



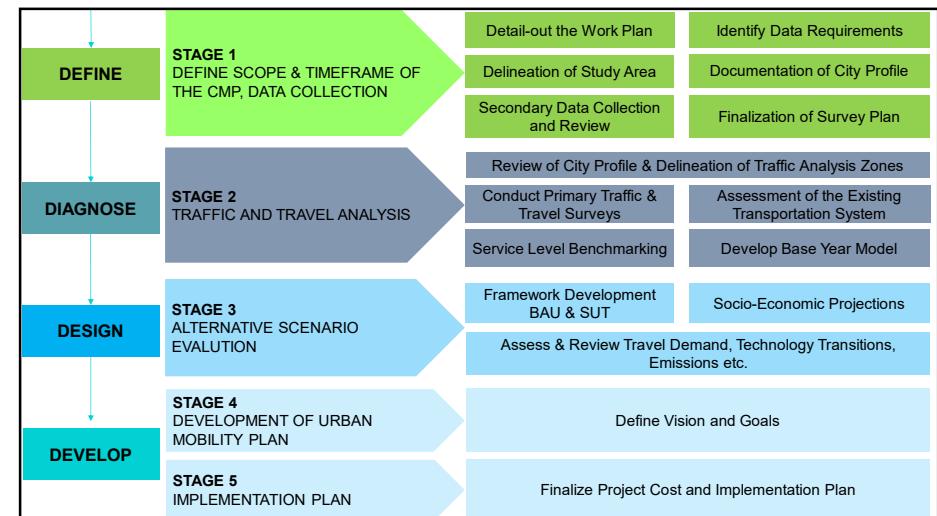
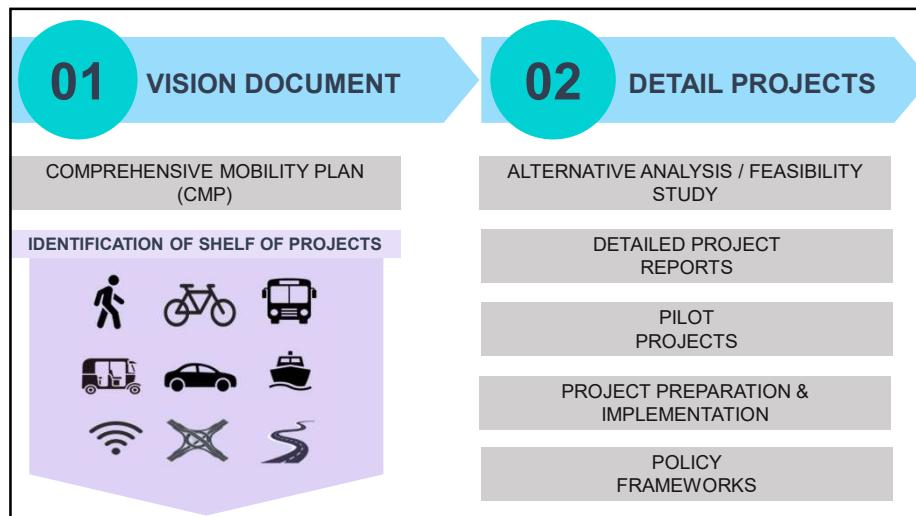
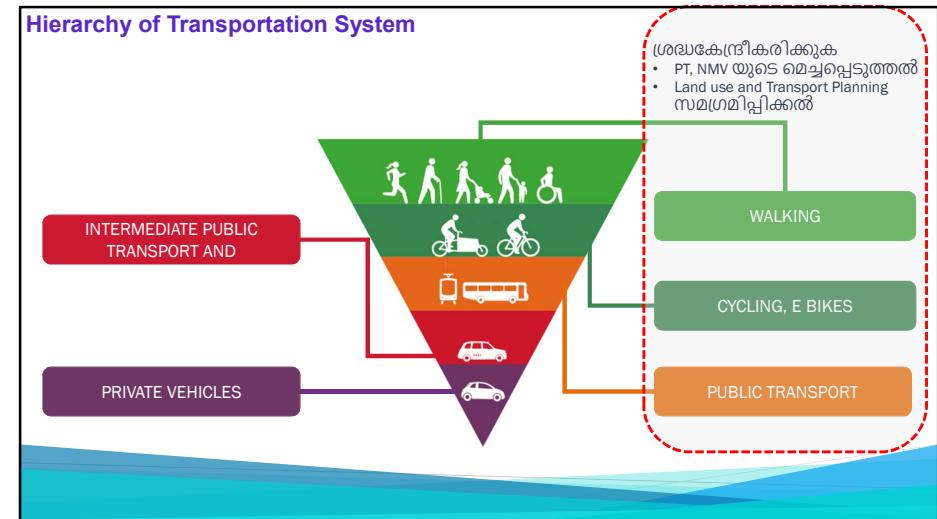
INTERNAL DISCUSSION

ഡ്യാമ്പർ[®]
കോംപ്രഹെൻസീവ്
മൊബൈലിറ്റി പ്ലാൻ (CMP)
കോഴിക്കോട്

KOCHI METRO RAIL LIMITED

Urban Mass Transit Company Limited





DEFINE

STAGE 1
CITY PROFILE

01

KOZHIKODE CITY PROFILE

KOZHIKODE

STAGE 1

- Rapidly urbanising area in India.
- Know as City of Spices, was once gateway to medieval South Indian coast
- One of the biggest economic hubs in Kerala
- UNESCO has named Kozhikode, the city of literature.

STAGE 1

STUDY AREA DETAILS

STUDY AREA	INFLUENCE AREA
CORPORATION	3 MUNICIPALITY
+ 2 MUNICIPALITY	+ 18 PANCHAYATS
+ 3 PANCHAYATS	
AREA	
210 in Sqkm	333 in Sqkm

STUDY AREA
Kozhikode Corporation (75 Wards), Ferroke Municipality, Olavanna Panchayat, Kunnamangalam Panchayat
Influence Area: Kozhikode Planning Area, Municipalities, Panchayats

INFLUENCE AREA

DEFINE

KOZHIKODE CITY PROFILE
Urban Plan Team, Kozhikode Corporation

STAGE 1

Demographic Profile

Population- Kozhikode Planning Area

Year	Population
1991	7,47,265
2001	8,21,600
2011	8,56,583

POPULATION

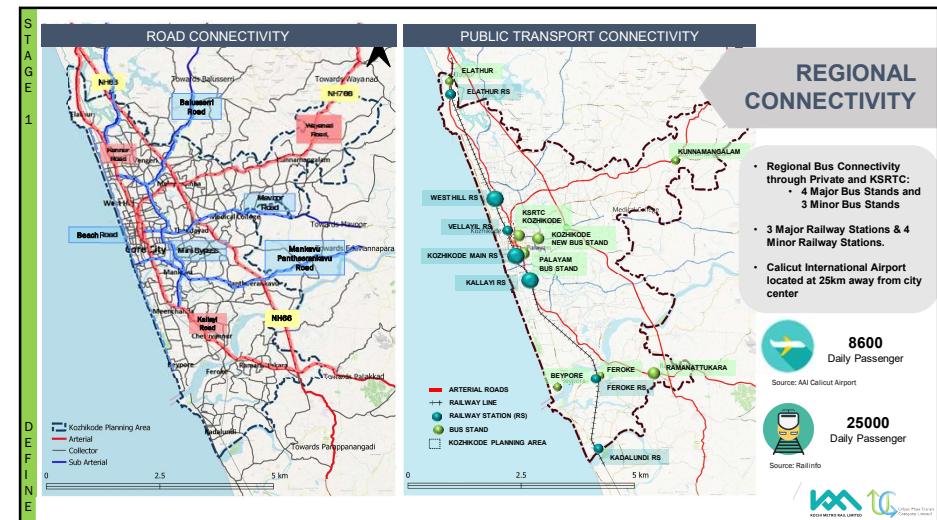
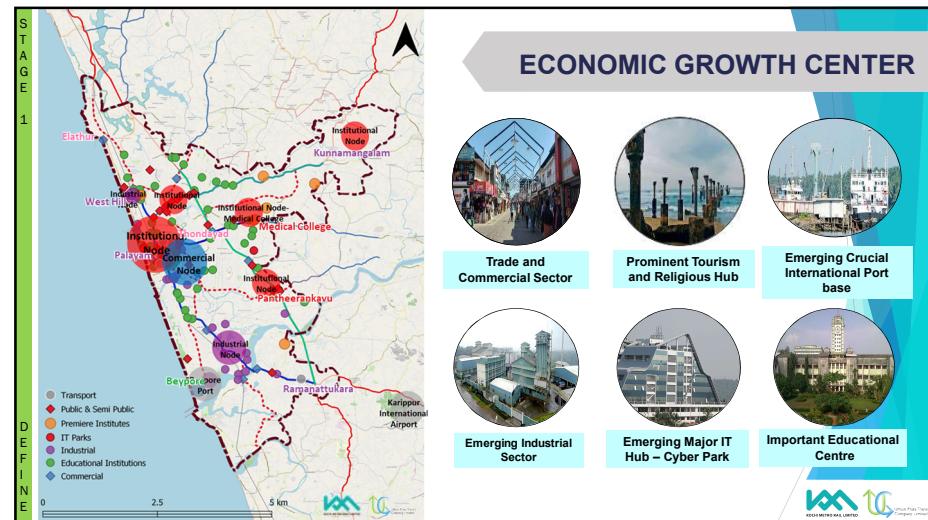
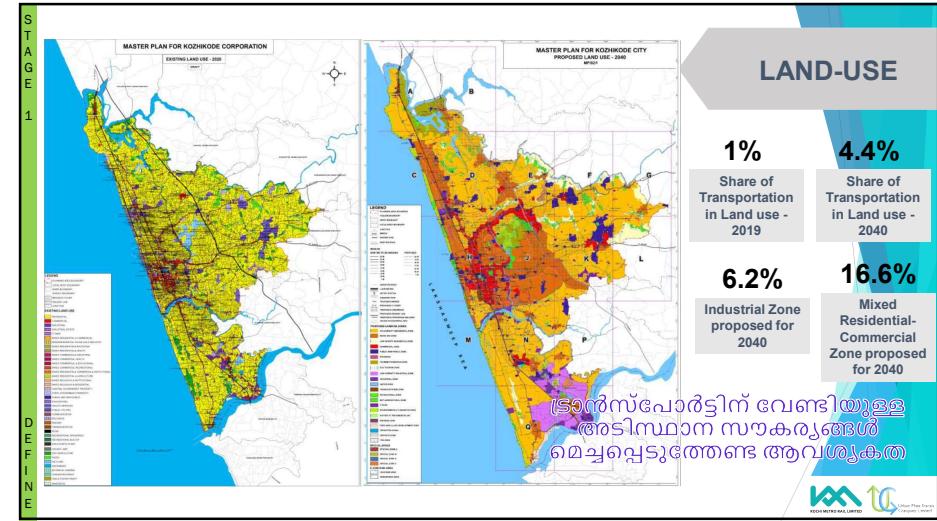
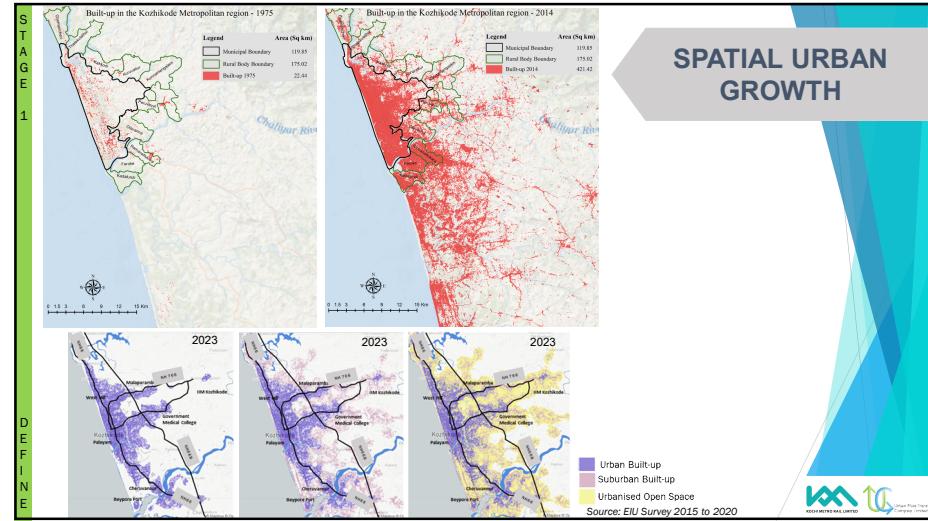
5063 People Per Sqkm
2023

8.56 Lakh Census 2011
10.63 Lakh Estimated 2023

*Based on Master Plan growth projections

DEFINE

KOZHIKODE CITY PROFILE
Urban Plan Team, Kozhikode Corporation



DIAGNOSE

STAGE 2
DATA COLLECTION &
TRAFFIC AND TRAVEL
ANALYSIS

02

EXISTING TRANSPORTATION & TRAVEL CHARACTERISTICS

STAGE 2
DAI GNOE

Data collection

2.1 Traffic & Transportation Surveys

December, 2022 and February, 2023

Kochi Metro Rail Limited **TPC** Transport Policy Council

STAGE 2
DAI GNOE

HOW EFFICIENT IS THE TRANSPORT SYSTEM?

NETWORK PUBLIC TRANSPORT PARKING INTERMEDIATE PUBLIC TRANSPORT FREIGHT NON MOTORISED TRANSPORT

TRAVEL CHARACTERISTICS

STAGE 2
DAI GNOE

NETWORK CHARACTERISTICS

Mavoor Road

Kozhikode Bypass (NH) Road

Mini Bypass Road

Cheruvannur Road, Near Post Office

Only 16%
Road Network availability >18m

Right of Way (ROW) availability >18m

Kochi Metro Rail Limited **TPC** Transport Policy Council

STAGE 2

About 81 %
Road Network has 2 lane capacity

- Limited Road space (ROW) availability along the major corridors in the city.

With increasing demand for travel....

22.5 Kmph
Average Network Speed

20.2 Kmph
Peak Hour –Average Speed

Increasing congestion

Thus, efficient strategies to move more people within the road space is necessary.

Logo: Kozhikode MCL Limited

STAGE 2

TRAVEL CHARACTERISTICS

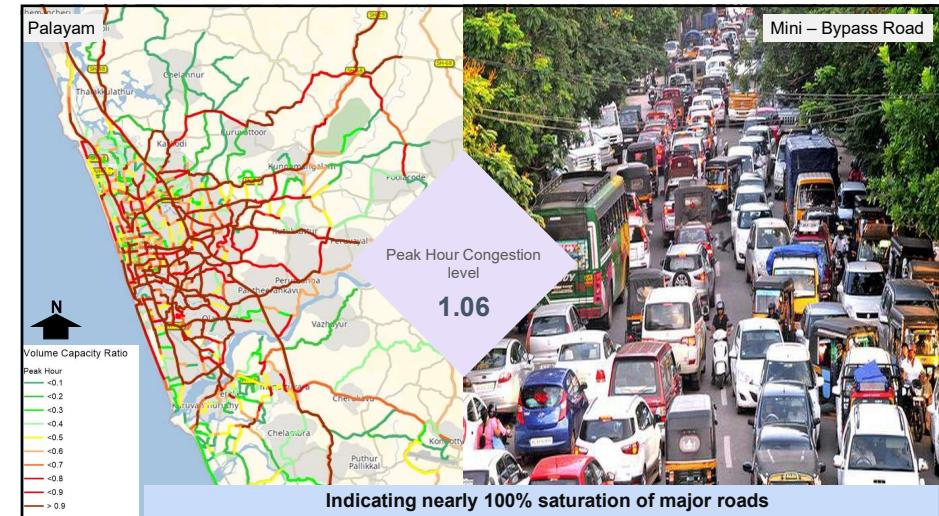
Higher Dependency on Personal Modes (61%)...

Passenger Mode Share (Primary Surveys 2023)

Vehicle Registration Trend in Kozhikode Planning Area

~6.3 Lakhs Vehicles Registered (as on date from Vahan Portal)

>90% Registered passenger vehicles are two-wheelers and cars



PUBLIC TRANSPORT SERVICE PROVIDERS

KSRTC Intercity & Inter State Private Bus Intracity & Intercity

PUBLIC TRANSPORT CHARACTERISTICS

KSRTC KOZHIKODE Kozhikode NEW BUS STAND PALAYAM BUS STAND
RAMANATTUKARA BUS STAND FEROKE BUS STAND

STAGE 2 DAINEGNE

Public transportation (City Bus) is provided by various private operators

365 Private Bus Permits Operate within city area

PUBLIC TRANSPORT SERVICE PROVIDERS

Majority of the Operations limited to high demand corridors

INR 10 Base Fare (2.5km)
INR 35 Average Private Bus Fare

Legend

- PrivateBusModelling KKD Bus Ro
- City
- Region - one service
- Regional
- (all other values)
- NH 766
- KKD Boundary

2 1 0 2 4 Kilometers

PUBLIC TRANSPORT CHARACTERISTICS

STAGE 2 DAINEGNE

Is the current PT system sufficient?

Long queue & Waiting times, Crowded buses, insufficient infrastructure

Unauthorised suspension of trips, Compromised safety...

It's the Need of the hour to re-vamp and organize PT system in Kozhikode

STAGE 2 DAINEGNE

INTERMEDIATE PUBLIC TRANSPORT

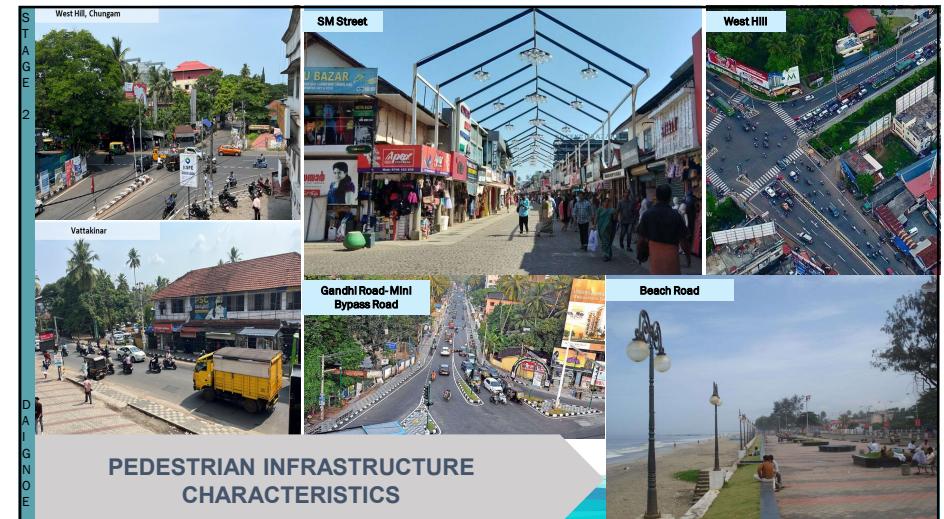
Existing Charging Points

Title: Comprehensive Mobility Plan Kozhikode
Name: Existing Charge Stations

- Very Reliable mode of Transport in the city.
- The base fare for private services is about INR 30.
- Availability of Charging stations from electric IPT, 26 locations in the city, however 1800 electric auto rickshaw permits are vacant

5,540 Auto-rickshaw permits
30km permit Area Permit

STAGE 2 DAINEGNE

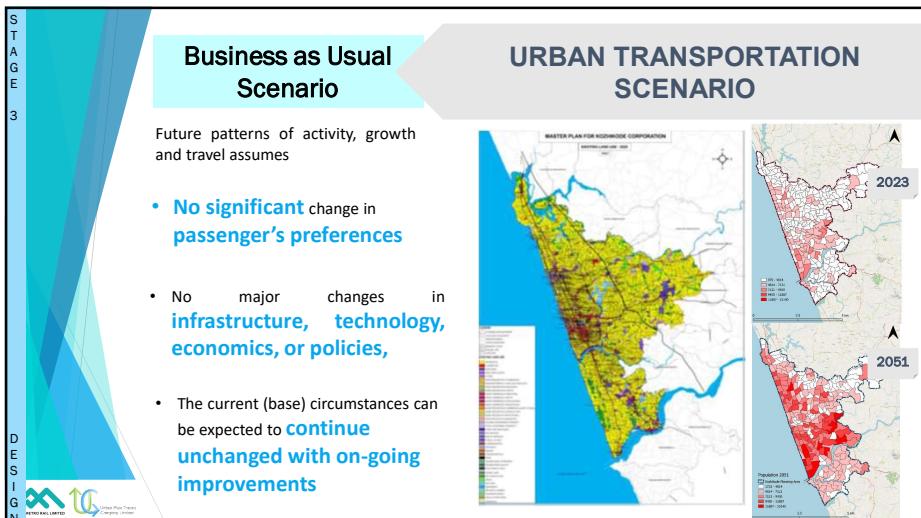




SERVICE LEVEL BENCHMARKING

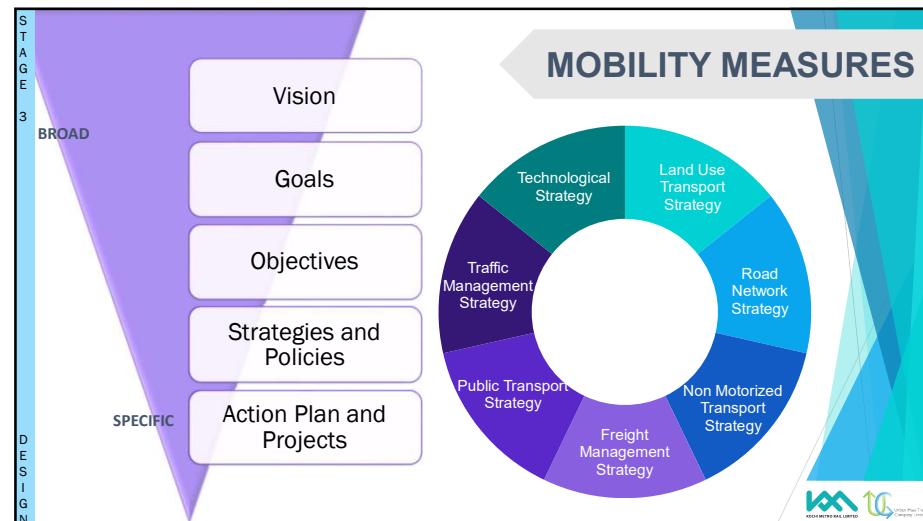
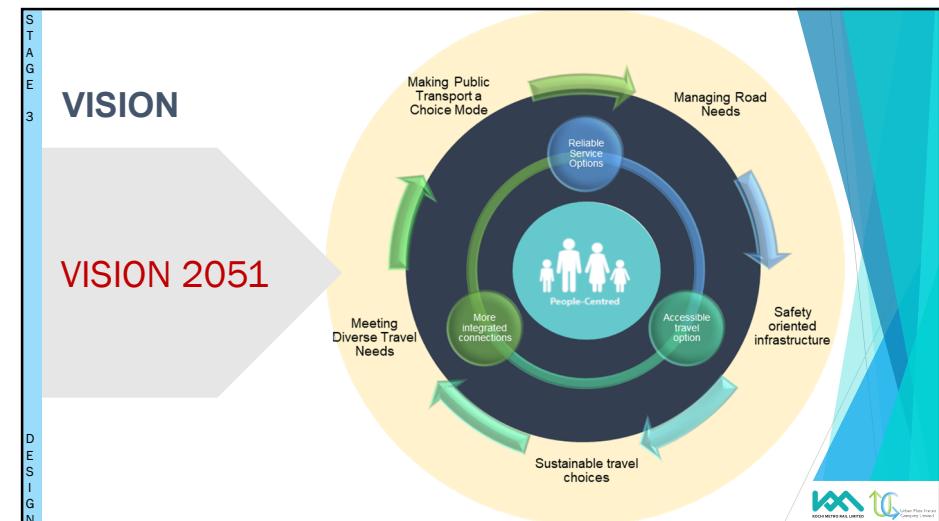
2023	STAGE 2
Public Transport Facilities	LOS 2
Pedestrian Infrastructure Facilities	LOS 2
Non-Motorised Transport Facilities	LOS 3
Level of usage of Intelligent Transport System (ITS) Facilities	LOS 4
Travel Speed (Motorized and Mass Transit)	LOS 3
Availability of Parking Places	LOS 3
Road Safety	LOS 3
Pollution Levels	LOS 1
Integrated Land Use and Urban Transport	LOS 4

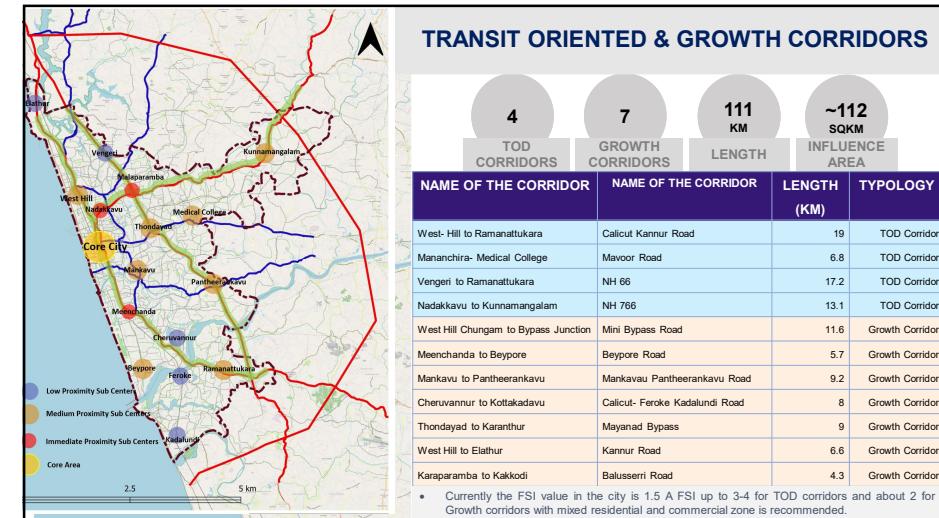
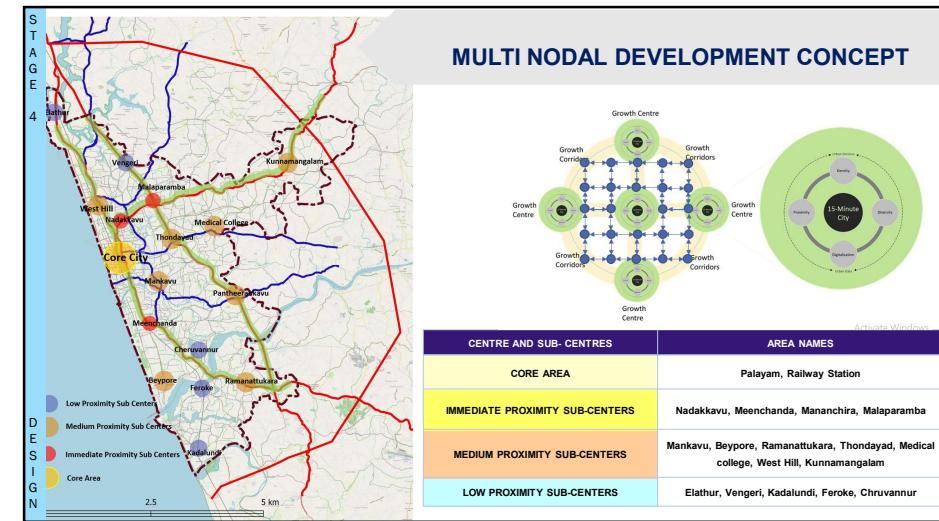
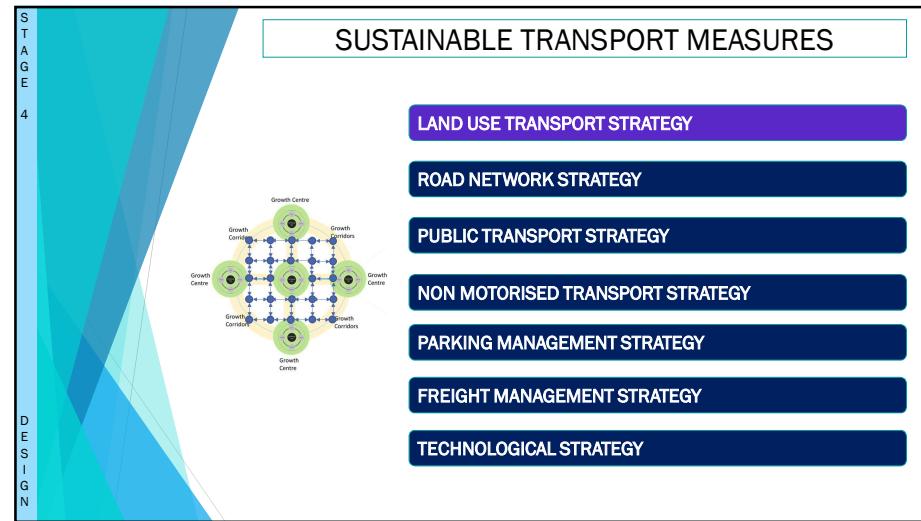
LOS 1 – Excellent, Needs to be Maintained
LOS 2 – Good, Can be Improved
LOS 3 – Needs Significant Improvement
LOS 4 – Poor, Needs Immediate Action

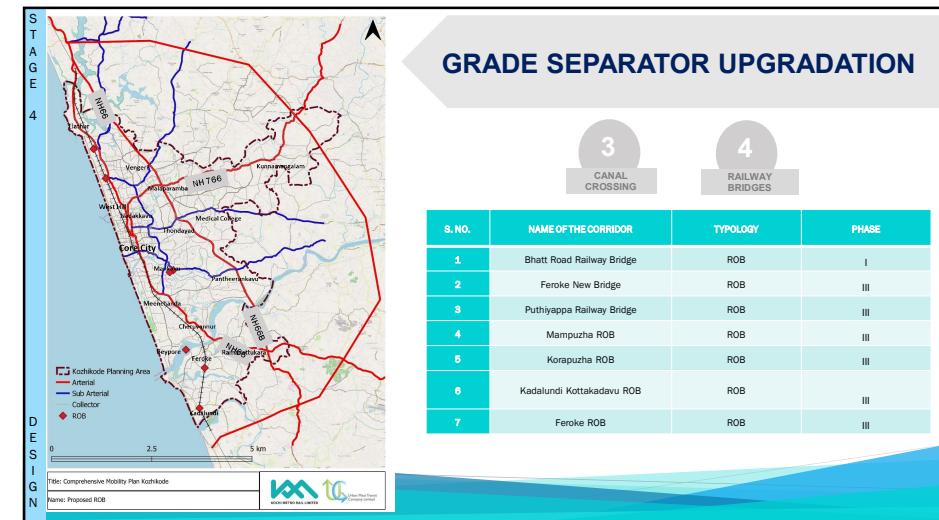
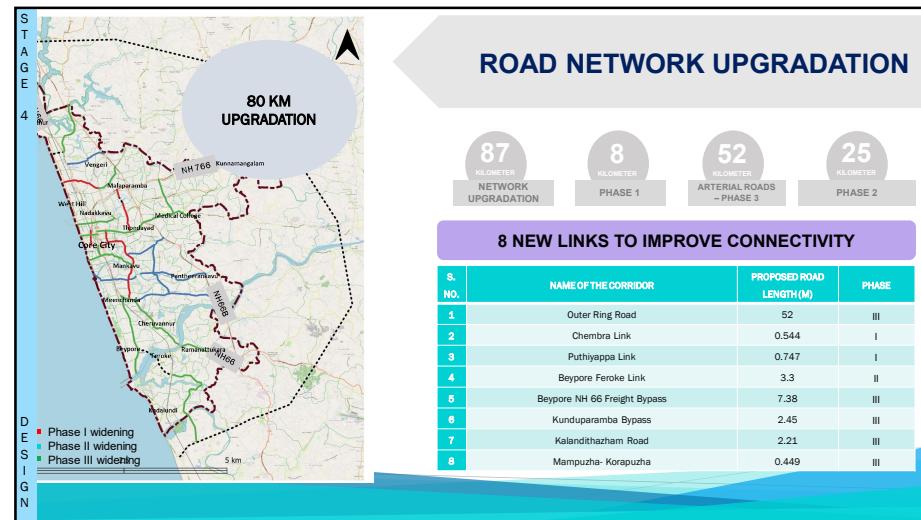
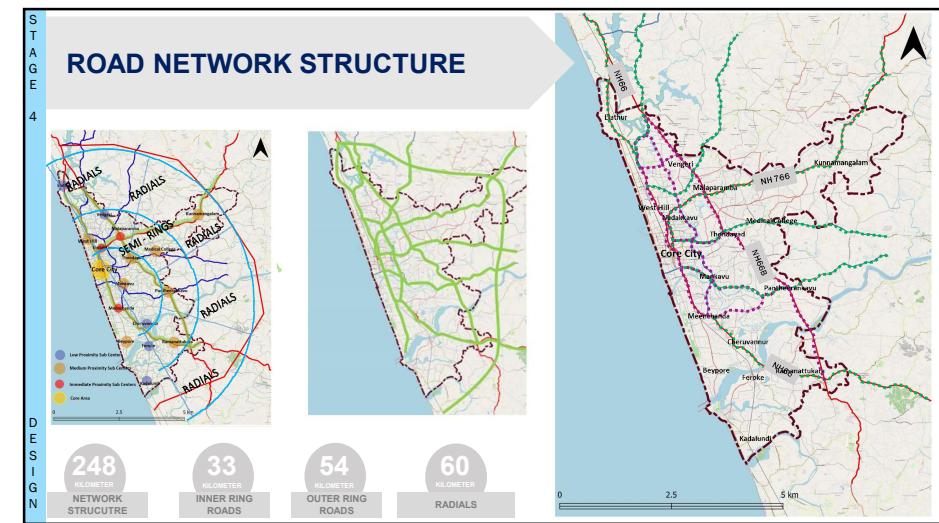
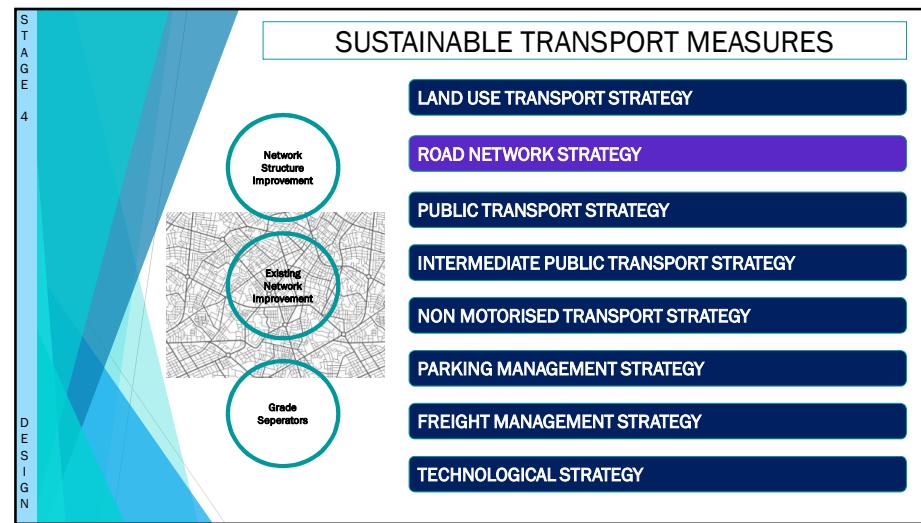


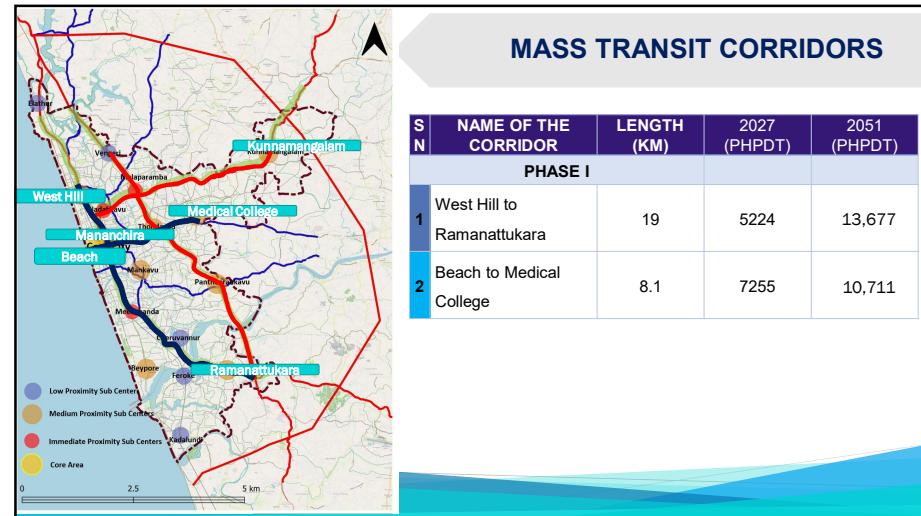
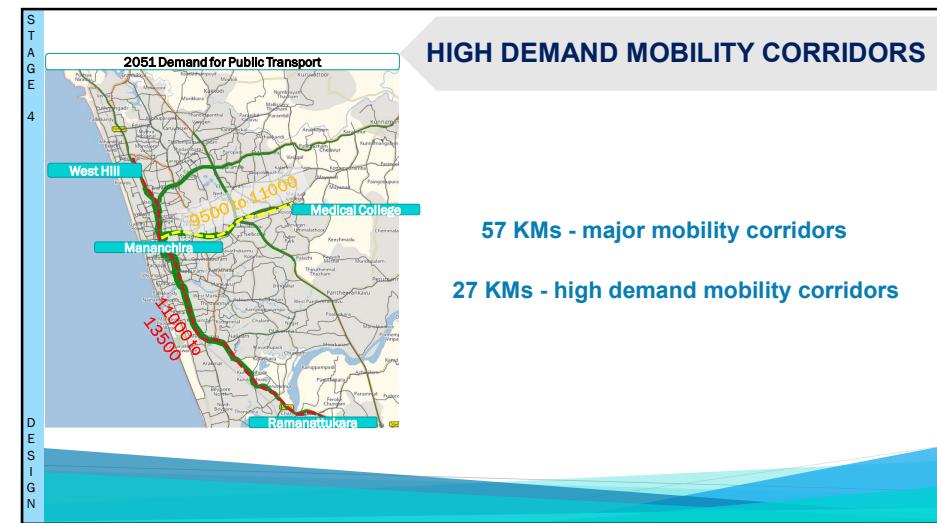
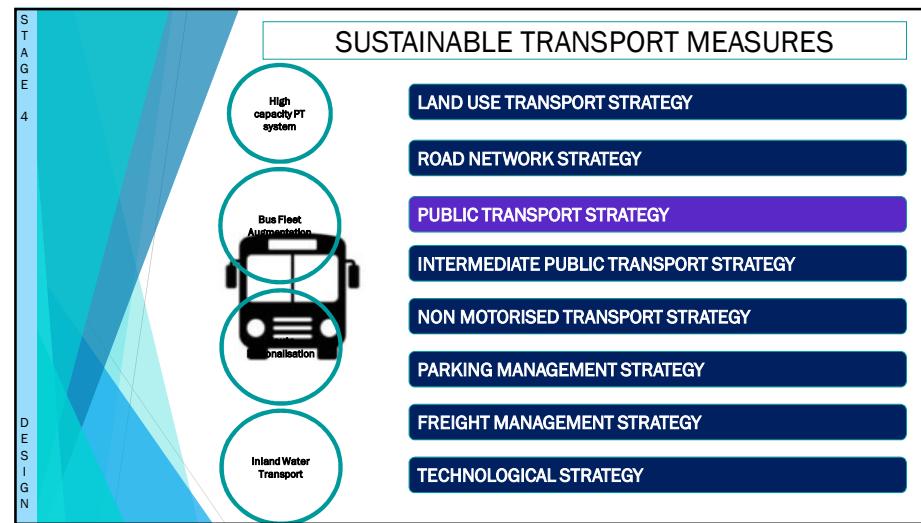
SERVICE LEVEL BENCHMARKING		2023	2051 (BAU)
Public Transport Facilities		LOS 2	LOS 3
Pedestrian Infrastructure Facilities		LOS 2	LOS 4
Non-Motorised Transport Facilities		LOS 3	LOS 4
Level of usage of Intelligent Transport System (ITS) Facilities		LOS 4	LOS 3
Travel Speed (Motorized and Mass Transit)		LOS 3	LOS 4
Availability of Parking Places		LOS 3	LOS 4
Road Safety		LOS 3	LOS 4
Pollution Levels		LOS 1	LOS 3
Integrated Land Use and Urban Transport		LOS 4	LOS 4

LOS 1 – Excellent, Needs to be Maintained
 LOS 2 – Good, Can be Improved
 LOS 3 – Needs Significant Improvement
 LOS 4 – Poor; Needs Immediate Action









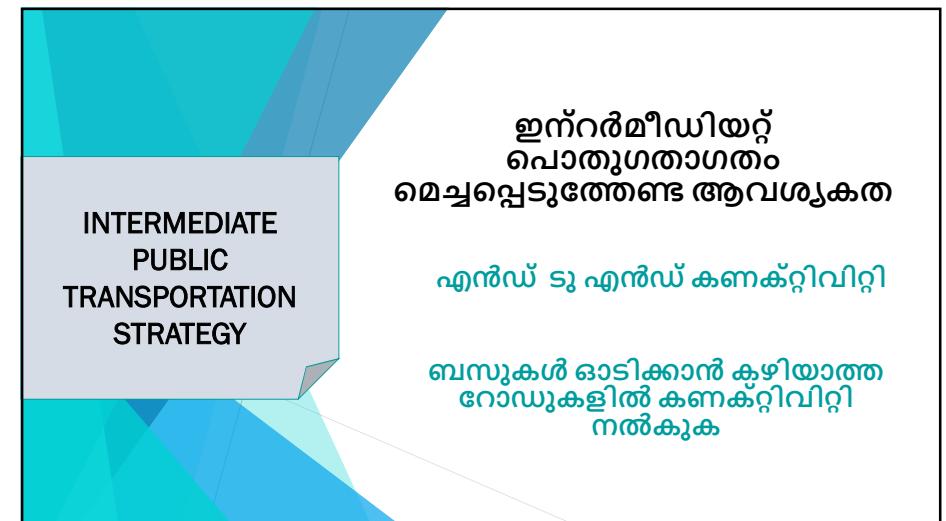
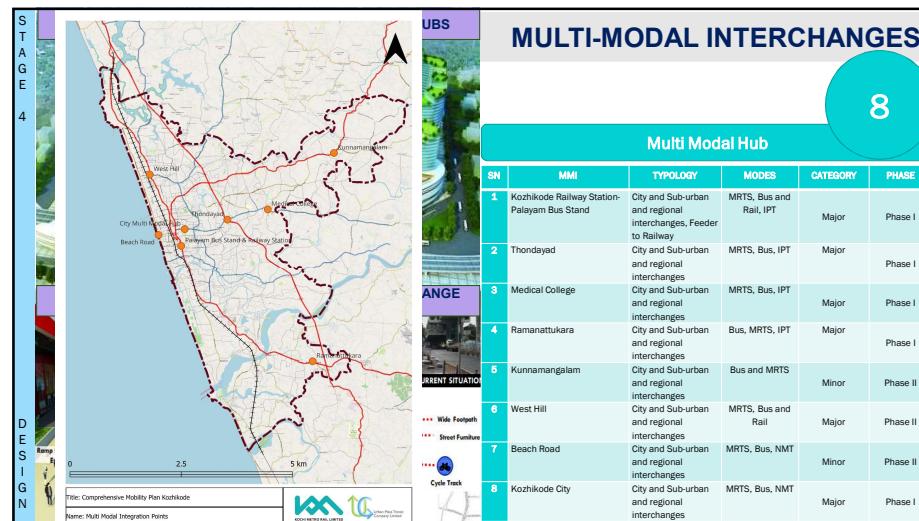
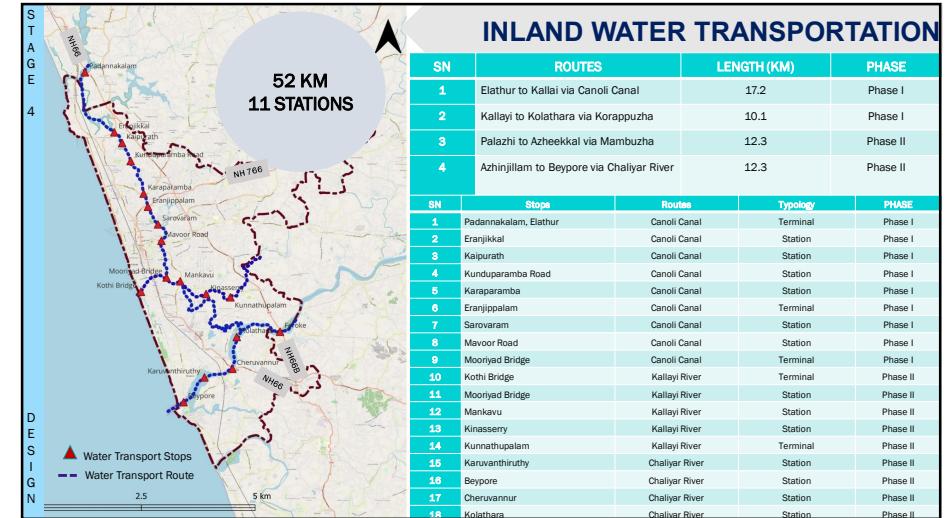
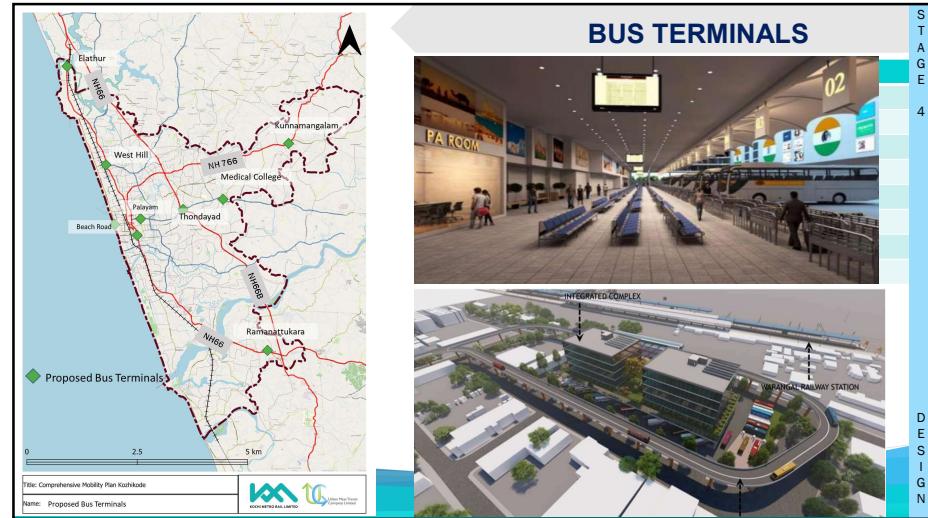
CITY BUS FLEET AUGMENTATION

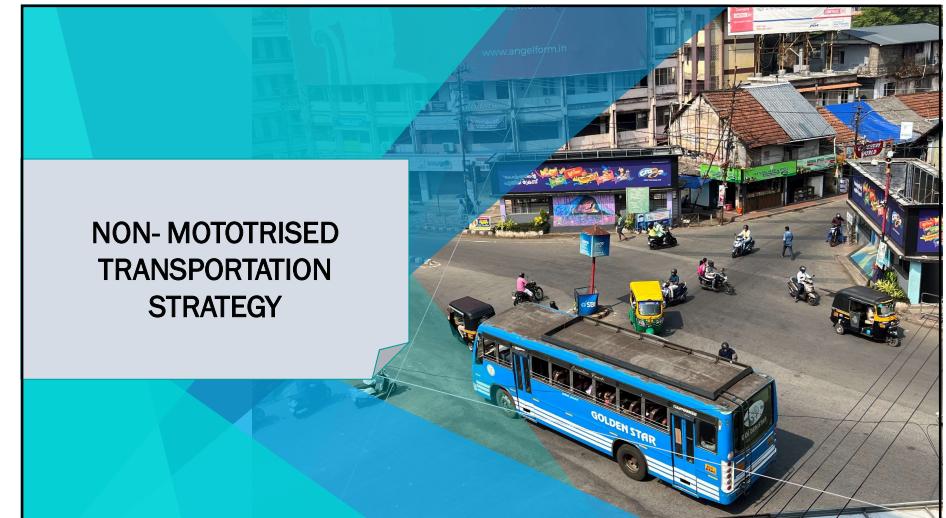
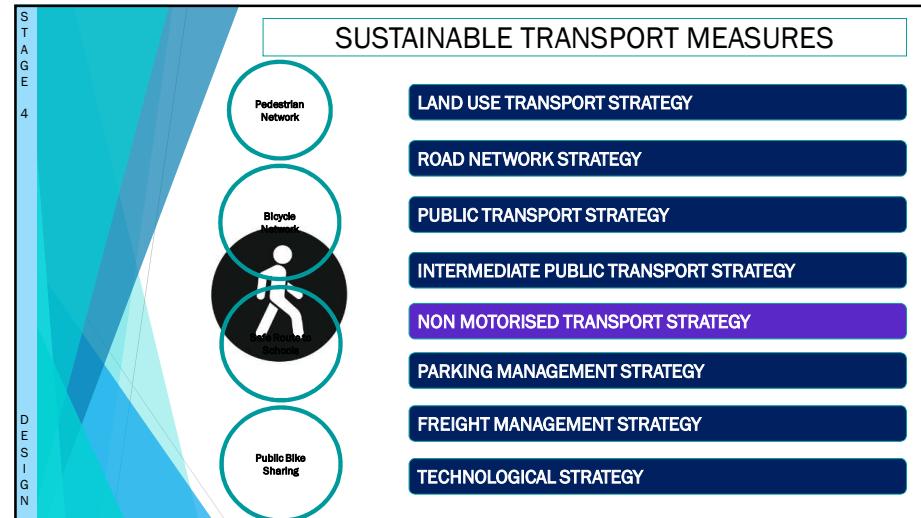
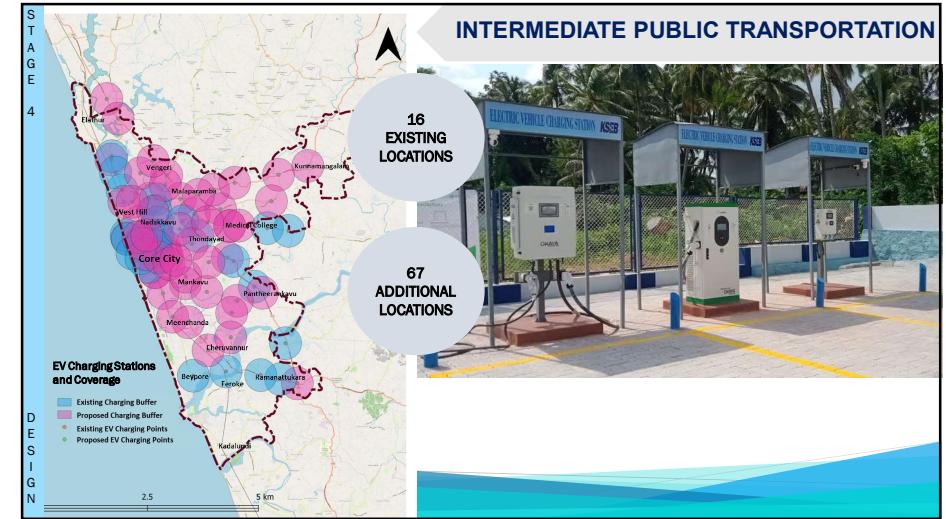
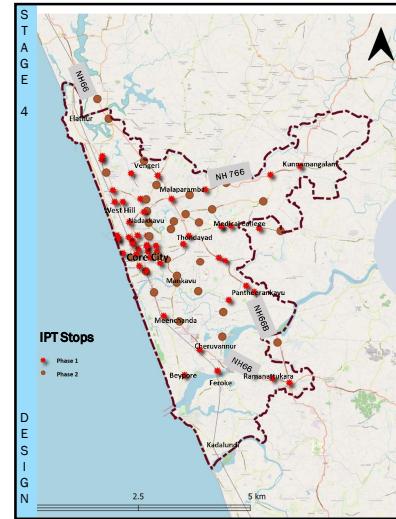
Fleet requirement over the years is estimated based on various norms and demand

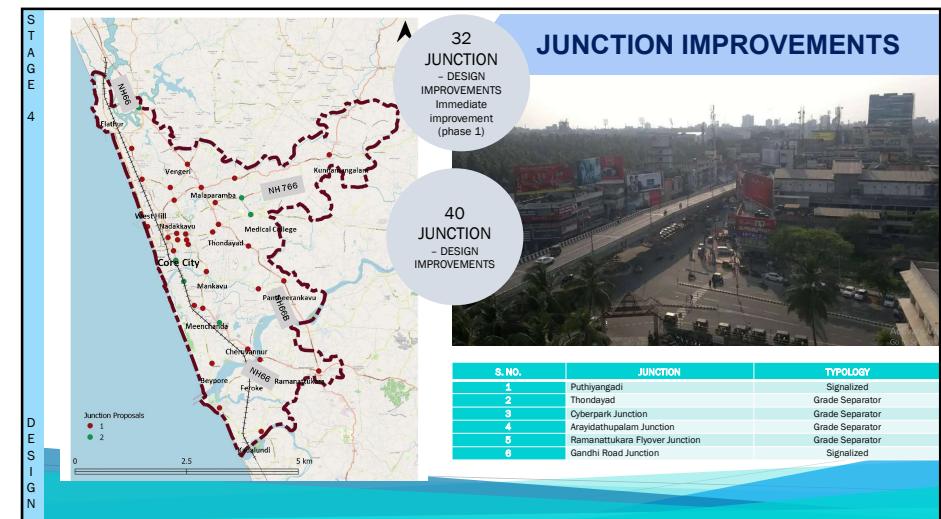
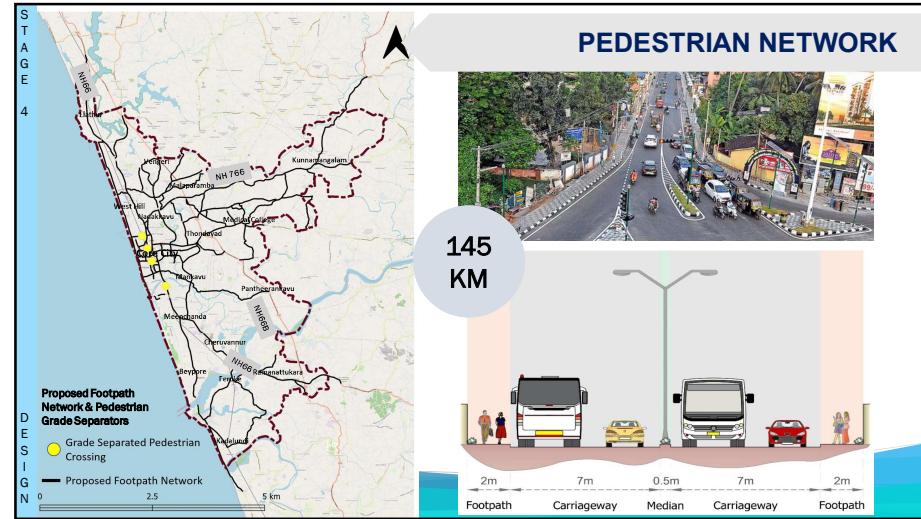
YEAR	EXISTING FLEET	RECOMMENDED FLEET SIZE	BUSES TO BE SCRAPPED		ADDITIONAL FLEET REQUIRED
			SUT_2027	SUT_2051	
2023	365	532			167
2027		572	53		93
2031		658	57		143
2041		830	66		238
2051		1059	83		312

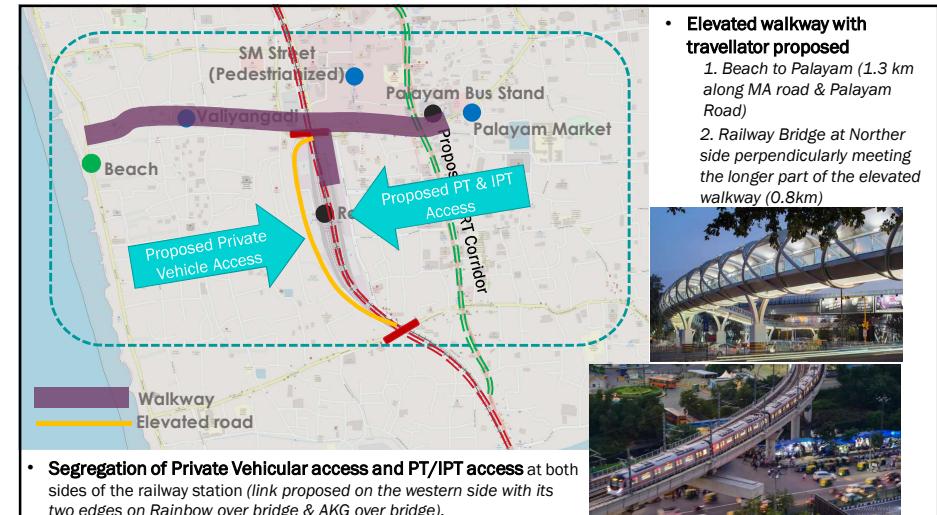
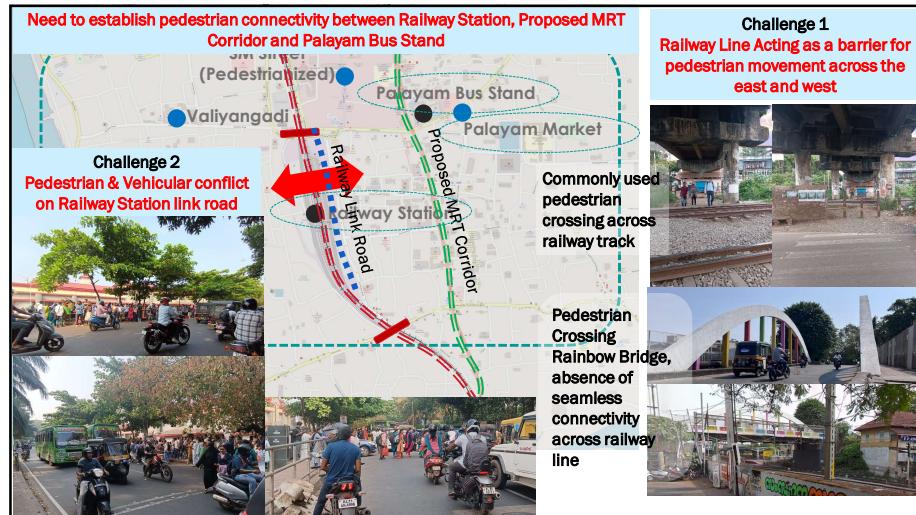
NEW BUS ROUTES	LENGTH (KM)	SUT_2027	SUT_2031	SUT_2041	SUT_2051	BUS TECHNOLOGY
Elathur Kunnamangalam	7.3	5	9	16	24	ELECTRIC BUS
Kunnamangalam-Nerkunn	14	4	7	13	20	ELECTRIC BUS
Meenchenda-Puramenne	9.8	9	13	18	35	ELECTRIC BUS
Medical College-Kunnamangalam	7.5	4	6	13	19	ELECTRIC BUS
Mayened Bypass	8.4	3	6	11	16	ELECTRIC BUS
Parambil Bazaar	8	4	7	13	20	ELECTRIC BUS
Thedimbettuhaacham						
Total		28	47	84	134	

Shorter public/ shared transport routes have been identified to enhance the public transportation system, these routes are intended to serve as a feeder to the Public Transport system



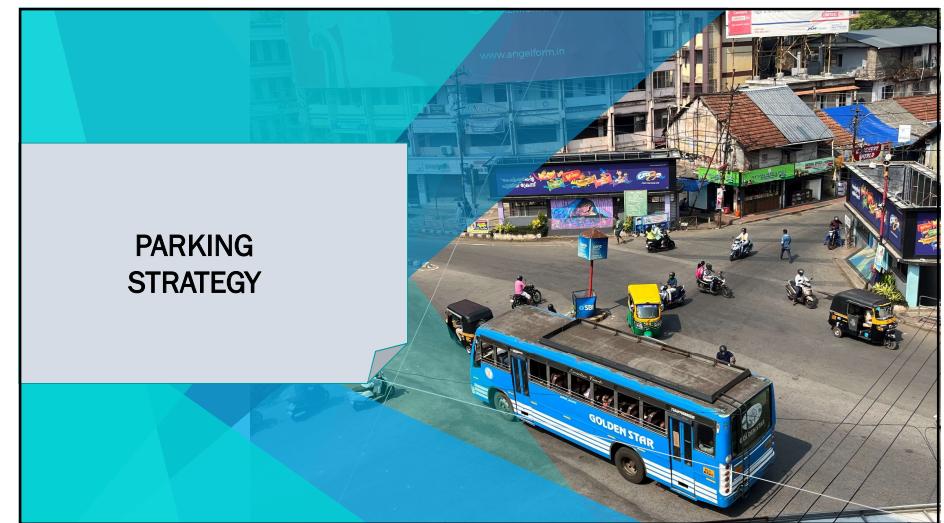






SUSTAINABLE TRANSPORT MEASURES

- LAND USE TRANSPORT STRATEGY
- ROAD NETWORK STRATEGY
- PUBLIC TRANSPORT STRATEGY
- INTERMEDIATE PUBLIC TRANSPORT STRATEGY
- NON MOTORISED TRANSPORT STRATEGY
- PARKING MANAGEMENT STRATEGY**
- FREIGHT MANAGEMENT STRATEGY
- TECHNOLOGICAL STRATEGY



OFF-STREET PARKING

6 Locations

Location	Type
Palayam Market	MLCP
Civil Station	MLCP
Ramanettukara	MLCP
Stadium	MLCP
Kallayi	Surface
Link Road, Beach	MLCP

ON-STREET PARKING

7 Locations

Location	Effective Length (m)
Mananchira Square	240
Wayenad Road	500
Erenjipalem Junction	1000
Menkavu Junction	1700
Kesar Junction, Mankavu Moorthy Road	400
Francis Road	1000
Kallayi Road	1500

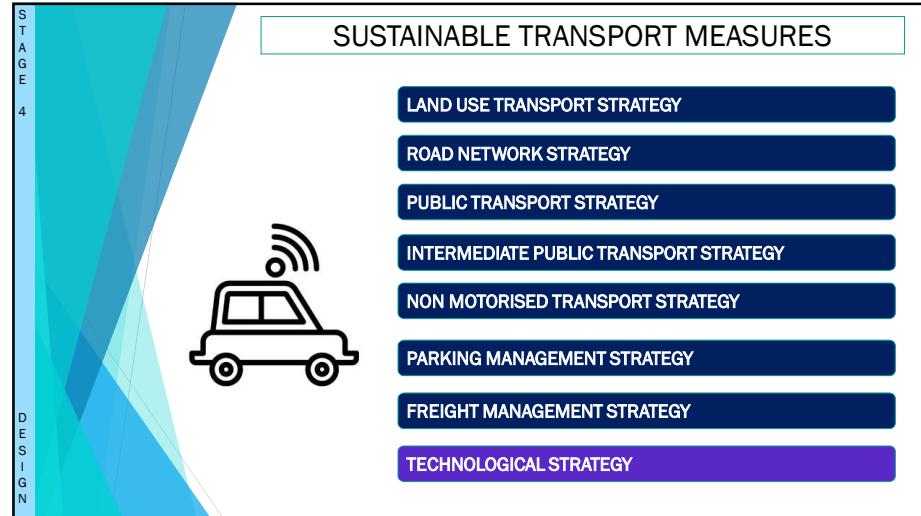
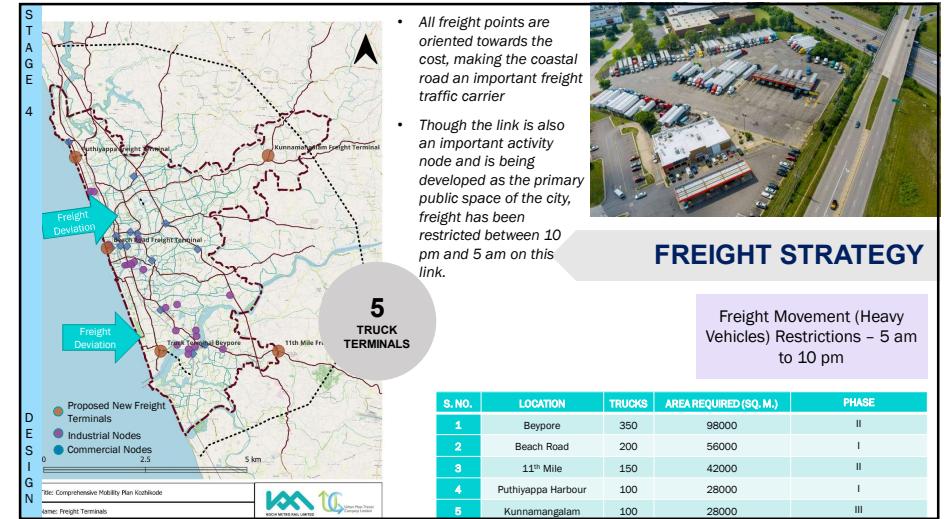
DESIGN STAGE 4

SUSTAINABLE TRANSPORT MEASURES

- LAND USE TRANSPORT STRATEGY
- ROAD NETWORK STRATEGY
- PUBLIC TRANSPORT STRATEGY
- INTERMEDIATE PUBLIC TRANSPORT STRATEGY
- NON MOTORISED TRANSPORT STRATEGY
- PARKING MANAGEMENT STRATEGY
- FREIGHT MANAGEMENT STRATEGY**
- TRAFFIC MANAGEMENT STRATEGY
- TECHNOLOGICAL STRATEGY



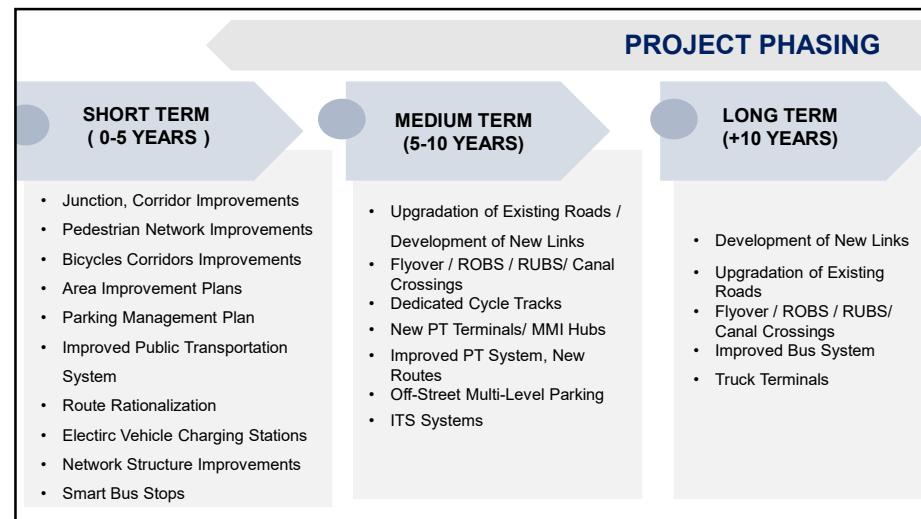
പരക്ക് ഗതാഗത്തി ന്റെ കാര്യക്ഷമമായ നീക്കം നഗര വളർച്ചയെ പിന്തുണയ്ക്കു ന്നു





SERVICE LEVEL BENCHMARKING		2023	2051
Public Transport Facilities		LOS 2	LOS 1
Pedestrian Infrastructure Facilities		LOS 2	LOS 1
Non-Motorised Transport Facilities		LOS 3	LOS 2
Level of usage of Intelligent Transport System (ITS) Facilities		LOS 4	LOS 1
Travel Speed (Motorized and Mass Transit)		LOS 3	LOS 1
Availability of Parking Places		LOS 3	LOS 2
Road Safety		LOS 3	LOS 2
Pollution Levels		LOS 1	LOS 1
Integrated Land Use and Urban Transport		LOS 4	LOS 1





SI.No	Projects	Total Cost (In Crores)	Phasing Rs (In Crores)		
			2023-2027	2027-2041	2041-2051
1	Improvement of Road Network	1180	142	114	923
2	Improvement of Non-Motorised Transport Facilities	243	165	78	0
3	Improvement of Public Transport System	4882	1669	2447	765
4	Improvement of Freight Transportation System	321	99	177	45
5	Intelligent Transportation System Facilities	38	16	22	0
6	Improvement of Parking Facilities	7	2	2	2
Overall CMP Proposals		6670	2093	2842	1736

PROJECT COST OF ~ 6670 CRORES

