



“Data Driven Mobility”

*Gopal Valecha
AVP – IT (BD)*



Delhi Integrated Multi-modal Transit System Limited

Joint Venture of Govt. of NCT of Delhi and IDFC Foundation

An ISO 9001, 14001, OHSAS 18001, ISO 27001 & CMMI L3 Certified Company

DIMTS Overview

DIMTS is a 50:50 Joint Venture of

Government of National Capital Territory of Delhi (GNCTD)

&

Infrastructure Development Finance Company Ltd. (IDFC; USD 10 billion assets under management; power, highways, ports, etc.)

Chief Secretary of Government of National Capital Territory of Delhi is the chairman of the company

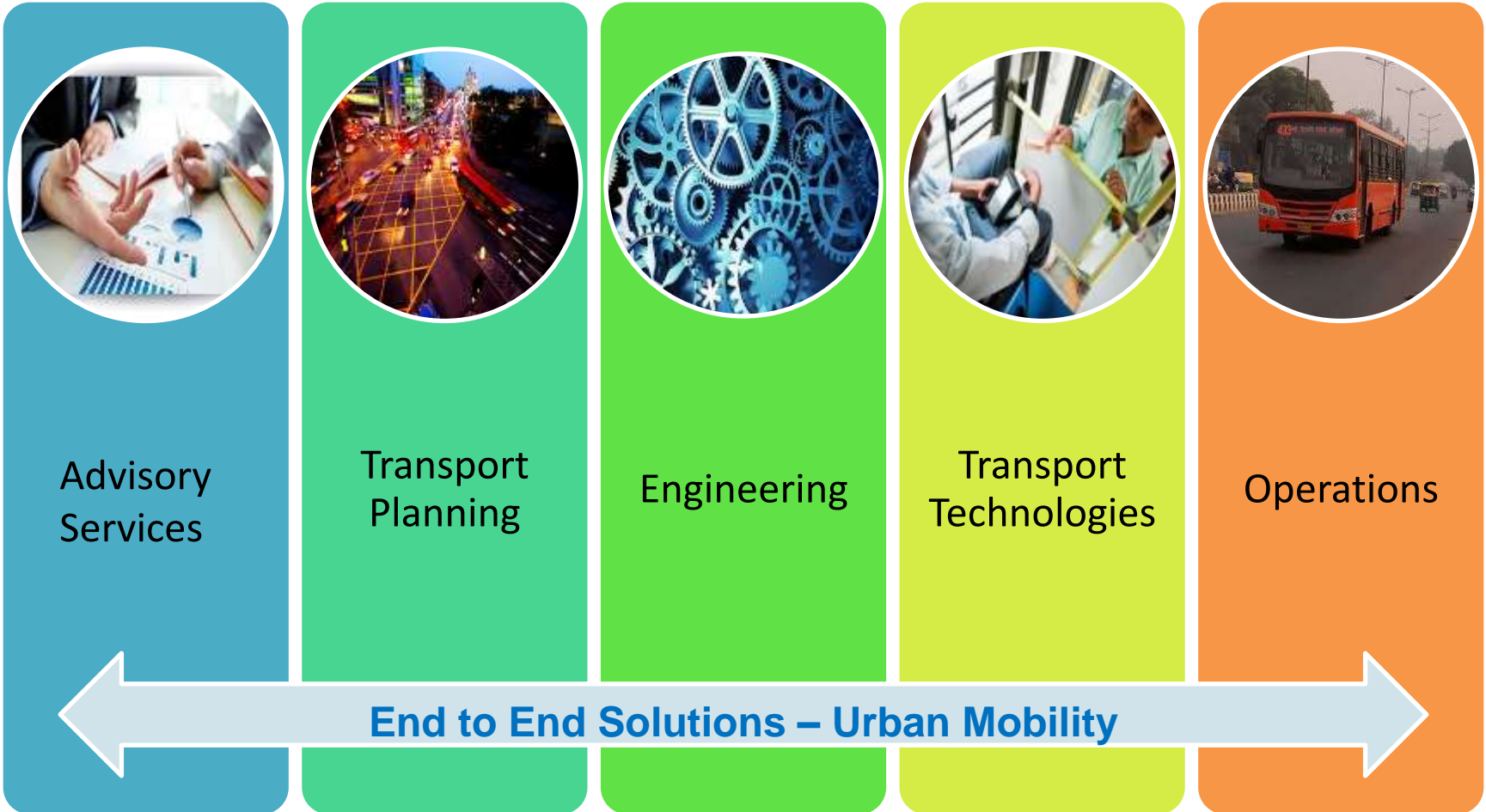
Vision

To create an environment where the majority of trips take place by public transport in preference to personal motorized transport

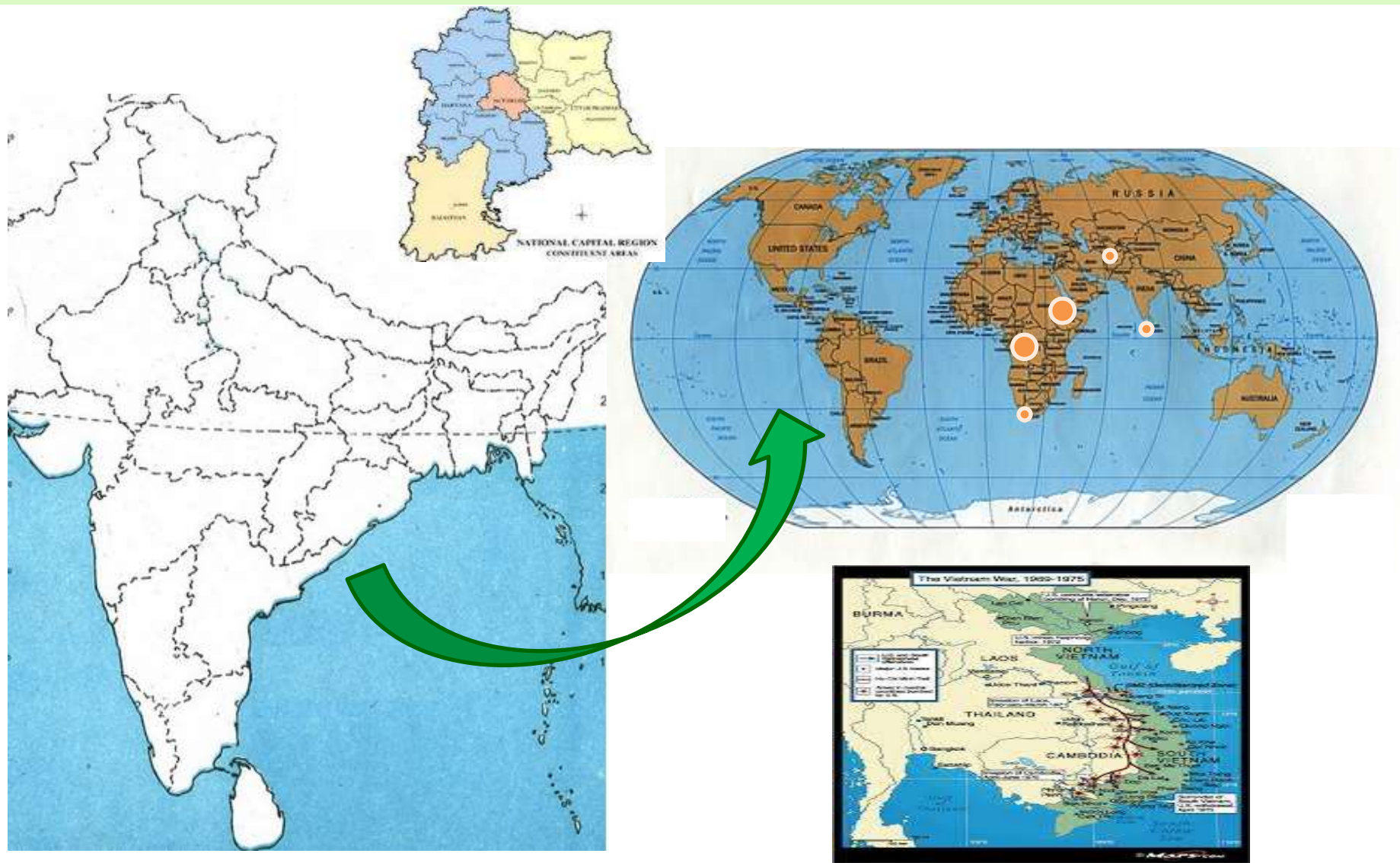


About DIMTS

A Value Proposition



Areas & Geographies



Projects and clients across 17 states in India and 5 countries

Sensors around us ...



Data is in Silos





Data (Real Time & Historic) helps cities in :

- Informed decision making
- Becoming more efficient
- Better governance and civic engagement
- Saving costs
- Safer
- Create new business models / revenue streams

- Public Transportation
- Transport Planning
- Route optimization & Rationalization
- Traffic Congestion
- Seamless Travel experience
- Parking
- Safety & Surveillance
- Waste management



We help people move



Delhi Context



1,500 Buses



400 + Water Tankers



80,000 TSR



25,000 PSV



1500 ETMs



900,000 E-Tickets

80 GB Data /Day

Command & Control Center... Empowering Authorities

State-of-the-art Command & Control Center for monitoring of various ITS sub-systems :

- Adaptive Traffic Control System(ATCS)
- CCTV based Junction Surveillance
- Variable Message Signs (VMS)
- Red Light/Speed violation Detection
- Video Incident Detection System
- Parking lot Vacancy Counter
- Automatic Vehicle locator System



Empowering Commuters



Utilizing Location DATA

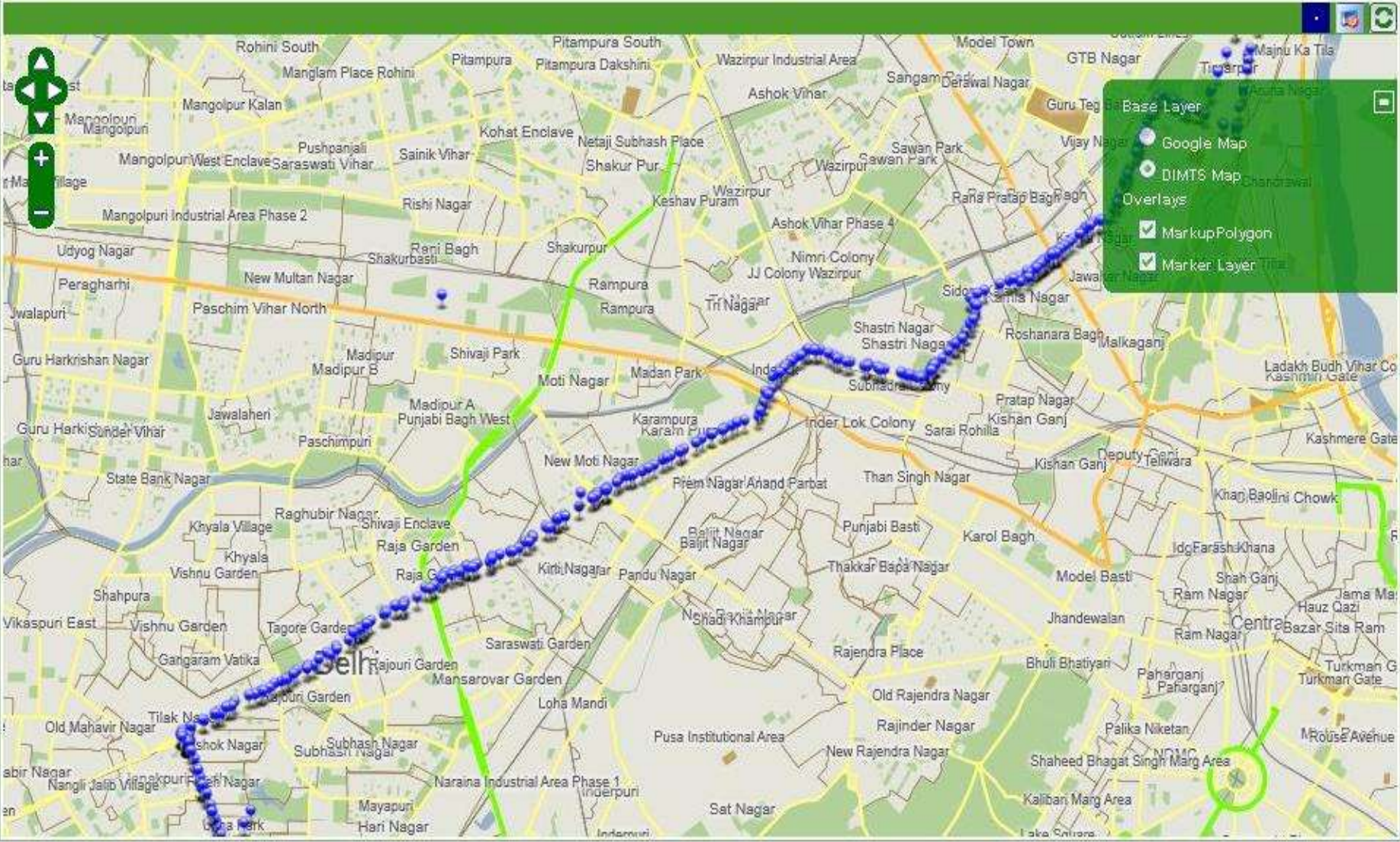
GPS based **Automatic Vehicle Location (AVL) System** has been deployed on all the buses. System is being used to monitor operations of the fleet

Alerts Dashboard manages alerts and responds to deviation/violations

- Over-speeding reports
- Depot, vehicle and route wise reports
- Missed stops reports
- Route deviation reports
- Trip status reports (Cut/Short/Missed)
- Distance travelled



Utilizing Location DATA

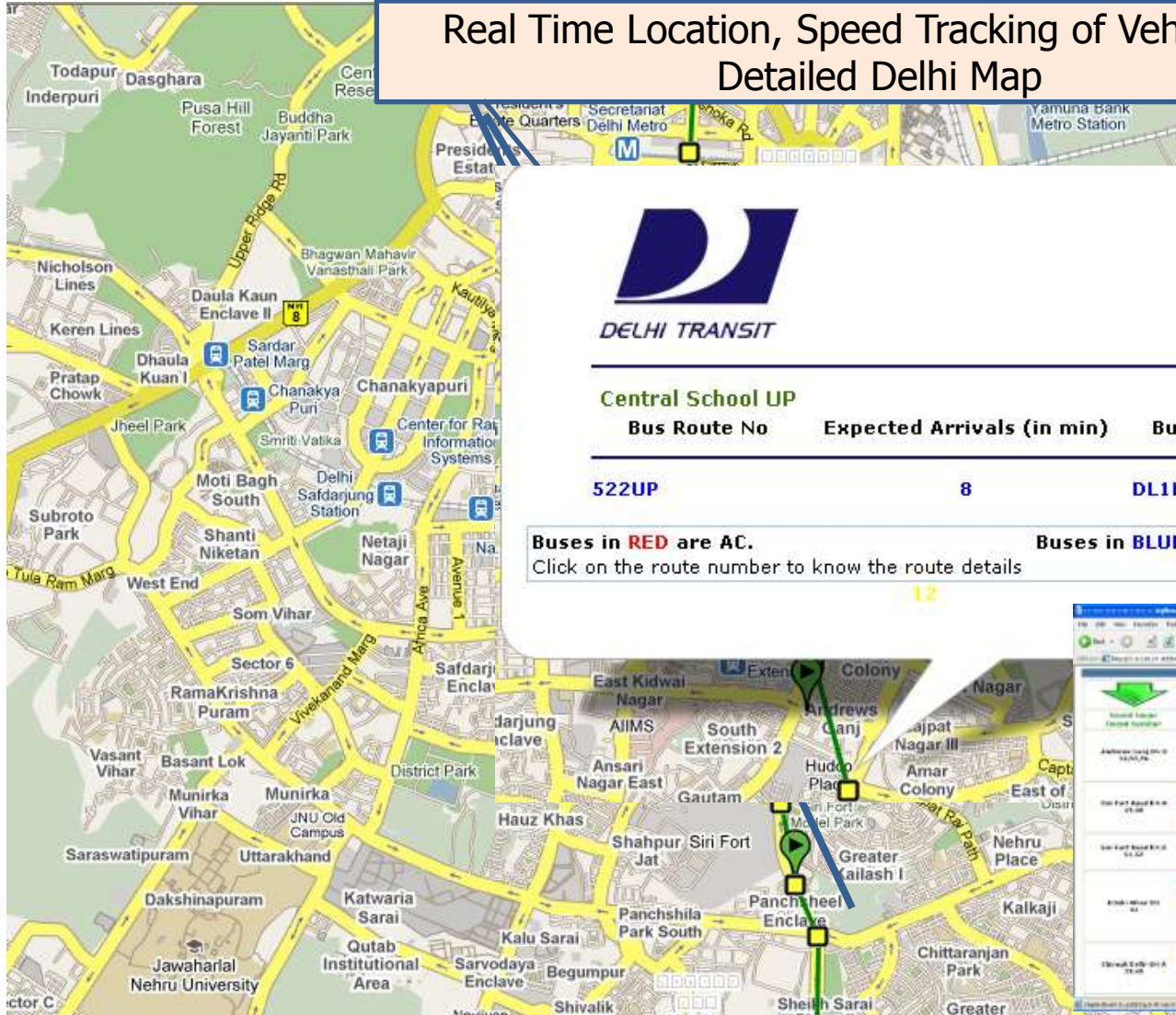


- Real-time tracking of > **80,000 Vehicles**
- Autos fitted with GPS integrated EFMs
- Complete Trip tracking with fare meter data
- Panic Button
- Tampering alert to prevent tampering of integrated meters
- MIS reporting to the Transport Department
- Pooch-o Auto booking mobile application for Public



Utilizing Location DATA ... Expected Time of Arrival

Real Time Location, Speed Tracking of Vehicles On Detailed Delhi Map



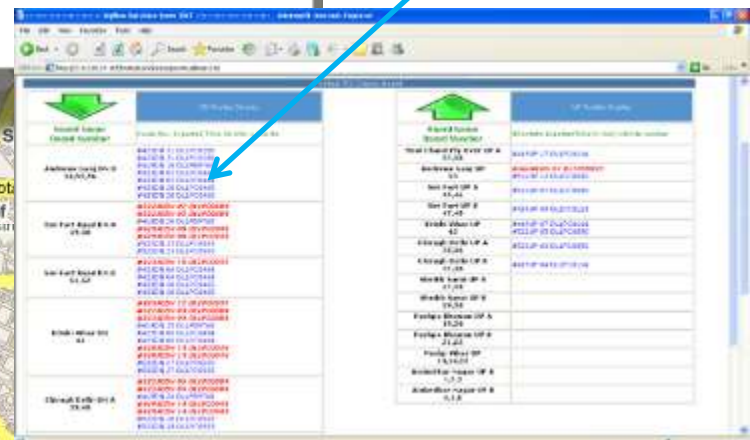
Central School UP

Bus Route No	Expected Arrivals (in min)	Bus No.
522UP	8	DL1PC0248

Buses in RED are AC. Buses in BLUE are Non AC.
Click on the route number to know the route details




ETA of Bus at each stop gets updated in real time on BQS LED as well as Web




Utilizing Location DATA ...Journey planner

5:32 PM

Search by Route No.



Route No. :



Check Seat Availability(Occupancy) and time

2:53 PM

Search Nearby Bus Stops

Use Current Location



Check Seat Availability(Occupancy) and time

5:33 PM

Route No. : 901

Name	: 114ST+901D
Source	: Kanjhawala Depot
Destination	: Kamla Market
Frequency	: 15mins
Bus Type	:  »
Name	: 901CLDOWN
Source	: MangolPuri Y Block
Destination	: Kamla Market
Frequency	: 15mins
Bus Type	:  »
Name	: 901CLUP
Source	: Ajmeri Gate
Destination	: Mangolpuri Y Block
Frequency	: 15mins
Bus Type	:  »
Name	: 901DOWN
Source	: Mangolpuri S Block
Destination	: Kamla Market
Frequency	: 15mins
Bus Type	:  »

Seat Availability(Occupancy) and time of arr

Utilizing Location DATA ...Journey planner

901CLDOWN

- Mangol Pur School
Arriving in : 2 min
- Rohini Depot III
Arriving in : 3 min
- Puspanjali Enclave
Arriving in : 3 min
- Kali Mata Mandir
Arriving in : 4 min
- Deepali Chowk
Arriving in : 6 min
- Saraswati Vihar C Block
Arriving in : 7 min
- Madhuban Chowk Outer Ring Road
Arriving in : 8 min
- Madhuban Chowk PP Metro Stn
Arriving in : 15 min
- Pitam
ETA is available for this route.
Arriving in : 16 min

Check Seat Availability(Occupancy) and time

Kali Mata Mandir

Arriving in (min) : 4

Seats Available:

Destination : Kamla Market
Route No. : 901CLDOWN
Bus No. : DL1PC4330
Current Location : Outer Ring Road, Mangolpur Kalan
Bus Type :

Seat Availability :

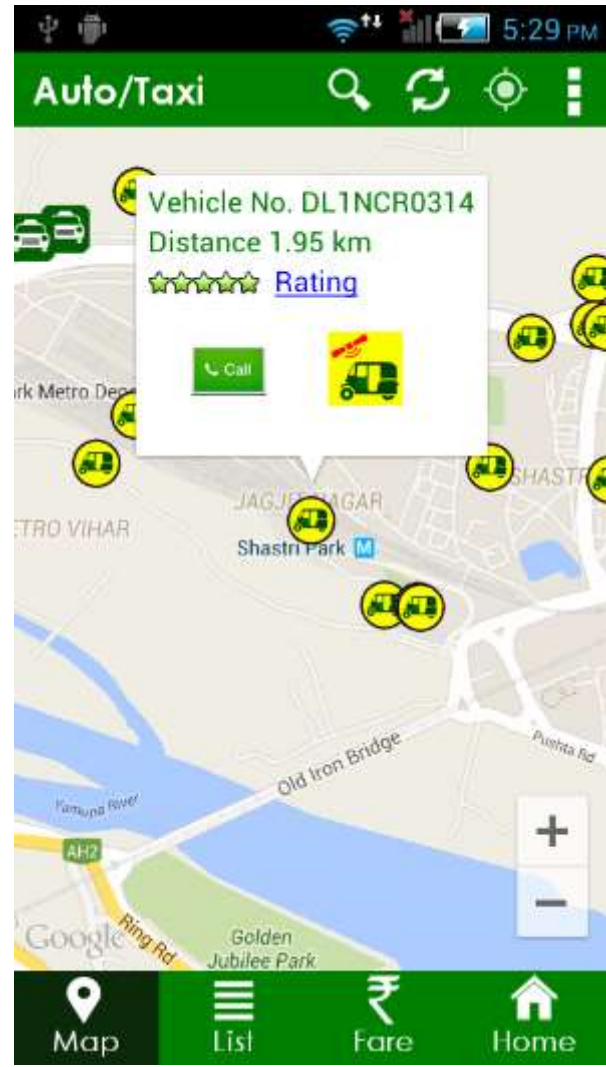
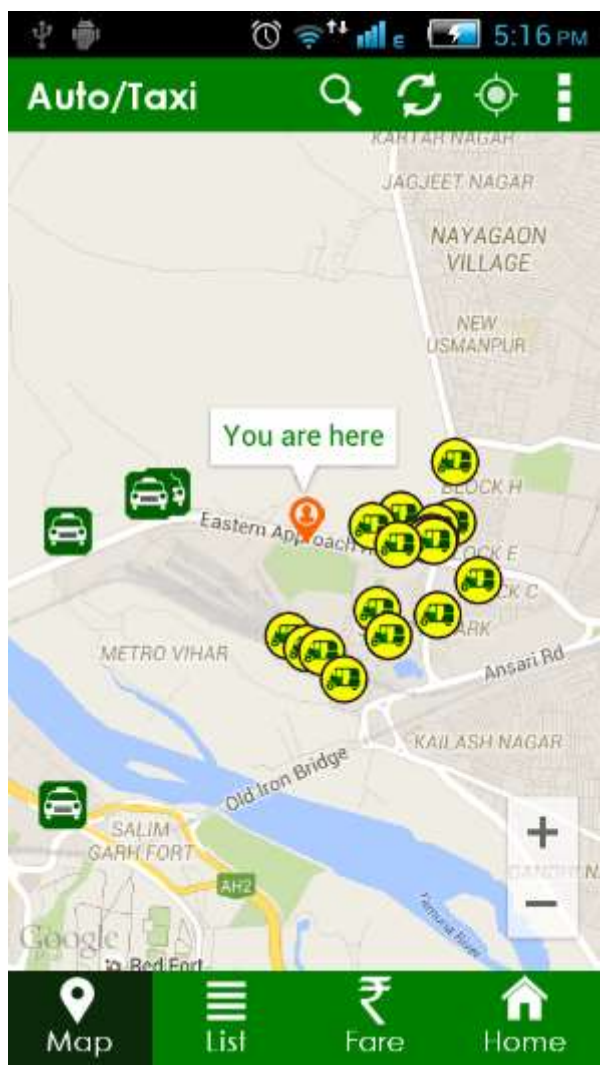
Check Seat Availability(Occupancy) and time

901CLDOWN

New Delhi

Check Seat Availability(Occupancy) and time

Utilizing Location DATA ...Journey planner



Utilizing Ticketing DATA...Journey planner

The screenshot displays three panels from a mobile application. The top panel, titled 'Trip Plan', shows input fields for 'Enter Origin' and 'Enter Destination', with checkboxes for 'Use Current Location as Origin' and 'Use Current Location as Destination'. Below these are 'Favourites' and 'Search' buttons. The middle panel, also titled 'Trip Plan', shows the origin as 'Maya Enclave, Block EA Maya Enclave, New Delhi' and the destination as 'IT Park Road, Metro Vihar, Shastri Park, Jagjit Nagar, Delhi, 110053, India'. It includes the same 'Use Current Location' checkboxes and 'Favourites'/'Search' buttons. The right panel, titled 'Different Routes', shows a route diagram with four bus stops: Maya Enclave, Zakhira, I.S.B.T Nityanand marg, and Shyam Giri Mandir. It lists route numbers: 778 (red arrow), 823 (green arrow), and 246 (cyan arrow). Summary statistics at the bottom of this panel are: Distance : 17.2 km, Travel Time : ~57.0 min, Fare : Rs. 25.

1:03 PM 4G VoLTE 1:20 PM 1:20 PM 1:20 PM

Trip Plan

Enter Origin

Use Current Location as Origin

Enter Destination

Use Current Location as Destination

Favourites Search

Trip Plan

Maya Enclave, Block EA Maya Enclave, New Delhi

Use Current Location as Origin

IT Park Road, Metro Vihar, Shastri Park, Jagjit Nagar, Delhi, 110053, India

Use Current Location as Destination

Favourites Search

Different Routes

Maya Enclave Zakhira I.S.B.T Nityanand marg Shyam Giri Mandir

→ : 778
→ : 823
→ : 246

Distance : 17.2 km Travel Time : ~57.0 min Fare : Rs. 25

Please update latest version from Google Play. NextE

Other Use Cases/Projects



MoUD eSBM Platform for Solid Waste Management under Swachh Bharat Mission





Government of India

Ministry of Urban Development

MEMORANDUM OF UNDERSTANDING

BETWEEN

MINISTRY OF URBAN DEVELOPMENT
GOVERNMENT OF INDIA

AND

DELHI INTEGRATED MULTI MODAL TRANSIT
SYSTEM LIMITED

Memorandum of Understanding between DIMTS and MoUD for providing eSBM Platform for Solid Waste Management in Urban Local Bodies

This Memorandum of Understanding (MoU) is signed on 2nd day of May 2010 by and between **PRESIDENT OF INDIA**, acting through **SHRI PRAVEEN PRAKASH, JOINT SECRETARY & MISSION DIRECTOR, MINISTRY OF URBAN DEVELOPMENT, GOVT. OF INDIA** (hereinafter called **MoUD** which expression shall unless repugnant to the context include its successors in Govt, business administrators and assigns or legal representative) of the **FIRST PARTY**

AND

DELHI INTEGRATED MULTI MODAL TRANSIT SYSTEM LIMITED, a Company registered under the Companies Act 1956 having its Registered Office at 1st Floor, Maharana Pratap ISBT Building, Kashmere Gate, New Delhi-110006 acting through **SHRI M. RAMSEKHAR, EXECUTIVE DIRECTOR & JOINT CEO** (hereinafter called **DIMTS** which expression shall, unless repugnant to the context includes its successor in business, administrators, liquidators and assigns or legal representatives) of the **SECOND PARTY**.

In the MoU, henceforth, **MoUD** and **DIMTS** shall be individually referred to as "PARTY" and collectively as "PARTIES".

Intelligent Signaling System – Ahmedabad

- DIMTS has been nominated for restoration & repair works of 186 signalised intersections and up-gradation of Control Room with remote monitoring, in a phased manner, for Ahmedabad Municipal corporation
- Based on DIMTS performance, Ahmedabad Municipal Corporation has renewed O&M contract by 3 more years - up to Oct 2018



- ISS Ahmedabad includes –
 - 186 Signalised Intersections
 - Adaptive Signal Controller
 - LED Signal Heads
 - Vehicle detection cameras
 - MPLS-VPN leased line
 - Operations Control Center
 - CoSiCoSt ATCS software
 - Operations & Maintenance of Signalised intersections

Intelligent Signaling System – Ahmedabad



AREA TRAFFIC CONTROL SYSTEM, AHMEDABAD



- HOME
- TranMMGE
- LIVE NETWORK
- TIME SPACE
- GRAPHS
- REPORTS
- SATURATION CHART
- ABOUT

JUNCTION NAME : SWASTIK



JUNCTION PARAMETERS

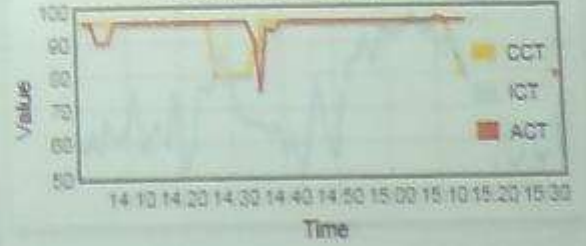
STAGE	SEQNO	SPLIT	STATUS	MODE	CYCLE NO.
4	4	5	JUNCTION-ON	ATCS	2

ICT - Intersection Cycle-Time

STAGE PARAMETERS

STAGE NO	ALLOCATED	AVAILABLE	
1	18	41	15
2	18	18	15
3	20	34	15
4	15	34	15

LIVE JUNCTION CYCLE-GRAPH



SAT
SATUR
NORM
UNDEF

Intelligent Signaling System – Surat

- In Jan 2014, DIMTS was awarded the contract for Development, Supply, Installation & Maintenance of Area Traffic Control System(ATCS) at 52 Junctions on BRTS corridor in Surat City
- DIMTS will Operate & Maintain these Junctions for 6 years.



- ISS Surat includes
 - 52 Signalised Intersections
 - adaptive Wireless Traffic Signal Controller,
 - LED Signal Heads,
 - Vehicle detection cameras,
 - OFC for 24x7 communication
 - Operation Control Center(OCC),
 - CoSiCoSt application software
 - TraMM Application Software

ATCS Control Room – Surat



ATCS Control Room – Surat

The image shows a large multi-panel display in a control room, divided into two main sections. The left section displays four live CCTV camera feeds showing busy streets in Surat, with many auto-rickshaws and pedestrians. The right section displays the TraMM (Traffic Monitoring and Management) web interface. The interface includes a navigation menu with options like Home, TraMM, Live Monitor, and Reports. A map of Surat is shown with various traffic points marked, including locations like Lohana Junction, Erandivan, and others. The interface also features a status bar at the bottom with various indicators and a taskbar at the very bottom.

The TraMM interface includes the following elements:

- Navigation Menu: Home, TraMM, Live Monitor, Reports, Mission Control, About.
- Map: A map of Surat showing various traffic points marked with colored dots (green, red, blue).
- Status Bar: A bar at the bottom of the interface with various indicators and labels.
- Taskbar: A Windows taskbar at the very bottom of the display.

AUTOMATED PARKING MANAGEMENT SYSTEM (APMS)



- Operator based Entry/Exit Booth with interface to Arming/Exit Loops, Bar-code printer/reader, Smart-Card Reader, User fare Display, Boom Barrier & ANPR camera for Number plate reading.
- Bar code based token generation at Entry Gate while Bar code token scanning, tariff calculation and Payment receipt generation at Exit Gate
- VMS as part of Parking Guidance system provides vacancy information.
- Availability of Parking slot information upon arrival and proper signage and navigation system, ensures hassle-free parking space.
- Provision for advance Parking reservation through SMS or Internet
- Efficient Parking reduces congestion, pollution, driver's frustration and enhances overall driving experience within Parking lot.

AUTOMATED PARKING MANAGEMENT SYSTEM (APMS)

Report Details

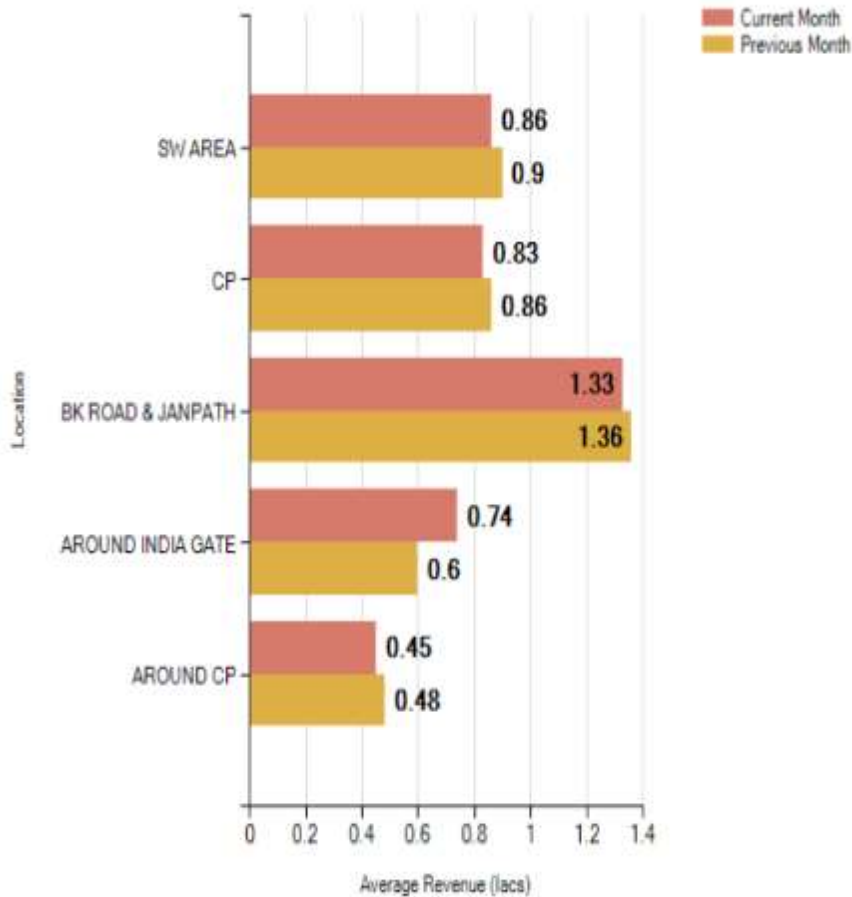


Location-wise Revenue & Capacity Utilization

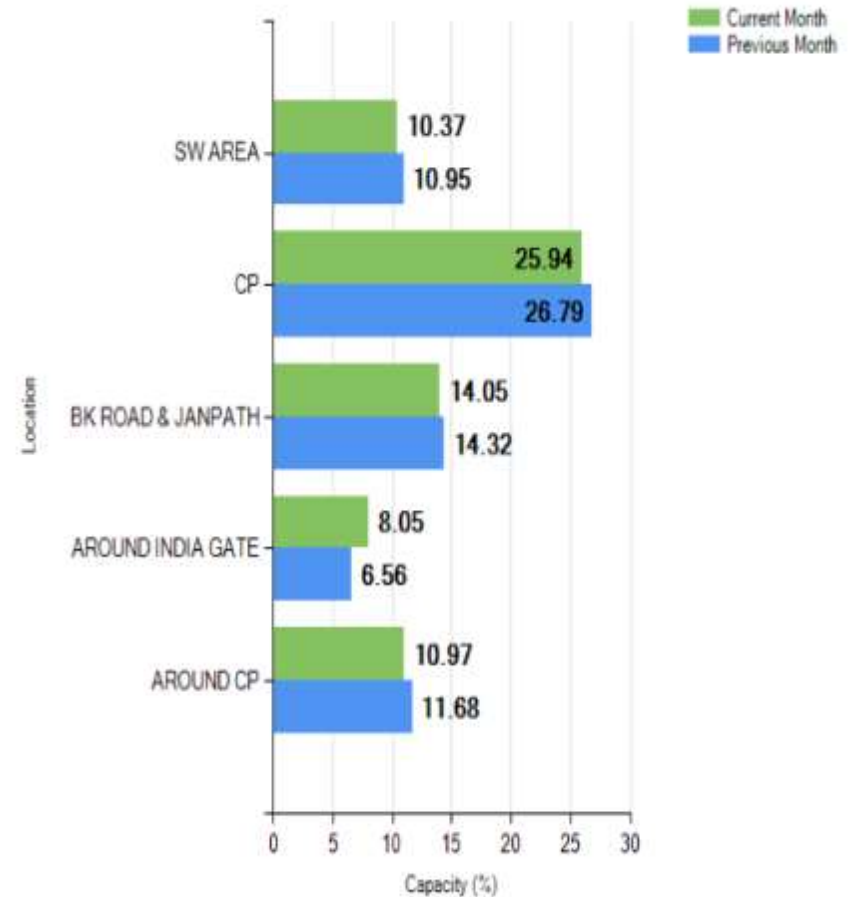
Current Month From 15-Feb-2015 To 16-Mar-2015

Previous Month From 16-Jan-2015 To 14-Feb-2015

Average Revenue Per Location (lacs)



Capacity Utilization (%)



AUTOMATED PARKING MANAGEMENT SYSTEM (APMS)

Welcome : dimts

Logout

Analyst MIS Report

Search Criteria

From 16-02-2015

To 16-03-2015

Select Location

CP

Select Parking

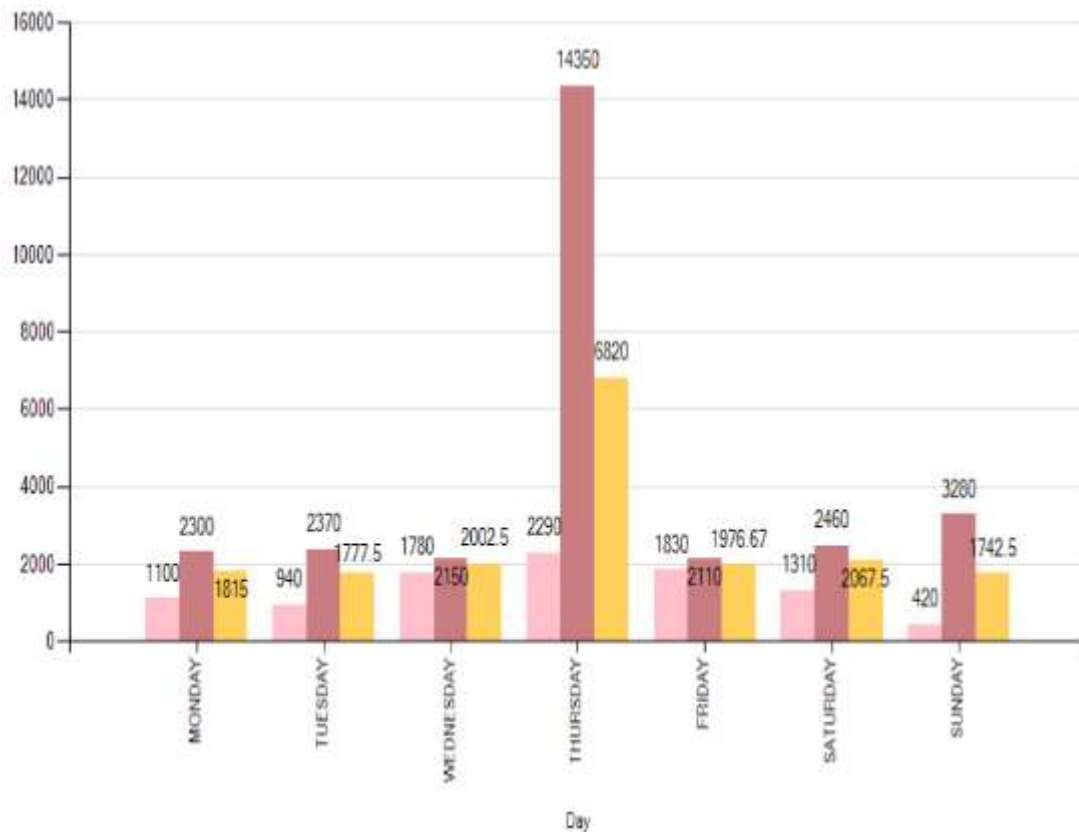
A BLX INNER CCL

View Report

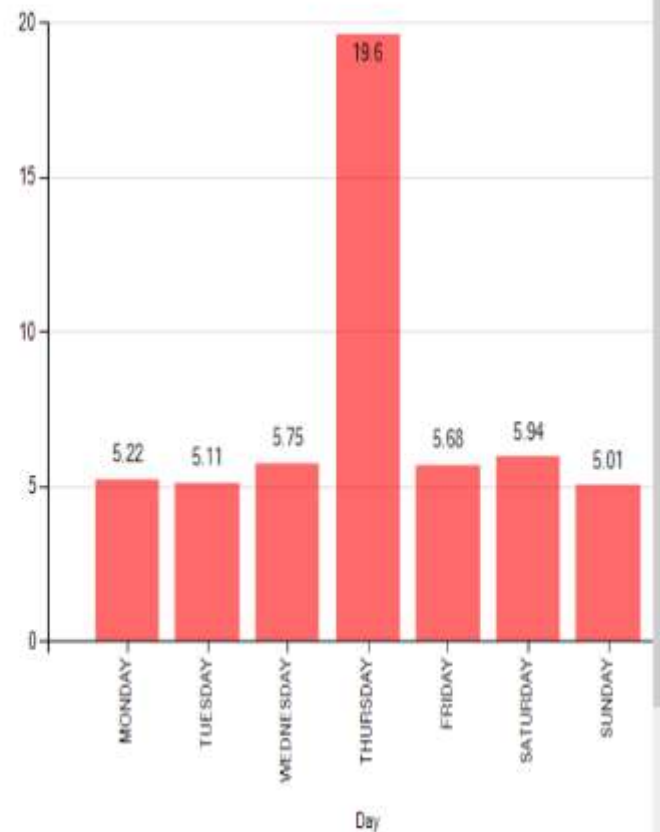
Report Details

Day - wise Analysis with Capacity Utilization

Minimum Amount Maximum Amount Average Amount



Capacity Utilization in %



MORTH - National Level Vehicle Security and Tracking System

Scope is to support MoRTH in formulating and implementing the scheme “Security for Women in Public Road Transport in the Country”

Project is planned to be funded from the Nirbhaya Fund.

Following components are proposed

A National
Backend Data
Centre.

CCC in 32 cities
covering more
than 3 million
vehicle

Installation of
GPS
CCTV
Panic Buttons
in nominated PSVs

Thank You

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