

HUBLI DHARWAD BRTS COMPANY LIMITED

Project Details Asia BRTS Conference

29th Sept to 1st Oct 2014



Proposed view of temple and Amargol Pond



PROJECT LOCATION



Twin cities separated by about 20 km.

Single Municipal area: 202 Sq.km

Population : 0.94 million(2011)

Density : 4678 persons per sq.km.

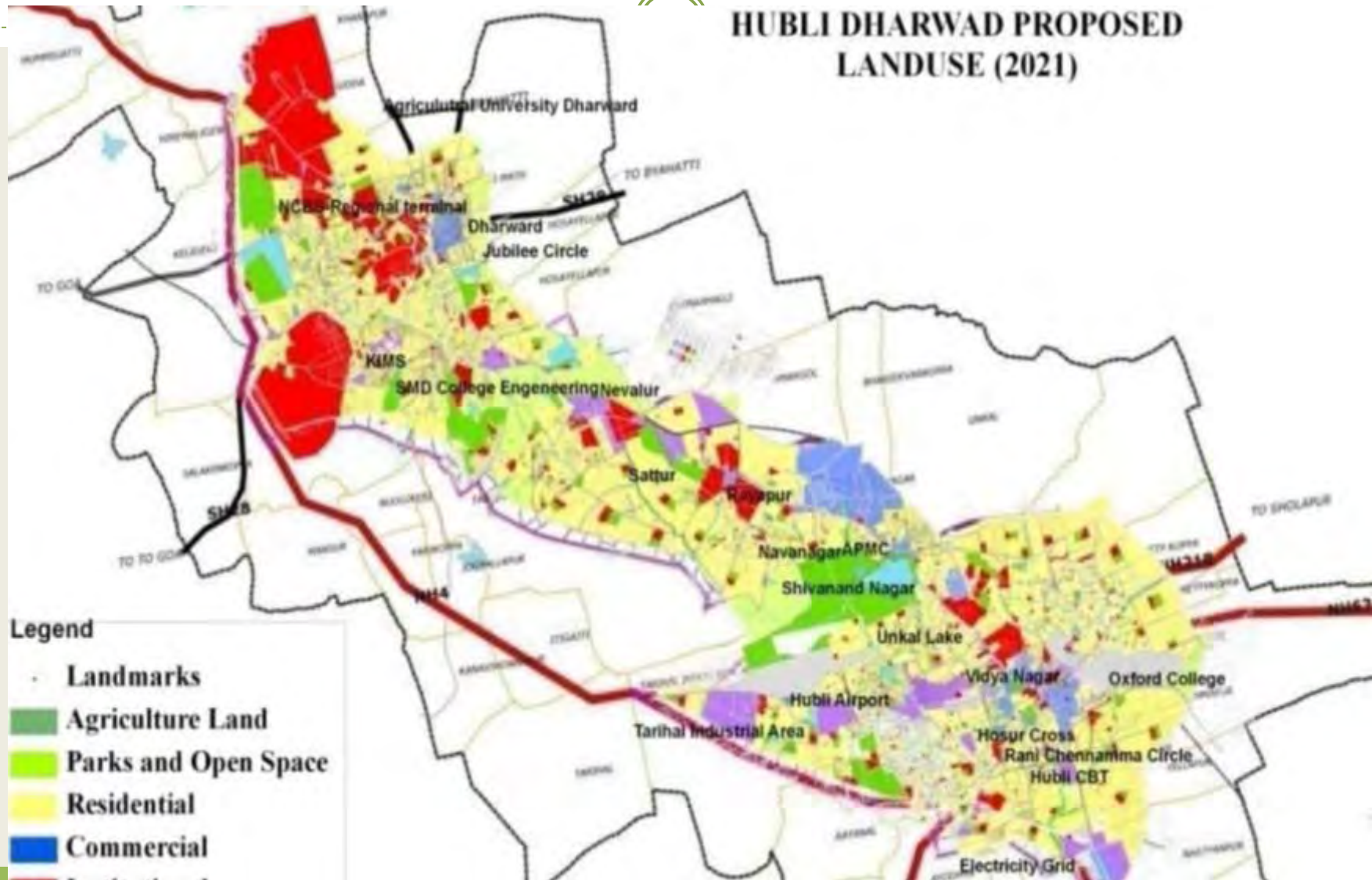
Hubli : Commercial centre and business hub of the region.

Dharwad: Administrative seat of District and Educational hub of the region.

Hubli-Dharwad the 2nd largest urban agglomeration.



GROWTH DIRECTION: ALONG THE CORRIDOR BETWEEN THE TWO CITIES



A map showing the proposed BRT route from Dharwad to Hubli. The route is highlighted in purple, starting at point B in Dharwad and ending at point A in Hubli. The map includes various landmarks, roads, and water bodies. A large green box with project features is overlaid on the left side of the map.

PROJECT FEATURES

- 22.25kms
- Existing ridership 1.76 lakhs passengers per day
- Dedicated BRT lanes
- 33 Bus shelters.
- 3 Depots, 1 Workshop, 2 Terminal, ITS, NMT infrastructure.
- Project cost 692INR Cr

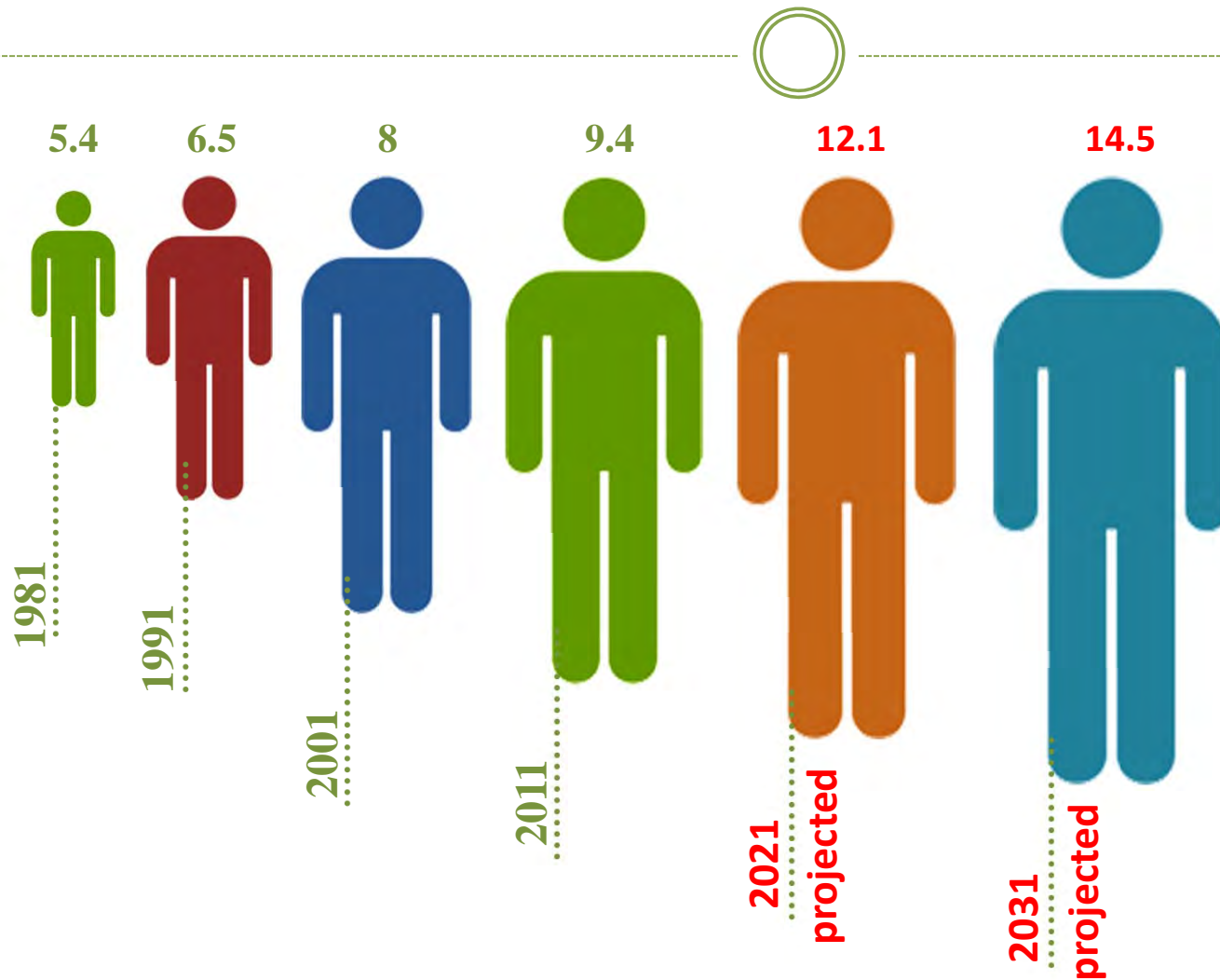
PROJECT PARTNERS



- Implemented by Hubli-Dharwad BRTS Company Ltd
- Acquisition of Land and Development of BRTS corridor by KRDCL
- Key Partners
 - NWKRTC (Bus Operator)
 - HDMC (Municipal Corporation)
 - HDUDA (Urban Development Authority)
- Guidance and Support from DULT, MOUD, GOK, & World Bank



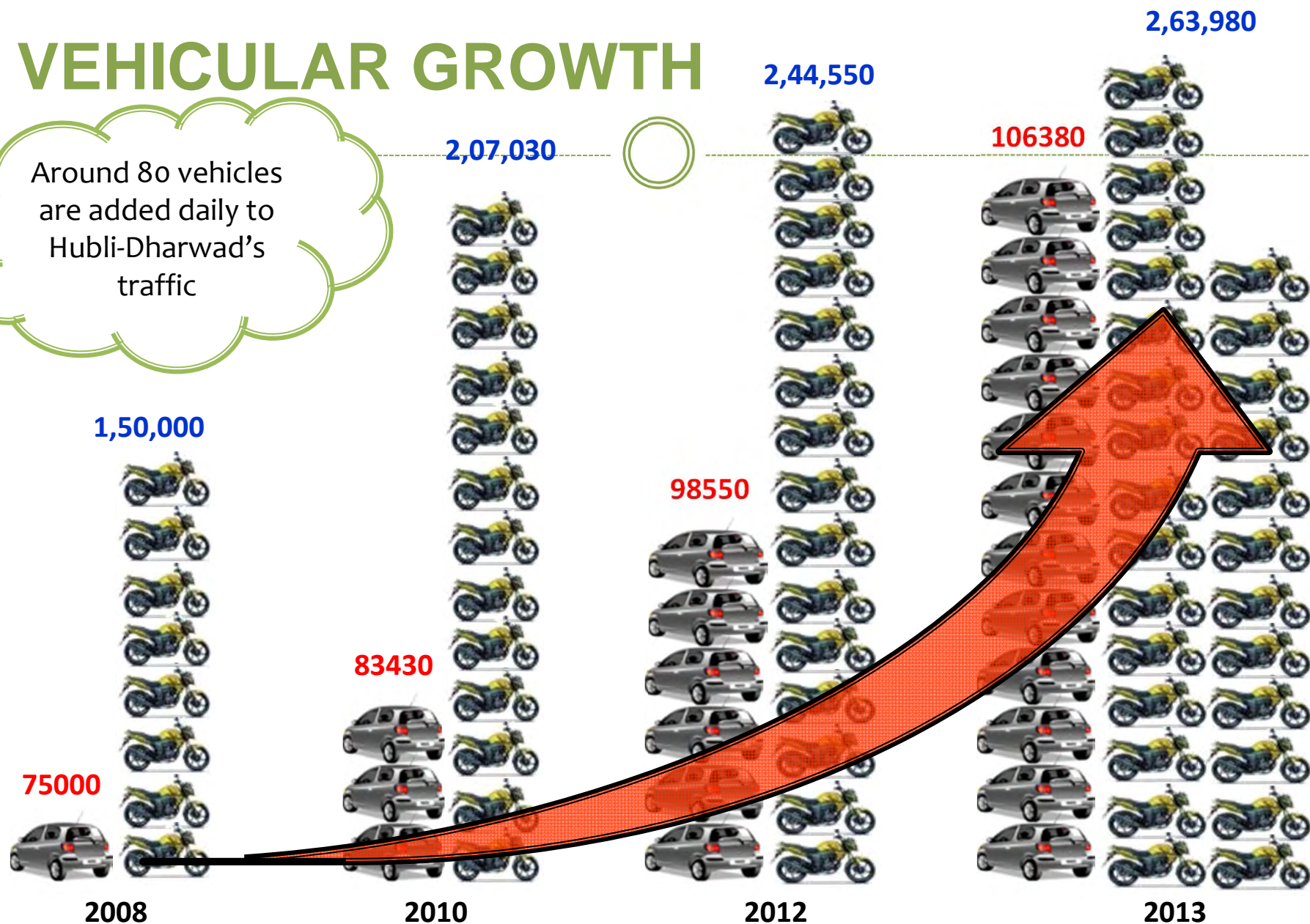
POPULATION GROWTH IN HUBLI-DHARWAD



Population in Lakhs

VEHICULAR GROWTH

Around 80 vehicles
are added daily to
Hubli-Dharwad's
traffic



Yearly Vehicle Registration

More
Vehicle and
More
Congestion

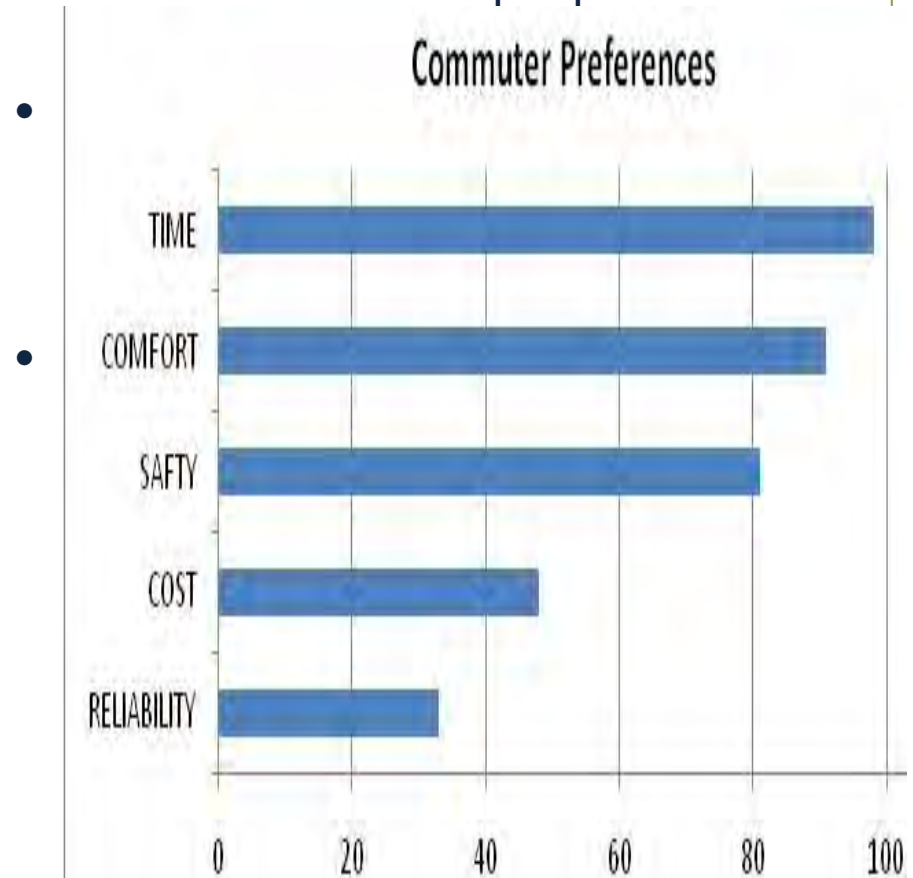


PUBLIC TRANSPORT USAGE

PT operator: **North Western Karnataka Road Transport Corporation (NWKRTC)**, a state government undertaking.

Numbers	Description
2.15 lakh	daily bus passengers
279	city buses operated
62%	intercity commuters
5270 INR	average earnings per bus
92%	fleet utilization
1.75 lakh	corridor passengers
1 minute	corridor NWKRTC frequencies
>6,000	corridor peak hour peak direction passengers
30%	Overall PT mode share for the twin cities

- Buses with 7% vehicle share carry around 70% of the people on PB

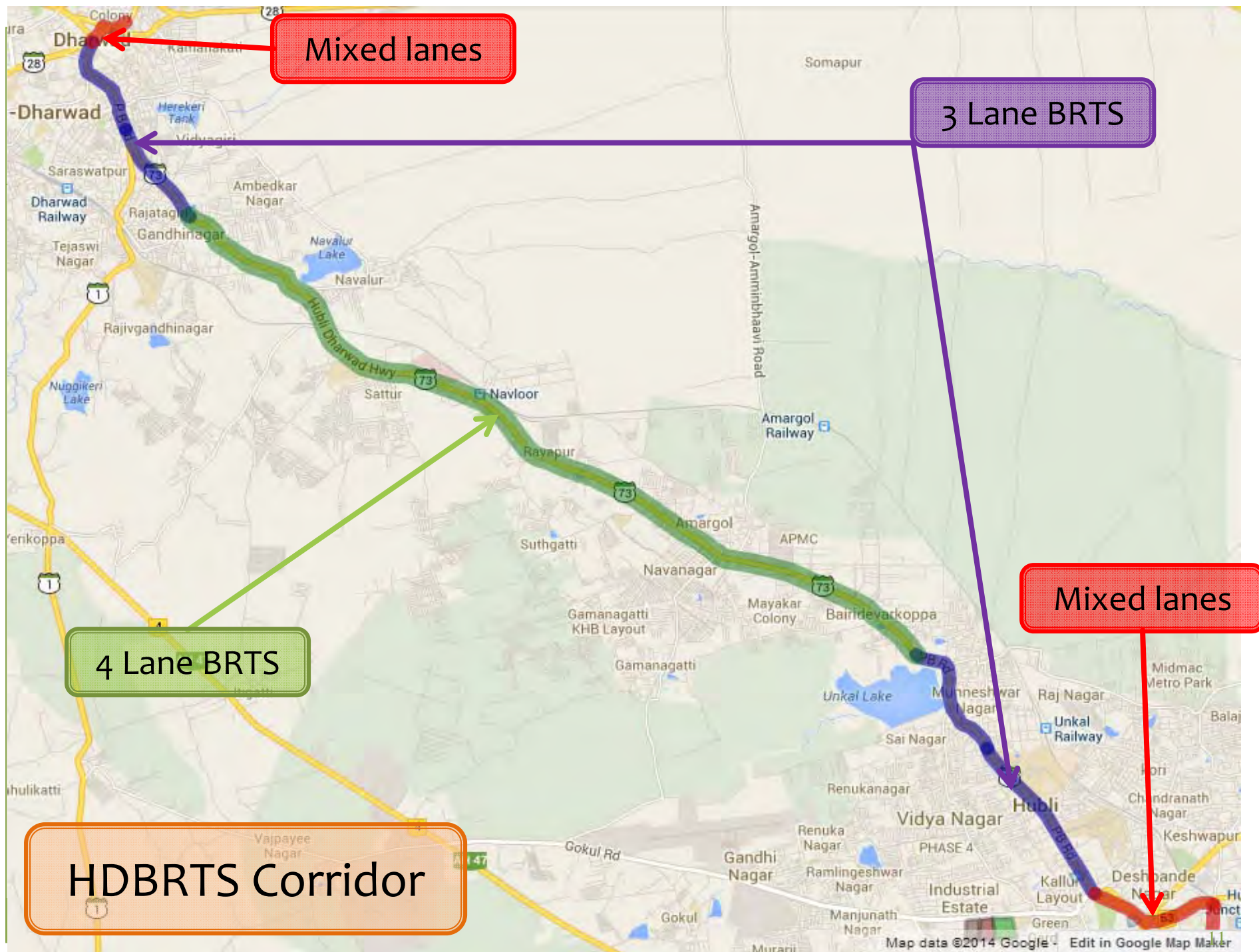


BRTS PROJECT - RIGHT ON TIME

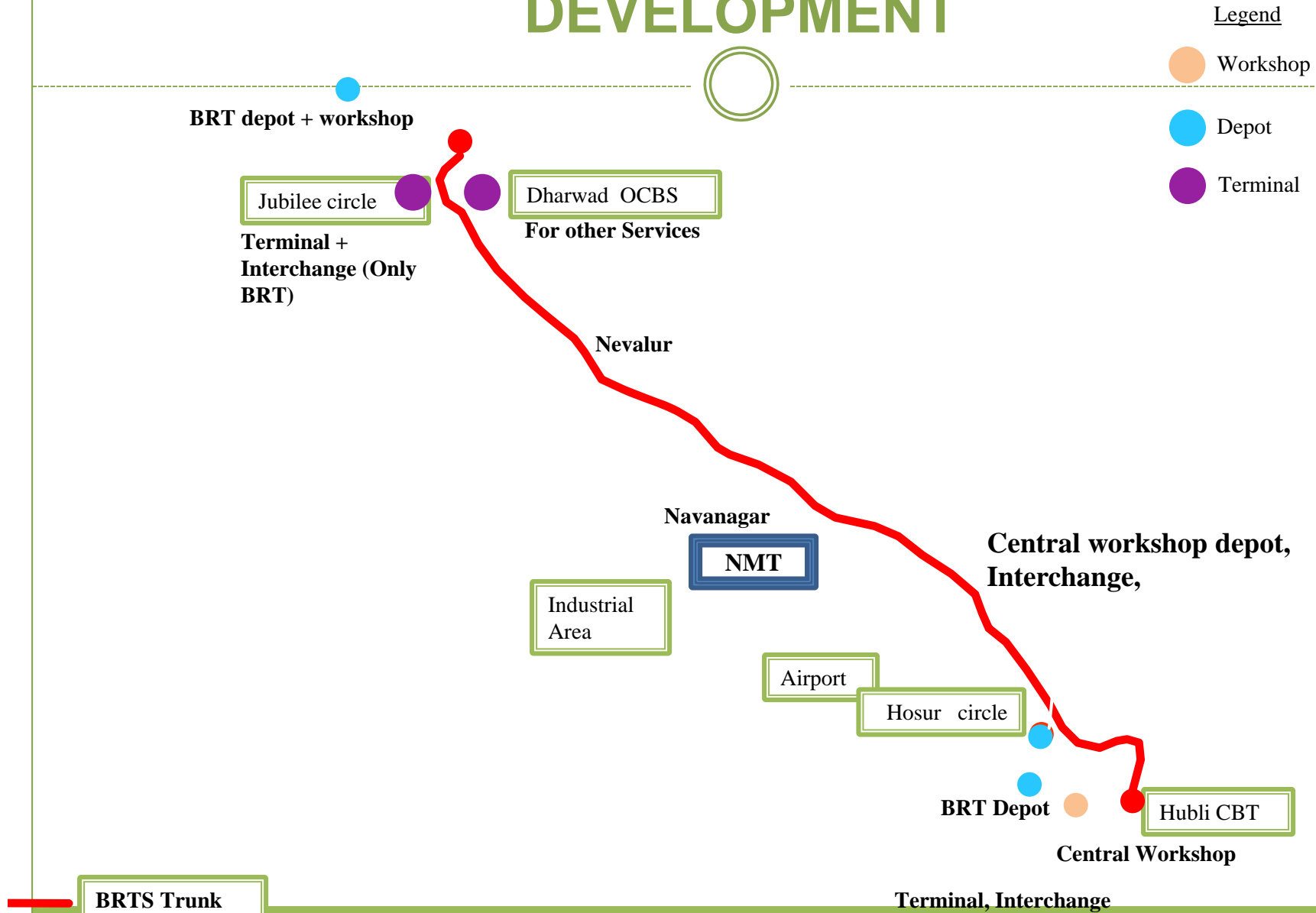


- State Govt. sanctioned proposal for **2 LANE TO 4 LANE** WIDENING of Hubli -Dharwad highway in 2009.
- **Mobility Plan** recommended BRTS
- SUSTAINABLE URBAN TRANSPORT PROJECT (**SUTP**) INITIATED BY GOVT OF INDIA – Funding available for improvements to public transport.





PROPOSED TRANSIT INFRASTRUCTURE DEVELOPMENT



BRT FEATURES

Designed for ~12000 PHPDT



Branded Median bus stops bus stations



Bus fleet – 12m, 900 mm standard buses and Articulated buses.



Off-board ticket collection



Level boarding & alighting



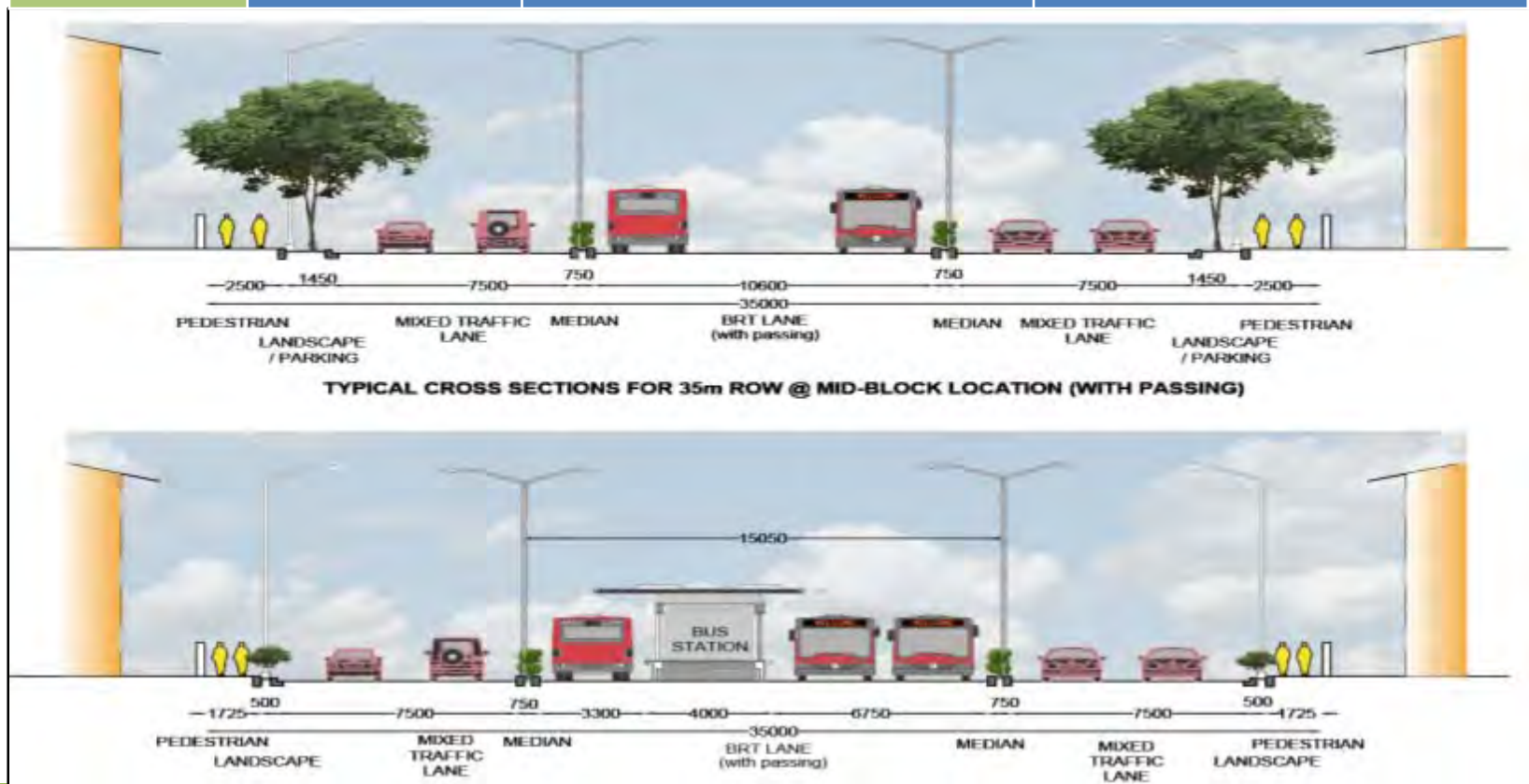
ITS for BRTS and ATCS for traffic management along the corridor.



PROJECT CORRIDOR – 35M SECTION



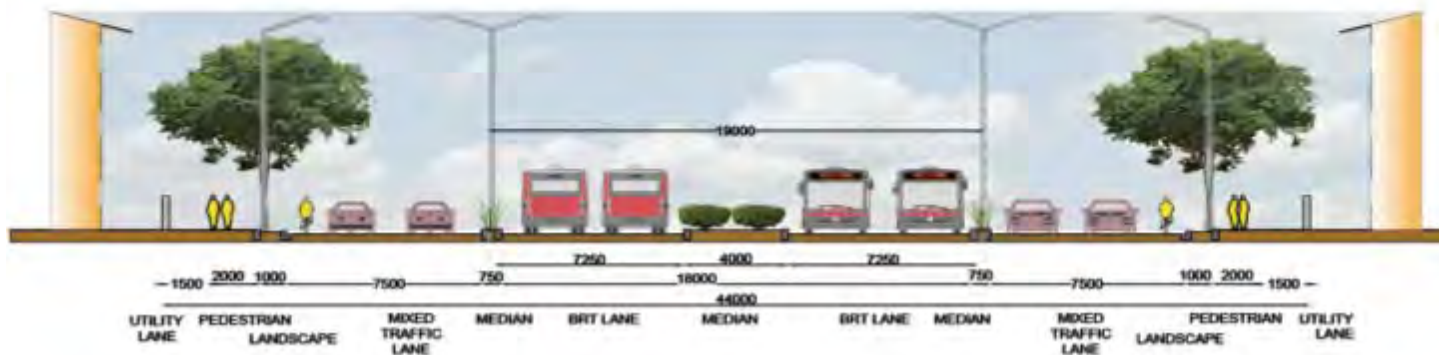
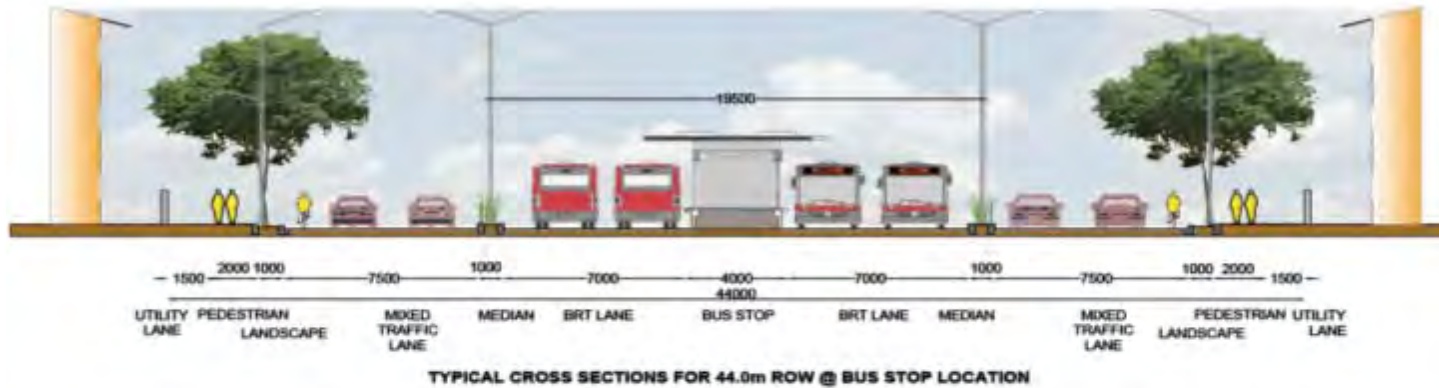
Width	Distance	From	To
35 m	4.2 km	Hosur Cross, Hubli	Naveen Hotel, Hubli
35 m	2.9 km	Gandhinagar Cross, Dharwad	Jubilee Circle, Hubli



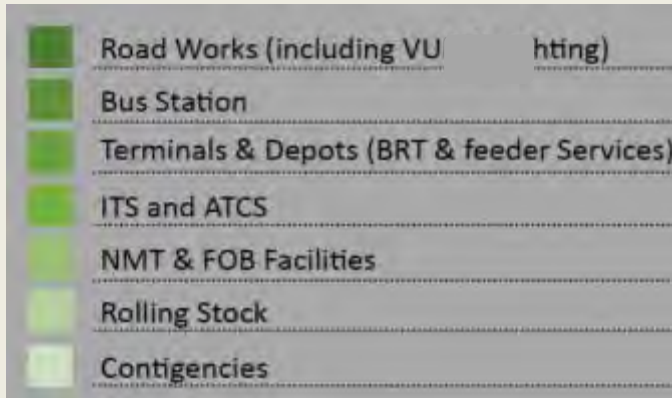
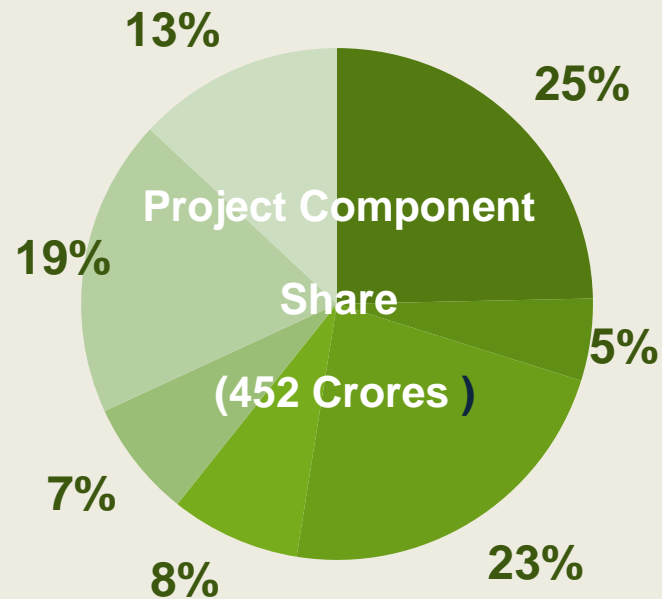
PROJECT CORRIDOR – 44M SECTION



Width	Distance	From	To
44 m	11.87 km	Naveen Hotel, Hubli	Gandhinagar Cross, Dharwad



PROJECT FUNDING



- Estimated cost of project – 692 Crores INR
- Funded under the Sustainable Urban Transport Project (SUTP)
- Support from World Bank and GEF
- World Bank funding – USD 55 million

DETAILS OF LAND ACQUISITION



SI No	Details	Extent as per JMC	Total-Private Land to be acquired	Govt Land/ Dept/	HDUDA
<i>Area in Acres and Gunta</i>					
	TOTAL AREA	67.25	31.18	20.14	15.23

Project Affected Persons

Title Holders

920

Squatters & Kiosk

87

Tenants

324

Community Assets

17

PRICE NEGOTIATION MEETINGS OF HUBLI CITY

DATE: 14.07.2014



COMMUNITY ASSETS SHIFTED



Place of within COI

Hanuman Temple at FCI

Bhairidevarakoppa

Shifted Place



Ganapati Temple

Bhairidevarakoppa



Place of within COI

Dismantling partially
affected part



Income Generation Activities Training

On : 06.08.2014, at : RUDSET Training Institute, Dharwad



Free Health Checkup Camp

On : 17.07.2014, at : SDM Medical College



BRTS BUS SHELTER

Model Image of BRT Bus Stand



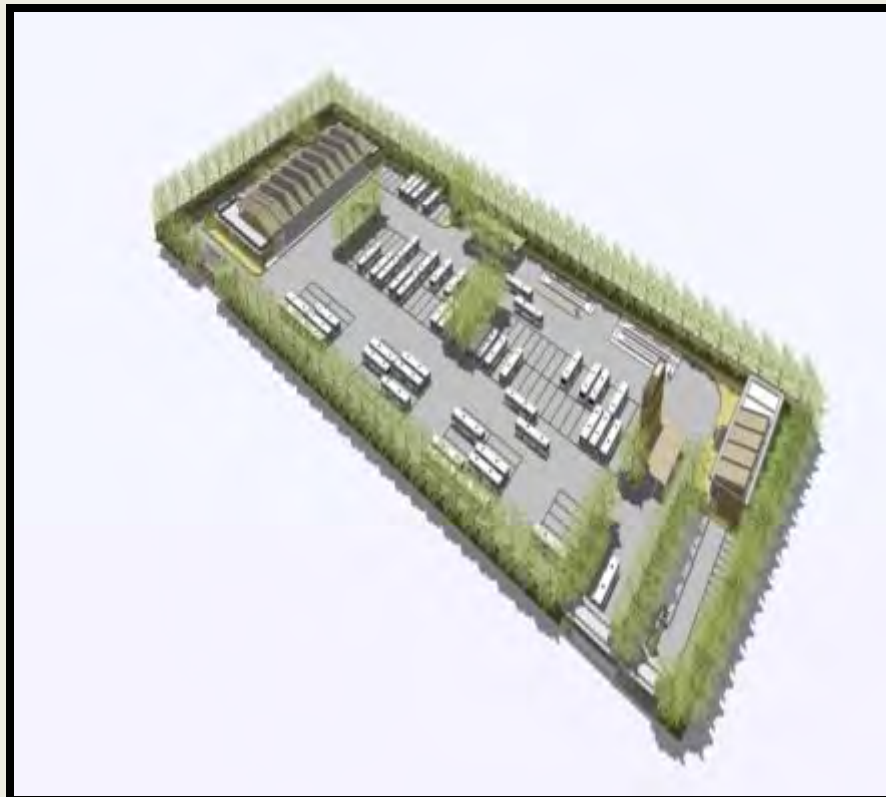
Fixing of Barricade under progress.



BRT DEPOT AT HUBLI



**Model Image of BRT Depot
Hubli**



Work Under progress



DIVISIONAL WORKSHOP AT HUBLI



Model Image of Divisional Workshop



Work is under progress



BRTS DEPOT AT DHARWAD

Model Image of BRTS Depot at Dharwad



Footing works under progress



OCBS (PW – 9)



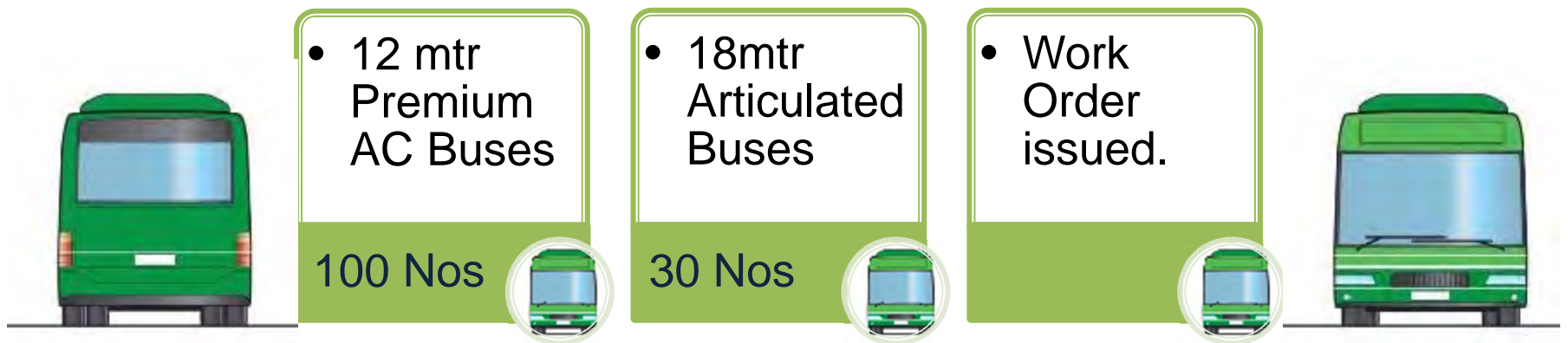
Site clearance under progress



Model Image of OCBS



PROCUREMENT OF BUSES FOR BRTS



TRANSIST ORIENTED DEVELOPMENT



Nature of Streets

- BRTS
- Roads with Dedicated Cycle Track
- Roads without Dedicated Cycle Track
- Pedestrian-and-Cycle-only Streets
- Project Area

Designing for cycling and pedestrian movements



Source: EMBARQ India

EMBARQ
India

TRANSIST ORIENTED DEVELOPMENT

2. Design of Plaza - ಸಾರ್ವಜನಿಕ ಜನರ ಅಂಗ



TRANSIST ORIENTED DEVELOPMENT



3. Design of Temple & Pond - ಅಮರ್ಗೋಳ ದೇವಾಲಯ ಮತ್ತು ಕೆರೆ



Proposed View of Temple and Amargol Pond

TRANSIST ORIENTED DEVELOPMENT



3. Design of Temple & Pond - ಅಮರ್ಗೋಳ ದೇವಾಲಯ ಮತ್ತು ಕೆರೆ



PROJECT CHALLENGES



COMPETING PRIORITIES OF THE STATE GOVERNMENT OVER PUBLIC TRANSPORT AND ALLOCATION OF FUNDS FOR THE PROJECT

- Presentations to key decision makers
- Visits to Janmarg, Ahmadabad by political leaders
- Sourcing funds through value capture, stakeholder contributions, JNNURM etc.

INTEGRATION OF THE PROJECT WITH ONGOING ROAD WIDENING PROJECT / MULTI-AGENCY CO-ORDINATION

- Onsite consultant team
- Weekly Coordination meeting with KRDCL
- Technical issues solved by Technical Advisory Committee, KRDCL
- Service level agreement between SPV and KRDCL



PROJECT CHALLENGES



INSTITUTIONAL ARRANGEMENTS

- ❑ **Special purpose vehicle created for implementing the project:
Hubli-Dharwad BRTS Company Limited**

- ❑ **Key Stakeholders represented on the Board of Directors**
 - **HDMC - Local Body**
 - **HDUDA - Urban Development Authority**
 - **NWKRTC - PT Operator**
 - **KRDCL (4- laning project)**
 - **Traffic Police Dept**
 - **PWD**

- ❑ **BRT bus operations by NWKRTC.**
 - Service level agreement between NWKRTC and SPV**

PROJECT CHALLENGES



☐ **LAND ACQUISITION**

▪ **RoW**

RoW in City built up area	35m
RoW in undeveloped areas	44m

▪ **Consent Award**

▪ **RAP, Grievance Redresal, Public consultations, FGD, Public Outreach**

☐ **ENVIRONMENTAL IMPACT - EMP and GREEN BRTS Programme**

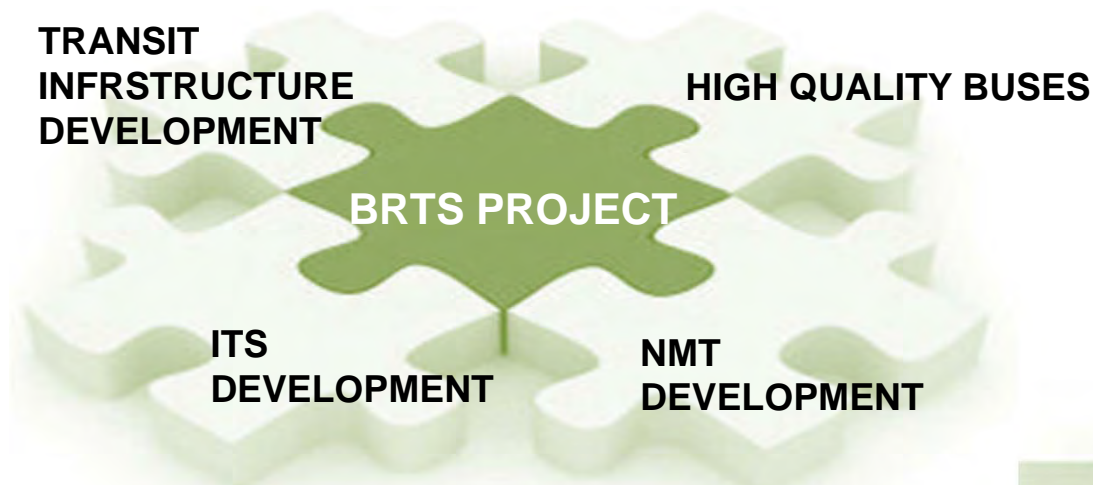
☐ **INTEGRATED TICKETING – TRUNK and FEEDER - Exploring options**

☐ **CHANGING BEHAVIOUR AND ATTITUDE TOWARDS PUBLIC**

TRANSPORT - Communication and Outreach strategy for promoting public transport and NMT

SPECIAL ATTRIBUTES

COMPREHENSIVE DEVELOPMENT OF THE CITY TRANSPORT INFRASTRUCTURE



TRUNK AND FEEDER INTEGRATION

Interchange facilities between sub-urban and city service.

Integrated ticketing: Trunk – feeder.

Route rationalization



SPECIAL ATTRIBUTES

DEVELOPING A CITY PLAN FOR HUBLI- DHARWAD

Planning framework for the City

Developing Urban design guidelines for the BRT corridor

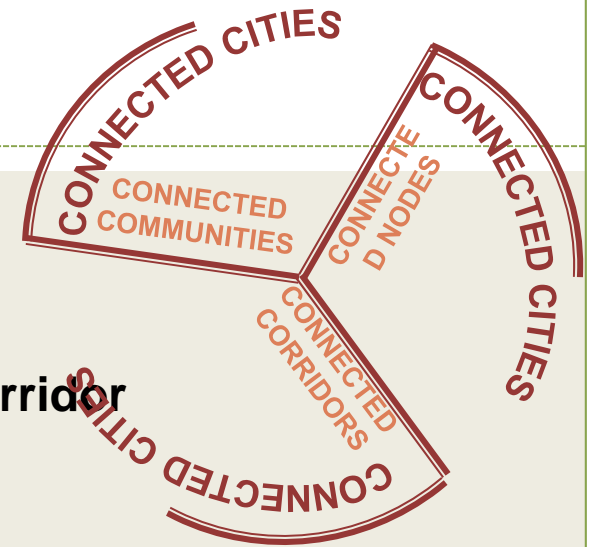
Identifying Urban renewal projects

TRANSIT ORIENTED DESIGN

Demonstration Project for ToD –Shaping Hubli-Dharwad as a CONNECTED CITY

Improving BRT station accessibility, developing public plaza

Integrating NMT, IPT facilities with BRT stops and NMT improvements



SPECIAL ATTRIBUTES

GREEN BRTS PROGRAMME

Around 3500 trees cut for the Project

Action plan prepared for GREEN BRTS

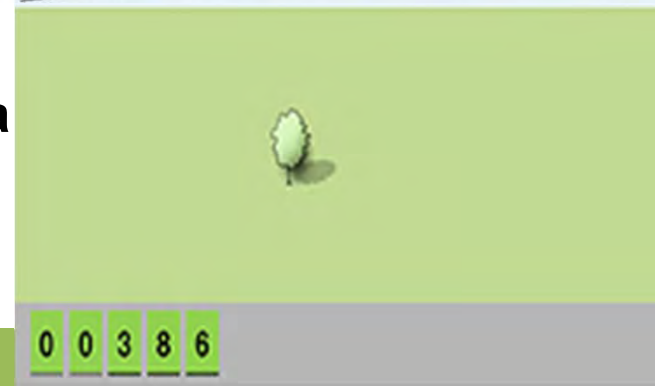
18,000 saplings to be planted

- **Avenue Plantation**
- **Transit infrastructure plantation**
- **Plantation in Schools, Colleges, Parks and other Public Spaces.**

GREEN BRTS Committee set up consisting of representatives of local environmental groups

Incentivizing planting in schools –Namma Thota @ GREEN BRTS

GREEN COUNTER on Website



SPECIAL ATTRIBUTES

WORKING WITH COMMUNITY



FGD's and Public consultation

Relocating community structures

Discussion on BRT Designs/ TOD Designs

Income generation activity training



PUBLIC OUTREACH ACTIVITIES

Campaign Plan for BRT

Presentation in colleges, schools etc

Organizing, competitions, events campaigns, street plays, etc

Information dissemination through Public information centre, Monthly news letter, website, press releases, media conferences,



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