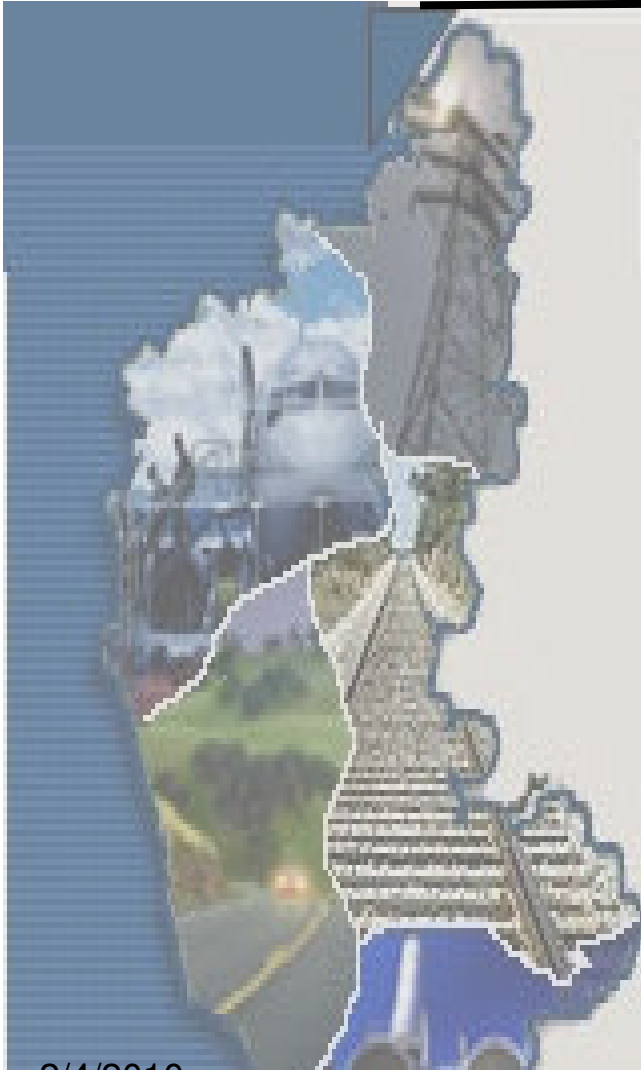




**WELCOME**  
to the  
distinguished  
**Excellencies and Delegates**

**Sustainable infrastructure**

**Infrastructure Development Department  
Govt. of Karnataka**



2/4/2010

**Infrastructure  
Policy 2007**

# Karnataka at a Glance

- **General**

- **Area: 1,92,000 Sq Km**
- **Population: 52.85 Million**
- **Literacy: 66.60%**
- **Climate: Semi-tropical**

- **Economy**

- **Among the Top 5 Industrial States**
- **Highly Skilled technical Manpower**
- **One of the fastest Growing Markets**
- **Steady GDP growth rate**

# Karnataka at a Glance

---

**Gross State Domestic Product  
(GSDP)**

**7 %**

**– Growth Rate**

---

**GSDP Contribution**

**– Agricultural Sector**

**19.13 %**

**– Manufacturing, Construction &  
Electricity Sector**

**25.16 %**

**55.72%**

**– Tertiary Sector**

---

**GDP in 2008**

**Rs. 2,15,282 cr**

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**Per Capita GSDP**

**Rs. 40,576**

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# Karnataka – ideal investment destination

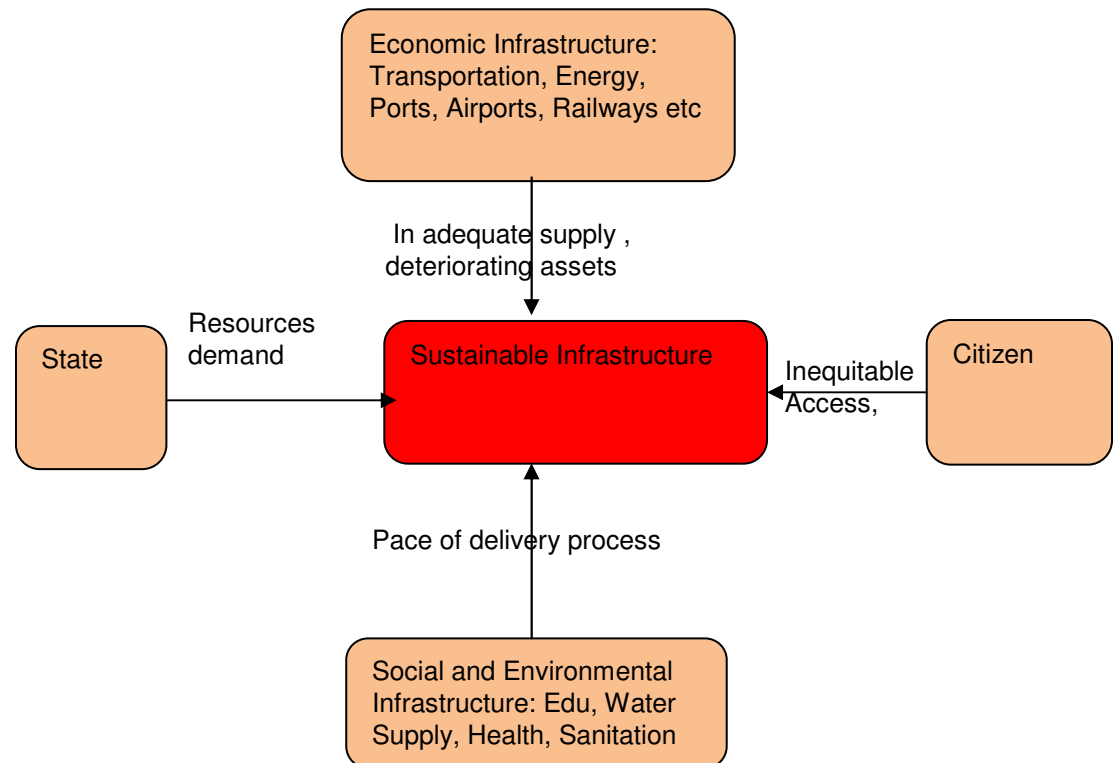


- **Leading IT, Biotechnology, Electronics, Telecommunications and Heavy machinery companies**
- **Largest number of engineering colleges in the world**
- **Congenial environment, rich-culture, cosmopolitan lifestyle, excellent healthcare facilities, travel connectivity, good law & order**



# Sustainable Infrastructure Action Plan

- going beyond the “do-no-harm” objectives
- Through Triple Bottom line:
  - economic and financial viability,
  - environmental sustainability and
  - social inclusion



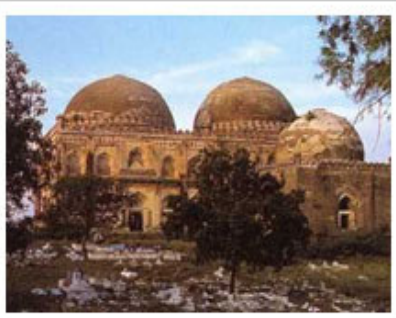
# Infrastructure investment

- Presently 4.5% of GSDP
- Target 8-9 % of GSDP
- India Competitive Index- 25
- Huge deficit in Tax- GDP ratio 22 %(35 %)
- Investment requirements  
(@ 2006 prices):  
plan)
  - Rs 92462 cr( 11<sup>th</sup>)
  - Rs 186275 Cr(12<sup>th</sup>)
  - Rs 315657 Cr(13<sup>th</sup>)
- Required Annual Investment of upto Rs 25000 Crore

2/4/2010

Infrastructure Polic





## a few Infrastructure Indices

o	Sector	Index	Target Index	Invest ( Rs Cr)
1	<b>Railways</b> ( railkm/ 1000sq km)	16	41	23300 (by 2020)
2	<b>Roads</b> (km/ Sqkm)	1.07	1.50	125000 (by 2020)
3	<b>Energy</b> (units per capita-annum)	700 (7800MW)	1400 (18500MW)	85000 (by 2020)
4	<b>Airports Districts(No)</b>	<b>4</b>	<b>30</b>	1500 (by 2012)
5	<b>Rapid Mass Transportation (km)- Bangalore</b>	0	693km (Metro-103+HSRL-34+Mono-60)	27000 ( by 2017)

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Infrastructure Policy 2007

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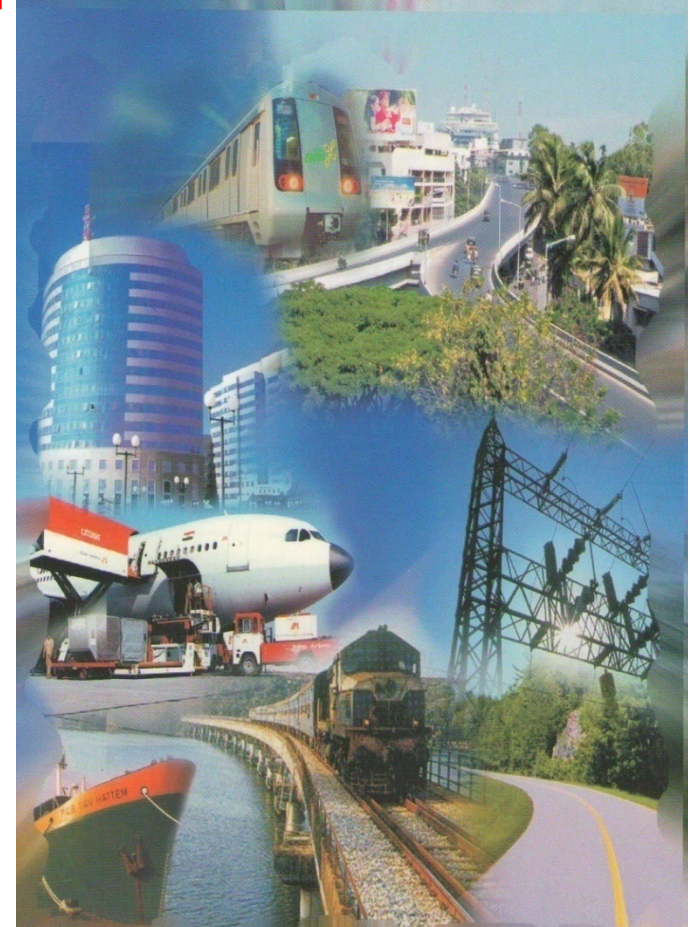
# Karnataka- Growth Drivers

- **Policy Drivers**
  - **New Infrastructure Policy of 2007**
  - **New Industrial Policy of 2009**
- **Institutions to Support**
  - **PPP- as a vehicle**
    - Regular Procurement**
    - Swiss Challenge**
  - **PPP Cell in Infrastructure Dept- Infrastructure**
  - **Karnataka Udyoga Mitra- Industry**



# Sector Focus in PPP

- Agri-Infrastructure
- Education
- Energy
- Healthcare
- Industrial Infrastructure
- Irrigation
- Public Markets
- Tourism
- Transportation & Logistics
- Urban and Municipal Infrastructure





# Industrial Zones



Sl. No.	Industrial Zones	Districts
1	Steel	Bellary, Koppal, Bagalkot, Haveri, Gadag & Raichur
2	Cement	Gulbarga, Bagalkot, Chitradurga, Belgaum and Others
3	Food Processing	Bangalore (R ), Kolar, Belgaum, Gadag, Koppal, Shimoga, Bagalkot, Bijapur, Davangere, Mandya and Dharwad
4	Information Technology/Bio-Technology	Mysore, Mangalore, Hubli-Dharwad, Belgaum, Shimoga, Gulbarga, Kolar and Mandya
5	Automobile	Ramanagara, Shimoga, Dharwad and Kolar
6	Readymade garments	Bangalore (R ), Tumkur, Kolar, Mandya, Belgaum, Bidar, Dharwad & Others
7	Sugar and co-gen, power	Bidar, Belgaum, Bagalkot, Shimoga, and Mandya
8	Pharmaceutical/Bio-Technology	Bangalore, Mysore and Hassan
9	Power Generation	Raichur, Bellary, Bijapur and Chitradurga

# Incentives & Concessions

- A. Facilitation:
  - Land to be acquired if required
  - Clearances
  - Provision of water & power
- B Asset based Support
  - Provision of Govt land at Concessional rate if available
  - Allowing Commercial development
  - Develop critical linkage Infra



# Incentives & Concessions

- C. Tax Concessions:
  - Entry & Spl Entry Tax on Machinery, Equipments & Construction materials- Limited to 25 Lakhs & 3 years
  - Stamp duty on land transfer in Zone I(100%0, II(50%)
  - Conversion fine- same pattern as above
- D. VGF





# Deliverables by Government

- Clearances
- Land Acquisition

## Compensation payment

- Market value of land
- Resettlement & Rehabilitation



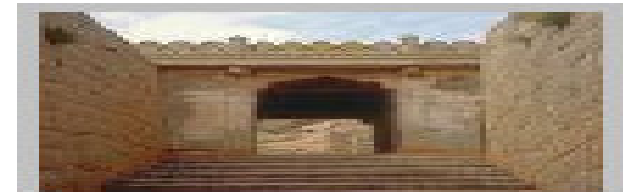
# SWISS CHALLENGE

- Clause 29 of the Infra '07 policy
  - Innovative/ *suo moto* Proposals
- Procedure
  - Proponent Submits proposal for Prelim examination
  - Provide 'approval to proceed' with studies
  - Submits a DPR with output based specification
  - Project Bid out
  - Original proponent has first right of refusal



# Central Assistance- VGF

- **PPP project should be from-**
  - Roads, Sea ports, airports, inland waterways, Power, Urban transport, water supply & sewerage, solid waste and other physical infrastructure
  - Infrastructure in SEZ
- **Government Support**
  - VGF not to exceed 20% \*(total project cost- Land cost)
  - Government or statutory entity can top up with another 20%
- **Approval process laid down**
- **Viability Gap Funding (VGF)**



# Initiatives

- **Standardised Contractual Documents**
  - **Bidding Documents**
    - RFQ
    - RFP
  - **Model Concession Agreements**
    - Ports
    - Airports
    - Roads
    - Water Supply and Sanitation – PBMC & PBDPS contract developed (under ADB Assistance)
- **Approval Mechanism**
  - SWA established
  - SLHCC



# Project Identification

<b>Time</b>	<b>No of Studies</b>	<b>Projects*</b>
<b>31/12/09</b>	<b>20</b>	<b>40</b>
<b>31/ 05/ 10</b>	<b>30</b>	<b>60</b>
<b>31/ 08/ 10</b>	<b>Dept Master Plans</b>	<b>100</b>

\* each studies has more than one project

- **IMPACT: Two pronged strategy to develop a shelf of 200 projects**

# KEY PROJECTS

SI No	Name of the Project	Project cost (Rs Crore)	Relevance	Status
1	Bellary Airport	140	Connectivity Steel City- Fast growing region	Request for Proposal (RFP)
2	High Speed Rail Link	5767	Connects City to Airport	Request for Qualification (RFQ)
3	Devanahally Business Park	9500	Business Hub by the side of the fastest growing Airport-Bangalore	RFQ by end January 2010
4	Sea Port at Tadri (35 MT expandable to 114 MT)	3000	To serve the Cement, Steel & auto Region	RFQ by 020/2/2010
5	Sea Port at Haldipur (19MT- Swiss Challenge Project)	2000	To serve the Cement, Steel & auto Region	DPR Stage

# KEY PROJECTS

SI No	Name of the Project	Project cost (Rs Crore)	Relevance	Status
6	Convention Centre at Devanhally (Tourism)	1050	Will be the largest in South India	Request for Proposal (RFP)
7	Logistic Park		Transportation, storage and Logistics in Bangalore	Feasibility & DPR Stage
8	Monorail Project in Bangalore- Corridor- 31 Km	5600	To serve as feeder to Metro	DPR Stage
9	Monorail Project in Bangalore (Swiss Challenge-15KM)	2400	To serve as feeder to Metro	DPR Stage
10	Food Parks	100	Forward integration to large Fruit and Veg. producing entres	Mid Tender stage

# KEY PROJECTS

SI No	Name of the Project	Project cost (Rs Crore)	Relevance	Status
11	VADA- Industrial Infrastructure	30345 Rlys, watersupply, telecom, Power	500 Sq Km of Industrial Development outside Bangalore	Feasibility done RFP by end January 2010
12	Logistics Architecture in Karnataka		To serve Karnataka's growing Industrial and Consumer Market	Feasibility Study under way
13	Intermodal Terminal HUBs in Bangalore	6 in Bangalore+ 1 in Mangalore	To provide seamless interchange	Project study
14	Mega Power Projects	30000	To meet the Karnataka's Power needs	Feasibility
15	Gas Pipeline Project	7000 by GAIL	From Dhabhol- Bangalore	Implementation COD by Mar 2010
16	City Gas distribution		Green Field Development	Feasibility



# KEY PROJECTS

SI No	Name of the Project	Project cost (Rs Crore)	Relevance	Status
17	Railway projects (1200 KM)	7000	To improve connectivity to ports, Industrial Zones.	Railway is examining to take on PPP-10 projects – DPR ready in 3.
18	Roads	3500	1600 km	NIT by end of Jan 2010
19	SH-69 & NH 63 - Roadsto Ports	1600	1600	Feasibility study
20	Bangalore Metro	8000- GOI & GOK	42 km	Under implementation

# RAILWAY NETWORK



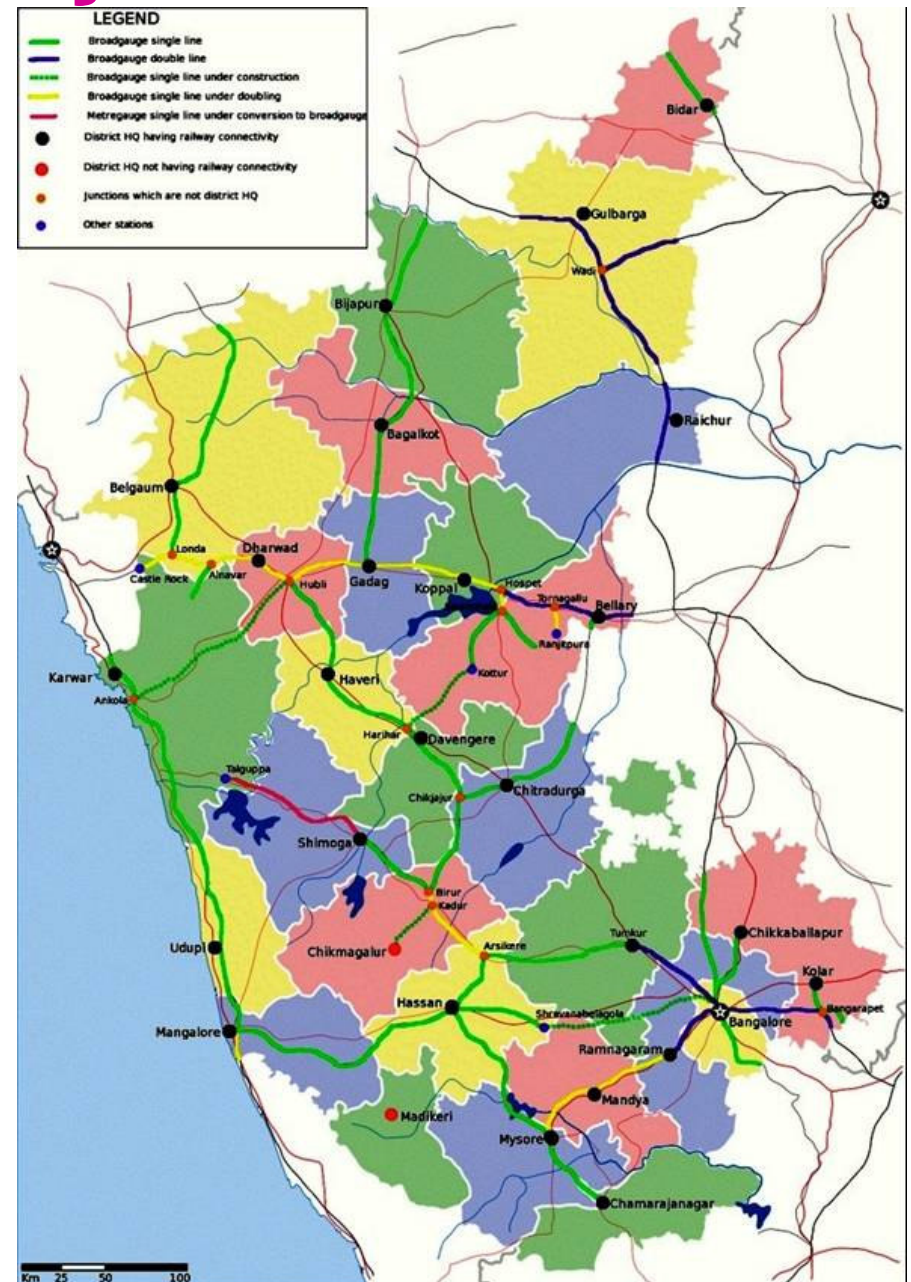
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# Focus on Railway Corridors

- To provide impetus for development of:
  - Connectivity with ports & industrial zones
  - General development: commerce, industry, tourism
  - Movement of Labour Force
  - Connectivity to power plants
  - Connectivity to Habitations

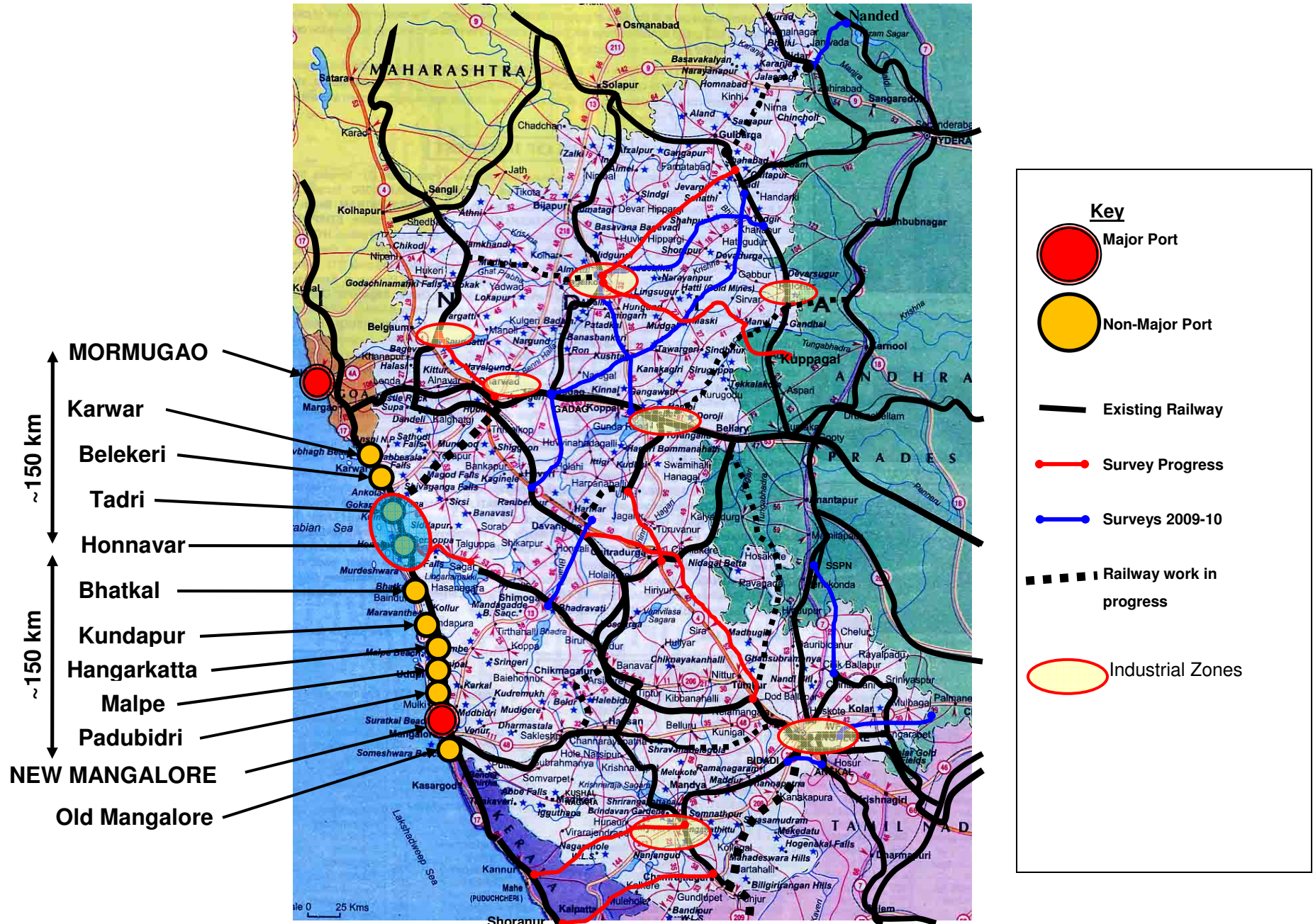


# Existing Railway Network





# Port / Railways/ Industrial Zones



# Railway projects in progress



NL: 10 cs: 3  
 GC: 3 cs: 2  
 DL: 8 cs: 1

# Priority Projects

N o.	Name of the Project	Cost (Rs.crores)	Total Kms	Remarks	Purpose	Recommendations
1	Hubli-Ankola	1000	167	Held up on account of CEC on environmental issues.	Port Connectivity.	K-RIDE
2	Bijapur - Shahbad	840	140	The proposal has been sent to MoR from GoK. Response is awaited.	Development of Cement Industrial Zone	K-RIDE
3	Shimoga- Harihara	504	84	Proposal has been sent to MoR through letter No:CM/460/Gol/2009 dated 26/8/2009	Port connectivity and Industrial Development	K-RIDE
4	Gadag - Haveri	350	84	Survey is under progress.	Port connectivity and Industrial Development	K-RIDE
5	Whitefield- Kolar- Mulbagal	350	52	Survey Completed	Industrial Zones (for movement of Labor force)	K-RIDE
6	Kuduchi - Bagalkot	816	142	Surveys completed and report submitted to Railway Board. It is with planning Commission for approval.	Development of Cement Industrial Zone and port connectivity	RAILWAYS
7	Tumkur - Davanagere	913	210	Surveys completed and report submitted to Railway Board.	To reduce traveling time between North and South Karnataka.	RAILWAYS

# Priority Projects

No.	Name of the Project	Cost (Rs.crores)	Total Kms	Remarks	Purpose	Recommendations
8	Alamatti - Koppal	600	150	Tender for Survey called on 14-10-09.	Connectivity of Cement and Iron ore Industries to port towards the eastern coast.	RAILWAYS
9	Londa – Goa (Doubling)	436.4	109	24.4 Km lies in Karnataka. Rs.120 cr is for this stretch. Forest clearance is required. RVNL proposes to do the doubling work between Hospet to Goa (Vasco). This proposal is submitted to the Planning Commission for clearance.	Connectivity for port, cement zone and power projects	RAILWAYS / K-RIDE
<b>TOTAL</b>		<b>5809</b>	<b>1138</b>			



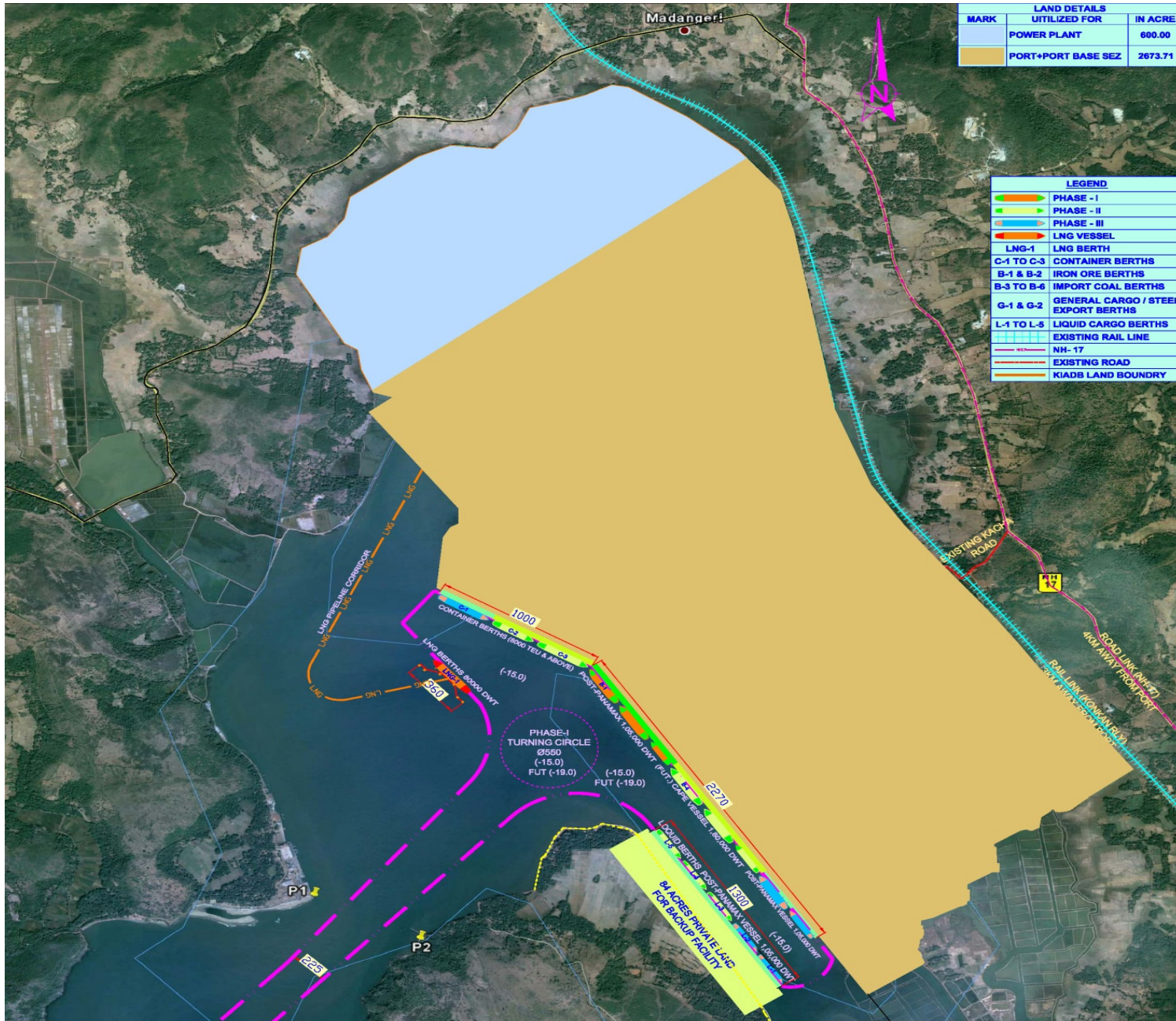
# PORTS



Slide 29



# TADRI- PROPOSED PORT LAY-OUT



# Project Development

Development Plan	- Proposed in three Phases
Total cargo capacity	> 114 MTPA
Total No Of Berth	> 16
Total Berthing length	> 4570 Meters
Total Project Cost	- 5677 Cr (approx.)

## Phase - 1

Berths:-	3 nos. for bulk Cargo (825 m long)
Draft:-	– 15 m <b>(Dredging envisaged for Panamax vessel only, assuming no rock strata to be encountered).</b>
Capacity:-	<b>34MTPA</b>
Vessel Size:-	Upto Post-Panamax of 105,000 DWT class
Completion Schedule:-	2010 - 2013

## Phase - II

Berths:-	<b>Total - 8 nos. (2330 m long)</b> 3 nos. (900m) for bulk cargo 2 nos. (650m) for containers 3 nos. (780m) for liquid
Draft:-	- 15 m
Capacity:-	<b>45 MTPA</b>
Completion Schedule:-	2015 - 2019

## Phase - III

### Phase – III:

<b>Berths:-</b>	<b>5 berths (1415 m long)</b> <b>2 nos. (545m) for General cargo</b> <b>1 nos. (350m) for container</b> <b>2 nos. (520m) for Liquid</b>
<b>Draft:-</b>	<b>– 15 m</b>
<b>Capacity:-</b>	<b>39 MTPA</b>
<b>Completion Schedule:-</b>	<b>2021 - 2025</b>

***Berth No:17 (LNG Terminal) : LNG berth of 5 MMTPA will cost apprx. 4000 Cr.***  
***Additional if gas based power plant coming up***

# Traffic Projections & Cost

(Cargo in Mil MT – Cost in Rs. Crore)

<b>Phase / Year Commodity</b>	<b>Phase 1 (2013-17)</b>	<b>Phase 2 (2018-22)</b>	<b>Phase 3 (2023-27)</b>	<b>Total (2013-27)</b>
<b>No. of Berths</b>	<b>3</b>	<b>8</b>	<b>5</b>	<b>16</b>
<b>Coal</b>	<b>12</b>	<b>12</b>	<b>16</b>	<b>40</b>
<b>Iron ore</b>	<b>15</b>	<b>15</b>	<b>-</b>	<b>30</b>
<b>General cargo</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>9</b>
<b>Container</b>	<b>-</b>	<b>12</b>	<b>18</b>	<b>30</b>
<b>Liquid Cargo</b>	<b>-</b>	<b>3</b>	<b>2</b>	<b>5</b>
<b>Total</b>	<b>30</b>	<b>45</b>	<b>39</b>	<b>114</b>
<b>Total Project Cost (Rs. Cr)</b>	<b>1550</b>	<b>2606</b>	<b>1521</b>	<b>5677</b>



# HIGH SPEED RAIL LINK (HSRL) TO BANGALORE INTERNATIONAL AIRPORT

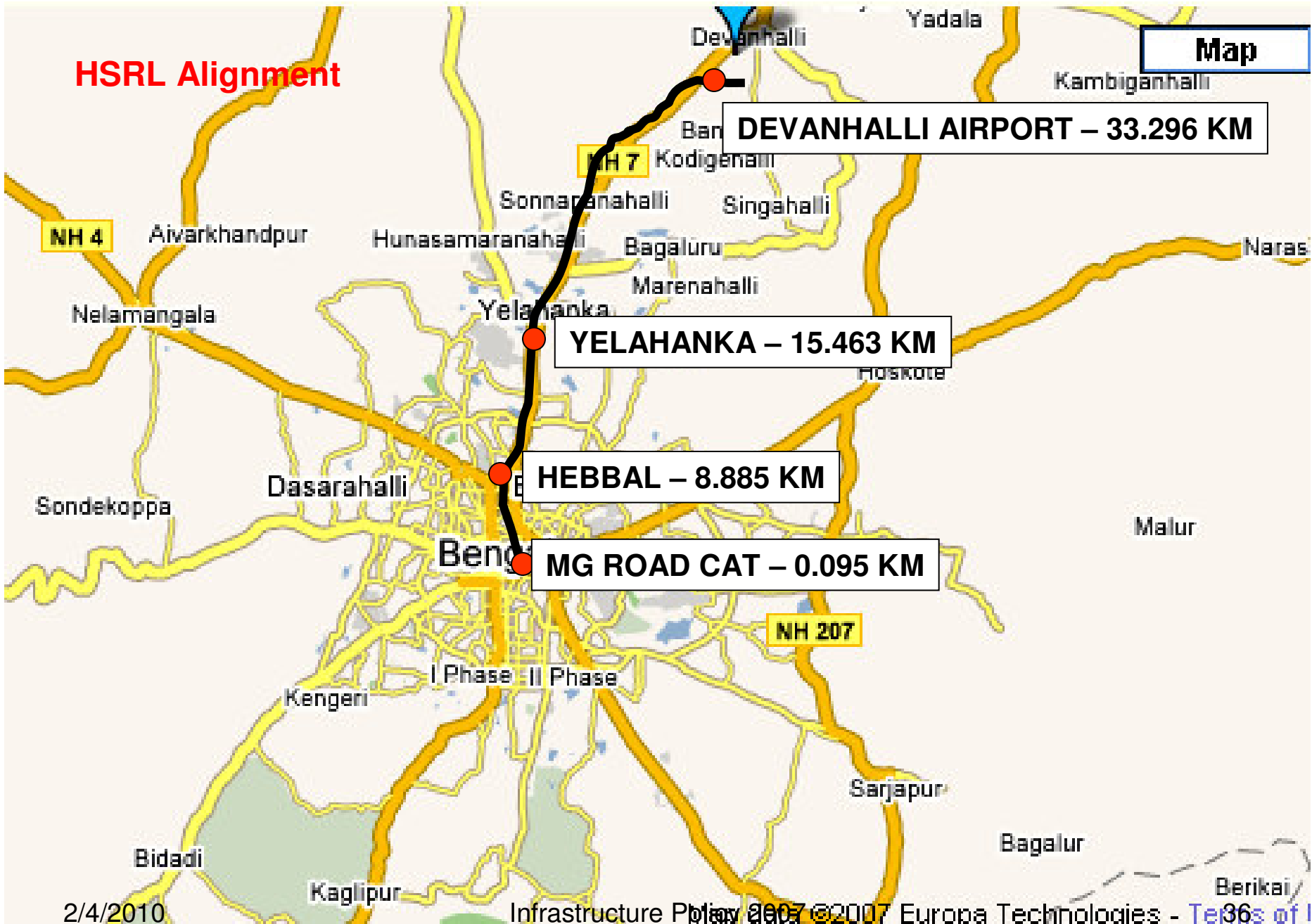


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**HSRL Alignment**

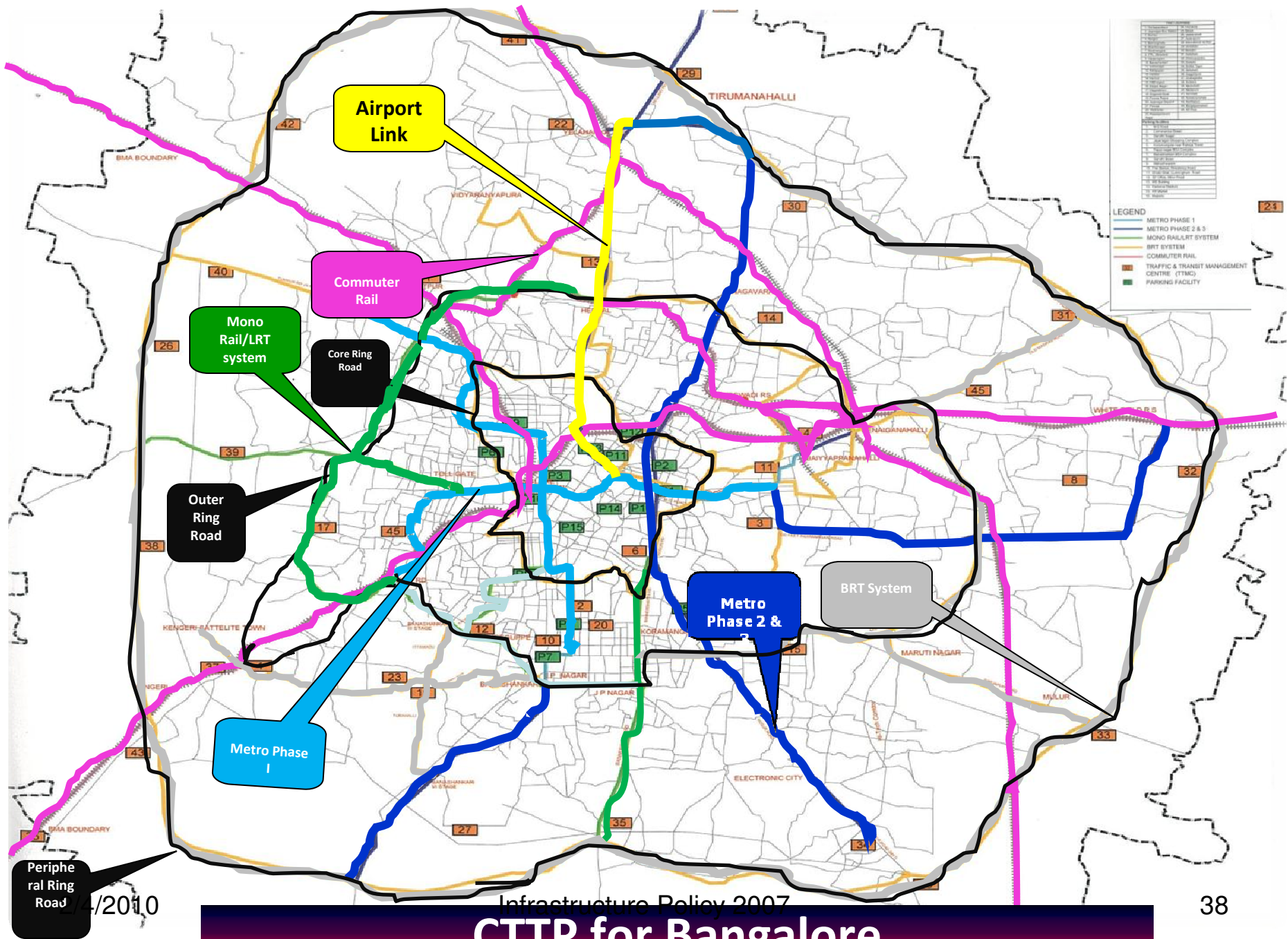




# Bangalore

## *Proposed Integrated Mass Transport System*

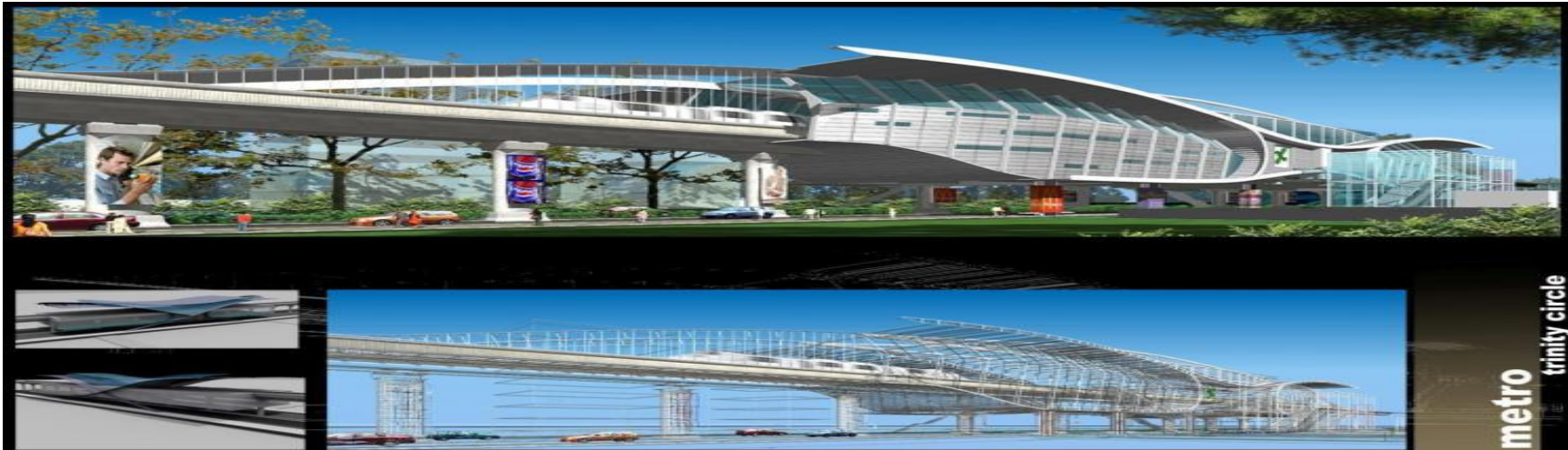
<u>System</u>		<u>Length</u>
• Metro System	-	137 km
• Mono Rail / LRT	-	60 km
• Bus Rapid Transit System	-	291.5 km
• Commuter Rail Services	-	204 km
<b>Total</b>		<b>- 692.5 km</b>



2010

Infrastructure Policy 2007  
**CTTP for Bangalore**

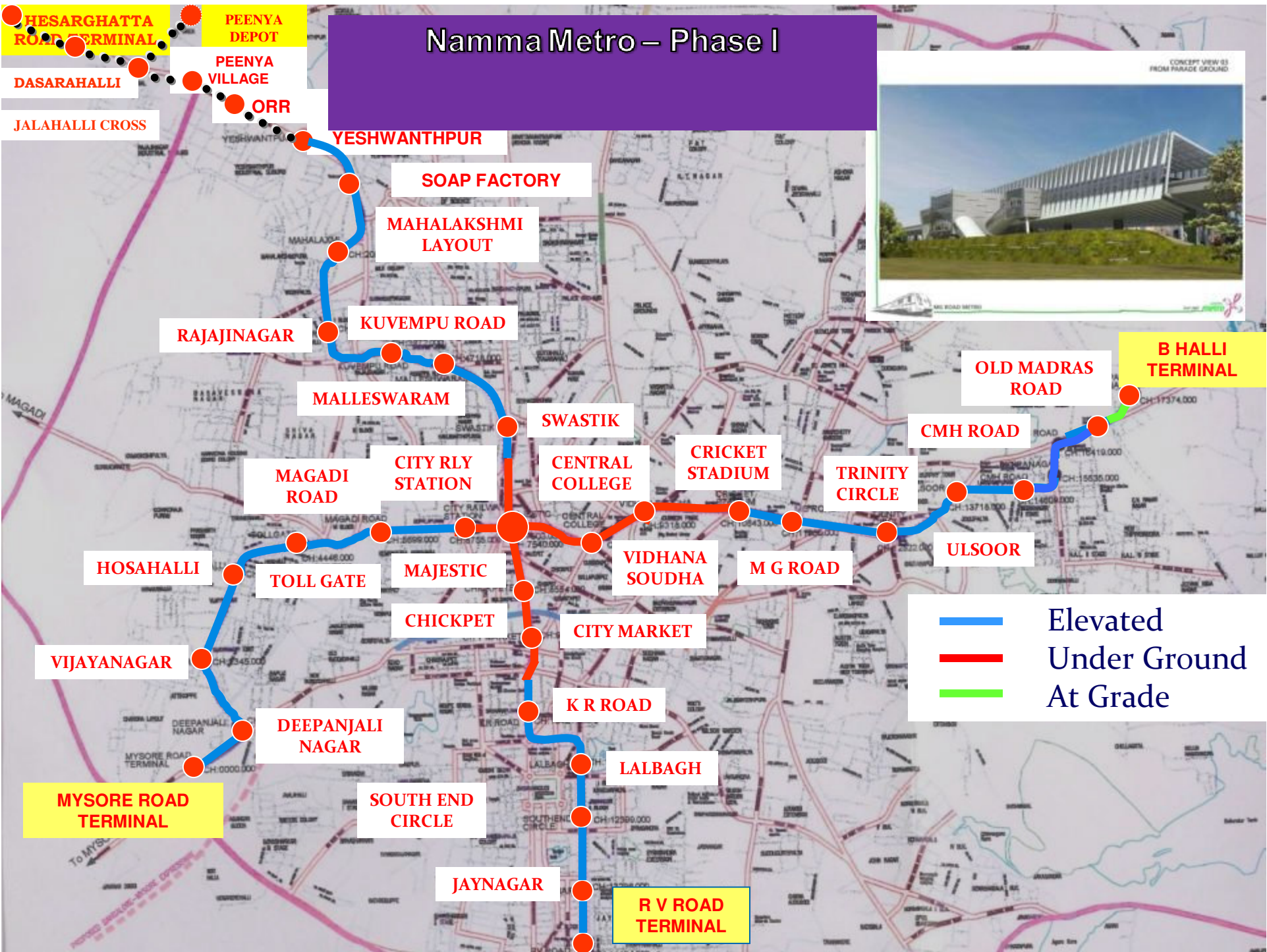
# Namma Metro



<b>EAST – WEST CORRIDOR</b>	<b>18.10 KMS</b>
<b>NORTH-SOUTH CORRIDOR</b>	<b>14.90 KMS</b>
<b>TOTAL</b>	<b>33.00 KMS</b>
<b>ELEVATED</b>	<b>25.65 KMS</b>
<b>AT GRADE (At Ground Level)</b>	<b>00.65 KMS</b>
<b>UNDERGROUND</b>	<b>6.70 KMS</b>
<b>GAUGE</b>	<b>Standard Gauge</b>
<b>TRACTION</b>	<b>750V dc Third Rail</b>
<b>SPEED</b>	<b>Max 80Kmph ; Avg. 32Kmph</b>
<b>NO. OF STATIONS</b>	<b>32 (24 elevated, 8 UG)</b>
<b>TRAVEL TIME</b>	<b>33 / 28 Mins. (end to end)</b>
<b>HEAD WAY</b>	<b>4 Mins at start ;later 3 Mins</b>



# Namma Metro – Phase I



# Monorails in the World

Palm Jumeirah Monorail



Las Vegas Monorail



Kuala Lumpur Monorail

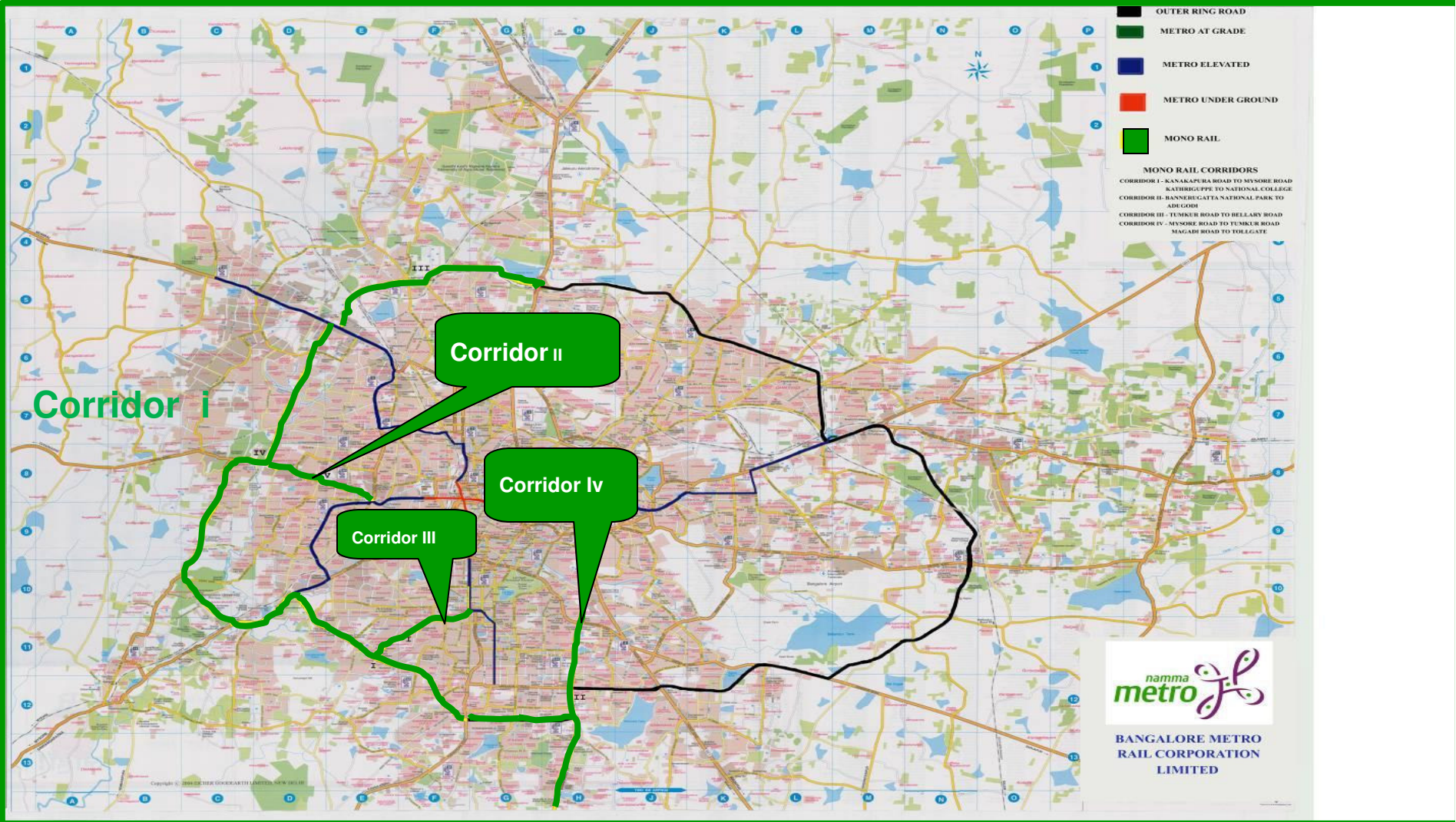


Tokyo-Haneda Monorail

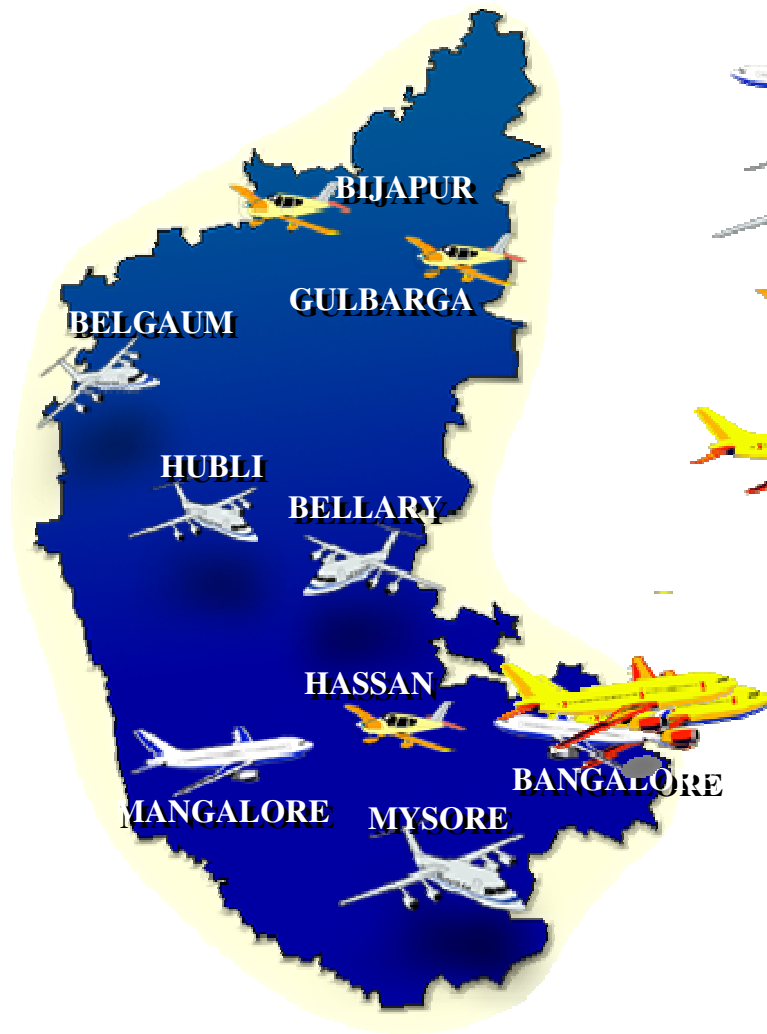




# Monorail Corridors (CTTP)



# Airports



**Existing**



**Existing**



**Proposed**



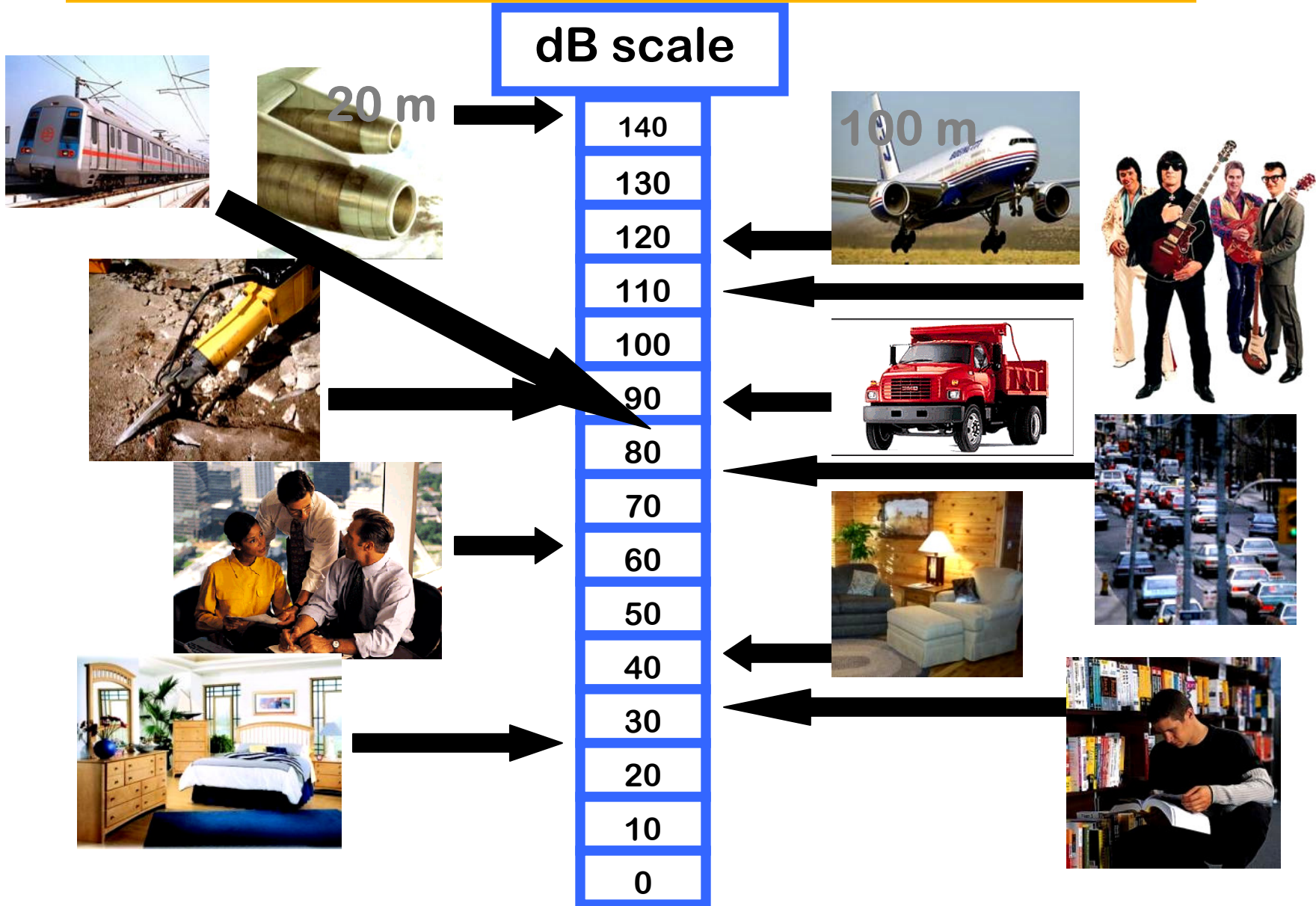
**New International Airport**



**Existing old HAL International Airport**



# Levels of Common Sounds



# Suvarna Karnataka Development Corridor (SKDC)

Sl. No.	Corridor
1	Bidar – Bangalore via Chitradurga
2	Tumkur – Honnavar via Shimoga
3	Chitradurga – Mangalore via Shimoga, Udupi
4	Bangalore – Belgaum via Davangere, Hubli

Additional corridor will also be developed to cover Bidar, Bijapur and Other potential locations.

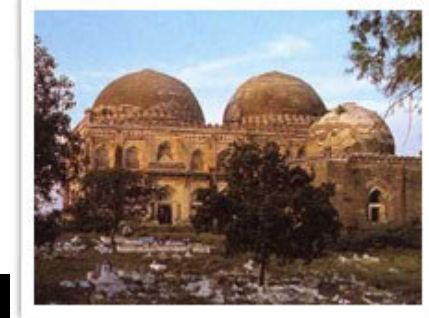
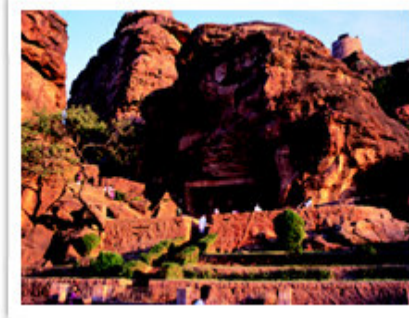
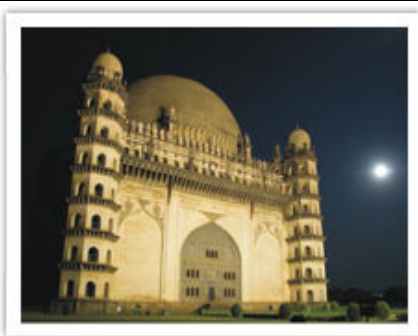


# Food Parks

- Food Parks under implementation
  - Malur, Hiriyur, Bagalkot, Jewargi and Chickmagalur
- New Food Parks
  - Shimoga,
  - Bangalore Rural,
  - Tumkur,
  - Davanagere,
  - Belgaum,
  - Bijapur Districts.



# Tourism Projects in Karnataka on PPP Format





# PPP Projects in Tourism

- **PPP Projects - Tourism**

- No of Projects – 16 Nos
- Value Rs 1621 Crs

Theme park,  
Cultural centre,  
Entertainment  
Golf Course  
Aquamarine Park  
Tourist Train Facilities

- **PPP Projects - Heritage Projects**

- No of Projects – 39 Nos Identified
- Project preparation



# Location details : 18 – hole Golf Course at Mangalore



# Tourism Circuit Development - Project Packages

Package	location
Package I	Jog Falls
	Agumbe
	Banavasi
Package II	Badami
	Pattadakal
	Aihole
Package III	Belur
Package IV	Bijapur
Package V	Gokarna



## TRANSPORT DEMAND ANALYSIS

Modes	Daily Trips in Lakhs (Modal Split)			
	2006	2025		
		Scenario 1	Scenario 2	Scenario 3
<b>Car</b>	4.2 (7.5%)	15.5 (12.2%)	9.7 (7.6%)	7.0 (5.5%)
<b>2W</b>	18.4 (32.8%)	60.4 (47.5%)	45.6(35.9%)	20.6 (16.2%)
<b>IPT</b>	7.3 (12.9%)	14.9 (11.7%)	8.9 (7.0%)	6.7 (5.3%)
<b>Public Transport</b>	26.3 (46.8%)	36.3 (28.6%)	50.0(49.5%)	92.9 (73%)
<b>Total</b>	56.2(100%)	127.2 (100%)	127.2 (100%)	127.2 (100%)

# **Infrastructure-** *Requirements*

- **Enabling Policy and Regulatory Framework**
- **Long-term equity and debt**
- **Capacity to manage the PPP Process**
- **Shelf of credible, bankable Projects**
- **Private Sector capacity to invest in projects**
- **Acceptance among the stakeholders**

# Issues in PPP

- **Size of Infrastructure investment- 20.5 Lakh Cr in 11<sup>th</sup> plan**
- **(GOI-40:SG-30:Private-30)**
- **Perceptions & Attitudes of Governance- the three arms**
- **Regulatory Framework**
- **Risk Sharing- Political & Commercial risks**
- **Monopoly in PPP- Art 12/ RTI/ CAG**
- **Fourth Estate**
- **Gap in funding- IRR for private sector**
- **Micro- management Vs Macro- management**
- **Dynamic Concession period**
- **Sustainable Infrastructure**

**NAMASKARAGALU**

BANGALORE MONO RAIL

