

# Hubballi : Regional information



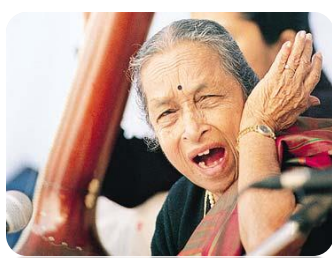
❑ Asia's biggest block level court



❑ Commercial hub



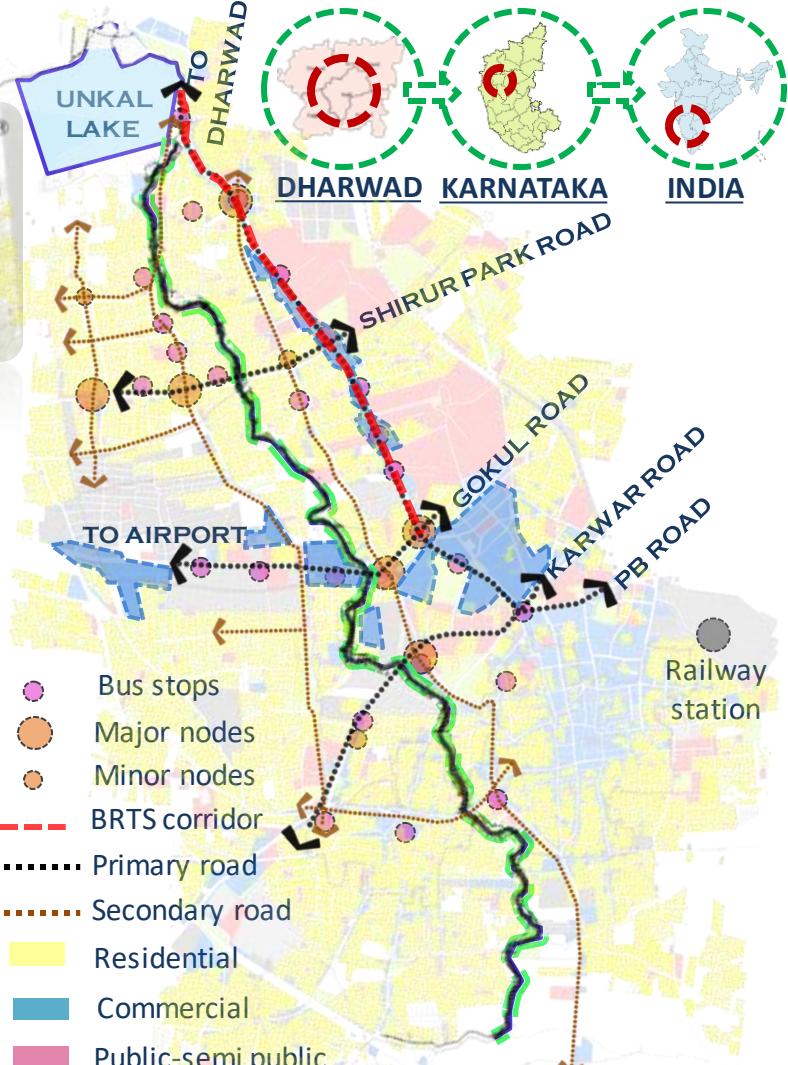
❑ Educational center



❑ Renowned for its Hindustani music



❑ Cyclothon



❑ South - western railways headquarters



❑ Chennai- Mumbai transit city

- ❑ Hubballi – Dharwad Corporation area 202Sq.km.
- ❑ Hubballi city area – 120 sq.km.
- ❑ Second largest city in the state of Karnataka after Bengaluru.
- ❑ Hubballi is **nodal point of the region and hub of flow of idea** due to its geographical and historical importance.

## Vision –

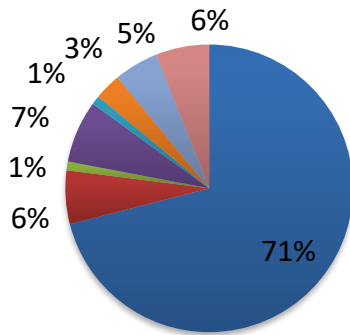
- ❑ To become gateway to north Karnataka (smart city vision)
- ❑ To get on the list of global creative cities through technology (smart city), talent (making cities more livable) and tolerance (promoting inclusion through connecting all realms of the city)

## City context

- ❑ Traffic problems due to increasing vehicles.
- ❑ Though there are active cyclists, no dedicated cycling infrastructure.
- ❑ No central green space and place making for citizen quality of life.
- ❑ Need to maintain good water quality and improve edge conditions of the nala.
- ❑ Unkal nala is the **only large green space** available in the city.

## % of vehicular share on roads

- Two wheelers
- Auto-rickshaws
- Jeeps
- Motor cars
- Omni bus
- Stage carriers
- Goods vehicles
- Others



## Traffic mode share:

- ❑ Bus patronage is relatively high (30%).
- ❑ Two wheelers and cars dominate with a share of 41%.
- ❑ **NMT share is low: Walk constitute 16% of the trips whereas bicycle constitute 7%.**

Unkal Nala divides the Hubballi and forms the major spine of the City. 90% of the population has to cross it minimum twice a day. And majority of the population resides along it. It is intrinsic part of their everyday life.



Hubballi Dharwad Smart City

## Existing nala information



- Length :8.5 Km
- Width : 12m to 20m
- Property boundary : 20m to 55m
- Population along proposed corridor : 1 Lakh ( 20% of total population)
- Currently fed by overflow of Unkal lake.
- Water quality depends on the water quality of Unkal lake.
- STPs are set up, one each on three inlet points of Unkal lake.
- Total capacity of all the STPs is 4MLD (2+1+1).
- Sewage inflow through many drain inlets.

## Local issues and project necessity

### Mobility

- Unsafe and Chaotic traffic condition

### Health & Hygiene

- Sewage and waste water discharge in nala.
- Solid waste disposal in nala.
- Mosquito breeding.
- Foul air.
- Scrub vegetation does not benefit environment.

### Social & Cultural

- Lack of recreational spaces in the neighbourhood.
- No social integration.
- Unsafe & Unused dead space

## Aim and Objectives

- Fight congestion
- Ease emissions
- Safer, more convenient and popular way of transport.
- Ensure seamless bicycle connectivity along the corridor.

- Create identity, sense of place and contribute to the overall city image.
- Encourage social activities and social integration.

- Convert inaccessible and a dead space into physically accessible and vibrant green spine of the city.
- Showcase the 'mission transformation' and 'swachchata' drives..



Alternate Mode of Transport



Last Mile Connectivity



Green and environment friendly



Health Benefits

## Comparison



Cycling along main road



Dedicated Cycling track



# Integration of Space, Activity, Mobility

## PROJECT INTEGRATION

SUSTAINABLE  
MOBILITY



DEVELOPMENT  
OF GREEN  
SPACES AND  
WATER EDGE



SAFETY,  
HEALTH &  
HYGIENE

## PROPOSAL – GREEN MOBILITY CORRIDOR

- ❑ Provide continuous dedicated cycle track and walkway along with green cover, recreational and economic activities like Food street, Weekly market etc. wherever possible with dedicated cycle stands.
- ❑ Improvement of existing storm water, sewage water and solid waste infrastructure with correction of nala section.

PROPOSED GREEN MOBILITY CORRIDOR AIMS TO CONNECT THE MAJOR ROADS WITH CYCLE TRACKS FOR ENCOURAGING CYCLE AND PEDESTRIAN MOVEMENT ACROSS THE CITY.

Clean water in channel

TYPICAL SECTION OF PROPOSED GREEN CORRIDOR



# Unkal nala GREEN MOBILITY CORRIDOR - USPs

## SUSTAINABLE LAST MILE CONNECTIVITY

1. Integration with BRTS corridor to encourage sustainable mode of feeder connectivity.
2. Sustainable mobility in the city instead of provision of IPT modes (Intra para transit ) ( auto, taxi etc.).

## INCREASED NMT SHARE

1. This proposed development would help in increasing the sustainable mobility (NMT) share of the city by the provision of walkway and cycle track.

## INTEGRATION WITH PROPOSED PBS PROJECT

1. Provision of PBS stations in proposed corridor to integrate it with HDSC PBS project.
2. This would facilitate city-wide NMT circulation.

## INCREASED REVENUE GENERATION

1. Comfortable access, recreational & commercial will increase revenue generation which otherwise would not be possible in case of roadside footpaths.

## PEDESTRIAN SAFETY AND USABILITY

1. Segregating pedestrian traffic from secondary roads.
2. This would help reducing pedestrian and vehicular conflict.
3. Provide maximum width of the roads for BRTS and at grade traffic.
4. NMT along water front acts as visual treat, it would induce larger footprint and better usability as compared to roadside footpaths and cycle tracks.

## Eco - friendly



Multi arched check dams with walkway



Solar panels



Air quality sensors

## Safety



CCTV and street lighting with smart poles and LED lights.



Canopy over walkways and cycle tracks.

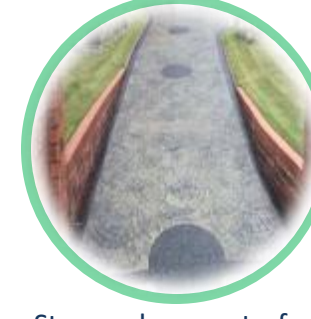


Guardrails or low walls along the edges of the corridor.

## Materials



PCC pavement with paint finish



Stamped concrete for walkways to create different patterns.



Stone cladding on toe walls along walkway and cycle tracks for seating

## Economic



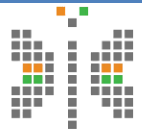
Advertisement boards



Race events



Vending zone



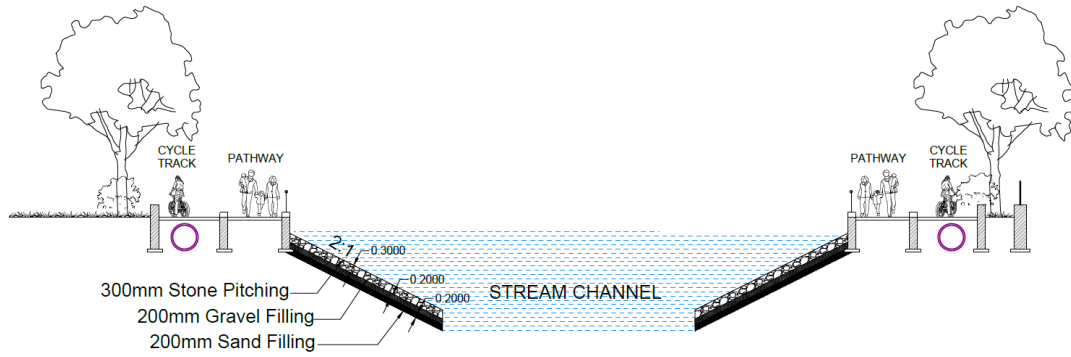
**PROJECT USPs**



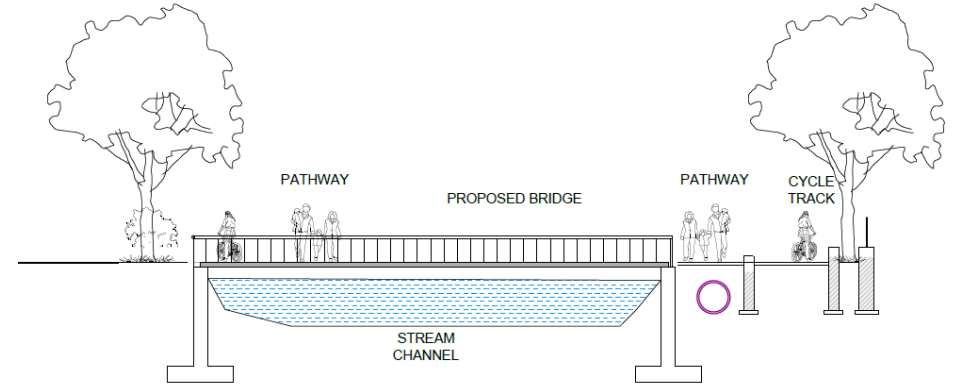
**Hubballi Dharwad Smart City**

# Unkal nala GREEN MOBILITY CORRIDOR – Typical sections

## TYPICAL DETAILS OF SIDE SLOPE PITCHING



## STEEL BRIDGE WITH RCC SUPPORTING STRUCTURE



## RETAINING WALL WITH CANTILEVER SLAB FOR CYCLE TRACK

