



AN ANALYSIS ON POTENTIAL PROPERTIES OF COMMERCIAL STRETCH AT PANTHEON ROAD, EGMORE TO ADDRESS THE ISSUES OF WORN URBAN FABRIC

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Abstract: The commercial areas at the city centers have many historical, urban, architectural, economic and social values. Commercial streets are among the most significant components of the architectural heritage of cities owing to their sustained organic development. Nevertheless, in the light of recent accelerated advances, many of them have lost their significance and been subject to other informal applications, sacrificing their historic identity. The aim of this study is to identify the urban issues and to expose the value of maintaining conventional commercial streets because the identity of communities depends on them.

This analysis supports to formulate an approach that encourages urban identity while designing these streets; it should rely on the values and standards of maintaining history, saving traditional places and ensuring their integrity and profit not only to their consumers but to all residents. The most effective strategies and approaches for coping with metropolitan centers should be implemented, which can be Urban Renewal, Regeneration, Redevelopment, Conservation, Rehabilitation, Revitalization etc.

Revitalization works with damaged urban environments by rejuvenating them in a manner that retains their social character. This combines policies and approaches related to urban regeneration, splitting the handling of urban fabric into three parts. The first examines what needs to be preserved and adapts or restores in order to fulfill its task; the second requires a total reconstruction of something which has lost its economic and historic value, and the third requires comprehensive revitalization.

Index Terms - regeneration, strategies, approaches, historic value, social character.

I. INTRODUCTION

The modern city has undergone drastic changes in its physical shape, not just through its massive geographical expansion but also through internal physical infrastructure. They also produced entirely new kinds of fabric and yet with issues. It was all primarily to meet the demands of contemporary urbanization; these areas have been exposed to several cultural, economic, and environmental variables that have adversely affected their institutional configuration, social makeup and economic structure.

The Commercial areas and their streets are among the most critical aspects in city centers that replace them at the forefront in communities that require adequate strategies to fix their challenges in order to thrive for future generations. For these purposes, the study examines existing commercial areas and methods of maintaining them within an interconnected setting.

The methodology adopted is a quantitative and qualitative data collection tool which deals with the macro and micro analysis of the region. The region selected up is Egmore at macro level analysis for few strong reasons which includes

- It holds many Grade 'A' Heritage sites** - Most of them are hidden away and unexplored.
- High Influx and Outflux** - Compared to other areas, Egmore has more influx & out flux of people owing to the importance of its major nodes and its numerous health & education facilities.
- Changing character across Egmore** - Ranging from contemporary office buildings to heritage government buildings & congested commercial areas, the site has a plethora of visual & cultural characters across different areas.
- Ecology of Egmore** - The abundant green cover within the Egmore museum enclosure & other heritage sites & the abundant scope of Cooum as a natural water source add to the ecological importance of Egmore.

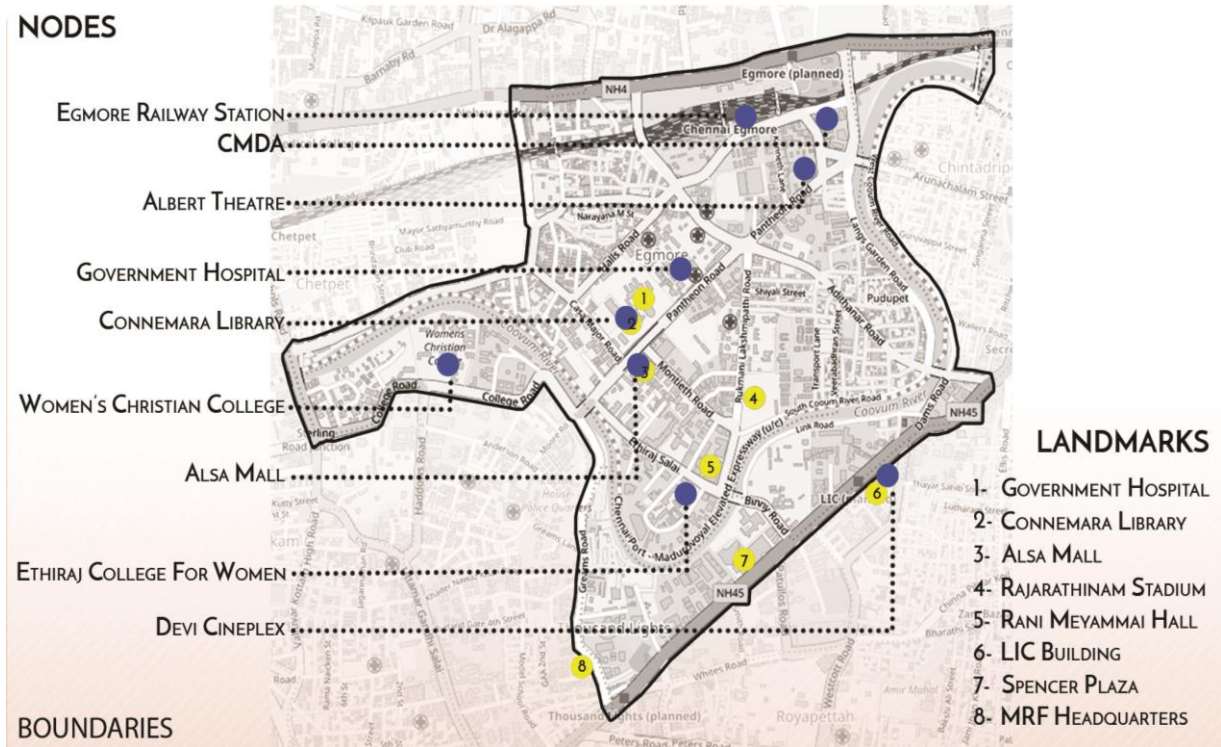


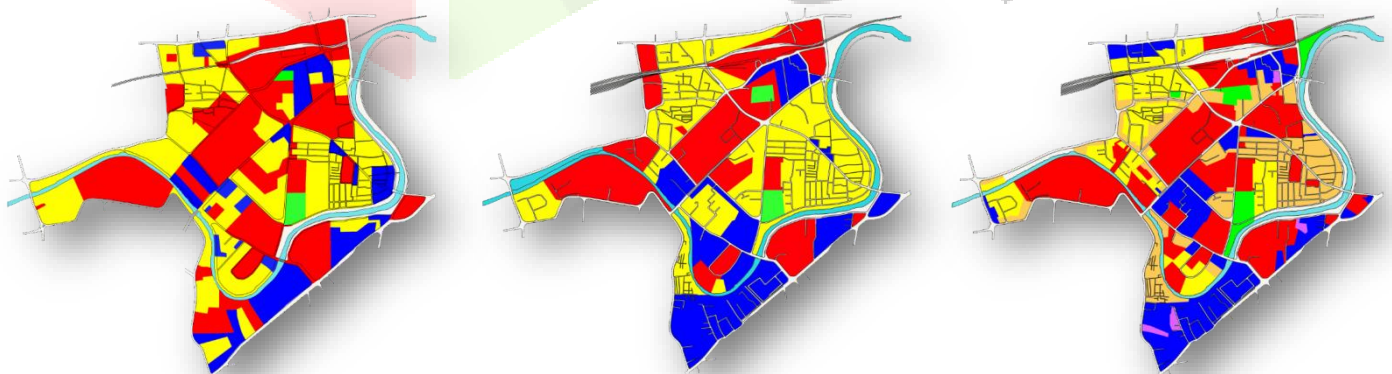
Fig – 01: Egmore Map – Boundaries and Nodes

The research further narrows down to Pantheon road, a vital commercial stretch. The main aim is to identify the issues of the vital commercial stretch Pantheon road to find the reason for the loss of the sense of identity that people had in relation to the Pantheon road and also, the analysis would support to find solutions to rekindle the sense of identity and rejuvenate the intrinsic qualities inherent along the stretch to allow it to reflect a character of its own. This also helps to track down redundant spaces in the current areas of high land value and repurpose them to suit the deficiencies in the surrounding population.

II. MACRO LEVEL ANALYSIS

The **macro level study** concentrates on the overall configuration of the area and some leading features and facets such as the extent, the form of progression, (i.e., compact, distributed, etc.), pattern of spreading of people and jobs, degree of crowding, road connectivity, mortality of buildings, user activity, traffic pattern etc.

2.1. Land Use – Urban Morphology



Source: cmdachennai.gov.in

Fig-02: Land use map, Egmore a) 1975, b) 2006, c) 2026

2.1.1. Observations

In 1975 Map, the percentage of land under institutional sector was more and the commercial sectors taken a start to develop along Anna salai, Greams road and Montieth road. And also the residential area has grown towards the south eastern & north western parts of egmore.

In 2006 Map, it could be observed that the metamorphosis of the core residential areas has led to the thinning of the institutional areas at the center. A commercial development seems to be concentrated towards the south of Egmore.

In 2019/2026 Map, the residential areas has been divided into primary/ mixed residential. The Institutional area seems to be tightly sandwiched between the densely populated areas.

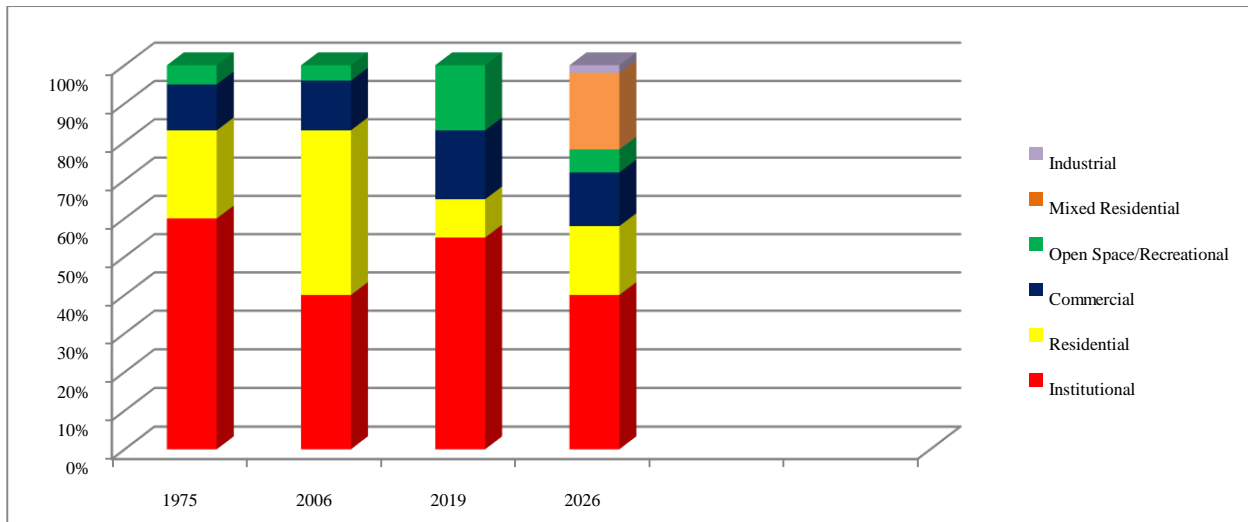


Chart -01: Comparison of Egmore land use pattern over years

2.1.2. Analysis

The Residential developments along the south eastern parts can be attributed to the occupational to the needs of the people, while residential growth along the north western areas is due to EVR road serving as a national highway with the developing commercial sectors, resulting in rise in the land value. The residents started to flourish, attracting people to this area.

The two residential zones have difference in character; one with more buildings with higher density (Continuous building area) and the other one with close buildings with lower density (continuous building area, but different typology of buildings).

Due to the absence of parking space, the open spaces in the institutional zone are used for parking; and the vehicles are even parked on the road. This shows that the residential zone in Egmore has the least amount of open space when compared.

2.2. Road Network and Streetscape Analysis



BUILDING HEIGHTS	STREET HEIRARCHY
G & G+1	ARTERIAL
G+2 & G+3	SUB-ARTERIAL
G+4 TO G+6	NATIONAL HIGHWAY
G+7 TO G+9	COLLECTOR
10+	LOCAL

- Arterial Road
 - Pantheon Road
 - Ethiraj Salai
 - Gandhi Erwin bridge Road
 - Dr.Nair Road
- Sub- Arterial Road
 - Montieth Road
 - Kuvam river Road

Fig-04: Legend

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- Road
 - Casa Mayor Road
 - Tamil Salai

Fig-03: Road Network and Streetscape (Source –Primary Survey 2020)

- National Highway
 - Anna Salai
 - EVR Road

The Pantheon road is the major access road which connects Nungabakkam (South West) to Chintadripet (North East) and also connects Purasaiwakkam (North West) to Triplicane (South East). The road width is not uniform along the stretch and it varies from 23.0m to

12.0m at certain points. The stretch holds 4 bus stop at the most congested nodes such as Co-optex, Government hospital, Sacred Heart shrine church, which is one of the reasons for accumulation of traffic and the other factor is the shrinking of road width at dense nodes.

2.3. Property Ownership Analysis

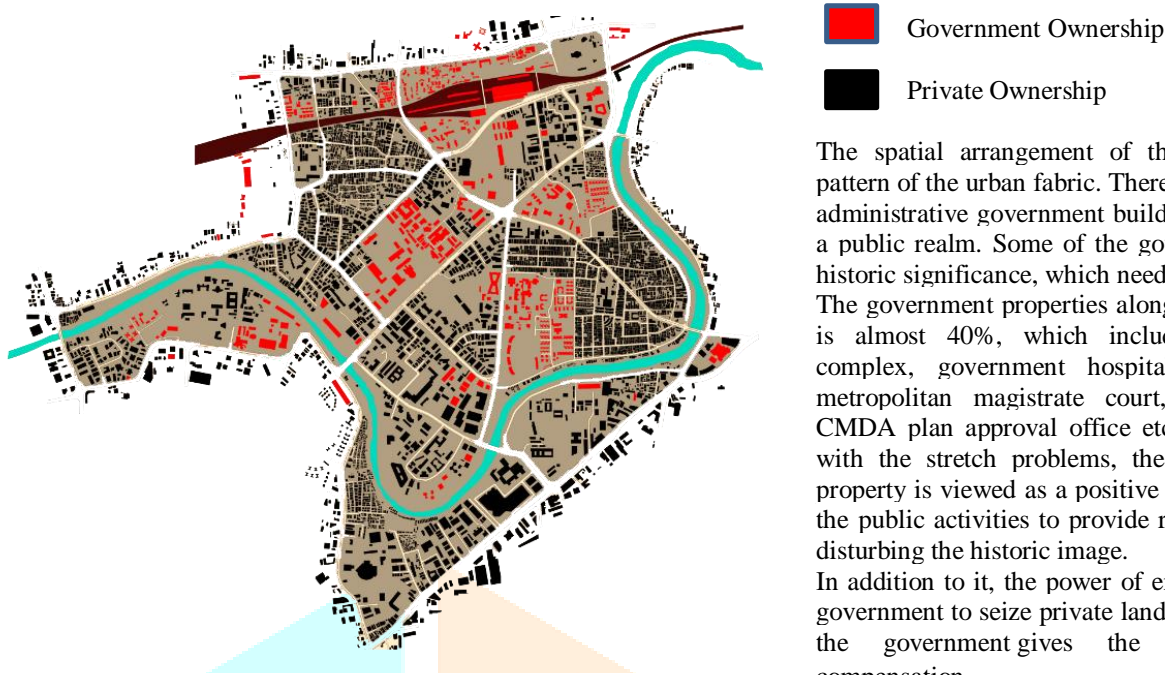


Fig-5: Government and Private Ownership (Source –Primary Survey 2020)

The spatial arrangement of these buildings, define the pattern of the urban fabric. There are significant numbers of administrative government buildings in the region which is a public realm. Some of the government buildings have a historic significance, which needs to be preserved.

The government properties along the pantheon road stretch is almost 40%, which includes government museum complex, government hospital, police hospital, chief metropolitan magistrate court, police housing colony, CMDA plan approval office etc, Therefore, when coping with the stretch problems, the existence of government property is viewed as a positive factor, which can tuck into the public activities to provide relief to the stretch without disturbing the historic image.

In addition to it, the power of eminent domain enables the government to seize private land for public purposes only if the government gives the property owner equal compensation.

but the need on this stretch is less, because the analysis is not intended to dense the stretch, but to solely on revamping of old identity with the resolution of the problems

The condemnation is regarded as the mechanism by which the government acquires private property for public good, dense the stretch, but to solely on revamping of old identity

2.4. Building Age Analysis

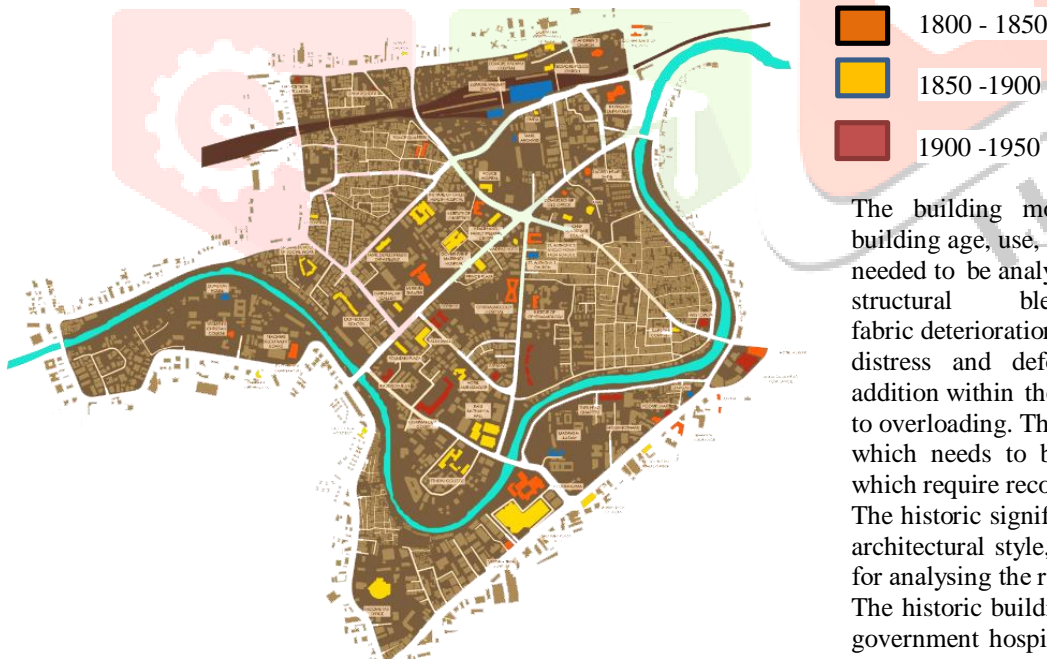


Fig -06: Age of the buildings (Source –Primary Survey 2020)

The building mortality calculated by differentiating building age, use, scale, and geographic situation and it is needed to be analyzed so as to identify the categories of structural blemishes, to spot any signs of fabric deterioration, to spot any signs of structural distress and deformation, to spot any alteration and addition within the structure, any misuse which can lead to overloading. This provides clarity on historic buildings which needs to be preserved and other building sites which require reconstruction, renovation etc.

The historic significant buildings provide information on architectural style, building material, which is important for analysing the rest of the region’s character.

The historic buildings such as Government museum and government hospital need attention to be preserved and need development to boost tourism. The private owned old residential building is regarded as essential property for reconstruction by using the incremental FSI, which

would also minimise the need to move from work to home.

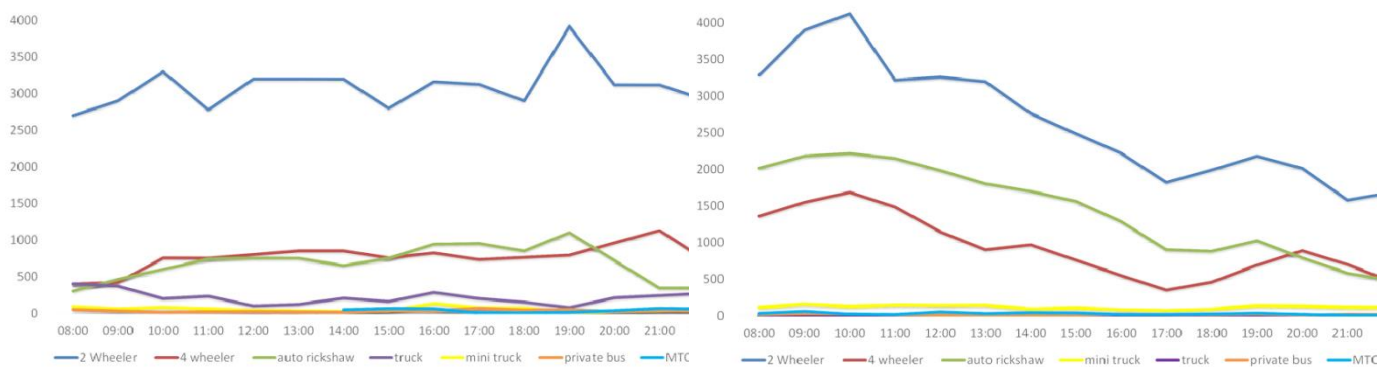
2.5. Activity Analysis



Fig-07: User based activity analysis (Source –Primary Survey 2020)

- School and college students of the stretch can be seen hanging around Pantheon road, Casa major road and Ethiraj road after school/college hours which largely contribute to the income of the hawker shop of the area.
- The growing IT culture has brought together the growing number of petty shops and hawkers in the vicinity.
- There are lot of government offices in Egmore, giving it an administrative feel. However the government employees mostly commute through train are not involved in much of street activity.
- The main recreational attractions are the museum theatre. The other spaces such as malls within the area have only regular customers walking in and yet not used as recreational space.
- There are people coming from Bengal, Calcutta and some other places visiting hospitals, mostly lodging within the stretch, which clearly states that budget hotels are needed for the stretch.

2.6. Vehicular Movement and Traffic Analysis



The movement of vehicles pause at the government hospital point

and at the two church (St. John the Baptist church and Sacred Heart Shrine Church) points, where the road width shrinks. The junction acts as lungs connecting Adithanar road to Mount road, Old Commissioners road to EVR road, Pantheon road to Chindadripet (north east) and Pantheon road to Ethiraj Salai (south west). Therefore, the chaotic junction demands intelligent solution.

III. MICRO LEVEL ANALYSIS

In the micro level study, an attempt is made to cover following given main specific objectives:

1. To analyse the processes of growth and development,
2. To inspect socio-economic characteristics,
3. To examine the availability and accessibility in infrastructure facilities,
4. To evaluate the urban problems of the region like, traffic congestion, accidents, parking, housing, commercial value etc.
5. To study the various kinds of prospects for development, and
6. To suggest the approach to solve problems of the region and to enhance the level of development.

Chart-03: Casa Mayor Road PCU

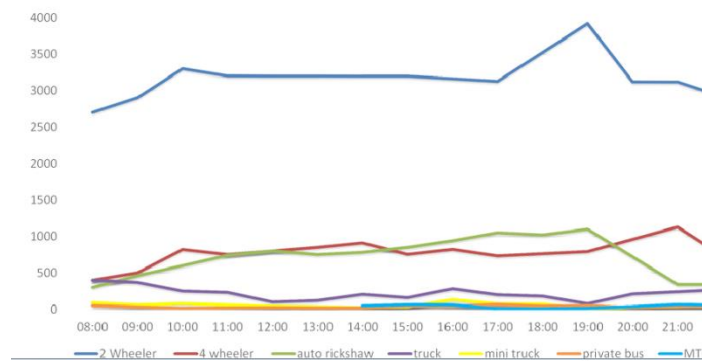


Chart-04: Adithnaar Road PCU

3.1. Observations

Pantheon road has good blend of institutional, commercial and residential development which needs to be exclusively assessed. The data collected through field work were analysed and processed in diagrammatic forms according to the requirements of the different aspects of the study.

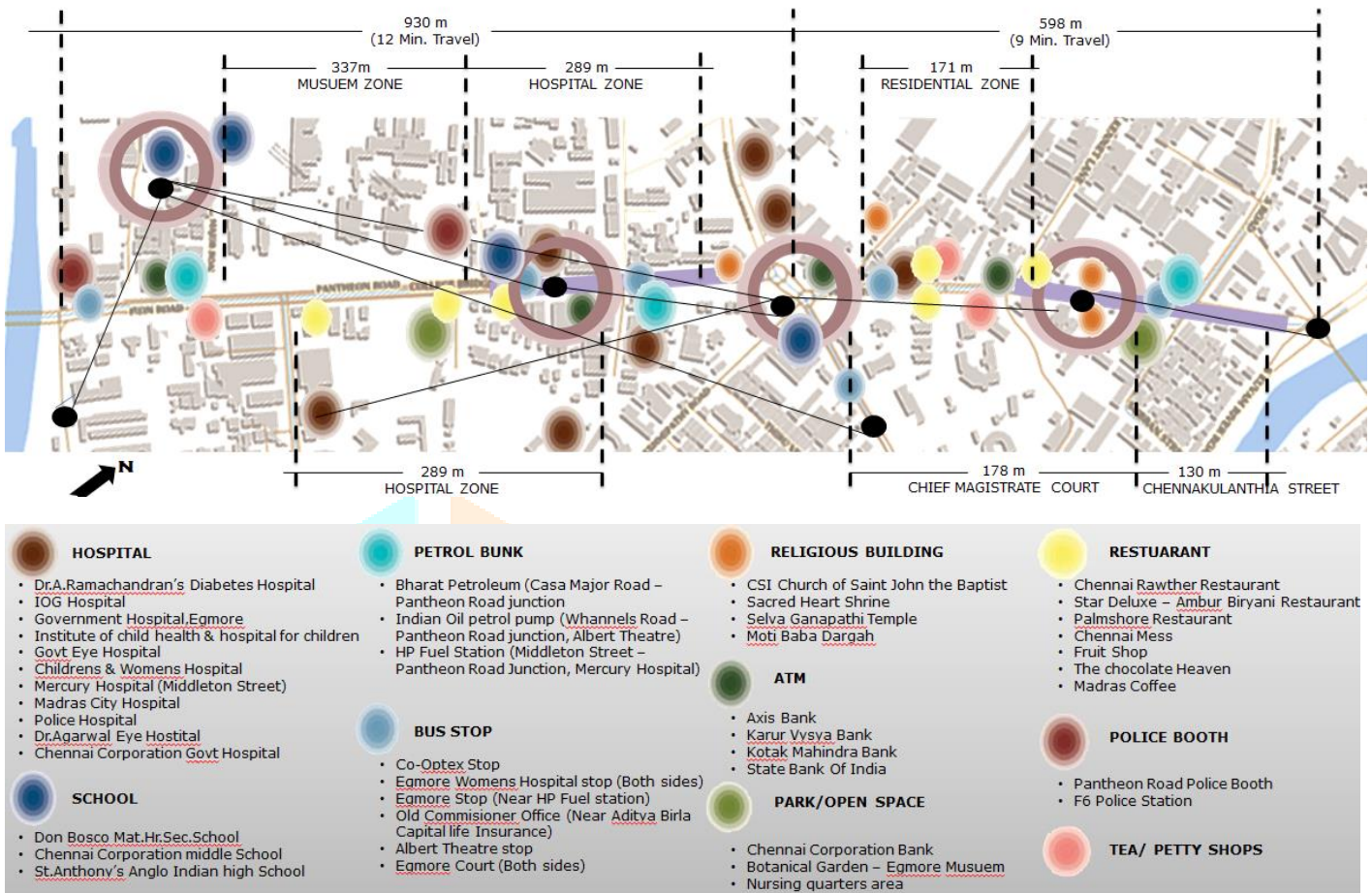


Fig-08: Map showing the micro level analysis of the commercial stretch, Pantheon Road

3.1.1. Commercial Typology

- Some of the privately owned old commercial buildings such as Fountain Plaza, Alsa Mall, Prince plaza still stands as landmark of the stretch with the old footfall but not very dense, where the rental value is very minimal of 100rs per sqft..
- Prince Plaza (G+3) which was shopping spot in the 1980's, faded and its purpose is switched to office activities.
- Pantheon road fashion street, where the shop plots are allotted by the government but temporary shelters have been constructed by the shop owners, but lacks amenities such as toilets, separate pavements for the shoppers etc.
- The other commercial G+3 buildings have a dense floating population due to many petty shops, which disrupt the overall character of the stretch.
- The Shobin Complex and the Ithru Complex (Old commercial building) G+3, which is rented for 50rs per sqft, which are vital properties for redevelopment.
- The level difference between the old buildings of the region and road is very minimal (0.45m) which puts it in risk during heavy rain.
- Pedestrian pavements fail to continue at points where commercial activities hit the road, which disturbs the vehicular movement in turn.
- Some new commercial building available with rental space of 4000sq.ft to 10000 sq.ft. Such commercial expanse seems to be the requirement of the stretch.
- Madras Hotel Ashoka (2 star hotel) of 1974 occupies around 3 acres of land along the stretch , which still houses regular footfall with nostalgic connect. The room fare is 3000rs per day.

3.1.2. Institutional Typology

- Egmore Musuem, which is 2nd oldest musuem in India & tenth oldest musuem in the world, requires special attention.
- The most dense zone of the stretch is the government hospital stretch, where people in and around faces issues with congestion, lack of amenities, lack of parking , circulation chaos etc.
- The Indo Sarcenic style which is found in the 1st stretch diminishes as moving towards north east part of Pantheon road.
- Two Church (St. John the Bapist church and Sacred Heart Shrine Chrch)placed opposite to each other requires cultural value and it also lacks basic amenities such as parking, church activity based shops which can avoid street hawkers congesting the spot.
- The Church compound lines up green cover and that makes this stretch shaded.

3.1.3. Residential Typology

- Pantheon road 1st lane apartment is in a deteriorated state, which requires redevelopment. By means of which it provides solution to parking and it also increases the number of dwelling units as well. Private property (guideline value) at Pantheon road is Rs16500 to Rs 20000 per sqft.
- Old colony style residential buildings of G+2 has wide opportunity to could expand to utilise the incremental FSI, which reduce the travel time of people employed around. Work and Home at one stretch reduce traffic influx.
- One new residential development (Stilt + 14 floors) of that area is RWD could initiate other stakeholders to develop land which has potential value. Such new developments break the skyline of the stretch at contrast. Such new development residential units cost from 2.15 crore to 350 crore. where in the old units values 88 lakhs to 1 crore. At present, the sqft charges along the pantheon road are Rs.15000 to Rs18000.
- Chennakulanthia street – Informal settlement of urban poor, where the activities spread to the Pantheon road. Central median barricades are used to dry clothes by the slum dwellers.

IV. ISSUES IDENTIFIED

The following issues were identified at the end of the study.

- A breakdown of Chennai's fashion street, Pantheon Road which is in lack of shelter, toilet facilities for the vendors.
- Don Bosco school vehicles are lined up in front of these shops, causing hindrance and it is considered as the primary node which causes traffic in this stretch during school timing.
- Although the malls at Pantheon road came into existence a few decades ago, they started to fail in a very short span of time, mainly because the shoppers seemed to have outgrown the malls. Even though the area is crowded; the malls struggle to bring enough sales.
- Wealthy neighborhoods report incomplete storm water drains, severe flooding during rains, parking of vehicles and encroachment on footpath.
- The residential zone at Pantheon road has the least amount of open space when compared and even the space underneath the Pantheon road flyover is used as dump yards.
- Lack of infrastructure facilities like sewerage, road and drainage in the unauthorized colonies.
- The Egmore Museum, which has 48 galleries and 11 sections, seems better off in terms of tourist, but the regular visitors are dwindling which is due to lack of speciality and tourism infrastructure facilities.
- Disposal of untreated waste in the Cooum River.
- The Pantheon road flyover has resulted in considerable reduction of the sidewalk width, while encroachment by street furniture, hawkers, petty shops and beggars render the sidewalk unusable on many stretches.
- The dense node, Government hospital entrance, where several activities takes place such as street hawkers selling food and other items, people waiting at the bus stop and bus stop used as resting place, the bus stop used as auto stands as well. All of these activities make the place chaotic.
- Large part of Egmore hospital was closed as it was considered unsafe to use. Even the old nurse quarters campus houses number of buildings which are dilapidated with one structure active for 80 nursing students and 10 staffs, which requires attention.
- Traffic snarls common at the junction where Adithanar Salai, Rukmini Lakshmi pathy Salai, Pantheon Road and Police Commissioner's Office Road meet, but there are also several near-misses in a day as motorists flouting basic safety rules put pedestrian lives in danger.
- There are around 150 slum dwellers along the Chennakulanthia street, where the household activity spread over the main street. All illegal encroachment with narrow streets.



Fig-09: Images demonstrating few issues of the stretch, Pantheon road

The

centers of cities have not been given adequate attention and thus are suffering from neglect, decay and many problems. Therefore, the need to establish a plan to deal with these streets to avoid the degradation and preserve its original character emerged.

The research clarifies the importance of performing initial studies before renewing the commercial streets at the historical center to know the reasons for their deterioration and then suggest the most effective method of dealing with it, in keeping with its historical value.

On overall, it proposes a technique for urban renewal of commercial streets in the city's historical centers, which is relevant and serves as a reference for making decisions. The methodology contains several procedures that can be summarized in two parts, the first is concerned with maintaining the traditional values of commercial streets, and the second is about the form of movement within the streets. In other perception, the urban renewal means revitalizing neglected urban neighborhoods through activities such as revitalization of historic neighborhoods; enhancing living standards in residential districts; redeveloping public parks, squares, urban furniture, modernizing urban infrastructure, transportation and network infrastructure.

V. CONCLUSION

commercial streets in historic

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