

Public bicycle sharing scheme for Mysore – station locations



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# Background

### Overview

Mysore, the second largest city in the state of Karnataka, is a historic city with numerous palaces and ancient monuments. Tourism is one of the main sources of the city's economy; 3.15 million tourists visited Mysore in 2010. The Mysore Palace located in the heart of the city is one of the most visited monuments in India. Mysore Dasara which is a 10 day event is one of the most celebrated festivals in India. On the last day of the festival, an elaborate procession is taken through the core of city which attracts a large audience from all over the world.

Being an important city for the state, the Directorate of Urban Land Transport (DULT), Government of Karnataka has taken keen interest in developing a public bicycling scheme (PBS) for Mysore and has already done a pre-feasibility study on the same. In the pre-feasibility report a total of 26 stations were identified for a pilot project. This report expands upon the report and identifies more stations to saturate the heritage core.

## Transport situation in Mysore

The traffic in Mysore is heterogeneous in nature. Bus traffic constitutes only 13% of the total mode share. The main modes of travel in Mysore are walk and two-wheelers. Mysore has both city and suburban bus services, which are operated by Karnataka State Road Transport Corporation (KSRTC). In Mysore, KSRTC operates 4217 trips using 262 schedules and carries around 1.79 lakh passengers per day<sup>1</sup>. The road network in Mysore has a radial and gridded structure. The city has 5 arterials which originate from the palace and are the highways which connect the city to the neighboring towns and villages. The street network in the city core has many parallel streets and a gridded nature.

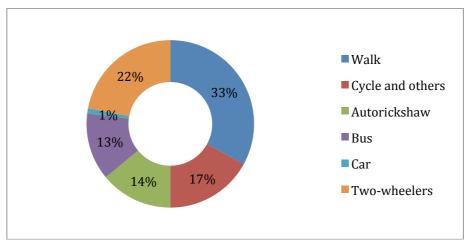


Figure 1: Mode share in Mysore,

\*This report has been created by EMBARQ India for the Directorate of Urban Land Transport, with the express purpose of informing the Authority on the ideal station locations for the implementation of PBS in Mysore. The views expressed here are those of the authors, and specific to the context and objective of report. EMBARQ India is the World Resources Institute's Centre for Sustainable Transport in India, and is part of WRI's global EMBARQ network.

<sup>&</sup>lt;sup>1</sup> ITS DPR

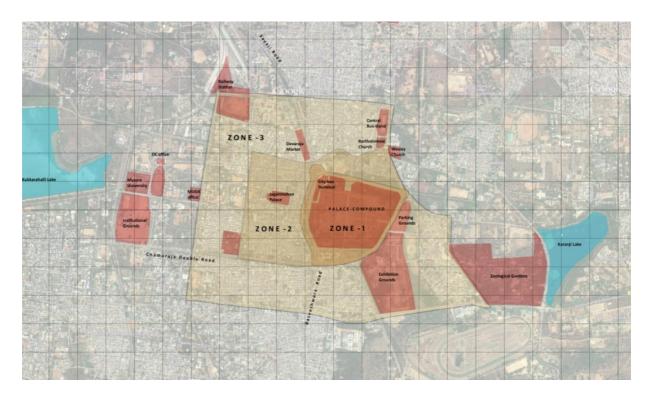


Source: ITS DPR, KSRTC, 2009

The average trip length in Mysore is around 4 km<sup>2</sup> which is ideally suitable for cycling. The city also has a relatively large bicycling mode share (around 17%)

## Heritage core

The heritage core has been identified around the Mysore palace by dividing into three zones. The Palace and the road abutting it constitute the zone one. Two other rings around the Palace have been identified and these constitute zones 2 and 3.



The city has wide roads and not much congestion except around the palace. The roads around the palace currently act as through fares for people crossing the city and are thus congested. Sayaji Rao road is also one of the busiest streets in the city and the main market area. It sees heavy pedestrian activity throughout the day.

A typical cross-section of Sayyaji road is shown in the figure below. A couple of photographs of the area are also shown which show a lot of on street hawking and pedestrian activity. The street also has two-wheeler parking which is usually full.

<sup>&</sup>lt;sup>2</sup> CTTP Mysore

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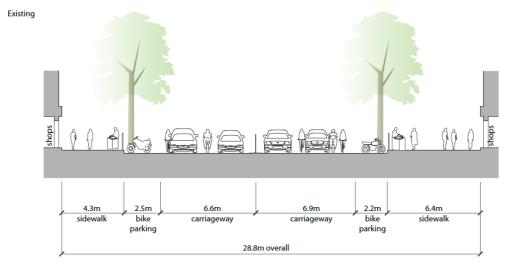


Figure 2: Cross-section Sayyaji Rao road



Figure 3: Sayyaji road

Chamaraja road which is to the south of the Palace is one the main arterials and has a large ROW with low vehicular activity.

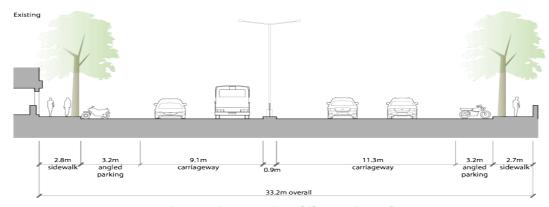


Figure 4: Cross-section of Chamaraja road

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Figure 5: Chamaraj road

Devaraj Urs road also generates a lot of activity due to its commercial nature. The intersection between Devaraj urs road and Sayyaji road (KR Circle) is also one of the busiest in the city. The city bus terminal is also located right next to the intersection which is another reason for the congestion at the intersection.



Figure 6: Devaraj Urs road



Figure 7: Ashoka road

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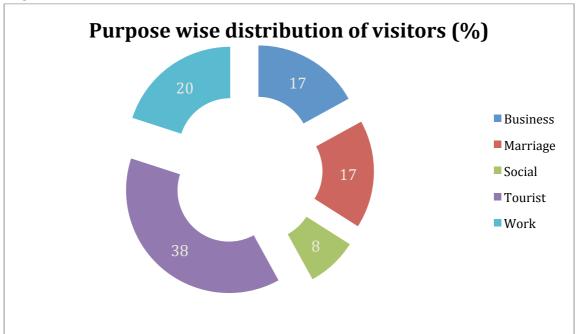


The other main street in the heritage core in terms of activity is Ashoka road. This road is also one of the major commercial activity street in Mysore. Ashoka road and Sayyaji road also have a lot of on street parking (mainly two-wheelers).

Some of these streets such as Ashoka Road, Sri Harsha road (which has a lot of hotels on it and as such is a major origin center) are one way streets. Ashoka Road and Sayyaji road also have parking on both sides of the street. These parking spaces can also be used to locate PBS stations.

## System users

The historic core of Mysore has been identified as the location of the PBS pilot project. The core mainly has commercial and tourist activity centers. As such it would be ideal to target the visitors to the city as the users of the PBS. According to the Comprehensive Traffic and Transportation Plan (CTTP) of Mysore, the two largest visitor groups to Mysore are tourists and business visitors. Inside the city the visitors mainly use taxi's (45%) or auto-rickshaws (36%) as the mode of transport. These trips are potential cycling trips and are the main target for the PBS.



Source: CTTP, Mysore

### Location of PBS stations

The success of a PBS initiative depends upon the level of saturation within the study area as well as the selection of a set of origins and destinations. This would create a network where people can plan their entire journey on bicycles.

In order to identify the station locations the major activity points within the historic core were first identified. The activity centers include – hotels, tourist

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visiting spots, work locations (for work tourists),

public transport infrastructure (which is the first point of entry for many tourists) and commercial/retail activity centers (shopping, restaurants etc).

When locating stations, care has also been taken to ensure that there is sufficient space to maneuver the distribution vehicles. The success of a PBS initiative also depends upon the user finding a bicycle upon arriving at a station. For this to happen a very good distribution system must be set in place – the distribution vehicle must have sufficient space to quickly and efficiently pick up and drop off bicycles.

The study area has been divided into smaller blocks of 250 meters by 250 meters. By locating stations within these blocks, a maximum distance of 500 meters between any two stations is ensured. Following this, each of the activity centers (hotels, tourist spots etc) has individually been identified within the study area. Some of the locations are slightly outside the study area, but have still been identified as station locations since there is sufficient activity at these locations.

The CTTP has been used to identify the most visited tourist activity spots as well as work locations within the study area.

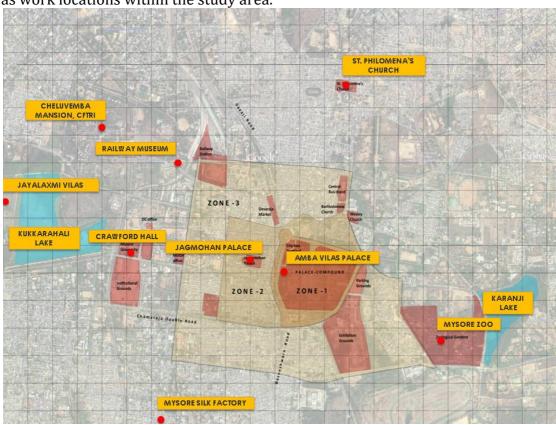


Figure 8: Tourist spots in core



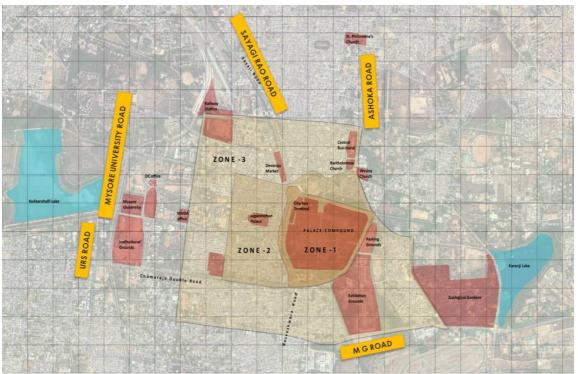


Figure 9: Most visited work locations (visitors)

Using Google maps, the hotels located in the core and the public transit stations were also identified. The railway station, city bus terminal, inter-city bus terminal and private bus terminal have been identified. All of which fall within (or close to) the core area.



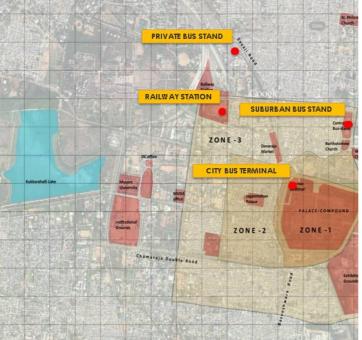


Figure 10: Public transport stations

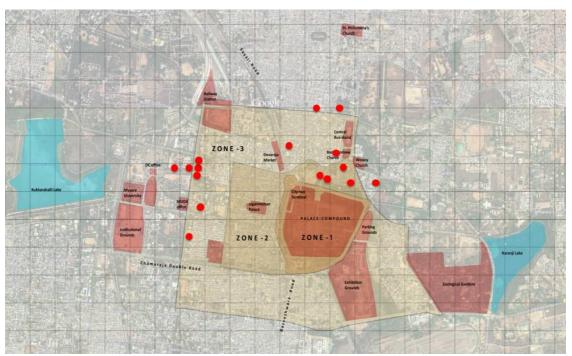


Figure 11: Hotels within the core

Finally, the existing land use map from Mysore Urban Development Authority (MUDA) has been used to identify the commercial/retail centers within the core.



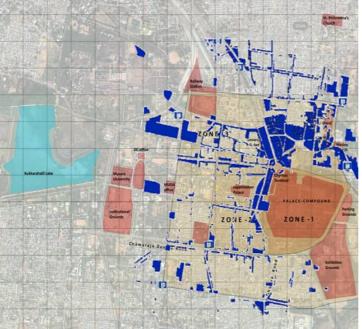


Figure 12: Commercial/retail activities within the core

Combining the above maps (and ensuring sufficient access for the distribution vehicle), the final station locations have been identified.

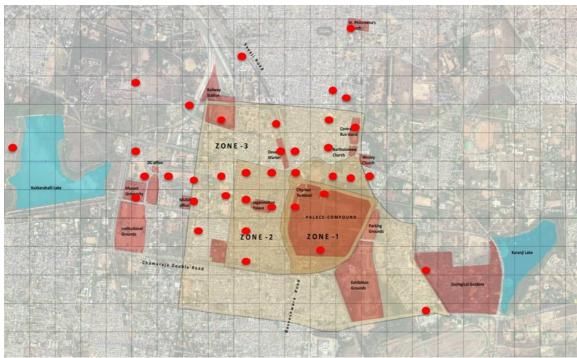


Figure 13: Station location map, PBS Mysore

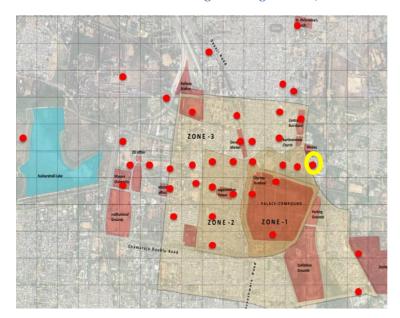
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# Station locations

Station 1: Bangalore-Nilgiris Road, near Woodlands Theater

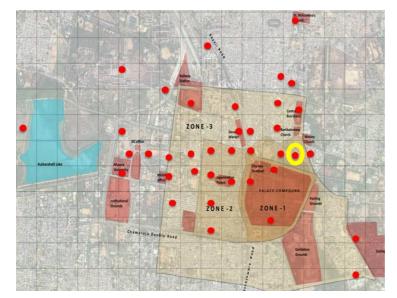








Station 2: Sri Harsha road

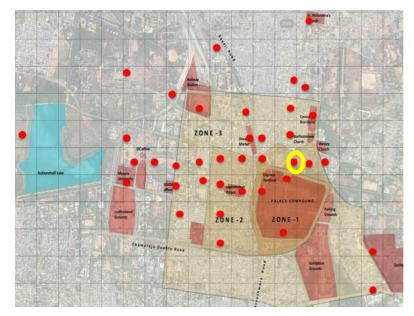








Station 3: Clock tower, near Mysore Palace

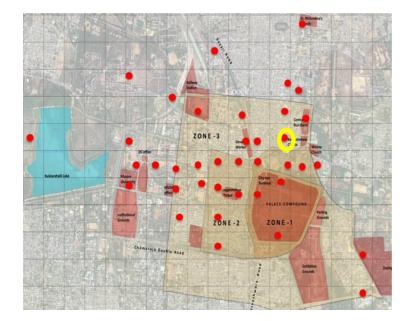








Station 4: KT Road, near Hotel Dasprakash

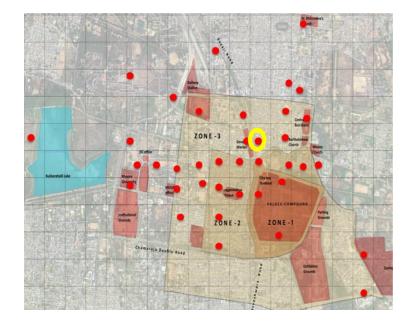








Station 5: Sayyaji Rao Road, near Market

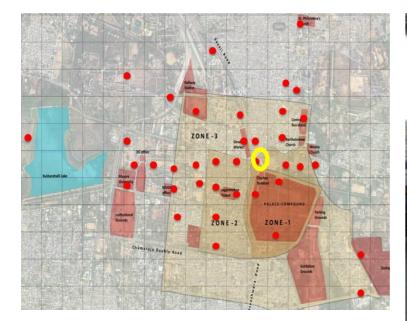








Station 6: Sayyaji Rao Road, near KR Circle

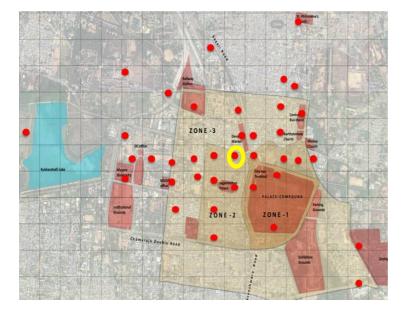








Station 7: Devaraj Urs road

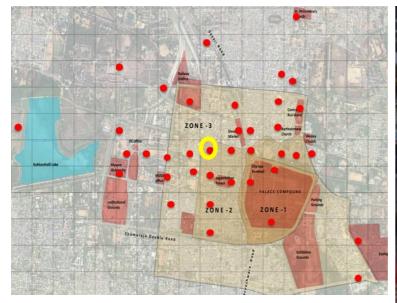








### Station 8: Devaraj Urs road (2)

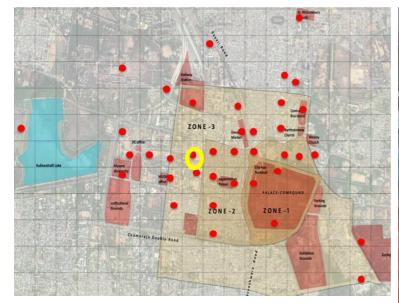




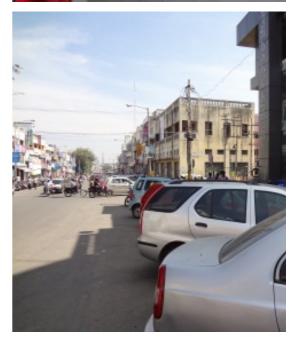




Station 9: Devaraj Urs road (3)

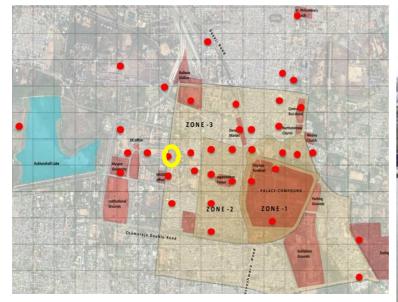








Station 10: JLB Road, near Maharaja's College

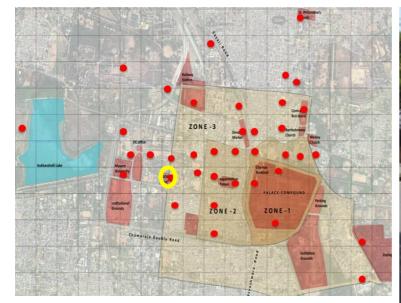








Station 11: JLB Road, near MUDA office

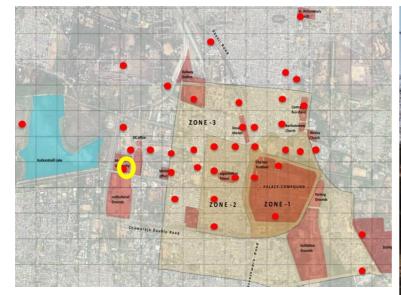




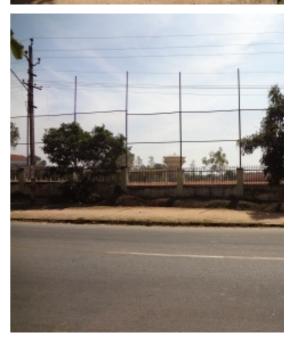




Station 12: Ramvilas road, near Institution ground

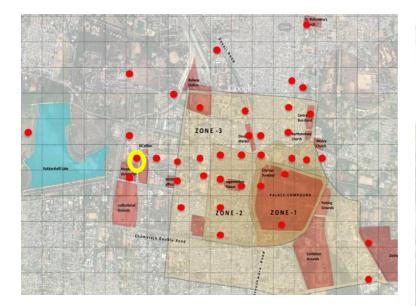








Station 13: Krishnavilas road, near DC office

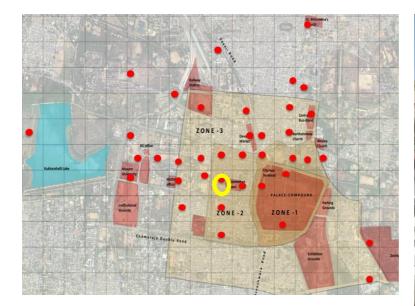




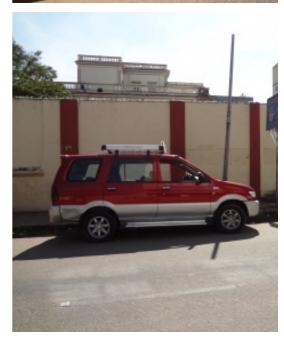




Station 14: Krishnavilas road, near Avila convent

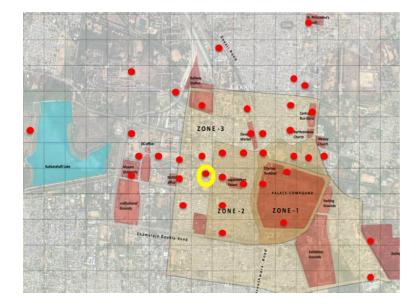








Station 15: Krishnavilas road, near IT office

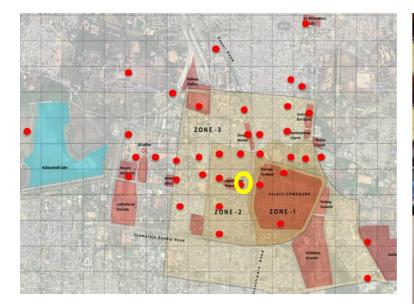








Station 16: Jagmohan palace

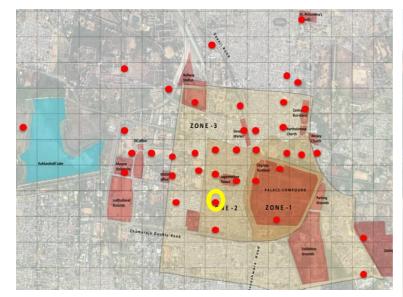








**Station 17: Ramvilas Road** 

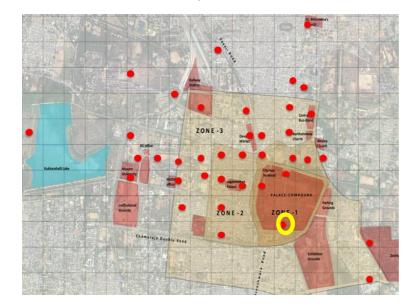








#### **Station 18: Mysore Palace**

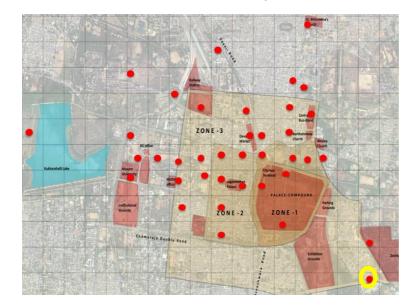








Station 19: MG Road, Mall of Mysore

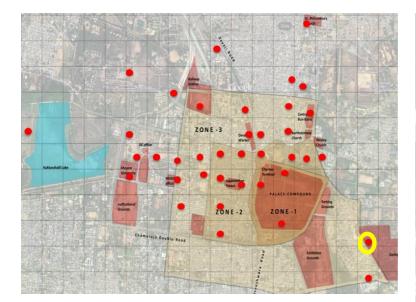








Station 20: Mysore zoo

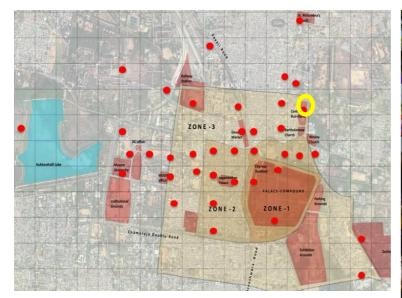








Station 21: KSRTC bus stand (inter city)

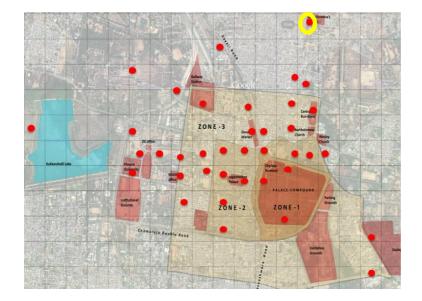








Station 22: St Philominas church

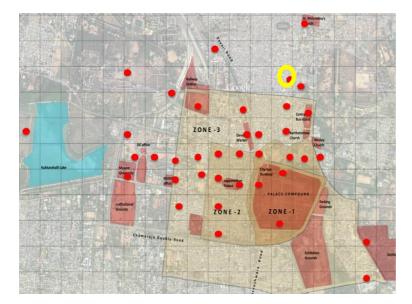








#### Station 23: Ashoka road

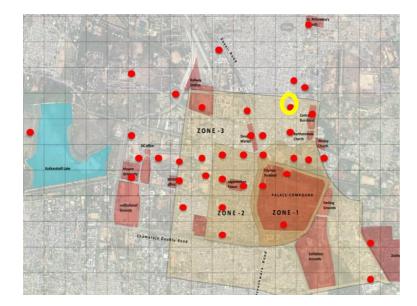








Station 24: Ashoka road, SBM circle

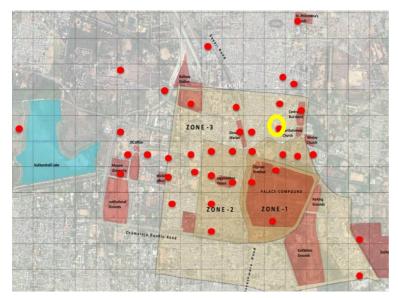




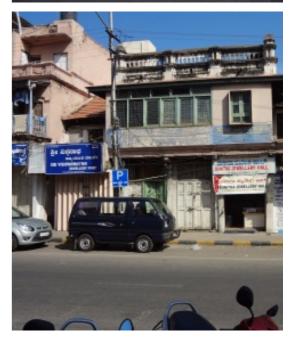




#### Station 25: Ashoka road

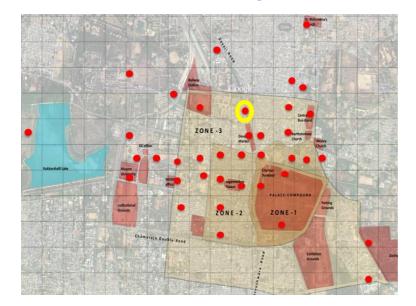








**Station 26: Medical college** 

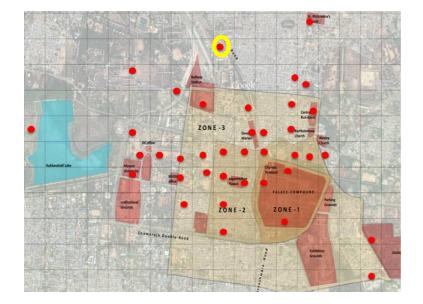








Station 27: Private bus stand









Station 28: Mysore railway station

