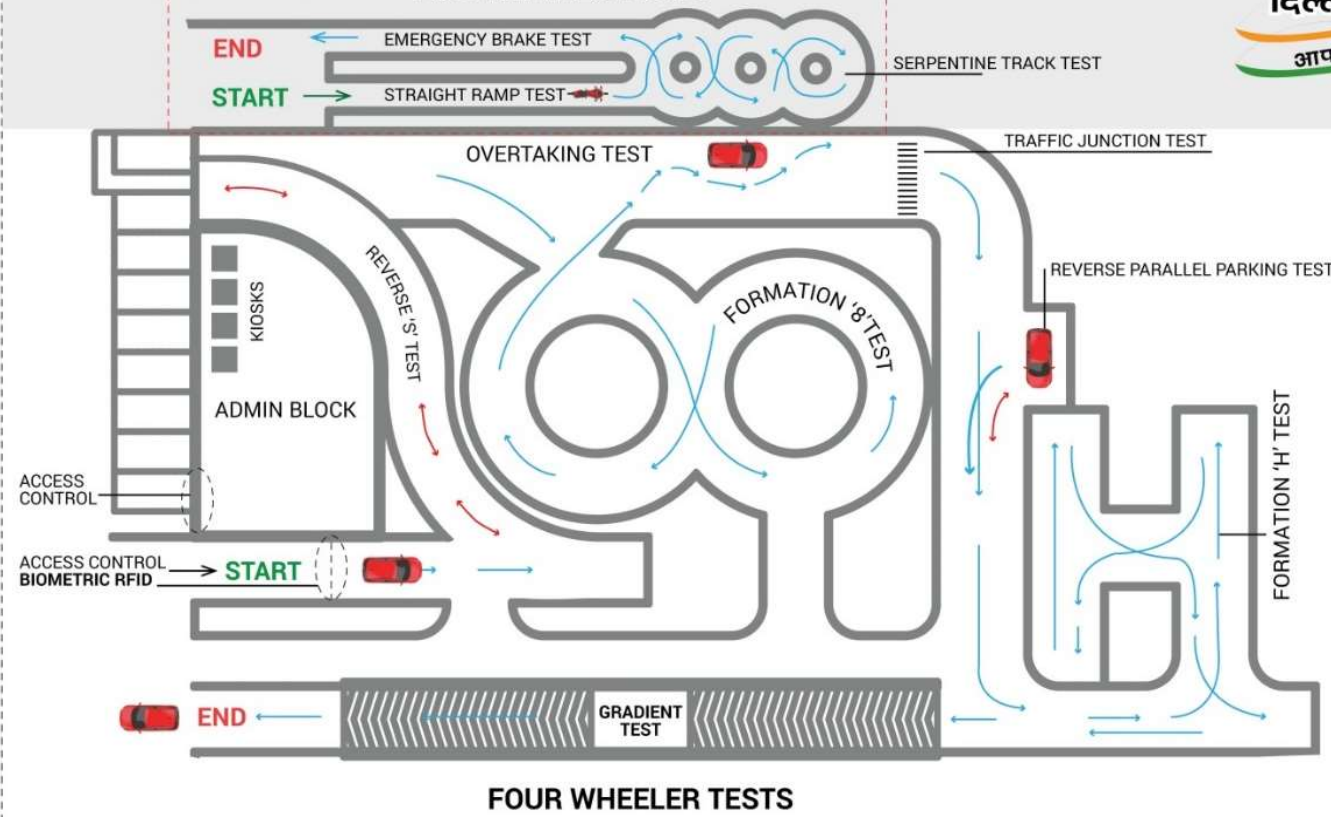# 30% driving licences in India are fake: Nitin Gadkari

Nitin Gadkari minced no words in criticising the current system of licensing and penalty system for traffic violations as he introduced the bill.

Technology Based Enforcement: An Example

Delhi's Fully Automated Driving Test Centre

Technology Based Enforcement

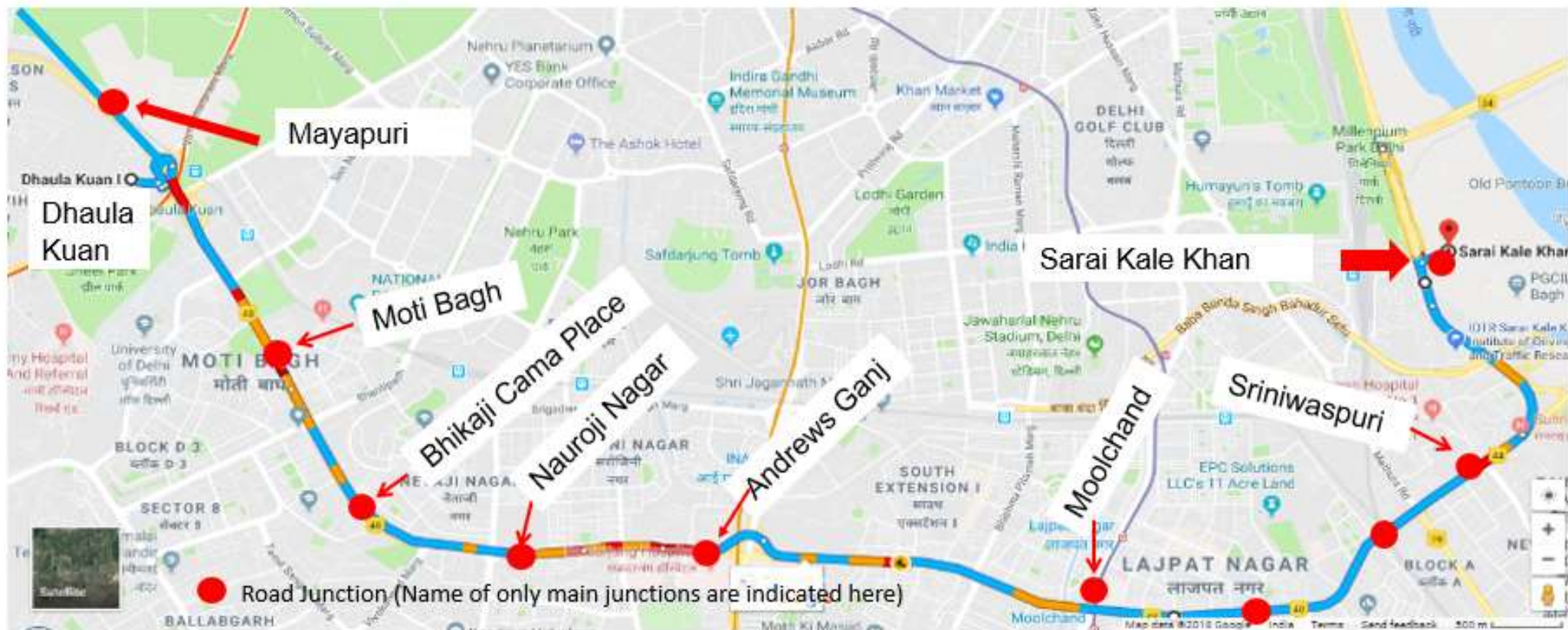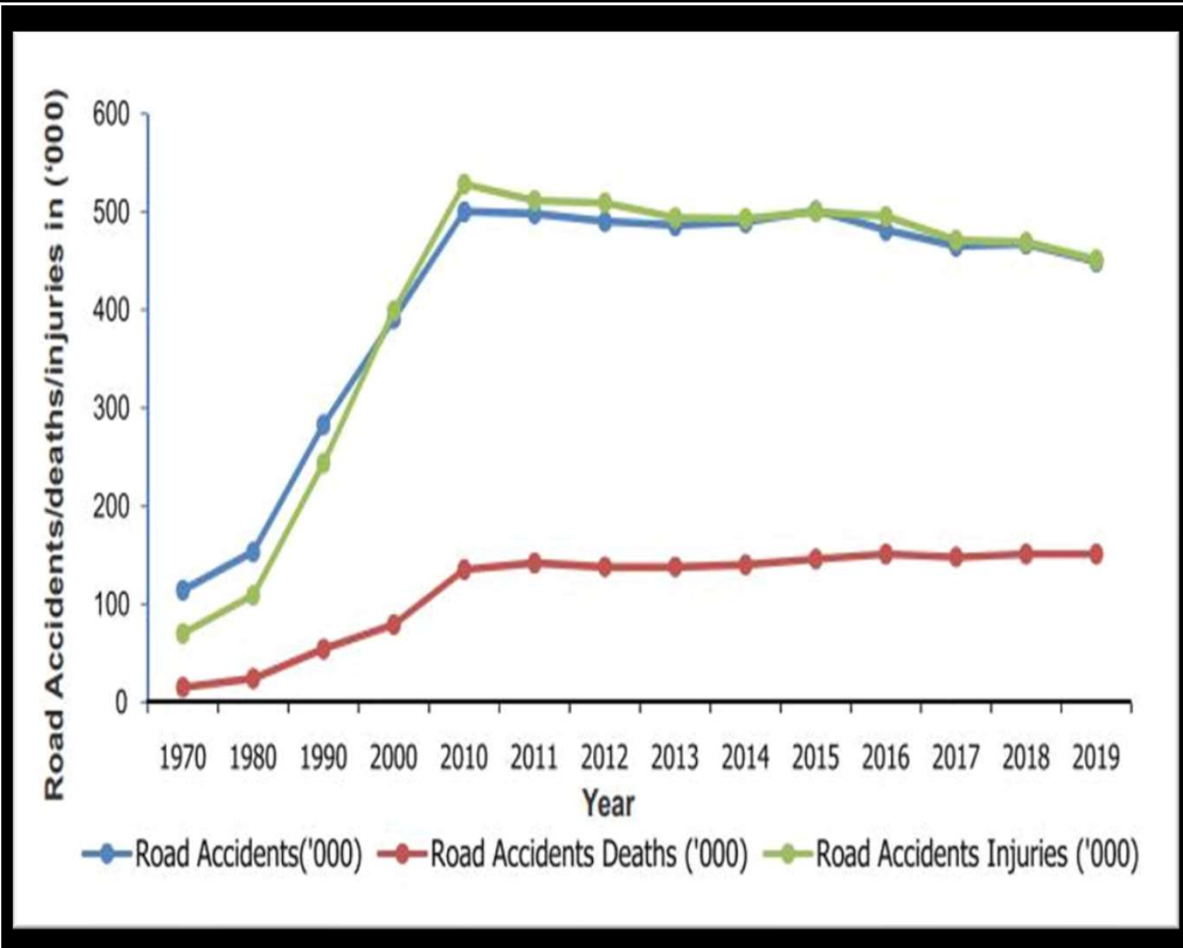| DRIVING TEST RESULTS		
Pass Percentage	**Before Automation**	**86%**
	After Automation	**49%**

Technology Based Enforcement: An Example

Camera-Radar Systems to Capture Traffic Violations
At key Junctions with High Vehicular Density

10 lacs Challans per year. No human intervention.

We are not SAFE on Indian roads and
we all together can make a difference

Research Demonstration of Vehicle-to-Everything (V2X) Communication Technology