



PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA

Sub: Karnataka State Logistics Plan - 2022 -reg.

Read: Proceedings of the 3rd State Logistics Co-ordination Committee meeting held on 29.08.2022 under the Chairmanship of Chief Secretary to Government of Karnataka.

PREAMBLE:

India's logistics sector has exhibited an exponential growth trajectory in the last decade and this trend is expected to continue. This sector is also one of the largest employment generators across the economy, employing 2.2 crore people.

Karnataka is one of the most economically vibrant states in India, housing a large and diverse industrial base - consequently, the demand for freight transport is on the rise as the population grows and the consumption increases. The logistics sector is undergoing a rapid transformation within the state due to demand enablers such as e-Commerce, emerging business models involving 3rd Party Logistics (3PL) & 4th Party Logistics (4PL) players, Direct Port Delivery & Direct Port Entry adoption by EXIM trade, new logistics community systems like PCS 1x and ULIP, etc.

Recognizing the critical role of the sector in the state's future, the Government of Karnataka is pursuing a range of actions to improve its logistics performance through creation of supportive policies. These include the development of dedicated rail-based freight corridors and improvements to the capacity and connectivity of coastal and inland water-based routes under Sagarmala, Bharatmala and PM Gati Shakti schemes of the Government of India.

The Government has also operationalized logistics development initiatives under the Government of Karnataka's 'Industrial Policy 2020-2025'. The policy offers incentives and facilitatory mechanisms for the development of a wide variety infrastructure projects ranging from Logistics Park, MMLPs, dry ports, and cold storages to truck terminals, Warehouses among others.

Further, Logistics & Transportation has been identified as one of the focus sectors out of the 6 Champion Service Sectors in the State under the Champion Services Sector Scheme of Government of India. The State has also accorded an 'Industry' status to Logistics and Warehousing sector.

The State of Karnataka is experiencing a radical transformation in the logistics ecosystem due to significant developments in infrastructure, power, road, water, and the state's overall industrial ecosystem. Karnataka aims to further enhance the state's stature as one of the leading logistics hubs in the country. Therefore, the State has undertaken an initiative to develop Karnataka State Logistics Action Plan.

The logistics action plan will promote logistics infrastructure, facilitate ease of doing business, and create the necessary support infrastructure.

The draft Karnataka State Logistics Plan-2022 placed before the State Logistics Co-ordination Committee meeting held on 29.08.2022 under the Chairmanship of Chief Secretary to Government of Karnataka, Committee approved the Karnataka State Logistics Plan.

Hence, the following order:

GOVERNMENT ORDER No. CI 282 SPI 2022, BENGALURU, DATED 21.10.2022

In the circumstances explained in the preamble, Government is pleased to approve the Karnataka State Logistics Plan - 2022 as detailed in Annexure, enclosed to this order, to facilitate Trade & Industry and investments in the logistics sector.

This Karnataka State Logistics Action Plan provides a comprehensive overview of the current logistics ecosystem in Karnataka (Part-1) and outlines an integrated Logistics Action Plan (Part-2) for the State of Karnataka to improve the logistics ecosystem and is a road map for overall development of the logistic ecosystem in the State to promote logistics infrastructure, improve Ease of Doing Business (EoDB) and create the necessary support infrastructure in the State.

This plan will ensure the trade competitiveness, improve the logistic landscape of the state and create more opportunities for the trade.

By Order and in the name of the
Governor of Karnataka,

Y. Nagarathnamma.
(NAGARATHNAMMA.G) *21/10/2022*
Desk Officer (Technical Cell),
Commerce & Industries Department.

To,

- 1) The Principal Accountant General (G & SSA), Karnataka, New Building, 'Audit Bhawan', Post Box No. 5398, Bengaluru.
- 2) The Principal Accountant General (E & RSA), Karnataka, New Building, 'Audit Bhawan', Post Box No. 5398, Bengaluru.
- 3) The Principal Accountant General (A & E), Karnataka, Park House Road, Post Box No. 5329, Bengaluru-01.
- 4) Special Secretary (Logistics), Department of Commerce, DPIIT, Ministry of Commerce, Government of India, Udyog Bhawan, New Delhi, 110011. (email id: as.logistics@gov.in)
- 5) Additional Chief Secretary to Government, Finance Department, Vidhana Soudha, Bengaluru.

- 6) Additional Chief Secretary to Government, Home Department, Vidhana Souda, Bengaluru.
- 7) Additional Chief Secretary to Government, Infrastructure Development Ports & Inland Water Transport Department, Vikasa Soudha, Bengaluru.
- 8) Principal Secretary to Government, Public Works Department, Vikasa Soudha, Bengaluru.
- 9) Principal Secretary to Government, Transport Department, M.S.Building, Bengaluru.
- 10) Principal Secretary to Government, Skill Development, Entrepreneurship and Livelihood Department, M.S.Building, Bengaluru.
- 11) Principal Secretary to Hon'ble Chief Minister, Vidhana Soudha, Bengaluru.
- 12) Secretary to Government, Agriculture Department, MS Building, Bengaluru.
- 13) Commissioner for Industrial Development and Director of Industries and Commerce, Khanija Bhavan, Race Course Road, Bengaluru.
- 14) Chief Executive officer & Executive Member, Karnataka Industrial Area Development Board, Khanija Bhavan, Race Course Road, Bengaluru.
- 15) Commissioner, Directorate of Urban land Transport (DULT), BMTC Complex, K H Road, Shanthinagar, Bangalore-27.
- 16) Geneal Manager, South Western Railways, Kempegowda Road, Gandhi Nagar, Bengaluru.
- 17) Chief Commissioner of Customs, Bengaluru Zone, Office of the Chief Commissioner of Customs, C. R. Buildings, Queens Road, Bengaluru.
- 18) Chairman, NMPT, Mangaluru-575010.
- 19) Director (Technical Cell), Commerce & Industries Department, Vikasa Soudha, Bengaluru.
- 20) Director (Exports) & Managing Director, VTPC, Kastur Ba Road, Bengaluru – **with a request to send this G.O. to the concerned through your office.**
- 21) Managing Director, Karnataka State Industrial Infrastructure Development Corporation (KSIIDC), Khanija Bhavan, Race Course Road, Bengaluru.
- 22) Managing Director, Dr. Devaraj Urs Truck Terminal, BMTC Complex, K H Road, Shanthinagar, Bangalore-27.
- 23) Additional Director (P&P), Department of Industries & Commerce, Khanija Bhavan, Race Course Road, Bengaluru.
- 24) Regional Officer, NHAI, Manjunatha Nagar, Bagalakunte, Bengaluru-73.
- 25) Joint Director General of Foreign Trade, 6th Floor, Kendriya Sadan, C & E Wing, 17th main, Koramangala 2nd Block, Koramangala, Bengaluru-34.
- 26) Joint Director FIEO, Bengaluru.
- 27) PS to Hon'ble Minister for Large and Medium Industries, Sugar, Vidhana Soudha, Bengaluru.
- 28) PS to Chief Secretary to Government, 3rd Floor, Vidhana Soudha, Bengaluru.
- 29) PS to Additional Chief Secretary to Government, Commerce & Industries Department, Vikasa Soudha, Bengaluru.
- 30) Guard File / Spare Copies.



**ANNEXURE to Government Order No.
CI 282 SPI 2022, dated 21.10.2022.**

Karnataka State Logistics Plan - 2022

Aug. 2022

Karnataka State Logistics Plan

(Part – 1: Current Logistics Ecosystem)

Abbreviations

ACC	Air Cargo Complex
ACS, GoK	Additional Chief Secretary, Government of Karnataka
AFS	Air Freight Station
APEDA	The Agricultural and Processed Food Products Export Development Authority
ARTO	Assistant Regional Transport Office
ANPR	Automatic Number Plate Recognition
BBMP	Bruhat Bengaluru Mahanagara Palike
BIAL	Bengaluru International Airport Limited
CBIC	Central Board of Indirect Taxes and Customs
CFS	Container Freight Station
CLMP	City Logistics Master Plans
CONCOR	Container Corporation of India
CWC	Central Warehousing Corporation
DDUTTL	D Devaraj Urs Truck Terminal Limited
DoT, GoK	Department of Transport, GoK
DULT	Directorate of Urban Land Transport
EoDB	Ease of Doing Business
GoI	Government of India
GoK	Government of Karnataka
HDMC	Hubballi-Dharwad Municipal Corporation
HMRDC	Hassan Mangalore Rail Development Company
ICD	Inland Container Depot
IR-SWR	Indian Railways - South-Western Railway Zones
IT	Information Technology
KAPPEC	Karnataka State Agricultural Produce Processing and Export Corporation Limited
KIADB	Karnataka Industrial Area Development Board
KPI	Key Performance Index
KPWD	Karnataka Public Works Department
KSDC	Karnataka Skill Development Corporation
KSIIDC	Karnataka State Industrial & Infrastructure Development Corporation Limited
KSWC	Karnataka State Warehousing Corporation
LEADS	Logistics Ease Across Different States
LMP	Logistics Master Plan
MMLP	Multi-Modal Logistics Park
MoRTH	Ministry of Road Transport and Highways
NHAI	National Highway Authority of India
NMPA	New Mangalore Port Authority
PCS	Port Community System
PFT	Private Freight Terminal
PMU	Project Monitoring Unit
PT	Gateway/Sea Port Terminal
PWD	Public Works Department
RTA	Road Transport Authority
SMP	State Master Plan
SGT	Satellite Goods Terminal

SLC	State Logistics Cell
SLCC	State Logistics Coordination Committee
SML	Short-Medium-Long Term Framework
TIES	Trade Infrastructure Export Scheme
ULIP	Unified Logistics Interface Platform
VTPC	Visvesvaraya Trade Promotion Centre

LOGISTICS CONNECTIONS

Executive Summary

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Executive Summary

India's logistics sector has exhibited an exponential growth trajectory in the last decade and was valued at INR 11 lakh crore in 2021. This trend is expected to continue, with the market size projected to reach INR 15 lakh crore by 2022. This sector is also one of the largest employment generators across the economy, employing 2.2 crore people.

Karnataka is one of the most economically vibrant states in India, housing a large and diverse industrial base - consequently, the demand for freight transport is on the rise as the population grows and the consumption increases. The logistics sector is undergoing a rapid transformation within the state due to demand side enablers such as e-Commerce, emerging business models involving 3rd Party Logistics (3PL) & 4th Party Logistics (4PL) players, Direct Port Delivery & Direct Port Entry adoption by EXIM trade, new logistics community systems like PCS 1x and ULIP, etc.

Recognizing the critical role of the sector in the state's future, the Government of Karnataka is pursuing a range of actions to improve its logistics performance through creation of supportive policies. These include the development of dedicated rail-based freight corridors and improvements to the capacity and connectivity of coastal and inland water-based routes under Sagarmala, Bharatmala and PM Gati Shakti schemes of the Government of India.

The Government has also operationalized logistics development initiatives under the Government of Karnataka's 'Industrial Policy 2020-2025'. The policy offers incentives and facilitatory mechanisms for the development of a wide variety infrastructure projects ranging from Logistics Park, MMLPs, dry ports, and cold storages to truck terminals, Warehouses among others. Further, Logistics & Transportation has been identified as one of the focus sectors out of the 6 Champion Service Sectors in the State under the Champion Services Sector Scheme of Government of India. The State has also accorded an 'Industry' status to Logistics and Warehousing sector.

Bengaluru being one of the densest urban logistics hubs in the country, the logistics sector in the city faces its own unique challenges including the mobility of people and transportation of goods.

This document provides a comprehensive overview of the current logistics ecosystem in Karnataka, highlighting its strengths and upcoming new initiatives and projects.

Karnataka Logistics Connectivity Map



REFERENCE

	Broad Gauge Rly. Line
	Proposed Broad Gauge
	Metre Gauge Rly. Line
	National Highways
	State Highways
	Ports
	Minor Ports
	District Headquarters
	International Airport
	Domestic Airport
	Proposed Airport

Logistics Profile of Karnataka

Four lane Roads
2643 Kms

Six lane Roads
246 Kms

Railway track
3572 Kms

Inland Container
Depot (ICD)
04
(2 are under development)

Container Freight
Station (CFS)
04

Private Freight
Terminal (PFTs)
02

Air Freight Station
(AFS)
01
(Under Development)

Air Cargo Traffic
(BIAL)
411,513 MT
(FY 21-22)

Air Cargo Terminals
07

Logistics Park /
MMLP
04
(Under Development)

Warehouse capacity
42.48 Lac MTs

Port Traffic
(NMPA)
39.30 MMT



01 A Brief Note on Karnataka

As one of the most economically developed states in India, Karnataka has experienced significant growth in terms of development economic zones & corridors, Industrial infrastructure and the State's overall industrial ecosystem.

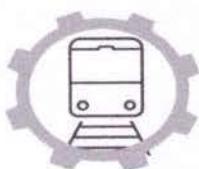
The development of the trunk infrastructure comprises of roads, railways, ports, airports, along with EXIM and storage infrastructure that ensure efficiency of the overall transport infrastructure. The increased efficiency of overall transport infrastructure is contributing to the growth of logistics ecosystem of the state.

Considering the growth of logistics sector, the Government of Karnataka (GoK) has identified the need and potential for the further development of the sector, as per the Industrial Policy 2020-25 which in turn is expected to provide a boost to the manufacturing and service sector, and thereby facilitate trade. Karnataka's Industrial Policy 2020-25 offers several incentives for the development of infrastructure including Logistics Parks, Dry Ports, Cold Storages, Truck Terminals, etc. In addition to this, Logistics & Transportation is also considered to be one of the focus sectors of the 6 identified Champion Service Sectors in the State. This policy initiative is likely to enhance the state's competitiveness in domestic and international market and encourage the investors to invest more in the regional economy of the state

Industry Status
accorded to the
Logistics &
Warehousing
Sector by
Government of
Karnataka.



Road Length
3,29,925 Kms



Railways route length
3572 Kms



Airports
INTL -2 / DOM - 6



Port
1 Major & 8 Minor ports



EXIM
4 ICDs / 4 CFSs / 3
ACCs / 2PFT



02

Logistics Network of Karnataka

Karnataka is well-connected to all the major cities in India. This well-connected transportation network offers promising potential for the development of integrated multimodal logistics infrastructure in the state.

2.1 Road Network

Karnataka's overall road network length is 3,29,925 Kms, with **national highways contributing 7,589 Kms, state highways 27,814 Kms**, major district roads 56,165 Kms, and municipal and rural roads 2,38,394 Kms.

Developed through integrated planning, these extensive systems complement each other, ensuring streamlined interstate connectivity through major highways and last-mile connectivity through rural and municipal roads. Major district roads also play an integral role in this ecosystem, bridging the gap between the major transit corridors and last-mile connectivity routes.

Karnataka's Road Type & Length
(In Kms 2021-22)

National Highways	State Highways	Major District Roads
7587	27814	56165

National Highways



- Single lane 121 Kms
- Intermediate lane 1268 Kms
- Two lane 3930 Kms
- Four lane 2022 Kms
- Six lane 246 Kms

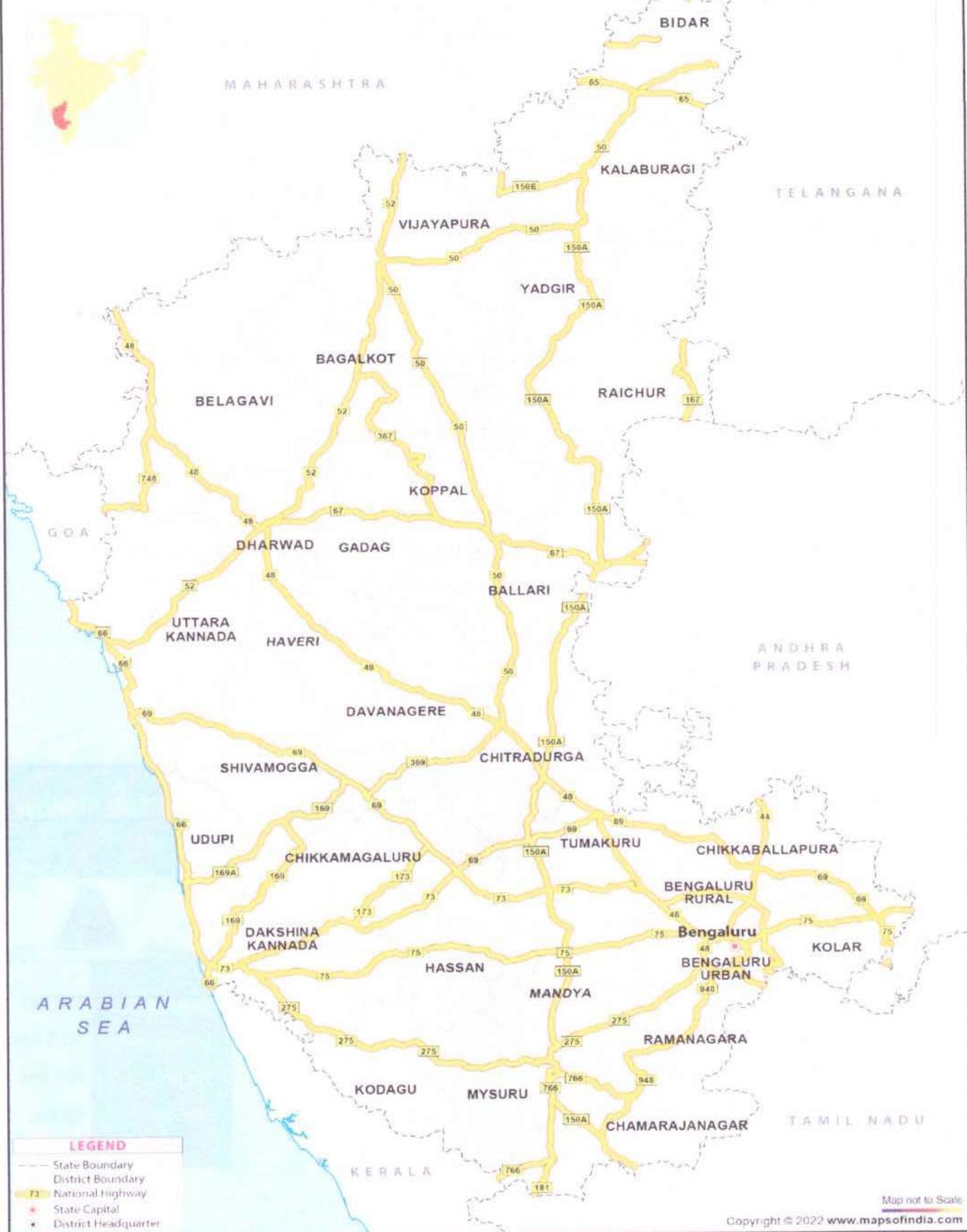
State Highways



- Single lane 6312 Kms
- Intermediate lane 14076 Kms
- Two lane 6805 Kms
- Four lane 621 Kms

KARNATAKA NATIONAL HIGHWAYS

N
▲



KARNATAKA STATE HIGHWAYS

N



MAHARASHTRA



LEGEND

- State Boundary
- District Boundary
- State Highway
- State Capital

Map not to Scale

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2.1.1 Key Freight Routes

NH 66
(300 Kms)

From Goa Border-Karwar-Ankola-Honnavar-Bhatkal-Udupi-Mangaluru-Kerala Border

NH 67
(395 Kms)

Ankola-Yellapur-Hubballi-Gadag-Bhanapur-Koppal-Torangallu-Ballari-Hagari-Karnataka/Andhra Pradesh border

NH 44
(143 Kms)

From Andhra Pradesh Border-Chikkaballapur-Devanahalli-Bengaluru-Chandapura-Attibele-Tamil Nadu Border

NH 50 / NH 369
(756 Kms)

From Maharashtra Border – Horti – Vijayapura – Hungund – Hospet – Jagalur – Chitradurga – Shivamogga – Tirthahalli - Mangaluru

NH 48
(589 Kms)

From Pune – Khandala - Kolhapur-Sankeshwar – Belagavi – Hubballi - Davanagere – Chitradurga – Tumakuru - Bengaluru

NH 75
(397 Kms)

Bengaluru - Nelamangala - Kunigal - Hassan - Sakleshpur-Uppinangadi - Mangaluru

SH 64
(190 Kms)

Highway connecting Kadur via Chikkamagalur, Mudigere, Belthangady, Bantwal and Kalladka

SH 68A
(12 Kms)

Highway connecting Tumakuru with Honnavar in Bhadravathi and Shivamogga

SH 19
(611 Kms)

Highway connecting Srirangapatna via Nagamangala, Hiriyur, Challakere, Ballari, Siruguppa, Sindhanur, Lingasugur, Surapura and Shahapur

NH 20
(354 Kms)

Highway connecting Raichur via Lingasugur, Hungund, Bagalkote and Belagavi.

KEY FREIGHT ROUTES (CONNECTING KARNATAKA)



Map not to scale
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2.1.2 Bharatmala Pariyojana

Bharatmala Pariyojana was launched in 2017, aimed at creating a holistic and comprehensive plan. List of major projects (in Karnataka) under this Bharatmala Pariyojna have been identified below (details in Annexure 10).



BHARATMALA
ROAD TO PROSPERITY

Major projects for Karnataka under Bharatmala

Six lane of Access Control of Bengaluru – Mysore Section

Chennai-Bengaluru Expressway

Amaravati-Bengaluru Section

Total length - 117 Kms
Elevated corridors - 8 Kms

Import/ Export hub priority projects under CBIC

Connectivity - 2 routes via Anantapur and Tirupati

Major bridges - 09
Road over bridges - 04

Connectivity to MMLP Dobbaspet through NH-207

Bengaluru - Amaravathi via Anantapur passing through NH-7 (Completed 4.5 kms long 4 lane elevated highway)

Road upgradation projects

Koppal-Metgal Road

Padil-Bantwal Road

Neraluru-Thorapalli-Agraharam Road

2.2 Rail Network

The Indian railway network is divided into multiple zones, and Karnataka is served by South-Western Railways, Central Railways, Southern Railways, Konkan Railway Corporation Limited and South-Central Railways.

Karnataka has a railway network spanning 3572 Kms¹, connecting several key traffic and freight routes, and providing interstate connectivity. 90% of the railway network of the State is operated by the South-Western Railways.

Karnataka is a pioneer state which came forward for contributing to the cost of constructing new railway lines with the Ministry of Railways on a 50:50 ratio. The government also bears 100 per cent of the cost for project's land acquisition.

Completion of New Lines and Double Line Projects in the last 5 years

Completed (Last 5 years)		Planned (Next 5 years)
New line 328 Kms		New line 1203 Kms
Doubling 653 Kms		Doubling 660 Kms

Government of Karnataka has also been taking several initiatives to augment the railway network in the state to ensure efficient logistics for manufacturing zones, including infrastructure projects for the upgradation of rail infrastructure, and setting up new ones.

Railway works in the pipeline	
22 New Line Projects	2381 Kms
16 Doubling Projects	1674 Kms
16 Surveys of new lines in progress	
Doubling & Electrification Sanctioned on all main lines in Karnataka	

¹https://indianrailways.gov.in/railwayboard/uploads/directorate/stat_econ/pdf/2022/Year%20Book%202020-21-English.pdf



New Railway Line projects (Under Implementation)

S.No	Name of the Project (in KMS)	Target Completion	Remarks
1	Ginigera-Raichur (165) (Part of Munirabad -Mahabubnagar-247)	Sep '24	Ginigera -Karatagi (66Km) has been commissioned.
2	Kadur - Chikmagalur - Sakaleshpur (93)	March '26	Kadur -Chikmagalur(46Km) has been commissioned
3	Raydurg - Tumkur via Kalyanadurg (207)	Dec '25	Rayadurga -Kadiradevarapilly (63 Km) has been commissioned.
4	Bagalkot - Kudachi (142)	Dec '26	Bagalkot -Kahjjidhoni (30Km) has been commissioned.
5	Tumkur - Chitradurga – Davangere (191)	March '25	Work in Progress
6	Shimoga - Harihar(79)	March '26	Work in Progress
7	Whitefield - Kolar (53)	March '25	Work in Progress
8	Marikuppam – Kuppam (24)	March '24	Work in Progress
9	Gadag – Wadi (257)	June '25	Talkal - Sangnai (22 Km) has been commissioned
10	Shimoga - Shikarpura - Ranebennur (89)	March '25	Work in Progress
11	Hassan - Belur (Umbrella work) (32)	Dec '25	Work in Progress
12	Dharwad - Belgaum via Kittur (73)	March '25	Work in Progress

Doubling of Railway Line projects (Under Implementation)²

S.No	Name of the Project (in KMS)	Target Completion	Remarks
1	Londa – Miraj (186)	March '23	<ul style="list-style-type: none"> Ghataprabha - Kudachi (46 Km) - commissioned on 28-03-2021 Desur - Belgaum (10Km) - commissioned on 04-05-2022 Belghavi - Suldhali commissioned on 28 06 2022 Remaining sections of Londa - Desur - TDC: Aug 2022 Suldhali - Ghataprabha (30Km) - TDC: Dec 22. Kudachi - Miraj (32 Km) - TDC Mar 23
2	Hospet - Hubli - Londa - Tinaighat - Vasco-de-Gama (362.73) (Executed by RVNL)	March '23	Work in Progress
3	Hubli - Chikjajur (190)	March '23	<ul style="list-style-type: none"> Commissioned Length - 145 Km Hubli South - Saunshi (20Km) & Devaragudda- Haveri (25Km) - TDC Dec 22
4	Hotgi-Kudgi-Gadag (284)	March '24	<ul style="list-style-type: none"> Commissioned length - 200 Km Badami - Bagalkot (26 Km) - TDC Jan -23 Hole Alur- Badami (19 Km) - TDC Oct-22
5	Baiyyappanahalli - Hosur(excluding BYPL) (48) (KRIDE)	March '24	Work in Progress
6	Yeshwantpur –Channasandra (excluding CSDR) (22) (KRIDE)	March '24	Work in Progress
7	Bangalore - Whitefield - Bangalore City- Krishnarajapuram Quadrupling(40) (Gati Shakti)	Dec '23	Work in Progress

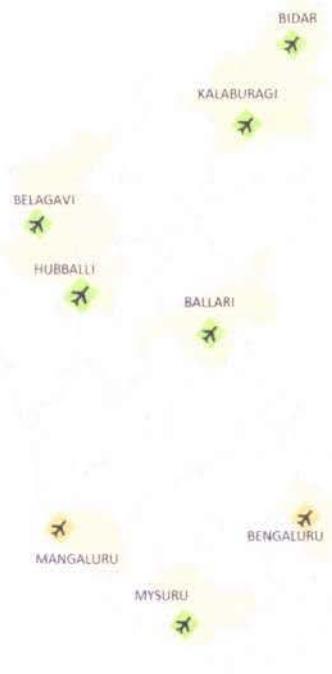
² Southern Railways with Information (as on 13th July 2022)

2.3 Airports

Karnataka has 08 functional airports including 02 international airports in Bengaluru and Mangaluru respectively.

Kempegowda International Airport, Bengaluru is the 3rd busiest airport in India and is ranked among the top international airports in terms of the quality of service and user experience. It has a state of the art air cargo complex with dedicated facilities for non-perishable, perishable, pharma, and express cargo/courier cargos.

Other operational airports are at Mysuru, Belagavi, Hubballi, Kalaburagi, Vidyanagar Ballari (Private JSW), and Bidar (Defence - Civil enclave). GoK is also developing Green Field airports at new locations such as Shivamogga, Vijayapura, Hassan, Raichuru Chikkamagalur (Airstrip) and Kushalnagar (Airstrip).



Air Cargo Handling Capacity

	International airport
	Domestic airport

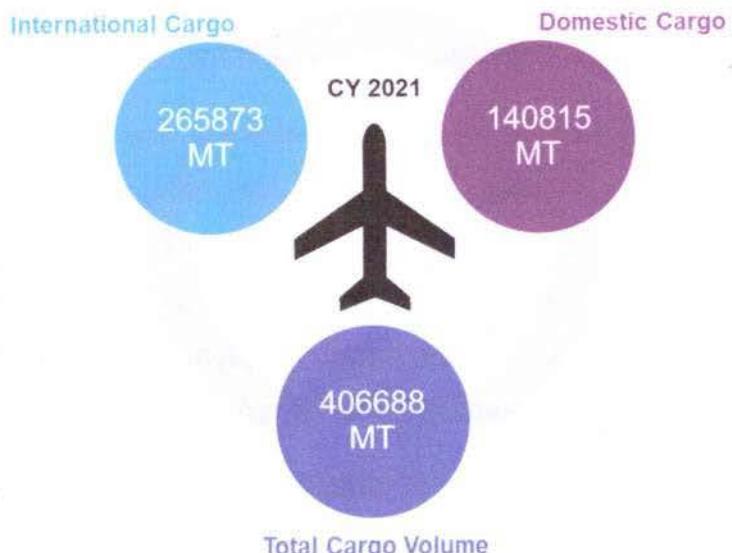
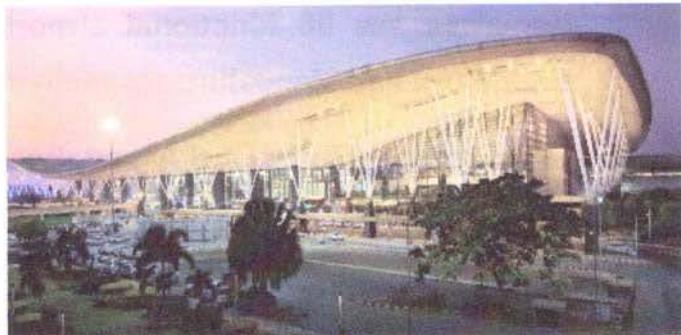
ACC	Capacity (sq.m)	Terminal	Operated By	Cargo Freighters	
Bengaluru (BIAL)	1,12,066	1 st ACC Terminal	Menzies	A320, A321, Saudi (Boeing 747) Aero logic- Boeing 777, FedEx -MD11, BA- Boeing 747, QR A330, A350, SQ - Boeing 747, Vistara - Grill Liner, EY - A320, A330, Boeing 747	
		2 nd ACC Terminal	Air India SATS		
		Cool Port			
		Blue Dart Cargo Terminal (domestic cargo)	Blue Dart		
		Express Cargo Terminal	DHL Express, UPS, EICI and FedEx		
Mangaluru	2,494 ³	ACC Terminal	Adani	ATR Aircraft Props (Propellers), QR400, A320 / A321 Boeing 737-200 Classics series, Boeing 737-400 Classics series	
Hubballi	500	Domestic Air Cargo Terminal	Cargo Logistics & Allied Service Company Ltd	A320, ATR, Embraer aircraft	

³ <https://www.aai.aero/en/services/cargo/overview-aai-managed-airports#:~:text=The%20total%20covered%20area%20of,transshipment%20is%203%2C80%2C987>

2.3.1 Bengaluru International Airport Pvt. Ltd. (BIAL)

The Kempegowda International airport, located in Bengaluru, is one of the busiest airports in India – there are non-stop and one-stop flights to 25 international and 76 domestic destinations, along with 47 airlines and 14 freighters operating within.

BIAL is among the most mechanized cargo terminals in the country, with the ability to process all types of cargos, including pharma and temperature-controlled products, perishable cargo, electronics, and livestock. The airport is powered by superior logistics solutions backed by two reputed cargo terminal operators – Air India SATS and Menzies Aviation Bobba Pvt Ltd, Bengaluru.



Towards the end of the FY 2020-21, the designated capacity at BLR Airport for cargo was enhanced from 570,000 MT pa to 715,000 MT pa, while the cargo handled for the financial year 2022 was 411,513 MT.

The presence of national and global logistics majors such as Blue Dart, AeroLogic, Cathay Pacific, DHL, Etihad Cargo, FedEx, Lufthansa Cargo, Qatar Cargo, Turkish Cargo, Singapore Cargo, etc., in the state clearly demonstrates that it is one of the most preferred destinations and provides a conducive ecosystem.

Bengaluru International Airport has also been recognized as the "Best Greenfield Cargo Airport" at India Cargo Awards 2020 & Fastest Growing Cargo Airport of the Year 2020 by Air Cargo India, No. 1 Airport for Perishable Shipments in the country for FY 2020-2021 by APEDA.

Air Cargo Complex Bengaluru has regularly featured in CBIC's National Time Release Study reports published in 2019, 2021 and 2022 for having one of the most efficient operations for handling of cargo. The airport also offers an Air Cargo Community System (ACS) for cargo businesses, digitizing clearances, and permissions to further

streamline air logistics and reducing paperwork at the airport, which has enabled seamless collaboration between all stakeholders in the supply chain to deliver superior and efficient cargo operations. Further, to facilitate the cargo truck management, the airport has developed India's first on-airport, dedicated Airport Truck Management Facility (ATMF), which is equipped with various features like parking, fuelling, cafeteria, medical facilities, rest areas, etc. and can cater to 250 trucks at a time.

Details of Cargo Terminals



EXPRESS CARGO TERMINAL BY BLR

1. India's Largest Express Terminal Housing International Integrators (DHL, FedEx, UPS & EICL)
2. 220,000 MTPA of designed capacity for processing express shipments



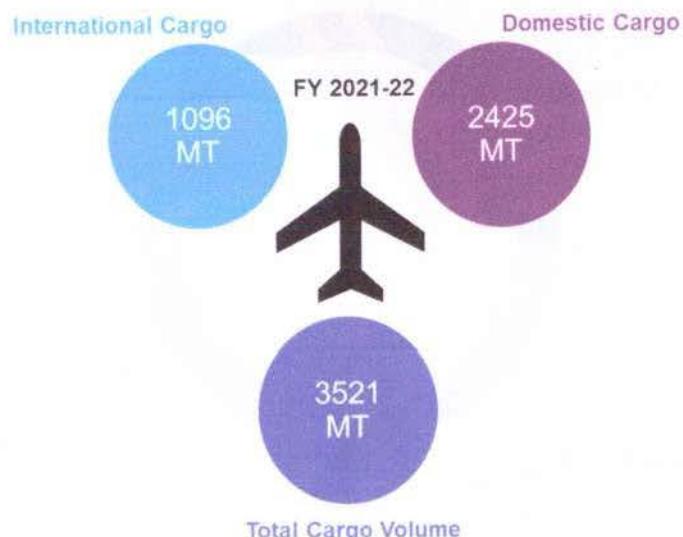
AIRPORT TRUCK MANAGEMENT FACILITY

India's first on-airport truck management facility

1. 250 Trucks Parking Area
2. Clean, Hygienic Toilet Facilities for Drivers
3. Dedicated Dormitory Facilities for Drivers
4. Food and Beverage Outlet

2.3.2 Mangaluru International Airport

Mangaluru International Airport is second busiest international airport of Karnataka, located in the southern coastal tip of the state. The Air Cargo Complex in Mangaluru has a capacity of 6000 MT per annum. It is the gateway to coastal Karnataka and Northern Kerala, which gives it an opportunity for handling special type of commodities like perishables, flowers, and sea food.



Infrastructure Facilities at Mangaluru Airport



2.3.3 Hubballi Airport

Hubballi Airport is a domestic airport serving the twin cities of Hubballi and Dharwad, along with other major parts of North Karnataka region.

Hubballi's first dedicated domestic air cargo terminal was made operational at the Airport. Cargo terminal spread across **500 sq. mts** and has a one-time holding capacity of **100 MT** and an overall annual capacity of **15000 MT**.



2.3.4 Kalaburagi Airport

The Kalaburagi Airport is a domestic airport located on the outskirts of Kalaburagi and is spread across 742 acres. The airport has been built by the State Government and handed over AAI during August 2019 for operations. The airport was started its operations from November 2019 onwards. It is covered under the UDAN-RCS Scheme of the Govt. of India **Further, the development of an Air Cargo Complex has been proposed within.**



2.3.5 Mysuru Airport

The Mysuru Airport is also known as Mandakalli Airport, it is a domestic airport located near the village of Mandakalli. At present, ATR-72 type planes can land at Mysuru Airport which has a runway with a length of 1,740 metres and a breadth of 30 metres. To facilitate the landing of bigger planes, the runway must be expanded to 2,750 metres and its breadth is 45 metres for A-320 type of aircraft.



2.3.6 Belagavi Airport

At present, it has an apron for parking of three A320 and B-737 aircraft. It is under the UDAN-RCS Scheme of the Govt. of India



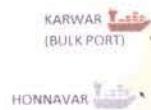
Proposed airports under construction			
Shivamogga 2022	Vijayapura (Bijapur) 2023	Raichur 2024	Hassan 2024

2.4 Sea Ports

In the current trade ecosystem, the vast majority of international trade is conducted through sea routes, making maritime logistics a key enabler of exports.

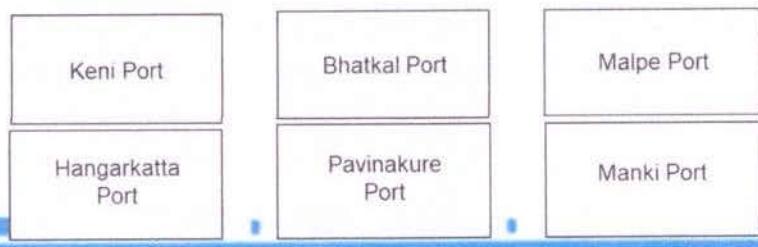
Karnataka has one major port – New Mangaluru Port – and 8 minor ports along its 320 Kms long coastline, facilitating EXIM cargo movement.

Most of the marine freight traffic that passes through Karnataka is routed through the New Mangaluru Port, which is also the 9th largest port in India.



	Operational ports
	Ports under implementation

Location of the Port Terminal	Operated By	Cargo handled for 2021-22 ⁴ (in MMT)
New Mangaluru Port (Major Port)	New Mangaluru Port Authority (NMPA)	39.30
Karwar Port	Maritime Board, Karwar	0.7
Old Mangaluru Port	Old Mangaluru Port	0.056



Ports under concept stage in Karnataka

⁴ Karnataka Maritime Board

2.4.1 Sagarmala

With optimized infrastructure investments, Sagarmala intends to reduce logistics costs for both domestic and EXIM cargo. Karnataka has identified 81 projects with an estimated investment of Rs. 7760 Cr. The components of the programme are Port Modernization & New Port Development, Port Connectivity Enhancement, Port-linked Industrialization, Coastal Community Development, and Coastal Shipping & Inland Waterways Transport. List of major projects (in Karnataka) under Sagarmala have been identified below (details in Annexure 9).



Proposed road connectivity projects for ports	Proposed rail connectivity projects for ports	Proposed waterway development
<ul style="list-style-type: none"> Old Mangalore port Belekeri and Keni Port Kundapur port Pavinakurve Port Manki port Bhatkal port Hangarkatta port Padubidiri port Multi-Purpose Tadadi Logistics & Eco-tourism hub 	<ul style="list-style-type: none"> Old Mangalore port Belekeri and Keni Port Kundapur port Pavinakurve Port Manki port Bhatkal port Hangarkatta port Malpe port Belekeri Port Honnavar port 	<ul style="list-style-type: none"> Almatti to Bagalkot Hangarkatte to Manipal Kodibag to Kadra in Kali River Gurupur (NW-43) & Netravati river (NW-74)

2.4.2 New Mangalore Port Authority

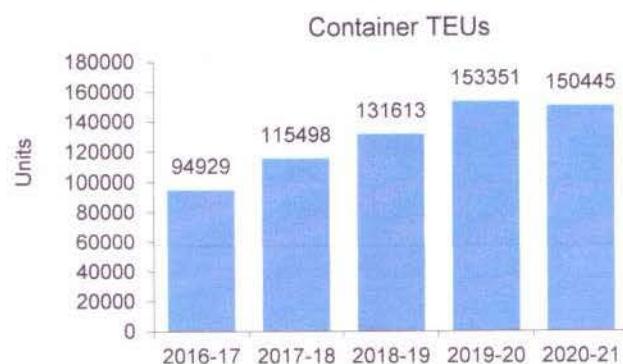
NMPA was declared as the 9th major port on 4th May, 1974. It is a modern all-weather port situated at Panambur, Mangaluru, Karnataka on the West Coast of India, 170 nautical miles South of Mormugao Port and 191 nautical miles North of Cochin Port. The port has an entrance channel of 7.5 km, with a 245 meters width and a dredged depth of 15.4 m.



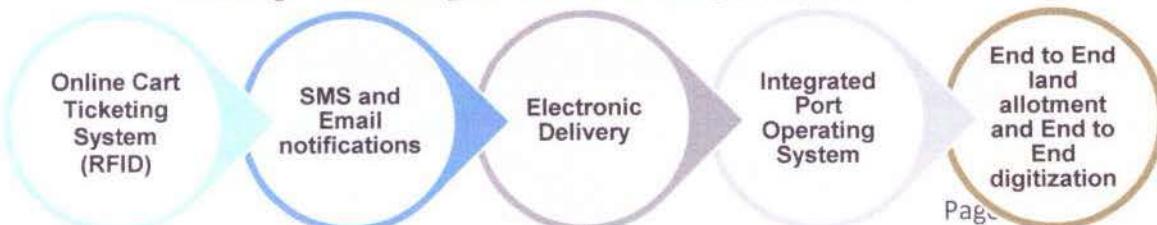
The port has land area of 1,960 acres and water area of 330 acres. JSW Infrastructure is investing nearly Rs 300 crore to develop the container terminal which will have a capacity of 400,000 TEUs. As part of the proposed investment, JSW Infrastructure will undertake mechanization of Berth No 14 for handling containers and other cargo on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

Key NMPA proposed projects under PM Gati Shakti

1. Mechanization of berth No.14 for handling container & other cargos in DBFOT basis with M/s JSW
2. Construction of new berth No.17 for handling bulk & dry-bulk cargos



New Age Technological Initiatives adopted by NMPA



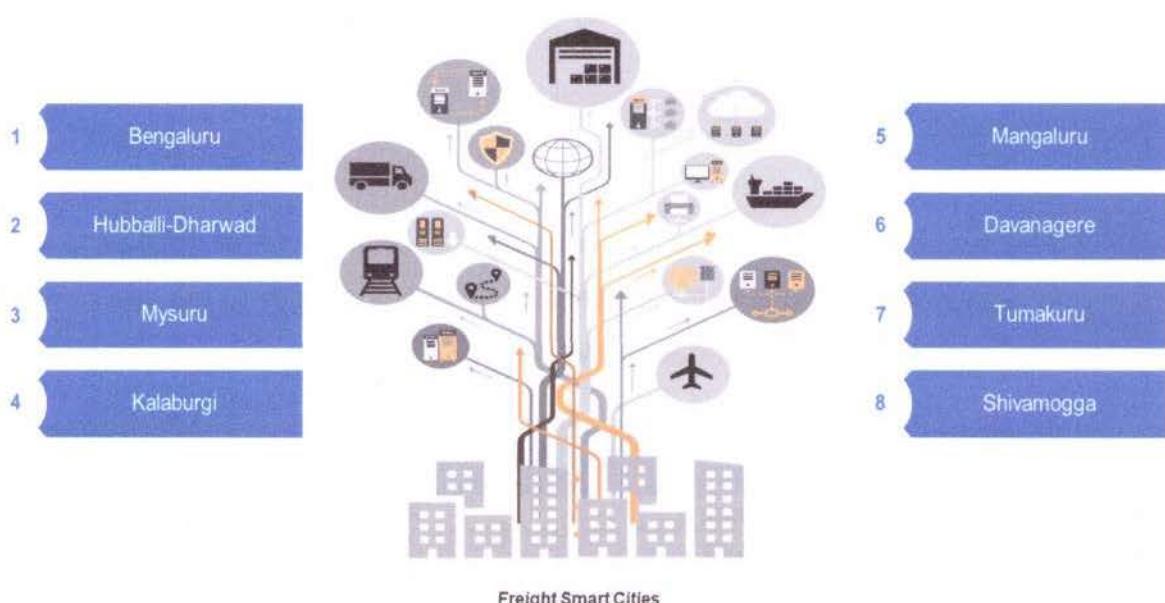
2.5 Green Logistics Infrastructure

Bangalore Electricity Supply Company Limited (BESCOM) has collaborated with EESL to install EV Charging stations along highways under FAME II. BESCOM has launched the 'EV Mithra' app to help residents locate electric-vehicle (EV) charging stations in the city. BESCOM has already set up **136 charging stations across the city** for charging electric vehicles.

S. No	Highways identified for EV Charging Stations
1	Bengaluru - Mysuru
2	Bengaluru - Chennai
3	Bengaluru – Mumbai
4	Bengaluru – Mangalore
5	Bengaluru – Honnavar
6	Bengaluru – Tirupati
7	Bengaluru – Hyderabad

2.6 Freight Smart Cities Initiative

The State of Karnataka has identified 8 Freight Smart Cities. City-level logistics committees are being constituted under the Freight Smart Cities initiative. These committees collaborate to develop City Logistics Plans in order to implement performance improvement measures at the local level, such as reshaping cities to be freight centric by establishing efficient first and last mile connectivity and increasing efficiency, as well as setting goals to improve the policy and regulatory framework for urban freight systems. These would also include the private sector of logistics services as well as logistics service users.



2.7 Details of Truck Terminals

A truck terminal is a highly specialised facility that is designed for a specific function and operating plan in terms of service standards, area served, and volume handled. It serves as a link between intercity and local transportation facilities, which handle goods distribution and collection within the city. Some of the major private transport terminals are listed in the given table.

The existing D. Devaraj Urs Truck Terminal (DDUTTL) at Yeshwanthpur handles around 600 – 700 trucks per day, over & above the 500 small vehicles using the facility for carrying the goods to the city.

Private Transport Terminals	Location
TCI Freight	Hosur Main Road, Bengaluru
Karnataka Freight Carriers Pvt Ltd	Siddaiah Road, Bengaluru
VRL Logistics	Mysuru Road
Shreeji Trans logistics Ltd	Yeswanthpur
Mahatma Gandhi Truck Terminal	Tudkur, Kalaburagi
S S Road Truck Terminal / APMC Truck Terminal	Athani, Belagavi
Chetan Roads Ways, MV Truck Terminal	Ballari
SSS Weigh Bridge Truck Terminal	Bangalore-Mysuru Road, Mysuru
Mysore New Goods Terminal	Metagalli, Mysuru
Raftaar Terminals - Container Terminal	Mangalore
JSW Truck Parking	Mahaboob Nagar, Toranagallu

Facilities available at DDUTL



DDUTTL has developed 2 truck terminals along the arterial roads (including NH) radiating from Bengaluru and is in the process of developing more to provide parking space for the trucks that enter Bengaluru every day.

S. No	Location	Area (in Acres)	Status
1	Yeswanthpur	38.29	Operational
2	Dasanapura	13.28	Operational
3	Mysuru (Bandipalya & Nachanahalli)	16.20	Operational
4	Dharwad (Belur)	7.26	Operational
5	Hospete (Amaravathi)	37	Under Progress
6	Hubballi (Anchatageri)	56	Under Progress
7	Dandeli (Uttara Kannada)	3	Under Progress



03 EXIM Infrastructure

An integral part of any logistics ecosystem is the EXIM (Export-Import) Infrastructure, which complements the core transport infrastructure and acts as a key enabler for facilitating the movement of goods.

Karnataka has an extensive ecosystem of EXIM infrastructure including ICDs, Logistics Parks, Warehouses, RWCs, Cold Storages, and PFTs, among others

Existing and proposed ICD Locations

Operational

Under Development

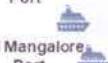
3.1 Inland Container Depots (ICDs)

An Inland Container Depot (ICD) is a container storage facility situated in the hinterlands, away from any major port. Shipping companies use ICDs to store and move shipping containers before and after transporting them to the seaport.

Karwar Port



New Mangalore Port
Old Mangalore Port



Bengaluru Rural
Bengaluru Urban

Attibele (Iggalur)

Kolar (Vemagal)

Mysuru

Bengaluru (Whitefield)

Mysuru (Kadakola)

Location of ICD	Operator	Status	Installed Capacity (TEUs)
Bengaluru (Whitefield)	CONCOR	Operational	2,40,000
Kolar (Vemagal)	Sattva	Operational	8258
Nanjangud Mysuru (Kadakola)	CONCOR	Proposed	-
Attibele (Iggalur)	Palrecha Infrastructure & Developers	Notified	-

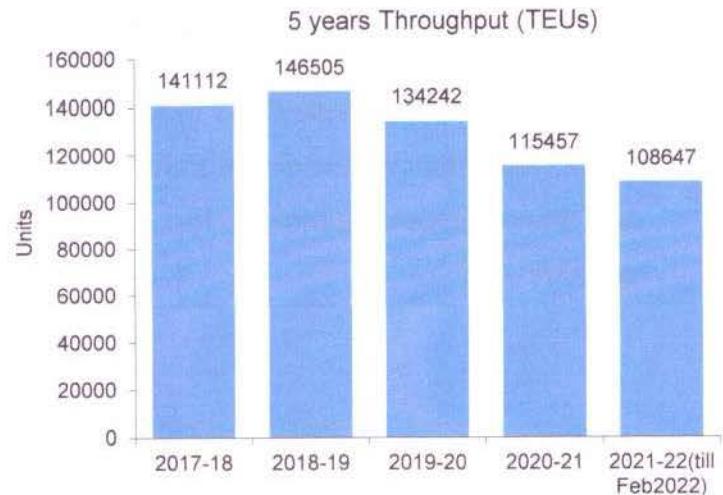
3.1.1 ICD Whitefield, CONCOR

ICD Whitefield, Bengaluru was commissioned by CONCOR in 1993 for a lease period of 99 years from the South-Western Railways. It is India's second largest in terms of area. The ICD provides rail services catering to both EXIM cargo to southern seaports and domestic cargo to the northern hinterland.

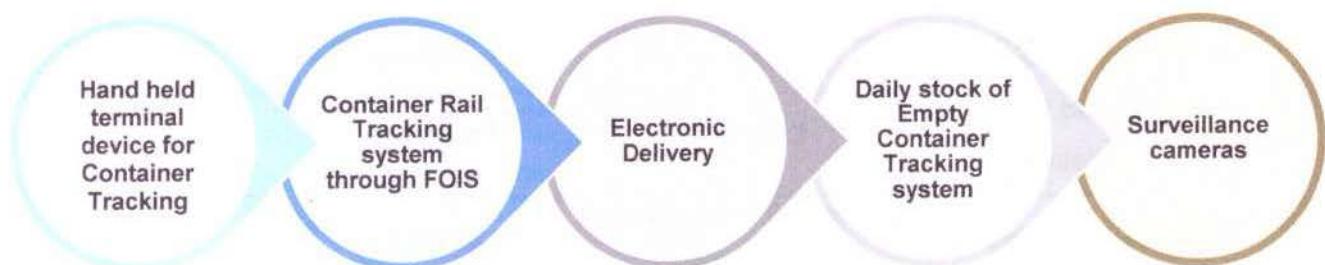


Current Infrastructure

Total Area		125 acres
Infrastructure		
Area	In sq. mts	
Warehouse Area	27,440	
LCL Warehouse	750	
Cold Storage WH	100	
Domestic Warehouse Area	12,969	
Parking Area	80,000	



New Age Technological Initiatives adopted by CONCOR ICD



3.2 Logistics Parks

Logistics parks are primarily focused on making the entire shipping process from booking to billing consistent and as simple as possible for the customer from origin to destination for B2B and B2C shipment profiles.



1

Government of Karnataka and MoRTH, Government of India have initiated the development of a Multi-Modal Logistics Park (MMLP) at Obalapura, near Nelamangala - Muddalinganahalli railway stop to promote logistics infrastructure.

2

Multi-Modal Logistics Park (MMLP) at Kadakola near Nanjangud is expected to become fully functional by 2022-23. CONCOR is developing MMLP and Inland Container Depot (ICD) with in the same.

3

KSIIDC is planning to develop a logistics park at Sy.No.62, Balepura village, Channarayapatna Hobli, Devanahalli Taluk, Bengaluru Rural District on an area of approximately 10 acres (on the national highway 207) on PPP model.

4

KIADB is planning to develop the logistics park in ~400 acres of land in Vasanthnarsapura Industrial Area 2nd Phase near Tumakuru on NH-48.

3.3 Warehouses

Karnataka has around **1622 warehouses** with an overall capacity of approx. **42.48 Lakhs MT** including the Central Railways Warehousing Complex. The combined capacity of the warehouses operated by the State Warehouse Corporation is the largest with 16,98,880 MT. Further, most of the warehouses in the state are owned by RAPCMS (Rasipuram cooperative marketing society) and TAPCMS (Taluk Agricultural Produce Co-operative Marketing Society).



No	Operated by	Number	Area in sq. ft	Capacity
1	Central Warehouse Corporation	19	25,17,426	4,54,977 MT
2	State Warehouse Corporation	153	101,93,280	17,15,348 MT
3	FCI Owned	21	133,18,043	3,78,480 MT
4	Karnataka State Co-operative marketing federation Owned	41	10,11,600	1,68,600 MT
5	Karnataka Food and Civil Supplies Corp. owned	53	2,68,068	44,678 MT
6	RAPCMS and TAPCMS owned	1114	25,93,356	4,32,226 MT
7	APMC Owned	119	19,62,900	3,27,150 MT
9	Private	102	42,90,000	7,15,000 MT

Railside Warehousing Complex (RWC)⁵

S. No	Address	Railway Zone	Total Capacity	Total Land Leased Area
1	SGT, Whitefield, Bengaluru	Southwestern Railway	34,700 MT	27,522 sq. mts
2	RWC, Mysuru New Goods Terminal, Near RPF Station, Mysore-570020	Southwestern Railway	12,200 MT	10,580 sq. mts

⁵ <https://www.crwc.in/en/facilities-services/operational-units>

3.4 Cold Storage

The State has ~ **223 cold storages** with an overall capacity of **6,76,832 MTs** among which Ganapathi cold storage located in Bellary, which is the largest under APEDA with a capacity of 8900 MT. AISATS Coolport is a one-stop shop comprising of regulatory offices such as Customs Clearances, State-of-the-art Drug Controller laboratory, Plant quarantine inspection and certification office.



No	Operated by	Number	Capacity
1	APEDA	138	2,53,168 MT
2	Private	79	4,13,631 MT
3	KAPPEC	9	10,015 MT

3.5 Container Freight Station (CFS)

A Container Freight Station (CFS) is a distribution facility where import and export shipments are consolidated and de-consolidated. It is located near a seaport and mainly consolidates and segregates the cargo. They majorly handle LCL (Less than Container Load) shipments since they require consolidation services.



Location of CFS	Operated by	Installed Capacity
Bengaluru (Whitefield)	Central Warehouse Corporation (EPIP)	36000 TEUs
Mangaluru (Panambur)	Central Warehouse Corporation	500 MT/Per Annum
Bengaluru (Hoskote)	Marigold Logistics Pvt Ltd	40000 TEUs
Bengaluru	Hindustan Aeronautics Ltd	20000 TEUs

3.6 Air Freight Station (Under Development)

Air Freight Station (AFS) is an Off-airport common user facility equipped with fixed installations of minimum requirement to handle temporary cargo storage of EXIM. An AFS is under construction at Devanahalli village, Bengaluru Rural District near the Bengaluru International Airport.



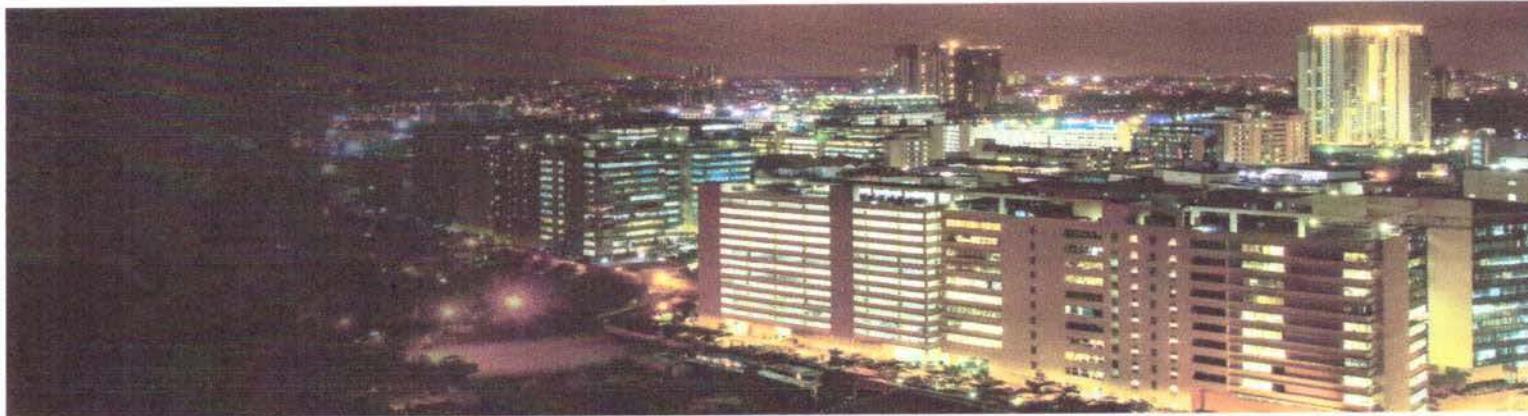
3.7 Private Freight Terminal (PFT)

Private Freight Terminal (PFT) serves domestic cargo, primarily facilitating access to rail transport and providing services including warehousing and transportation for incoming and outgoing cargo, along with last mile connectivity.



Location of the PFT ⁶	Proposed
Kolar	Adani Agri Logistics Ltd (Siding served by Malur)
Anekal	Distribution Logistics Infrastructure Private Ltd (DLI)

⁶ <https://www.fois.indianrail.gov.in/RailSAHAY/pages/TrmiDashboard.jsp>



Population

65 lakhs (2001)

96 lakhs (2011)



GDP

INR 5,43,073 Crores (FY 2018-19)

INR 5,96,290 Crores (FY 2019 -2020)

04

Bengaluru: City Logistics

Bengaluru is the most liveable among 111 cities in India in the Government of India's 'Ease of Living Index'. Bengaluru is a rapidly growing city and has witnessed an exponential boom in Services sector and in prominent growing sectors including logistics. Logistics is one of the key enablers of this growth, contributing to its economy and enabling other sectors while providing a wide range of jobs to the city's residents.

The city's economic strength, vibrancy, and liveability as a world-class city relies on the complex logistics and supply chains that support businesses, along with a reliable freight network to ship products made locally and deliver goods sold online.⁷

Currently, Bengaluru's Street network is the backbone of this substantial freight movement—a majority of the goods transported in the city everyday are on road-based freight networks. With a changing delivery landscape, trucks and other road-based freight transport will continue to play a role in delivering goods and services to the doorsteps of city residents and businesses, better known as "the last mile"—although we are seeing and encouraging the use of smaller, environmentally friendly modes such as e-cargo bikes.



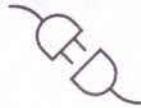
⁷ <https://censusindia.gov.in/census.website/data/census-tables>, Economic Survey of Karnataka 2021-2022

However, as one of the nation's largest and most densely developed urban environments and production hubs, Bengaluru faces unique challenges when it comes to efficient movement of freight. These issues are compounded by the recent trends like the rise of e-commerce and retail businesses - final-mile freight movement in Indian cities is currently responsible for 50 per cent of total logistics costs in India's growing e-commerce supply chains⁸. Consequently, conventional transport methods are often inefficient – they either require tailor-made alterations to function in such an environment, or incorporation of novel methods and systems developed for the same.

This is recognized by the Government of India, which expects the demand for urban freight to grow by 140 per cent over the next 10 years,⁹ and has introduced plans for 'Freight Smart Cities' to enhance urban freight efficiency and reduce logistics costs to recognize the need for managing movement of goods to improve the city freight traffic. Bengaluru is one of the key identified cities under the initiative, and it aims to address some of the logistical bottlenecks and improve the efficiency of the overall ecosystem through integrated smart planning and development of transport infrastructure in the city.

Under the initiative, the current focus needs to be on the following areas while developing the City Logistics Master Plan - last mile delivery, parking management, EV vehicle support infrastructure, and ITS (Intelligent Transport Ecosystems).

BESCOM has already set up 136 ports at 74 locations across the city for charging electric vehicles. A dedicated mobile application is available to locate the EV Charging Stations



Last Mile Delivery



Parking Management



EV Support Infrastructure



ITS (Intelligent Transportation System)

⁸ <https://pib.gov.in/PressReleasePage.aspx?PRID=1732331>

Emerging Logistics Hubs in and around Bengaluru:

The following are the emerging logistics hubs in and around Bengaluru towards facilitating freight movement to and from the city.

1. Whitefield-Hoskote region

- The region is served by the NH-75 (towards Chennai) and the Bengaluru-Chennai main railway line.
- The Outer Ring Road or ORR (via K.R. Puram) provides road connectivity to other highways as well as other areas of Bengaluru city.
- It is an established logistics & warehousing location, with the presence of Pearl Harbour Container Terminal, Indian Railways Satellite Goods Station (with CRWC warehousing), retail warehouses, etc.

2. Electronics City-Bommasandra region

- The region is served by the NH-75 (towards Hosur/ Krishnagiri/ Chennai/ Salem and part of both the Golden Quadrilateral & North-South Corridor of NHAI) and the Bengaluru-Salem railway line.
- The ORR (via Silk Board Junction) provides road connectivity to other highways as well as other areas of Bengaluru city.
- It is an important industrial region with several units located within Electronics City, Bommasandra Industrial Area, Jigani Industrial Area and SIPCOT, Hosur (Tamil Nadu).

3. Peenya- Greater Peenaya- Nelamangala- Tumkur region

- The region is served by the NH-75 (towards Tumkur/ Hubli and part of the Golden Quadrilateral of NHAI) and the Bengaluru-Hubli main railway line.
- The ORR (via Peenya) provides road connectivity to other highways as well as other areas of Bengaluru city.

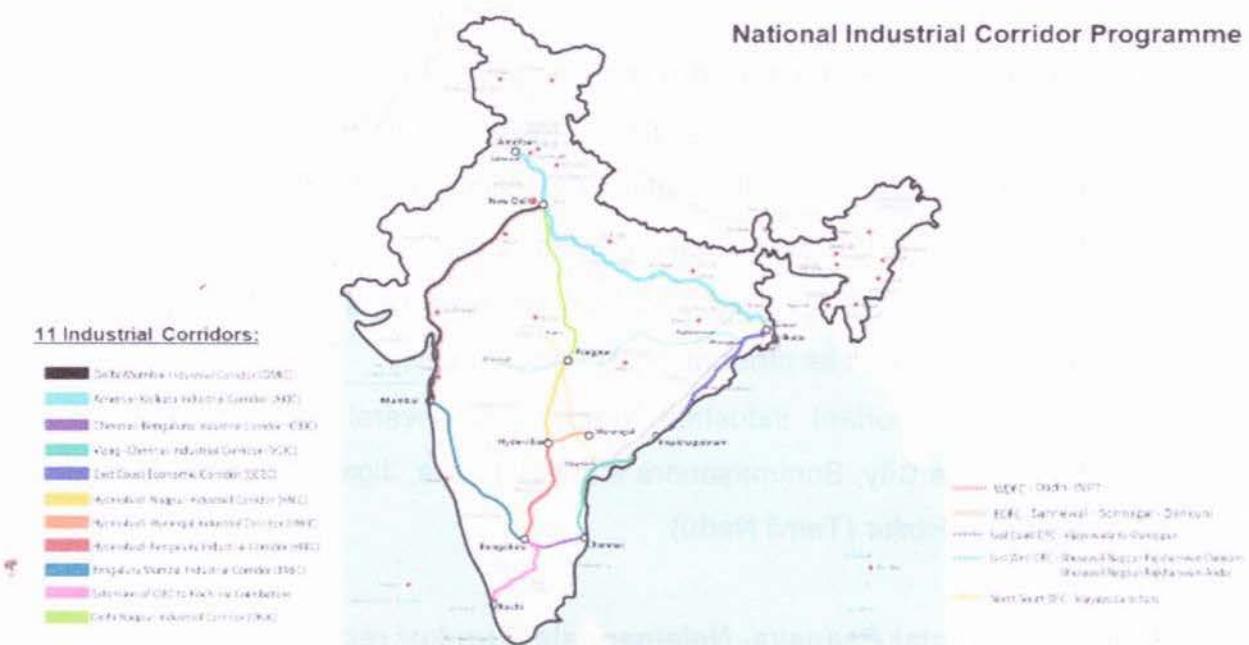


05

Industrial Ecosystem

5.1 Industrial Corridors

Karnataka proposed to have three industrial corridors passing through the state, Chennai Bengaluru Industrial Corridor (CBIC), Bengaluru Mumbai Economic Corridor (BMEC) & Hyderabad Bengaluru Industrial Corridor (HBIC)



S. No	Industrial Corridor	Coverage of the States	Port Connectivity by Road & Rail
1	CBIC	Tamil Nadu, Andhra Pradesh, and Karnataka	Ennore Port & the Container Terminal at the Chennai Port
2	BMEC	Maharashtra, Karnataka	Mumbai & Mangaluru Ports
3	HBIC	Telangana, Andhra Pradesh, Karnataka	Connecting Southern parts

5.2 Special Economic Zones (SEZs)

Karnataka is one of the largest industrial and manufacturing hubs in the country, which is enabled by the extensive industrial infrastructure in the state, ranging from SEZs, industrial areas, and global industrial townships to plug and play infrastructure



SEZs

As an export hub, the SEZs within Karnataka play an important role in enabling the high volume of exports achieved by the state. There is a total of 36 SEZs within the state, specializing in production and exports in various sectors like IT, Engineering, Pharma, and Textiles, among others¹⁰.

Sector	SEZs
IT/ITES	27
Engineering	3
Biotech	1
Textile	1
Pharma	1
Multi product	1
Aerospace	1
FTWZ	1

¹⁰ http://sezindia.nic.in/upload/uploadfiles/files/Op_%20SEZ.pdf

5.3 Industrial Areas

Karnataka has a total of 173¹¹ industrial areas spread across 82,289 acres. The top 5 industrial areas in Karnataka are depicted below



¹¹ <http://en.kiadb.in/our-key-projects/#menu1>

I. Dobbaspeta Industrial Area, Bengaluru

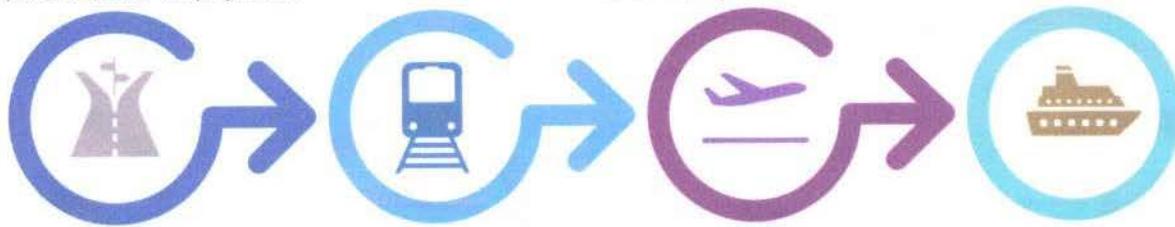


Road Connectivity

Dobbaspeta Industrial Area is adjacent to NH-648 which connects with NH-48 (Delhi-Chennai) at 6 kms from the project site

Air connectivity

The nearest airport is Bengaluru International Airport, which is 63 kms from the project site



Rail Connectivity

Muddalinganahalli railway station is 3 kms from the project site

Port connectivity

Dobbaspeta Industrial Area is situated at 320 kms and 410 kms from Mangaluru and Chennai sea ports, respectively

II. Vasanthanarasapura Industrial Area, Tumakuru

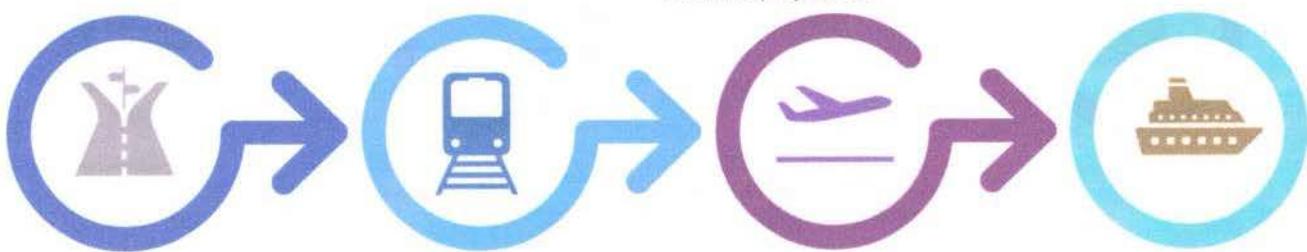


Road Connectivity

National Highway NH-48 (Delhi-Chennai) is adjacent to the project site

Air connectivity

The nearest airport is Bengaluru International Airport, which is 100 kms from the project site



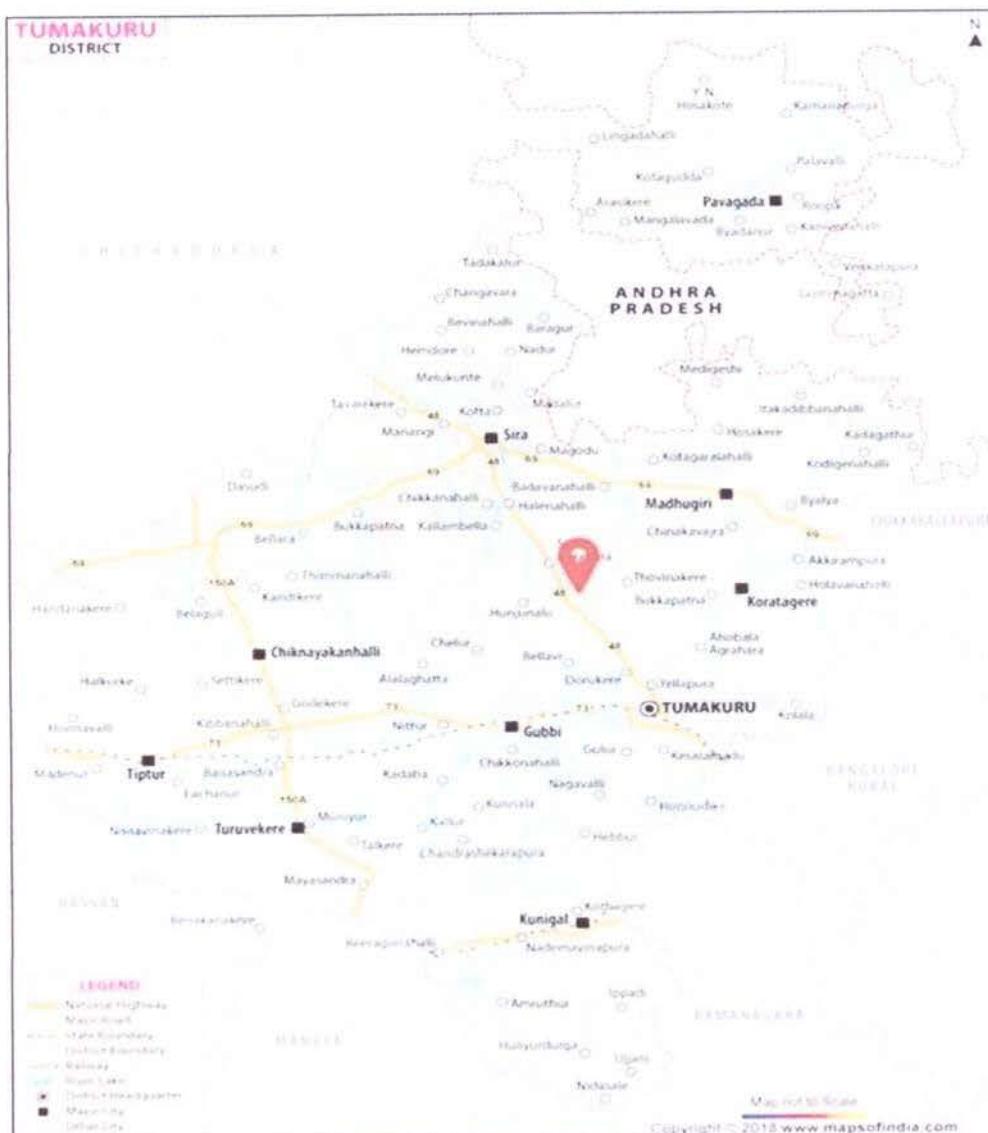
Rail Connectivity

The nearest railway station is Tumakuru railway station (25 km). Bengaluru City Railway Station is 90 kms from the industrial area

Port connectivity

Vasanthanarasapura Industrial Area is situated at a distance of 320 kms and 450 kms from Mangaluru and Chennai Ports respectively

III. Tumakuru Machine Tool Park, Tumakuru

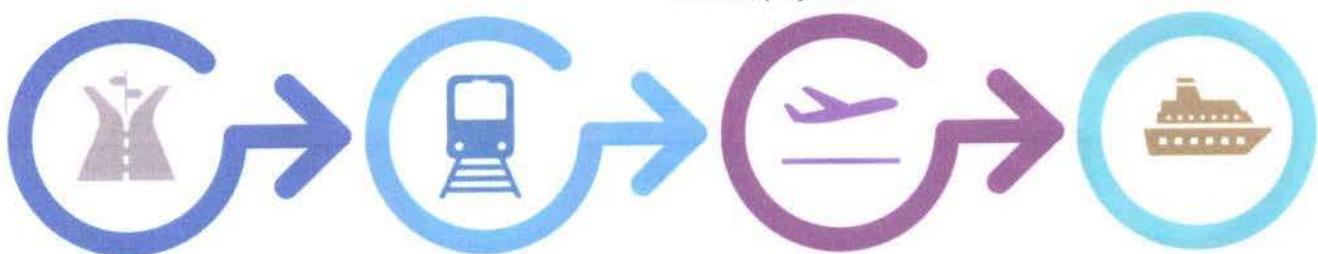


Road Connectivity

National Highway NH-48 (Delhi-Chennai) is 6 kms from the project site

Air connectivity

The nearest airport is Bengaluru International Airport, which is 120 kms from the project site



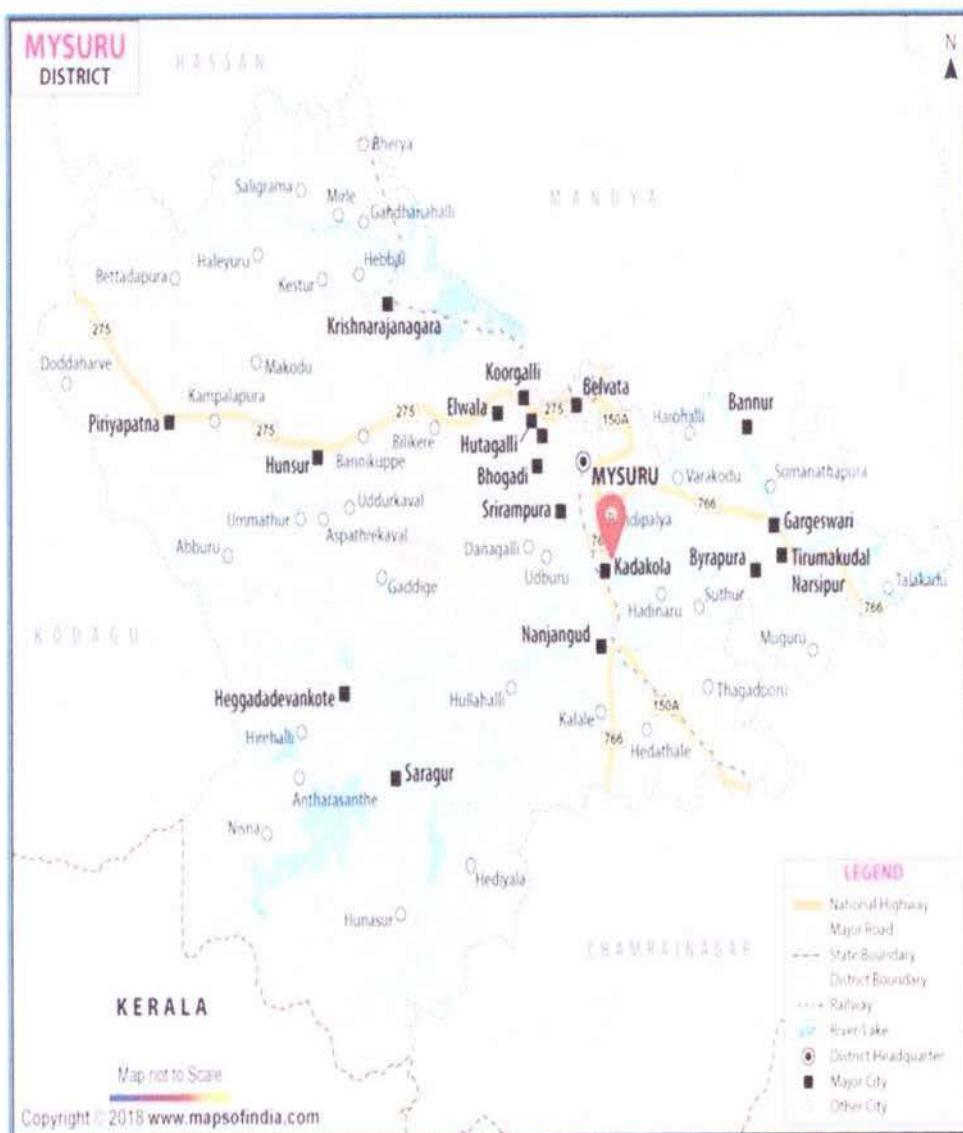
Rail Connectivity

The nearest railway station is Tumakuru railway station (32 kms). Bengaluru City railway station is 100 kms from the industrial area

Port connectivity

Tumakuru Machine Tool Park is situated at 330 kms and 430 kms from Mangaluru and Chennai ports respectively

IV. Kadakola Industrial Area, Mysuru Kadakola Industrial Area, Mysuru

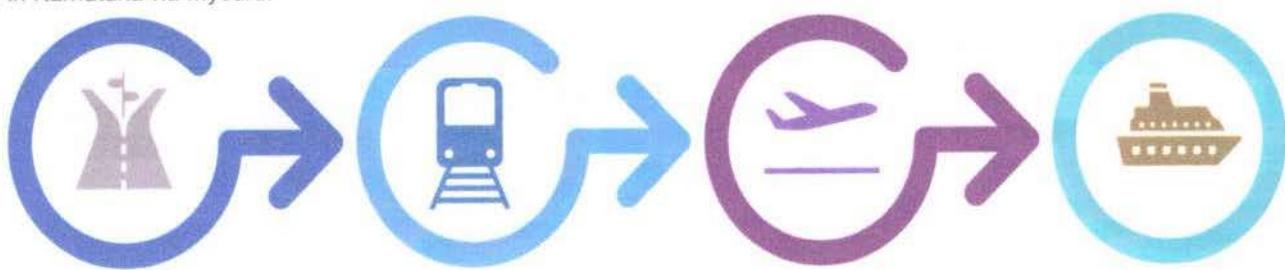


Road Connectivity

Kadakola Industrial Area is adjacent to NH-766 which connects Kozhikode in Kerala with Kollegal in Karnataka via Mysuru.

Air connectivity

The nearest airport is Mysuru Airport, which is 5 kms from the project site



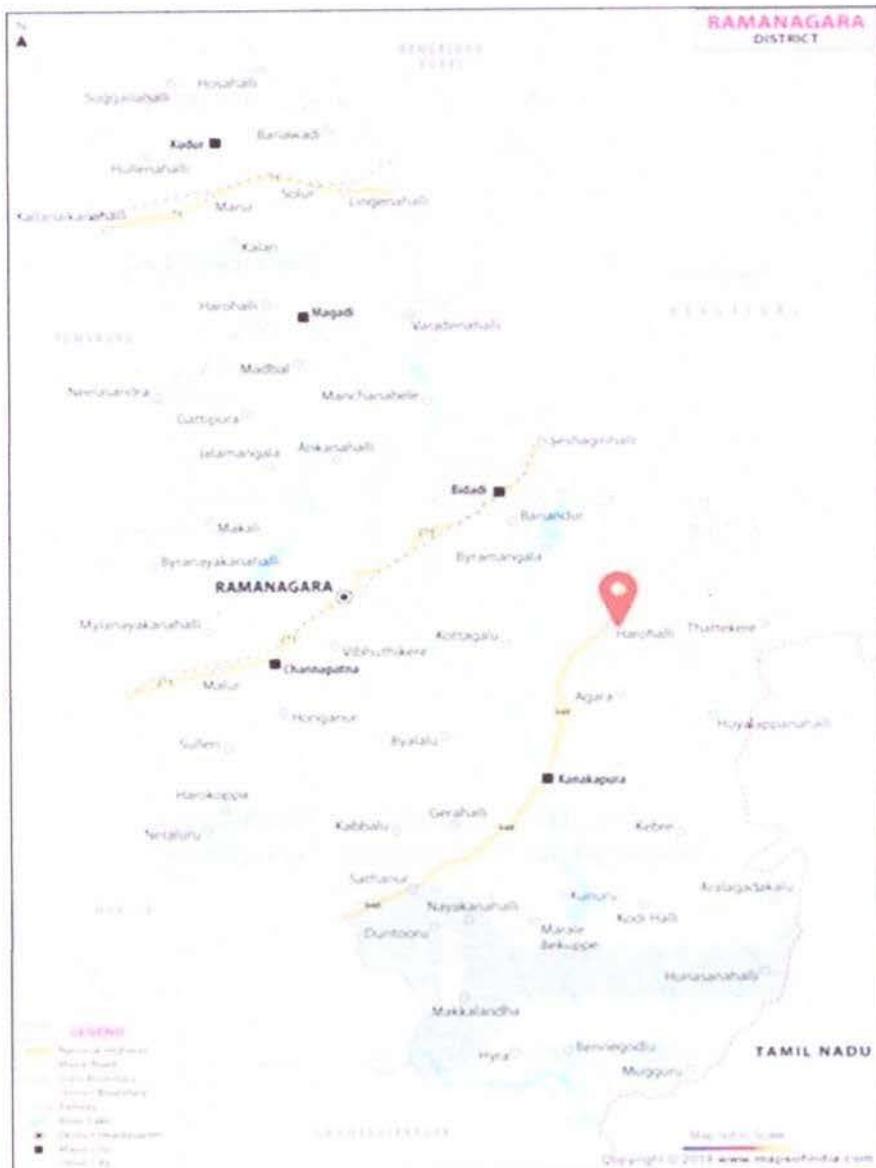
Rail Connectivity

Mysuru railway station is 16 kms from the project site

Port connectivity

Kadakola Industrial Area is situated at 270 kms and 380 kms from Mangaluru and Kochi Sea ports respectively

V. Harohalli Industrial Area, Ramanagara



Road Connectivity

Harohalli Industrial Area is adjacent to NH-948 which connects Bengaluru and Coimbatore



Rail Connectivity
Bidadi railway station and Ramanagaram Railway Station is ~20 kms and ~35 kms from the project site



Air connectivity

The nearest airport is Bengaluru International Airport, which is ~85 kms from the project site



Port connectivity

Harohalli Industrial Area is situated at a distance of ~360 kms and ~370 kms from Mangaluru and Chennai Sea Ports respectively

5.4 Global Industrial Townships

Karnataka is also home to a number of international industrial townships, signifying the capabilities of the industrial ecosystem and the immense foreign investment potential in the same.¹²

Japanese Industrial Area Township

520 acres with 225 acres already allotted; 31 acres reserved for commercial activities, uninterrupted power supply

Address

Japanese Industrial Township, Vasanthnarasapur Industrial 3rd Phase, Thippedasarahalli, Karnataka 572138

Technology Innovation International Park (CDC Taiwan)

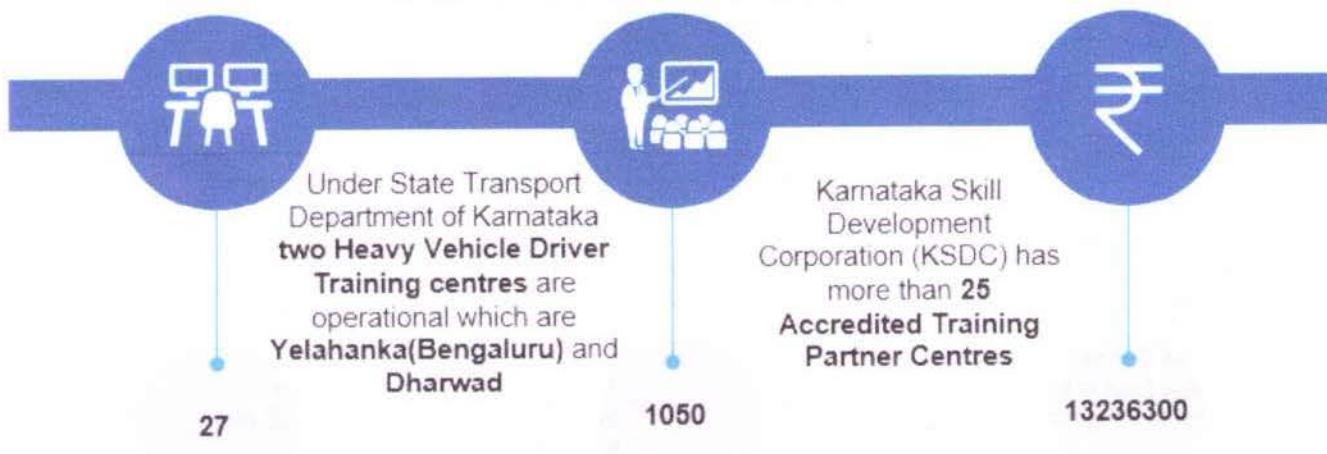
70 acres of developed Grade-A infra, reserved area for residential & Commercial spaces, 30m wide main road

Address

Industrial Area, Devanahalli, Near Bangalore International Airport Pvt Ltd

5.5 Logistics Skilling Infrastructure

Two more Training Institutes at **Kalaburagi** and **Mangalore** are in final stages of completion



Number of training centres for skilling of logistics sector professionals

Number of individuals, trained in logistics training centres during the year

Investment (as a percentage of total budgetary allocation) made by the state / UT in Transport and logistics sector skilling(in Rs)

¹² Invest Karnataka 2022 Brochure

Karnataka State Logistics Plan

(Part-2 Logistics Action Plan)



STATE LOGISTICS ACTION PLAN

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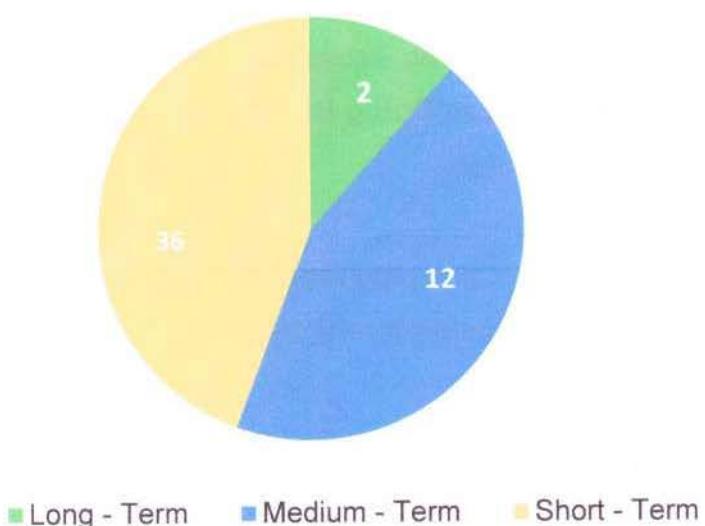
Summary

The State of Karnataka is experiencing a radical transformation in the logistics ecosystem due to significant developments in infrastructure, power, road, water, and the state's overall industrial ecosystem. Karnataka aims to further enhance the state's stature as one of the leading logistics hubs in the country. Therefore, the Government of Karnataka has undertaken an initiative to develop Karnataka State Logistics Action Plan. The logistics action plan will promote logistics infrastructure, facilitate ease of doing business, and create the necessary support infrastructure.

Since the plan is a live document, it seeks support from various State Department(s) in terms of providing data for concerted interventions. The timeline for implementation of measures under Karnataka State Logistics Action Plan is categorized as below:

Short	Medium	Long
1 – 2 years	2-5 years	5-10 years

Under the 03 pillars – Infrastructure, Services and Policy & Regulatory Framework – 50 interventions are proposed as action points.



1. Need for State Logistics Action Plan

The **Government of Karnataka seeks to unlock the potential of the logistics industry**, which is needed to fuel economic growth, through better infrastructure design, improved operational procedures, and increased cooperation among stakeholders.

The State is experiencing a radical transformation in its logistics ecosystem due to significant developments in trade. There has been a surge in demand for quality and high value-added logistics eco system and infrastructure need for the State.

Despite the recognition of logistics as a critical driver of economic development, the logistics sector continues to be highly skewed with the bulk of freight being handled at ICD CONCOR Whitefield, NMPA (New Mangalore Port Authority) and BIAL (Bengaluru International Airport Limited). The transportation connectivity, though well-established, is severely congested due to the high traffic density on both road and rail. It has led to an increase in the logistics cost for traders and shippers in the state. These issues were also highlighted in the LEADS reports and elaborately in LEADS 2021 report where Karnataka slipped to 8th position.

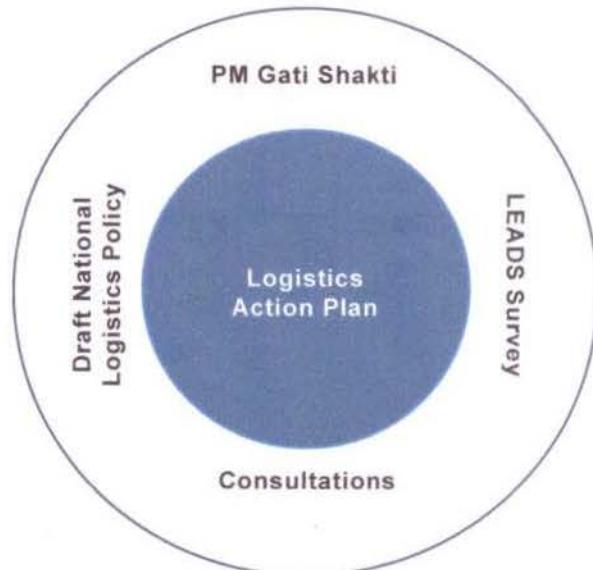
This Karnataka State Logistics Action Plan outlines an integrated Logistics Action Plan for the State of Karnataka to **improve the logistics ecosystem** and is a road map for overall development of the logistic ecosystem in the State to **promote logistics infrastructure, improve Ease of Doing Business (EoDB)** and create the necessary support infrastructure in the State.

This plan will ensure the trade competitiveness, improve the logistic landscape of the state and create more opportunities for the trade.

2. Design Principles for Karnataka State Logistics Action Plan



- Stakeholder Consultations:** Multiple stakeholders consultations including State and Central Department(s), customs, and logistics stakeholders are brought together on a common platform to identify bottlenecks with a common agenda of easing and facilitating the logistics environment in the state.
- Coordination:** Inter-departmental coordination is enabled by bringing all the relevant Departments under a common umbrella committee i.e., State Logistics Coordination Committee (SLCC). This allows for a unified approach to achieve the agenda points elucidated under the Logistics Action Plan.
- Public and Private participation:** To improve the logistics ecosystem it is imperative to have a live feedback loop. The involvement of major logistics service providers and State



3. Stakeholder Consultations

Visvesvaraya Trade Promotion Centre (VTPC) is the mandated nodal agency for the promotion of international trade for the State of Karnataka under the aegis of the Department of Industries & Commerce, Government of Karnataka.

VTPC has facilitated various stakeholder consultations with a wide variety of shippers, road transporters, container train operators, freight forwarders, multimodal transport operators, air cargo agents, shipping lines, and ICD/CFS operators, among others. These consultations were intended to identify, validate and finalise the final set of indicators. During the process, VTPC consulted with exporters across 12 major districts; had discussions with 9 State departments; and consulted 4 central agencies i.e., NHAI, NMTA, ICD Whitefield. Details of the consulted departments are mentioned below.

S. No.	Central and State Departments
1	DULT (Directorate of Urban Land Transport)
2	State Transport Department
3	Public Works Department (PWD)
4	IDD (Infrastructure Development Ports & Inland Water Transport)
5	KSIIDC (Karnataka State Industrial and Infrastructure Development Corporation)
6	Energy Department / BESCOM (Bengaluru Electricity Supply Company Limited)
7	NHAI (National Highways Authority of India)
8	CONCOR (Container Corporation of India)
9	South-Western Railway
10	KIADB (Karnataka Industrial Area Development Board)
11	NMPA (New Mangalore Port Authority)
12	State Police Department
13	KSDC (Karnataka Skill Development Corporation) of Karnataka Skill Development, Entrepreneurship & Livelihood Department

4. Issues highlighted in LEADS reports

Karnataka's LEADS ranking has continued to slip from 4th in 2018 to 8th in 2021, as rapid urbanization and boom in the e-commerce and new ages sectors have put a strain on the existing logistics infrastructure of the state. The stakeholders highlighted poor road connectivity along key freight routes, inadequate parking and resting facilities for truck drivers, and insufficient logistics infrastructure as critical issues and challenges.

Below are the detailed challenges faced by stakeholders in Karnataka, that were highlighted in LEADS 2021 report:

- **Infrastructure:**
 - Lack of quality road connectivity on the stretches of Mangaluru – Bengaluru, Mangaluru – Hubli (Ghat section), Kodagu - Kushal Nagar – Mangaluru, Ramanagara - Anmod (near Goa check post).
 - Lack of parking spaces and resting facilities for drivers along the key freight routes. There are no Transport Nagars available in the State.
 - Lack of adequate warehousing facility at Mangaluru port for sugar and grains and no availability of Terminal structure at Hubballi.
 - There is no rail connectivity from Ankola to Hubballi. Current route is through Hassan, which is time consuming and hence has higher freight charges. Hassan to Mangaluru is only single line railway track and only few trains are allowed due to difficult terrain
- **Services:**
 - Frequent theft cases are reported on State roads such as old Hubli road.
 - Non-availability of scheduled train services between Bengaluru and Chennai Port. Thus, majority of traffic moves by road, adding to the overall logistics cost.
 - Mobile/internet connectivity issues persist along freight routes. Tracking and tracing is also an issue while transiting the cargo through the freight routes
 - The lorry association does not allow vehicles from other States and charges them extra in case it allows them to enter the States' border.
- **Regulatory & operating environment:**
 - There are frequent stoppages/check points at the Karnataka border adding to the transit time and the overall logistics cost.
 - Grievance redressal in the State is a major challenge.
 - High toll charges on the stretch of Hubli – Rajkot and on Mangaluru road.
 - Frequent unwarranted stoppages by RTO are prevalent in the State.
 - The process for setting up a warehouse/ ICD in the State is not streamlined. It requires clearances from different departments with long lead time

5. PM Gati Shakti National Master Plan

PM Gati Shakti focuses on the preparation of National Comprehensive Plan to holistically integrate all the existing and proposed development initiatives. The idea is to enhance the economic zones in a way that they become the fulcrum of economic development. Moreover, to facilitate this, the concept of Geospatial Mapping needs to be incorporated rather than adopting the sectoral approach. Other considerable factors are Comprehensive GIS Layers, Spatial Layers, High Resolution Images, Administrative boundaries, Economic Zones, Infrastructure, Utilities & Logistics, etc. The list of categories of capital investment projects which can be funded under this scheme are

1

Development of nodes like ICDs, CFS, warehousing, multimodal or uni modal logistics parks, modern aggregation centres, etc.



2

Critical connectivity infrastructure for providing last and first mile connectivity to industrial parks, economic zones.



3

Inter-connected infrastructure for attaining multimodal connectivity



4

Development of city logistics plan.



9

Connectivity projects to ensure 24x7 freight flow in the State



5

Digital support including data monitoring centres at State level for monitoring freight flows



6

Setting up of PM Gati Shakti data centres



7

Development of new industrial parks including land acquisition



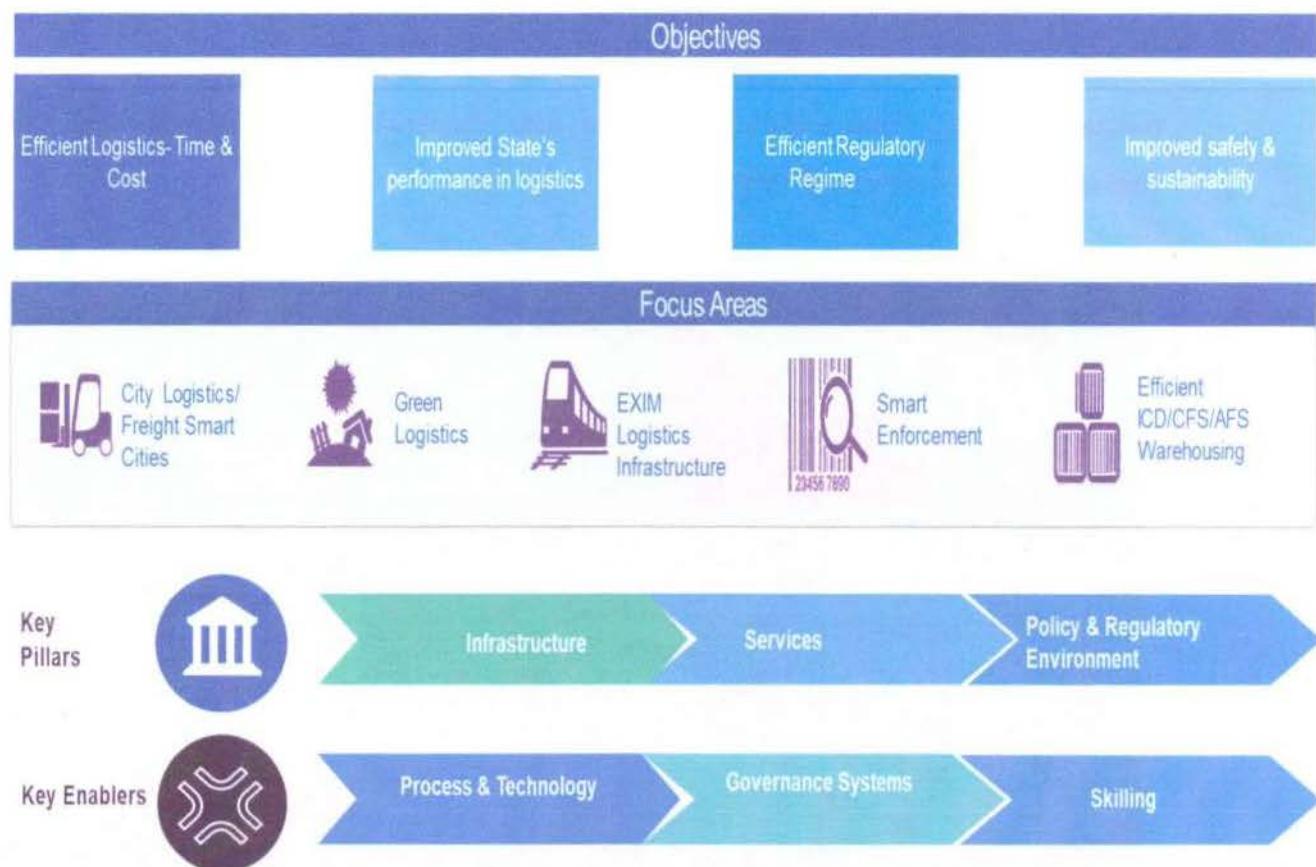
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Connectivity projects for cargo terminals being developed by Ministry of Railways



6. Framework for Karnataka State Logistics Action Plan

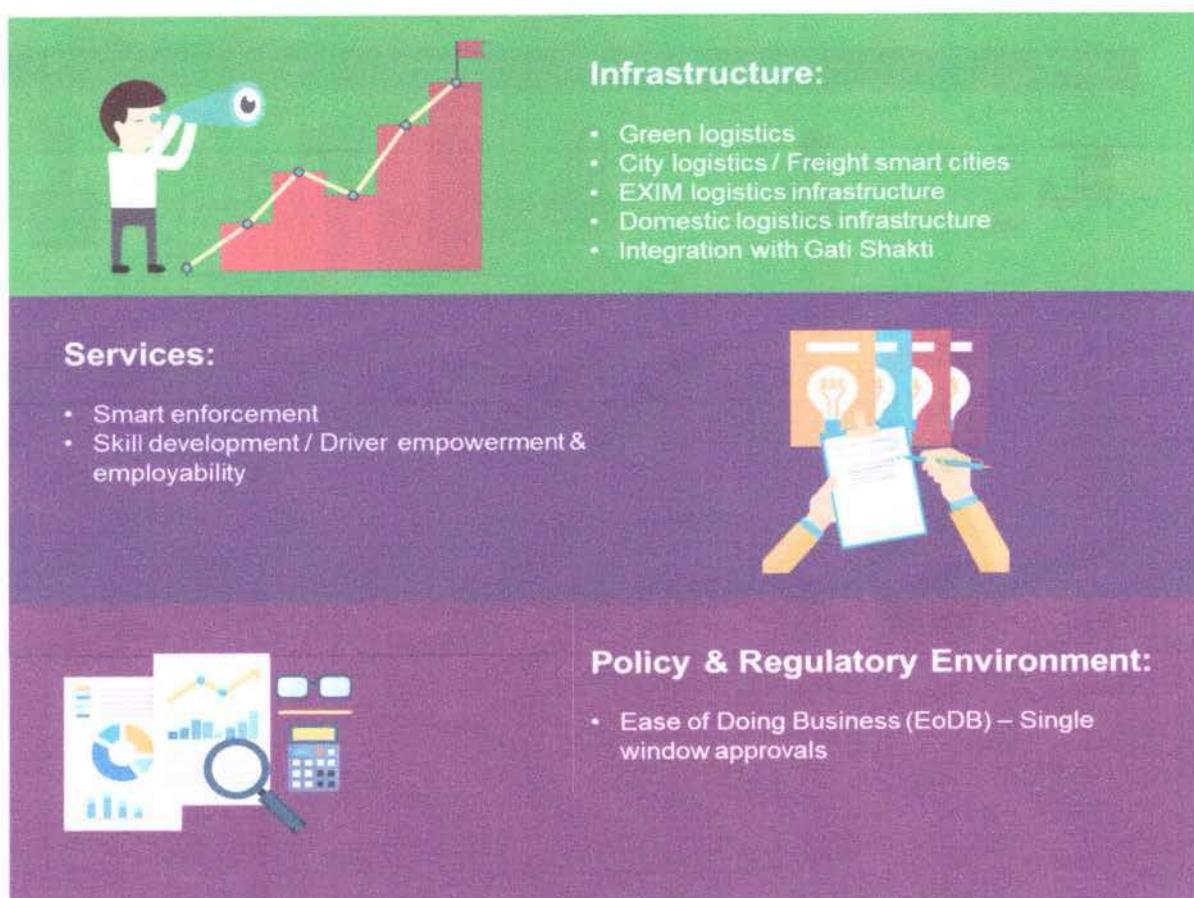
The logistics action framework prioritizes key areas and guides the development and expansion of logistics infrastructure. It integrates all the infrastructure involved in logistical activities such as ports, airports, roads, railways, logistics parks, truck terminals, and storage facilities, among others to make sure the state builds a “world-class logistics ecosystem”.



7. Karnataka State Logistics Action Plan

The Karnataka State Logistics Action Plan has been outlined with a core vision to ensure that the State of Karnataka will have a sustainable and efficient logistics ecosystem. The Plan views logistics as a mainstream activity that cuts across modes, industries, and sectors to increase the state's productivity and competitiveness.

The key tasks are structured under the 3-logistics pillar model - "Infrastructure Development, Service Enhancement & Policy-Regulatory Environment" in the following Action Plan matrix. Timelines and measures against each task are mapped to the concerned departments.

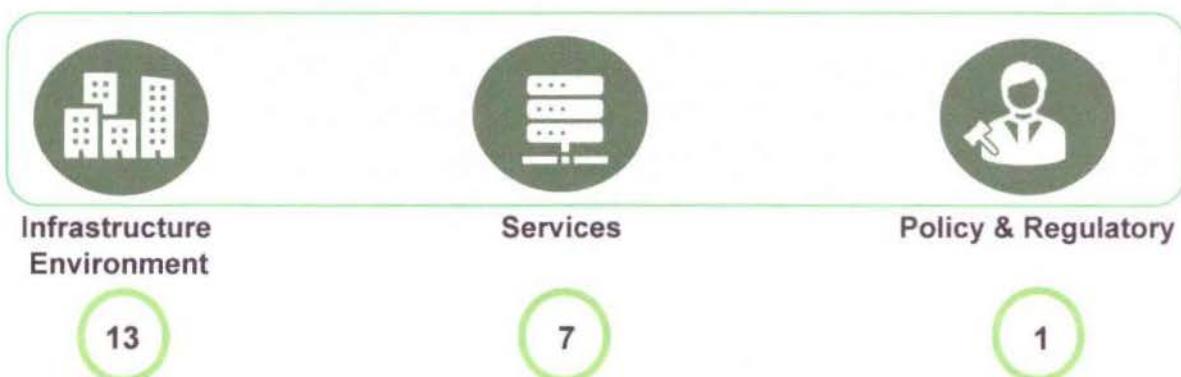


7.1 Summary of Recommendations

#	Focus Pillar	Action Area	Action Point
1	Infrastructure	Implementation of PM GatiShakti activities	Expedite the creation of State Master Plan (SMP) by uploading mandatory layers on the BISAG-N portal of Government of India
			Validate and adopt the SMP
			Improve the first and last mile connectivity to the economic zones, consumption centers and the ports
		Develop EXIM Infrastructure (ICD/ CFS/ AFS/ ACC/ ICP/ LCS/CRT etc.)	Enhance Logistics Infrastructure by developing new Inland Container Depots (ICDs), Multi-Modal Logistics Parks (MMLPs), and CRTs
			Improve connectivity to existing ICDs
			Improve railway connectivity to seaports
			Improve National Highway connectivity to seaports
			Improve road connectivity between major demand centers
			Rectify the black spots to enhance road safety on all freight routes
		Augment Domestic Logistics Infrastructure	Establish New Truck Terminals- Unimodal logistics parks across the State
			Improve cold storage facilities in the major production and export clusters
		Create City Logistics Master Plans	Create Master Plans for eight cities as identified by Directorate of Urban Land Transport
		Decarbonize logistics sector through promoting Green Logistics	Promote EV adoption for freight movement within the city and highways between major production and consumption zones.
			Promote carbon-neutral warehousing

#	Focus Pillar	Action Area	Action Point
2	Services	Implement Smart Enforcement Initiatives	Implement eChallan and check post portal in the state
			Eliminate physical check posts by implementing Automatic Number-Plate Recognition (ANPR) and cargo monitoring system - Modernize Check posts to reduce unwarranted stoppages
			Equip RTO flying squads with SMART wearables such as body-worn cameras with video recording capabilities for inspection and enforcing transport regulations, especially related to overloading
		Enhance employment and address the shortage of skilled workforce through skill development Initiatives	Implement surveillance systems on key State Highways and consider strengthening highway patrolling to increase cargo safety
			Identify skill development requirements for the Logistics sector
			Prepare skill development plan for fulfilling the skill gap for logistics sector
			Prepare a comprehensive plan for driver empowerment and employability on issues such as road safety
3	Policy & Regulatory Environment	Promote Ease of Doing Business by simplifying the regulatory regime for logistics facilities	Simplify regulatory processes for the warehousing industry

7.2 Action areas under each of the above pillars are identified below



(i) Infrastructure

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
Integration with PM GatiShakti NMP					
1	Implementation of PM GatiShakti activities	1.1 Expedite creation of the State Master Plan (SMP) by integrating 28 (24+4) essential layers on the BISAG-N portal of Government of India (Details are at Annexure 2)	1.1.1 Expedite the data integration of the information on Geographic Information System (GIS) platform developed by BISAG-N 1.1.2 KSIIDC (Nodal Agency) to verify the documents before department uploads them	Karnataka State Industrial & Infrastructure Development Corporation Limited (Nodal Agency)	Short- Term
		1.2 Validate and adopt SMP	1.2.1 Coordinate with BISAG-N to address the needs of the State with customized layers 1.2.2 Validate the respective SMP data and use the SMP to identify gaps in existing infrastructure as per GatiShakti framework 1.2.3 Adopt existing tools in the BISAG-N portal for		Medium-Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			<p>facilitating investment in trade infrastructure through SMP</p> <p>a) Adopt the Forest NOC tool, Private Land acquisition tool etc. for speedy approvals for infrastructure facilities</p>		

EXIM Logistics Infrastructure

2	Develop EXIM Infrastructure (ICD/ CFS/ AFS/ ACC etc.)	2.1 Enhance Logistics Infrastructure by developing new ICDs, MMLPs, and CRTs	2.1.1 Expedite the completion of MMLP at Kadakola (Mysuru)	Container Corporation of India- CONCOR	Short Term
			2.1.2 Expedite the action to setup an MMLP in Obalapura -Muddalinganahalli		Short- Term
			2.1.3 Complete CRT (Container Rail Terminal) to provide custom clearance facilities for exports at Sambra, Belagavi		Short- Term
			2.1.4 Set up an ICD in North Karnataka region – Around Hubballi Dharwad		Medium-Term
			2.1.5 Explore setting up of a new ICD near the Chennai Bengaluru Industrial Corridor near Hoskote		Long- Term
		2.2 Improve connectivity to existing ICDs	<p>2.2.1 Improve the last mile connectivity to ICD Whitefield</p> <p>a) Provide road connectivity to ICD Whitefield via Kadugodi Dinnur road. The transfer process of identified land from CONCOR Revenue Department to KIADB to be expedited.</p> <p>b) Explore additional linking of the ICD, Whitefield to Satellite Goods Terminal (SGT) through extending the proposed Kadugodi Dinnur road- ICD link road</p>	Karnataka Industrial Area Development Board / Revenue Department / Indian Railways - CONCOR	Short-Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			(identified in (a) above) to SGT		
		2.3 Improve railway connectivity to seaports	2.3.1 Improve railway connectivity of Belekeri and Pavinakurve ports (proposed to be developed as a greenfield port)	South-Western Railways	Medium - Term
			2.3.2 Improve railway connectivity to Karwar port from Ankola to Hubballi (Subject to obtaining to respective clearance from National Board of Wildlife (NBWL) & Ministry of Environment, Forest, and Climate Change (MoEFCC))	South-Western Railways	Long- Term
		2.4 Improve National Highway connectivity to seaports	2.4.1 Improve road connectivity to Belekeri port by resolving connectivity issues on the NH 766 E and 766 EE: Sirsi-Kumta-Belekeri Port	National Highways Authority of India / Ministry of Road Transport and Highways of India- Infrastructure	Short- Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			<p>2.4.2 Improve road connectivity to NMPA port through expediting the construction of Bengaluru - Mangaluru Highway in the following stretches</p> <p>NH 75:</p> <ul style="list-style-type: none"> a) Maranahalli to Hassan b) 4 laning of existing stretch from Maranahalli to Addahole c) 4 laning of Devihalli to Hassan section and widening of existing Hassan bypass to 2-lane d) 4 laning of existing stretch from Addahole to Bantwal section 	Development, Ports & Inland Water Transport Department	Medium-Term
			<p>2.4.3 Improve road connectivity of NH 66:</p> <ul style="list-style-type: none"> a) Between Kasargod - Karwar road Stretch to Major and Minor ports b) Construction of 4 lane flyover bridge for a length of about 3.0 Km from KIOCL (Kudremukh Iron Ore Company Limited) junction to Baikampady along NH-66 c) Construction of Road Over Bridge (ROB) on the Eastern Side of NH-66, to connect Baikampady Industrial Area with the Port area 		Medium-Term
			<p>2.4.4 Improve road connectivity from Mysuru to NMPA port by expediting the development of NH 275: Mysuru to Mangalore stretch</p>		Medium-Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
3		2.5 Improve Road connectivity between major demand centers	2.5.1 Improve road connectivity from Bengaluru to Mysuru NH 275: a) Bengaluru to Nidaghatta b) Nidaghatta to Mysuru		Short- Term
		2.5.2 Expedite the construction of the road stretch NH 48: Belagavi to Sankeshwar (Maharashtra - Karnataka border) for facilitating freight movement	Medium-Term		
		2.6 Rectify the black spots to enhance road safety on all freight routes	2.6.1 Identify and draw the action plan to reduce the black spots and choke points (as identified by PWD) on the key state freight routes	Public Works Department	Short-Term
		2.6.2 Expedite rectification of the black spots and choke points identified on the key National Highways	National Highways Authority of India	Medium-Term	
3	Augment Domestic Logistics Infrastructure	3.1 Establish New Truck Terminals across the State <u>(Details are at Annexure 3)</u>	3.1.1 Enhance support services including warehouse facilities, petrol pumps, resting facilities/ dormitories, etc., as well as provide utility infrastructure such as road network, power and backup, drainage facilities, etc., in existing and upcoming truck terminals	D Devraj Urs Truck Terminals Ltd	Short- Term
			3.1.2 Expedite the development of the truck terminals across the state for identified locations		Short- Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
		3.1.3 Explore alternate financing options to develop truck terminals (such as PPP model, appropriate GoI schemes such as PM Gati Shakti)	D Devraj Urs Truck Terminals Ltd	Short- Term	
		3.2 Improve cold storage facilities in the major production and export clusters	3.2.1 Conduct a gap assessment study to establish cold storage facilities for perishable products at major production and export clusters at the district level	KAPPEC and State Horticulture Department	Short-Term

City Logistics/Freight Smart Cities

4	Create City Logistics Master Plans (CLMP)	4.1 Create Master Plans for 8 cities as identified by DULT (list cities in Annexure 4)	4.1.1 Undertake baseline studies to map current mechanisms for smart enforcement on existing road infrastructure in selected cities	Directorate of Urban Land Transport (DULT)	Short- Term
			4.1.2 Undertake demand assessment for freight movement in the selected cities		Short- Term
			4.1.3 Expedite the preparation of CLMP as per the applicable guidelines from GoI in a phased manner: <ol style="list-style-type: none"> In the first phase, consider three sectors (Agri, e-commerce & Solid waste management) for Bengaluru city for inclusion in CLMP. The proposed timeline to complete the study is 6 months In the second phase, expand CLMP for Bengaluru; to the entire city and other sectors 		Medium-Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			<p>c) In the third phase, prepare CLMP for Hubballi – Dharwad and Mysuru followed by other identified cities</p> <p>4.1.4 Emphasize on key priority areas such as last-mile delivery, parking management, EV vehicle support infrastructure, ITS (Intelligent Transportation System) in Freight Smart Cities while developing the CLMP</p> <p>4.1.5 Establish Urban Freight Quality partnerships between the freight industry, local governments, local businesses, and the local communities for gaining a deeper understanding of Urban freight transport, along with its issues and implement testbeds & pilots to test feasible solutions. The insights and learning from such testbeds and pilots may be used while preparing scale up plans in future, if any</p>		Medium-Term

Green Logistics

5	Decarbonize the logistics sector by way of promoting Green Logistics	5.1 Promote EV adoption for freight movement within the city and highways between major production and consumption zones	5.1.1 Undertake a demand study to analyze demand for EV public charging infrastructure on key freight corridors and major logistics demand centers (list at Annexure 5)	Energy Department / Bengaluru Electricity Supply Company Limited	Short- Term
			5.1.2 Identify freight movement routes in the city for the construction of EV charging stations		Short - Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			<p>5.1.3 Formulate an appropriate scheme for battery disposal</p> <p>5.1.4 Develop EV charging stations at every 20-25 km for identified routes (list at Annexure 5) in a phased manner</p> <p>a) Expedite EV charging station development on Bengaluru - Mysuru Highway and Bengaluru - Tumakuru highway under FAME II</p> <p>Subsequently undertake EV charging stations development for the other identified highways</p>		Short - Term
			<p>5.1.5 Encourage private players to install charging stations and provide subsidies in line with state EV policy</p>		Short -Term
			<p>5.1.6 Develop Public EV charging infrastructure in areas with high charging demand for freight movements as identified in (5.1.1) to ensure high utilization in accordance with EV Policy.</p> <p>Prioritize Public EV charging infrastructure in Large and Mega sized urban agglomerations (> 5 million population)</p>		Medium - Term
		5.2 Promote carbon-neutral warehousing	5.2.1 Encourage public and private players to exceed ECBC (Energy Conversation Building Code, Indian Green Building Council) criteria for	Commerce and Industries Department	Short- Term

#	Action Area	Action Point	Measures to be implemented	Stakeholder	Timeline
			energy conservation during the construction of warehouse infrastructure		

(ii) Services

#	Action Areas	Action Points	Measures to be implemented	Stakeholder	Timeline
Smart Enforcement					
6	Implement Smart Enforcement Initiatives	6.1 Implement digital solutions and Check post portal in state	6.1.1 Develop a digital transformation roadmap (process of adopting various technologies within a business to digitize and modernize its operations (in a phased manner) to deploy check post portal (priority routes list at Annexure 6)	State Transport Department	Short-Term
		6.2 Eliminate physical check posts by implementing Automatic number-plate recognition (ANPR) system/- Modernize Check posts to reduce unwarranted stoppages	6.2.1 Conduct a feasibility study to implement the ANPR system covering maximum cities a) Prioritize key freight routes such as Bengaluru - Mysuru, Bengaluru - Tumakuru Highway, and Bengaluru - Mangaluru highway	State Police Department / Transport Department	Short-Term
		6.3 Equip RTO flying squads with SMART wearables such as body-worn cameras with video recording capabilities for inspection and	6.3.1 Implement smart city solutions such as command and communications centres, disaster recovery centres 6.3.2 Install sensors for heights, WIM and RFID readers on major industrial routes such as Bengaluru -	State Transport Department State Police Department	Short-Term

#	Action Areas	Action Points	Measures to be implemented	Stakeholder	Timeline
		<p>enforcing transport regulations, especially related to overloading</p> <p>6.4 Implement surveillance systems on key State Highways and consider strengthening highway patrolling to increase cargo safety</p>	<p>Mysuru, Bengaluru - Tumakuru Highway, and Bengaluru – Mangaluru highway</p> <p>6.4.1 Install CCTV cameras in hotspots identified and link them with district command control rooms to act as per prevalent laws in theft cases</p> <p>6.4.2 Install boards and signages such as 'Dial 112' for emergency support and create awareness on key freight routes for use in case of distress</p> <p>6.4.3 Identify hotspots in the proximity of industrial areas and key freight routes. For this purpose, existing statistics of theft cases especially for cargo vehicles (highways wise/ district wise data) issued by Additional Director General of Police may be used (list at Annexure 6)</p>	State Police Department	Short- Term
					Short- Term
					Short-Term

Skill Development / Driver Empowerment and Employability

7	Enhance employment and address the shortage of skilled workforce through Skill development Initiatives	7.1 Identify skill development requirements for Logistics sector	<p>7.1.1 Undertake a Skill Gap assessment study for the logistics sector in consultation with Industry to identify training needs for Logistics</p> <p>a) Prioritise job roles such as Cargo Handling, Warehousing, Dangerous Goods, Sector-specific logistics (e.g., temperature</p>	Karnataka Skill Development Corporation, Entrepreneurship & Livelihood Department	Short-Term
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#	Action Areas	Action Points	Measures to be implemented	Stakeholder	Timeline
			<p>controlled), Training Programme on Air cargo operations, cold chain solutions, and packaging</p> <p>7.1.2 Emphasize on providing training for tech-based job roles related to logistics:</p> <ul style="list-style-type: none"> a) Prioritise 12 job roles identified by the Skill Development Department in the first year b) Include other courses for providing skills in Drone technology, Internet of Things (IoT)/ Industry 4.0, Bar-coding and Radio Frequency Identification (RFID) 		Short-Term
		7.2 Prepare a Skill development plan for fulfilling the skill gap in the logistics sector as identified in (7.1.1)	<p>7.2.1 Set up a Centre of Excellence (CoE) for the logistics sector at three identified districts: Dharwad, Bengaluru, and Dakshina Kannada (already identified by Karnataka Skill Development Corporation (KSDC))</p> <p>7.2.2 Prepare district-wise skill development plan in coordination with Stakeholders</p>	Karnataka Skill Development Corporation, Entrepreneurship & Livelihood Department	Short- Term
		7.3 Prepare a comprehensive plan for driver empowerment and employability on issues such as road safety	<p>7.3.1 Expedite the completion of Heavy Vehicle Drivers Training Institutes at Mangaluru and Kalaburagi</p> <p>7.3.2 Introduce mandatory periodic driving refresher courses</p>	State Transport Department	Short- Term
					Short- Term

#	Action Areas	Action Points	Measures to be implemented	Stakeholder	Timeline
			7.3.3 Conduct road safety week and other road safety initiatives to create awareness in association with transport associations		Short-Term

(iii) Policy & Regulatory Environment

No.	Action Areas	Action Points	Measures to be implemented	Stakeholder	Timeline
Ease of Doing Business					
8	Promote Ease of Doing Business by simplifying the regulatory policy regime for logistics sector		8.1.1 Strengthening of the Single Window system (Fire NOC, Gram panchayat license) Physical interface to the departments be eliminated by ensuring end-to-end online application and approvals	Commerce and Industries Department, GoK	Short- Term
			8.1.2 Set up a grievance redressal mechanism for logistics sector	State Transport Department	Short- Term

8. Government of India Schemes to aid Logistics Infrastructure

(i) Special Assistance Scheme – PM Gati Shakti related investment

An amount of Rs. 5,000 crore for FY 2022-23 is earmarked under the PM Gati Shakti initiative, which will be disbursed according to the projects approved. States are advised to adopt the following guiding principles for selection of projects:

- 1** Impact on logistics efficiency, resilience, sustainability, and reliability
- 2** Integrated approach to planning
- 3** Unity for economic clusters
- 4** Critical connectivity projects useful for faster movement of goods

For availing the benefits under the initiative, the states are required to collate a list of projects selected, creating an annual action plan which will be appraised by the State Empowered Groups of Secretaries (EGoS) towards ensuring that the proposed projects are in line with the PM Gati Shakti National Master Plan. Finally, the states will submit the projects to the Department for Promotion of Industry and Internal Trade (DPIIT), which will scrutinize the proposals and recommend a state-wise list of projects to the Department of Expenditure (DoE) for approval and release of funds. This scheme will help Government of Karnataka in future oriented infrastructure planning and will enhance the future productive capacity of the State's economy. The capital expenditure projects can be approved in diverse areas across the logistics ecosystem.

State Departments to identify & implement projects by leveraging Special Assistance Scheme under PM Gati Shakti

The concerned line departments should identify logistics & infrastructure connectivity projects which can be submitted through Empowered Group of Secretaries (EGoS) for obtaining funds under the Special assistance Scheme – PM Gati Shakti related investment.

(ii) Trade Infrastructure for Export Scheme (TIES) Scheme

In India, the Micro, Small and medium Enterprises (MSMEs), considered to be the engine of growth for any nation, are facing challenges including the absence of timely access to adequate and organized finance, limited knowledge, non-availability of suitable technologies, high cost of credit and over-regulation, among others. The TIES scheme seeks to address infrastructure related challenges faced by MSMEs for exporting goods and services.



The aim of the Trade Infrastructure for Export Scheme (TIES) scheme is to assist in the creation of modern infrastructure for exporters, like setting up and upgradation of infrastructure projects with export linkages like land customs stations, plug-and-play facilities, quality testing and certification labs, cold chains, trade promotion centres, dry ports, export warehousing and packaging, SEZs and ports/airports cargo terminuses. The Scheme lays thrust on last and first-mile connectivity projects related to export logistics.

Karnataka is aggressively working towards assisting MSMEs through TIES scheme to support funding of export infrastructure across State. Karnataka is one of the leading states to get approval on TIES projects. Recently, Ministry of Commerce and Industry, Government of India, has launched an integrated portal for TIES projects to assess the progress on real-time basis.

9. Annexures

Annexure 1 : LEADS Analysis

Karnataka's rank, index score for 2018, 2019, and 2021 as mentioned below:

LEADS Analysis #	2018	2019	2021
Karnataka's Rank	4	7	8
Index Score	3.19	3.37	3.18
Parameters	8	9	17

Pillar 1- Quality of Infrastructure		Pillar 2- Quality of Logistics Services		Pillar 3- Operating & Regulatory Environment	
Sub Pillar	Karnataka Score	Sub Pillar	Karnataka Score	Sub Pillar	Karnataka Score
Quality of Road Infrastructure	3.51	Quality of Logistics Services	3.52	Extent of Facilitation	3.07
Quality of Rail Infrastructure	3.33	Quality of Logistics Service Providers	3.52	Ease of Obtaining Approvals	3.07
Quality of Multi-Modal Terminal Infrastructure	3.41	Reasonableness of Freight Rates	2.42	Efficiency of Regulatory Services	3.07
Quality of Uni-Modal Terminal Infrastructure	3.14	Reasonableness of Terminal Rates	2.49	Range Scaled EoDB Rank	3
Quality of Warehousing Infrastructure	3.50	Timelines of Cargo Delivery (Transportation)	3.56	TIES (Trade Infrastructure Export Scheme) Outlay	2
		Timelines of Cargo Delivery (Terminal Services)	3.49	State's Logistics Enabling Initiatives	5
		Availability of Mobile or Internet Connectivity	3.42	Variables of Logistics Ease	3.33
		Safety and Security During Transportation	3.7		
		Safety and Security at Terminals	3.74		

Outside top 5 states

Among the Top 5

Annexure 2 : PM GatiShakti Mandatory Layers

S. No.	Layers	Departments
1	Land records	Revenue, Rehabilitation, and Disaster Management
2	Eco-sensitive zones	Science, Technology & Environment/ Forest, and Wildlife Preservation
3	Water resources	Water Resources
4	Canals	Water Resources
5	Seismicity	Revenue, Rehabilitation, and Disaster Management
6	Mining areas	Water Resources
7	Roads	PWD
8	Drainage	Water Supply & Sanitation
9	Forest	Forest and Wildlife Preservation
10	CRZ	NA
11	Rivers	Water Resources
12	Reservoirs dams	Water Resources
13	Flood maps	Water Resources
14	ASI sites	NA
15	Water supply pipelines	Water Supply & Sanitation
16	Economic zones	Industries & Commerce
17	Wildlife	Forest and Wildlife Preservation
18	Reserve forest	Forest and Wildlife Preservation
19	Embankments	Water Resources
20	Soil type	Agriculture
21	Power transmission and distribution	Power
22	Tourism sites	Tourism & Cultural Affairs
23	Sewer lines	Water Supply & Sanitation
24	Industrial parks	Industries & Commerce

Annexure 3 : Details of Truck Terminals

List of Truck Terminals developed by D Devraj Truck Terminals Limited are mentioned below

S. No.	Location	Area (acres)
1	Yeswanthpur	38.29
2	Dasanapura	12.22
3	Mysuru (Bandipalya & Nachanahalli)	16.20
4	Dharwad (Belur)	7.26
5	Hospete (Amaravathi)	37.82
6	Hubballi (Anchatageri)	56.13
7	Dandeli (Uttara Kannada)	03.00
8	Raichur	12.00

Annexure 4 : List of Cities identified under Freight Smart Cities Initiative

The State of Karnataka has suggested 7 additional cities under the Freight Smart Cities Initiative, apart from Bengaluru (which has already been identified under the 75 cities proposed by the Government of India). The list of priority cities from Karnataka has been sent by ACS, UDD, GoK to the Special Secretary Logistics Division, GoI for approval.

S. No.	Cities
1	Bengaluru
2	Hubballi - Dharwad
3	Mysuru
4	Kalaburagi
5	Mangaluru
6	Davanagere
7	Tumakuru
8	Shivamogga

Annexure 5 : Highways identified for installation of EV Charging stations under FAME II

S. No.	Highways
1	Bengaluru - Mysuru
2	Bengaluru - Chennai
3	Bengaluru – Mumbai
4	Bengaluru – Mangaluru
5	Bengaluru – Honnavar
6	Bengaluru – Tirupati
7	Bengaluru – Hyderabad

Bengaluru Electricity Supply Company Limited (BESCOM) has launched the 'EV Mithra' app to help residents locate electric-vehicle (EV) charging stations in the city. BESCOM has already set up 136 ports at 74 locations¹³ across the city for charging electric vehicles. Mobile Application is available to locate the EV Charging Stations.

BESCOM will work with HESCOM (Hubballi Electricity Supply Company) to install Charging stations on Bengaluru-Belagavi Highway for 60-70 spots.

¹³ ¹³ BESCOM launches app to locate EV-charging stations in Bengaluru | Cities News, The Indian Express

¹³ <https://belagaviinfra.co.in/bescom-to-work-on-installing-60-70-charging-stations-on-bengaluru-belagavi-highway/>

Annexure 6 : Key Freight Routes

Key Freight Routes (Connecting Karnataka)		
S. No.	Details	Description
1	NH 66	From Goa Border-Karwar-Ankola-Honnavar-Bhatkal-Udupi- Mangaluru-Kerala Border
2	NH 67	Ankola-Yellapur - Hubballi - Gadag - Bhanapur-Koppal-Torangallu- Ballari-Hagari- Karnataka/Andhra Pradesh border
3	NH 44	From Andhra Pradesh Border-Chikkaballapur-Devanahalli-Bengaluru-Chandapura-Attibele-Tamil Nadu Border
4	NH 50, NH 369	From Maharashtra Border-Horti-Vijayapura-Hungund-Hospet-Jagalur-Chitradurga-Shivamogga-Tirthahalli-Mangaluru
5	NH 48	From Pune – Khandala - Kolhapur- Sankeshwar – Belagavi – Hubballi - Davanagere – Chitradurga – Tumakuru - Bengaluru
6	NH 75	Bengaluru - Nelamangala - Kunigal - Hassan - Sakleshpur-Uppinangadi - Mangaluru
7	SH 64	Highway connecting Kadur via Chikkamagalur, Mudigere, Belthangady, Bantwal and Kalladka.
8	SH 68A	Highway connecting Tumakuru with Honnavar in Bhadravathi and Shivamogga
9	SH 19	Highway connecting Srirangapatna via Nagamangala, Hiriyur, Challakere, Ballari, Siruguppa, Sindhanur, Lingasugur, Surapura and Shahapur
10	SH 20	Highway connecting Raichur via Lingasugur, Hungund, Bagalkote and Belagavi.

Annexure 7 : Responsibility Matrix for operationalising respective projects under PM Gati Shakti

S. No	Infrastructure Project	Responsibility Matrix
1	Development of ICDs, CFS, Multi Modal and Uni Modal Logistics Parks, Warehousing, Modern Aggregation Centers	KIADB, CONCOR, DDUTTL, UDD
2	Critical Connectivity Infrastructure for providing last and first mile connectivity to Industrial Parks and Economic Zones	PWD, KSHIP, RDPR
3	Interconnected Infrastructure for attaining Multi Modal Connectivity	SW Railways, NHAI, KSHIP
4	Development of City Logistics	DULT
5	Digital Support including Data Monitoring Centres at State level for monitoring freight flows	Transport, State Police Department
6	Setting up of PM – Gati Shakti data center	IDD
7	Development of New Industrial Parks including land acquisition	KIADB
8	Connectivity Projects for Cargo terminals by M/o Railways	Railways, KRIDE
9	Connectivity projects to ensure 24*7 Freight Flowing States	Transport, Commerce & Industries, UDD, PWD, IDD

Annexure 8 : List of Inprinciple Approved Roads¹⁴

S.no	Name of DPR stretch (NH Zone Bangalore)	Total Length
1	Consultancy services for feasibility study, detailed project report, survey and preparation of land plan for widening to two lane with paved shoulders for 1. Channarayapatna - Holenarasipura - Arakalgud - Kodlipet - Madikeri in the State of Karnataka 2. Madikeri - Virajpet - Makutta (in Karnataka) and connecting Kannur (in Kerala) Karnataka = 45 KMs, Kerala = 55 KMs) in the State of Karnataka	183.00
2	Sirsi, Haveri, Kudligi and terminating at its junction with NH-150A near Molkalmur	241.00
3	Ginigera-Gangavathi-Manvi-Sindhur-Kalmali-Raichur.	173.00
4	Shimoga-Honnahalli-Malebennur-Harihara-NH 206.	83.00
5	Mariyammanahalli-Itagi-Harapanahalli-Harihar-Junction	104.00
6	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with paved shoulders from Mysore(on NH-766) - Bannur - Malavalli (on NH-948) in the State of Karnataka.	45.00
7	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for upgradation of road from Kalpetta connecting Mananthavadi in the State of Kerala, H.D.Kote- Jayapura and terminating at Mysore in the State of Karnataka (existing SH-33) "	90.00
8	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with paved shoulders from Karnataka Border -Hunasahalli-Kodihalli- Kanakapura-Ramanagara- Magadi-Koratagere(exisiting SH-3) in the State of Karnataka "	170.00
9	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lanes with paved shoulders from Gundlupet(NH 212) to Chamaraj Nagar(NH 150A) in the state of Karnataka for an approximate length 35.00km	35.00
10	Consultancy Services for feasibility study, Detailed Project Report, survey and Preparation of Land Plan for widening to two lane with paved shoulders from Shimoga Shikaripura-Tadas	118.00

¹⁴ Public Works Department

S.no	Name of DPR stretch (NH Zone Bangalore)	Total Length
11	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan for Widening to two lane with Paved Shoulders Vijayapura-Yatnal (Karnataka) – Guddapur-Jath-Junction of NH-166 Near Nagaj (Vijayapura-Yatnal) about 30.00 kms & Providing by pass to Vijayapura City from NH-13 (Old) Solapur-Vijayapura Section Connecting this road about 17.00 Kms for an approximate length 47.00 km in the State of Karnataka.	47.00
12	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders From Junction of joining NH-65 Murval-Aalur-Akkalkot-Indi- Zalki(NH-13)Bijapur border (NH-13) for an approximate length 63.00 kms in the State of Karnataka	63.00
13	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Afzalpur-Almel-Indi for an approximate length 42.00 km in the State of Karnataka.	42.00
14	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Junction of NH-50 near Hungund-Aihole-Pattadakal-Badami-Ramdurg for an approximate length 85.00 km in the State of Karnataka.	85.00
15	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Stretch starting from near Gurlapur-Mudhol-Bilagi cross on NH52 for an approximate length 75.00 km in the State of Karnataka.	75.00
16	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Lingasugur-Rodalabanda-Narayanapur-Nalatwad-Muddebihal-Huvinahipparagi- Devarhipparagi-Tamba – Junction of SH41 and SH-34 for an approximate length 167.00 km in the State of Karnataka.	167.00
17	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Indi-Zalki-Chadachan-Shiradon – Maharashtra Border for an approximate length 48.00 km in the State of Karnataka.	48.00
18	Consultancy Services for Feasibility Study cum DPR, Survey and Preparation of Land	92.00

S.no	Name of DPR stretch (NH Zone Bangalore)	Total Length
	Plan by adopting LiDAR or similar technology for Widening to two lane with Paved Shoulders Jath (Maharashtra) –Athani-near Gokak for an approximate length 92.00 km in the State of Karnataka.	
19	Tadas-Kalghtagi-Dharwad-Hebsur-Naragund-Annigeri to Join NH-63	118.00
20	Dandeli-Haliyal-Dharwad -Savadatti-Mudgal-Jamakandhi-Vijaypur	260.00
21	Junction of NH-48 near Sankeshwar connecting Gokak, Yaragatta, Munavalli and terminating at its junction with NH-52 near Naragunda	127.00
22	Naragund-Belavanaki-Gajendragad-Kushtagi-Tavargere-Sindhanur on NH-150A	141.00
23	Koppal-Belgatti-Mundaragi-Bagevadi-Belhatti-Govandi-Gurdur-Shiggaon	114.00
24	Nargund-Gadag-Mundaragi-Itagi-Jagalur	260.00
25	Consultancy Services for Feasibility study cum DPR, Karwar – Kaiga - Mundgod- Savanur – Gadag - Gajendragad for an approximate length of 318.00 Kms (including Bypass or Flyover Wherever necessary in Town/City limits) in the State of Karnataka, Job No. NH-KNT-2017-18-880	318.00
26	Consultancy Services for Feasibility study cum DPR, junction of NH-67 near Ramnagar and terminating at its junction with NH-66 near Sadashivgad-via-Ganeshgudi-Joida- Kadra for an approximate length of 122 Km (including Bypass or Flyover wherever necessary in town/city limits) in the state of Karnataka.	122.30
27	Consultancy Services for Feasibility Study cum DPR, Khanapur-Haliyal-Yellapur for an Approximate Length of 93.00 Kms. (Including Bypass or Flyover wherever necessary in town/city limits) in the state of Karnataka.	93.00
28	Consultancy Services for Feasibility Study cum DPR, "From Juction of NH-52 near Yellapur-Sirsi-Siddapur-Talaguppa and Terminating at its Junction with NH-66 Near Bhatkal length of 195.00 Kms. (including Bypass or Flyover wherever necessary in town/city limits) in the state of Karnataka.	195.00
29	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "Chincholi-Sedam-Chittapur-Wadi-NalwarSannati-Shahpur (NH to NH link road)" to National highway by Adpoting Lidar or similar technology in the state of Karnataka	170.00
30	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "Bhalki-Basavakalyan (Upto Jn of NH-65)" to National highway by Adpoting Lidar or similar technology in the state of Karnataka	47.00
31	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "Manekhalli-Chincholli-Mariyan" to National highway by Adpoting Lidar or similar technology in the state of Karnataka	54.00

S.no	Name of DPR stretch (NH Zone Bangalore)	Total Length
32	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land Plan for Up gradation of road from "Starting its Junction with NH-50 near Kalaburagi and Terminating at NH-65 near Umerga" to National highway by Adopting Lidar or similar technology in the state of Karnataka.	64.00
33	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "starting at its junction with NH-9 near Zahirabad-Bidar-Deglur to National Highway by Adopting Lidar or similar technology" in the state of Karnataka.	58.00
34	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "Starting its junction with NH-65-near Zahirabad- Bidar (NH-50) -Bhalki-Nilanga- Nitur terminating at NH-361 near Latur" to National Highway by Adopting Lidar or similar technology in the state of Karnataka.	48.00
35	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Upgradation of road from "Hyderabad- Moinabad-Chevella- Mannegudda- Kodangal- Karnataka border upto junction of NH-150 near Yadgir" to National Highway by Adopting Lidar or similar technology in the state of Karnataka	60.00
36	Consultancy Services for Feasibility Study cum Detailed Project Report, Survey and Land plan for Up gradation of road from "Starting its junction with NH-9 near Sastapur to Narayanpet, via Mudbi - Harkood - VK Salgar - Mahagoan - Kodli - Kalgi -Madbool - Tengli cross- Dandoti- Chittapur-Bhimanhalli - Handarki cross-Gurmitkal-Putpak" to National Highway by Adopting Lidar or similar technology in the state of Karnataka	200.00
37	Belgaum-Bagalkot-Raichur	350.00
38	Junction of NH-161 near Nizampet-Narayankhed-Bidar (Junction at NH-50 in Karnataka)	60.00
Total length		4720.30

Annexure 9 : List of Projects under Sagarmala¹⁵

1. Port Development & Modernization

1.1 Construction of Berths and Port Modernization

- Construction of 1258 Mtrs long Wharf at Karwar Port
- Mechanization and Infrastructure Development at Karwar Port
- Construction of Coastal Berth at Hangarkatta in Udupi Taluka of Karnataka
- Construction of Coastal Berth at Gangolli in Byndoor Taluka of Karnataka
- Construction of Coastal berth at Belekeri in Ankola Taluka of Karnataka
- Construction of transit sheds /ware houses / godowns/ silos and Plot storage for general cargo at existing Belekeri Port in Ankola Taluk of Uttar Kannada District
- Development of storage facility (for hire) in Karwar
- Port Upgradation at Karwar Port (Fire Fighting Equipment)
- Integrated Old Mangalore Port Development (Dedicated Lakshadweep Jetty, Cargo, RoRo/RoPax & Cruise Terminal)
- Development of Multipurpose Harbour at Hangarkatta for private Yacht to provide parking, refilling, hotel hospitality and repair facilities.

1.2 Construction of Breakwater

- Construction of Break Water at Belekeri

1.3 Dredging

- Capital Dredging, including rock dredging at Karwar Port to increase the draft up to (-)15Mtrs
- Capital Dredging at Gangolli Port
- Capital Dredging at Belekeri Port

1.4 Connectivity

- Road Connectivity to Pavinakurve Port
- Road Connectivity to Multi-Purpose Tadadi Logistics & Eco-tourism hub.
- Road Connectivity to Belekeri Port and Keni Port
- Road Connectivity to Manki port
- Road Connectivity to Bhatkal port
- Road Connectivity to Kundapur port
- Road Connectivity to Hangarkatta port
- Road Connectivity to Padubidiri port
- Road Connectivity to Old Mangalore port
- Rail connectivity to Pavinakurve Port
- Rail connectivity to Belekeri Port
- Rail connectivity to Keni-Belekeri Port

¹⁵ Infrastructure Development, Port & Inland Water Transport Department

- Rail connectivity to Honnavar port
- Rail connectivity to Manki port
- Rail connectivity to Bhatkal port
- Rail connectivity to Kundapur port
- Rail connectivity to Hangarkatta port
- Rail connectivity to Malpe port
- Rail connectivity to Old Mangalore port
- Floating Jetties for Connectivity including Seaplane
- Installation of Floating Jetties and Ancillary Infrastructure at Byndoor, in Udupi
- Installation of Floating Jetties MRO & Ancillary Infrastructure at Malpe
- Installation of Floating Jetties & Ancillary Infrastructure at Mangalore
- Installation of Floating Jetties and Ancillary Infrastructure at Kali River, Karwar.

1.5 Coastal Community Development

- Establishment of Marine college under Indian Maritime University Chennai for providing Navigational education to get the jobs in Merchant Vessels for the people of the Karnataka at Karnataka Coast.
- Under Sagarmala Community Development Programme for providing training for seamen, Sarang, Driver and ship crews under IV ACT/ MS ACT/ Harbour Craft Rules and providing Port Managerial Skill Development Programme for creating more employment opportunities to the people of the State.

2. IWT Proposals

2.1 Development of Waterways

- Development of waterways from Almatti to Bagalkot in Karnataka
- Providing water ways from Kodibag to Kadra in Kali River in Uttar Kannada District. Development of waterways on Kali River (NW – 52) in Karwar Taluka of Karnataka(Cost of Phase 1 - 12.3 Cr) ,(Cost of Phase 2 - 37.7 Cr)
- Development of waterways from Hangarkatte to Manipal in Udupi Taluka of Karnataka
- Development of waterways on Gurupur (NW-43) & Netravati river (NW-74) in Mangalore Taluka of Karnataka, waterways from Old Mangalore port on Gurupur and Netravati.

2.2 Construction of Jetties

- Providing water ways from Honnavar to Gerusoppa in Sharavati River in Uttar Kannada District
- Providing water ways from Malpe Port to other places on the banks of the Udyavara River.

- Providing water ways from Kundapur Port to other places on the banks of the group of 5 rivers.
- Construction of Passenger Jetties in the Upper Reaches of Aghanashini River.
- Construction of Passenger jetty at Honnavar Side and Kasarkod side
- Passenger Jetty at Tenginagundi in Bhatkal Taluka of Uttar Kannada District
- Integrated Development of Tadadi – Aghanashini
- Waterway in Kumta Taluka of Uttar Kannada District

3.Tourism

3.1 Development of Multi-Purpose Harbors

- Development of Multipurpose Harbour at Malpe in Udupi Taluk of Udupi District
- Development of Multipurpose Harbour at Mangalore in Dakshina Kannada District
- Development of Multipurpose Harbour at Bairdur (Byndoor) in Bairdur (Byndoor) taluka of Udupi District
- Development of an Integrated Wayside Logistics Amenities and Eco Tourism Resort at Tadadi
- Upgradation of Karwar Museum
- Development of Karnataka State Pavilion at National Maritime Heritage Complex

3.2 Island Development

- Gurupur River Islands Development in Dakshina Kannada District

3.3 Construction of Jetty

- Providing landing platforms and other allied facilities to promote the Inland Water Transport, Passenger Traffic, pleasure tourism Old Managlore Port to Kasaba, Bengre
- Construction of landing platform for pleasure Tourism in Gurupur river in Mangalore Taluka
- Passenger Jetty at Murudeshwara in Bhatkal Taluka
- Construction of Passenger Jetties at Sadashivgad and "KurmaGad" Island in Karwar Taluka
- Construction of multipurpose jetty for house boats, river cruises, yachts/ sail boats and water sports at Tadadi in Kumta Taluk
- Construction of floating jetties at 18 proposed locations

4. Fisheries

4.1 Construction of Fishery Harbour

- Development of Multisector port at Belambara in Ankola Taluk of Uttara Kannada District of Karnataka State
- Development of Multisector port at Majali in Karwar Taluk of Uttara Kannada District of Karnataka State
- Development of Multisector port at Murudeshwar in Bhatkal Taluk of Uttara Kannada District of Karnataka State
- 2nd stage development of Multisector port at Tadadi in Kumta Taluk of Uttara Kannada District of Karnataka State
- Upgradation of multisector port at Bhatkal, Malpe and Hangarkatte Multisector ports

4.2 Construction of Jetties

- Development of Gangolli Fishing jetty in Kundapur Taluk of Udupi District
- Development of Floating jetties at 10 locations in Karnataka BHATKAL, HANGARKATTE, HONNAVAR, KODIBAG, KUNDAPUR KODI, ullal kote pura, Old Mangalore, Tadadi , Aghnashini and Malpe.

4.3 Construction of Breakwater

- Construction of Break Water at Belekeri Port in Ankola Taluk of Uttara Kannada District
- Construction of training walls at estuary of river Gangavali for development of Gangavali & Manjuguni Fish landing centres in Uttara Kannada District
- Construction of 2nd stage breakwater for development of Shirooru Alvegadde Fish landing centre in Byndoor taluk of Udupi District
- Construction of breakwater for development of Uppunda Madikal Fish landing centre in Byndoor taluk of Udupi District
- Construction of breakwater for development of Fishery Harbour at Hangarkatte in Udupi Taluk of Udupi District
- Construction of breakwater (Phase-III) for development Gangolli port in Kundapur Taluk of Udupi District
- Construction of New Northern breakwater and maintenance dredging at Bhatkal port in Bhatkal taluk of Uttara Kannada District

4.4 Other Projects

- Construction of fish processing units at Honnavar and Malpe Multisector ports
- Construction of cold storage units at Karwar, Honnavar and Malpe Multisector ports
- Construction of Auction Hall at Gangolli Multisector port in Kundapur taluk of Udupi District

Annexure 10 - Bharatmala Pariyojana

- **Six Laning of Access Control of Bengaluru – Mysore Section:** With a total length of 117 Kms, this project was a part of economic corridor of Bengaluru – Mallapuram. This project consists of about 8 Kms elevated corridors, 9 major bridges and 4 ROBs, and has been provided with an Access Controlled Service Road.
- **Chennai-Bengaluru Expressway:** The Bengaluru – Chennai Expressway has been re-aligned to serve the import/export hub connecting it to the seaport and is identified as one of the priority projects under Chennai – Bengaluru Industrial Corridor (CBIC). It will provide connectivity to the proposed Multimodal Logistics Park at Dobbaspet accessible through NH-207 or Bengaluru Ring Road from BCE
- **Amaravati-Bengaluru Section:** The connectivity between Bengaluru and Amaravathi has two routes, via Ananthapuramu and Tirupati. The first one, Bengaluru to Amaravathi via Ananthapuramu passing through NH-44 has been completed - this 4.5 Kms long 4 lane Elevated Highway connects the other route and will improve connectivity and decrease congestion.
- **Koppal-Metgal Road Upgradation Project:** The project involves the upgradation of the road infrastructure between the route connecting Koppal and Metgal and has an overall outlay of INR 457 crores¹⁶
- **Padil-Bantwal Road Upgradation Project:** The project involves the upgradation of the road infrastructure between the route connecting Padil and Bantwal and has an overall outlay of INR 300 crores.¹⁷
- **Neraluru-Thorapalli-Agraharam Road Upgradation Project:** The project involves the upgradation of the road infrastructure between the route connecting Neraluru & Thorapalli and has an overall outlay of INR 429 crores.¹⁸

¹⁶ <https://indiainvestmentgrid.gov.in/opportunities/project/21331>

¹⁷ <https://indiainvestmentgrid.gov.in/opportunities/project/21276>

¹⁸ <https://indiainvestmentgrid.gov.in/opportunities/project/21541>

