

SOCIO ECONOMIC IMPACT OF A WALKABLE ZONE: A CASE OF SULTANPUR CITY'S CBD

Thesis Submitted in Partial Fulfilment of the requirements
for the award of the degree of
Master of Planning (Urban Planning)

Thesis Report Submitted by:

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Under The Guidance of:

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**SCHOOL OF ARCHITECTURE & PLANNING, BABU BANARASI DAS
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4. Degree for which the thesis is submitted: **Masters in Urban Planning**
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School of Architecture and Planning
6. Thesis Preparation Guide was referred to for preparing the thesis. ☐ YES ☐ NO
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DEPARTMENT OF URBAN PLANNING

**SCHOOL OF ARCHITECTURE & PLANNING, BABU BANARASI DAS UNIVERSITY,
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Certificate

This is to certify that this thesis report titled **"SOCIO ECONOMIC IMPACT OF A WALKABLE ZONE: A CASE OF SULTANPUR CITY'S CBD"** Has been submitted by **Mr. AUPAM YADAV (1230152006)**, in partial fulfilment of the requirements for the award of the Post Graduate degree Master of Planning (with specialization in Urban Planning) to the School of Architecture & Planning, Babu Banarasi Das University, Lucknow.

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EXECUTIVE SUMMARY

This thesis **SOCIO ECONOMIC IMPACT OF A WALKABLE ZONE: A CASE OF SULTANPUR CITY'S CBD** looks at how creating a walkable zone in the heart of Sultanpur City can shape its social and economic landscape. Walkable environments are becoming increasingly important as cities try to balance growth with sustainability and inclusivity. Through this study, I set out to understand the current state of pedestrian infrastructure in Sultanpur's CBD, how a more walkable environment could benefit local businesses and property values, and how it might influence how people interact with their city.

Using a mix of data analysis, surveys, interviews, and field observations, the study reveals that while the CBD does have areas that support pedestrian activity, they often fall short in terms of safety and comfort. On the positive side, areas with better pedestrian infrastructure tend to see more foot traffic and busier shops and restaurants. Local businesses in these walkable areas have shared how pedestrian-friendly streets bring in more customers and boost sales. Property owners have also seen an increase in property values, showing that walkability can be a valuable investment for the community.

Beyond the economic aspects, walkable spaces encourage people to spend more time outside, connect with their neighbours, and enjoy a cleaner, healthier environment. To build on these benefits, the thesis recommends making sidewalks wider and more comfortable, improving crossings and public spaces, and encouraging collaboration between the public and private sectors to fund these improvements.

In essence, this research makes a strong case for investing in pedestrian infrastructure in Sultanpur City's CBD. By focusing on creating safe and inviting spaces for people to walk, Sultanpur has the opportunity to become a more vibrant, inclusive, and economically resilient city.

ACKNOWLEDGEMENTS

I owe colossally to my thesis guide Ar. Shalini Diwaker, for his diligent guidance, support, inspiration, and trust in my capabilities throughout my research and working period. He continuously encouraged me to nurture ideas and made my thesis successful. I would also like to thank, Ar. Ankita Gupta for supervising and providing me with great insights during the reviews. I take this opportunity to thank all the professionals and academicians whom I consulted for my thesis. I am highly obliged to Prof. Mohit Agrawal for sparing time from their busy schedule to assist me in my research work. I thank Pawan Kumar for their continuous support and brainstorming sessions. I thank my Parents, family and friends for extending me moral support and encouragement. I am grateful to my family for always believing in me and inspiring me to move ahead in life.

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UNDERTAKING

I, Mr. Anupam Yadav, the author of the thesis titled “**SOCIO ECONOMIC IMPACT OF A WALKABLE ZONE: A CASE OF SULTANPUR CITY’S CBD**”, hereby declare that this is an independent work of mine, carried out towards fulfilment of the requirements for the award of the Masters in Urban Planning at the Department of Architecture and Planning, BBDU, Lucknow. The work has not been submitted to any other organization / institution for the award of any Degree/Diploma.

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Chapter - 1

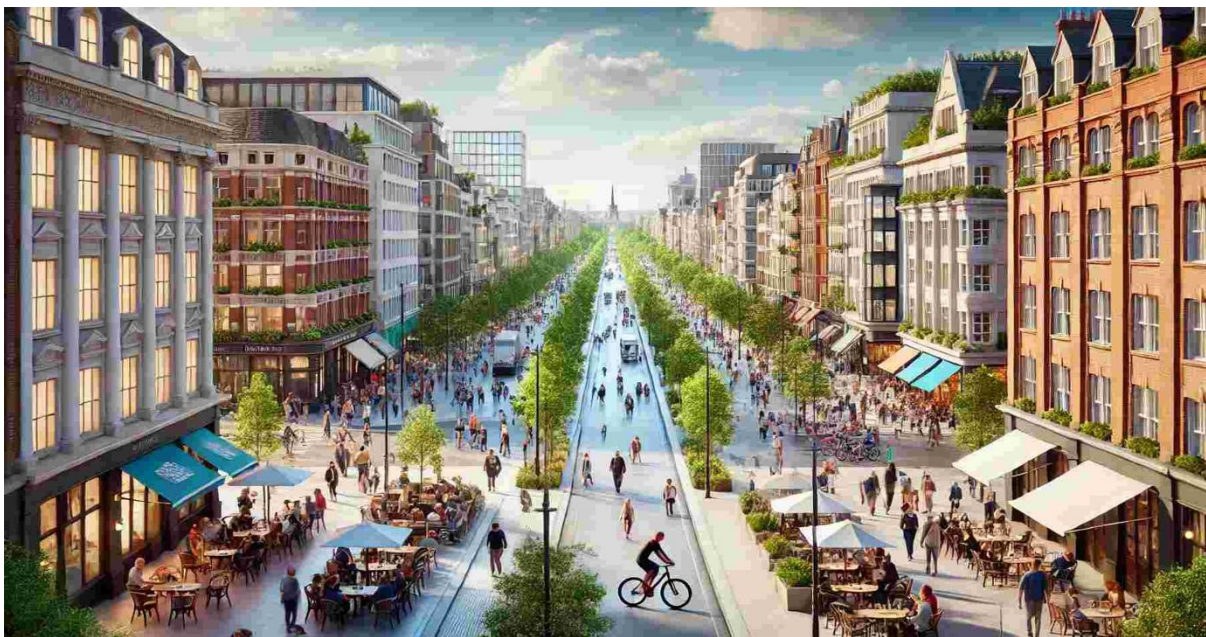
Introduction

INTRODUCTION

The idea of making cities more walkable is becoming increasingly popular as we look for ways to build communities that are both sustainable and inclusive. In particular, creating walkable zones in the heart of a city's Central Business District (CBD) can have a big impact. These areas encourage people to walk, thanks to better sidewalks, more inviting public spaces, and improved safety. But the benefits go way beyond just making it easier to get around on foot.



Source: Google



Source: Google

Walkable zones can boost local businesses by bringing more people past their doors, raise property values, and cut down on transportation costs. They also make it easier for neighbours to connect and build a sense of community. This study looks closely at how a walkable zone can bring these socio-economic benefits to life in the CBD, focusing on how it can create a healthier, more vibrant, and more resilient place to live and work. By talking to stakeholders

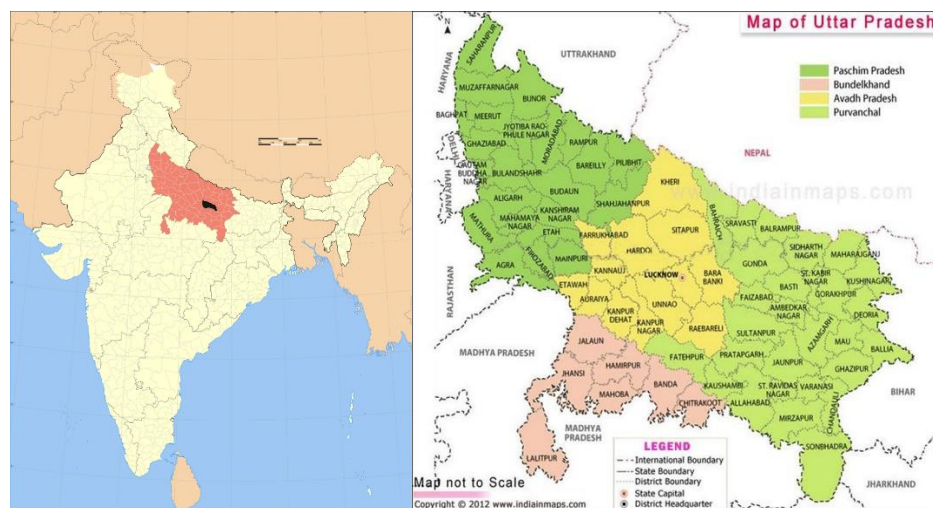
and analysing data, the research shows how thoughtful city planning can transform busy downtowns into places that are better for people and the environment.

The core concept of this thesis revolves around understanding how walkability within urban spaces can influence the social and economic fabric of a city. In particular, it focuses on the Central Business District (CBD) of Sultanpur City, where the potential for developing pedestrian-friendly zones remains largely untapped.

As urban centers in India continue to grow, issues such as traffic congestion, pollution, lack of pedestrian infrastructure, and declining public spaces have become increasingly prominent. Walkable zones are emerging as a sustainable solution to these challenges by prioritizing people over vehicles. These zones promote accessibility, safety, environmental sustainability, and vibrant street life—all of which contribute to both social well-being and economic prosperity.

This thesis seeks to explore how converting or enhancing parts of Sultanpur's CBD into walkable zones could impact local businesses, employment, property values, and community engagement. It is based on the idea that streets designed for people—not just cars—can stimulate local economies, foster healthier lifestyles, reduce environmental strain, and create inclusive urban spaces that serve a broader section of society.

By studying real-world data and examples, the thesis develops a framework for evaluating and implementing walkable zones in medium-sized Indian cities, offering a path toward more resilient and people-centered urban development.



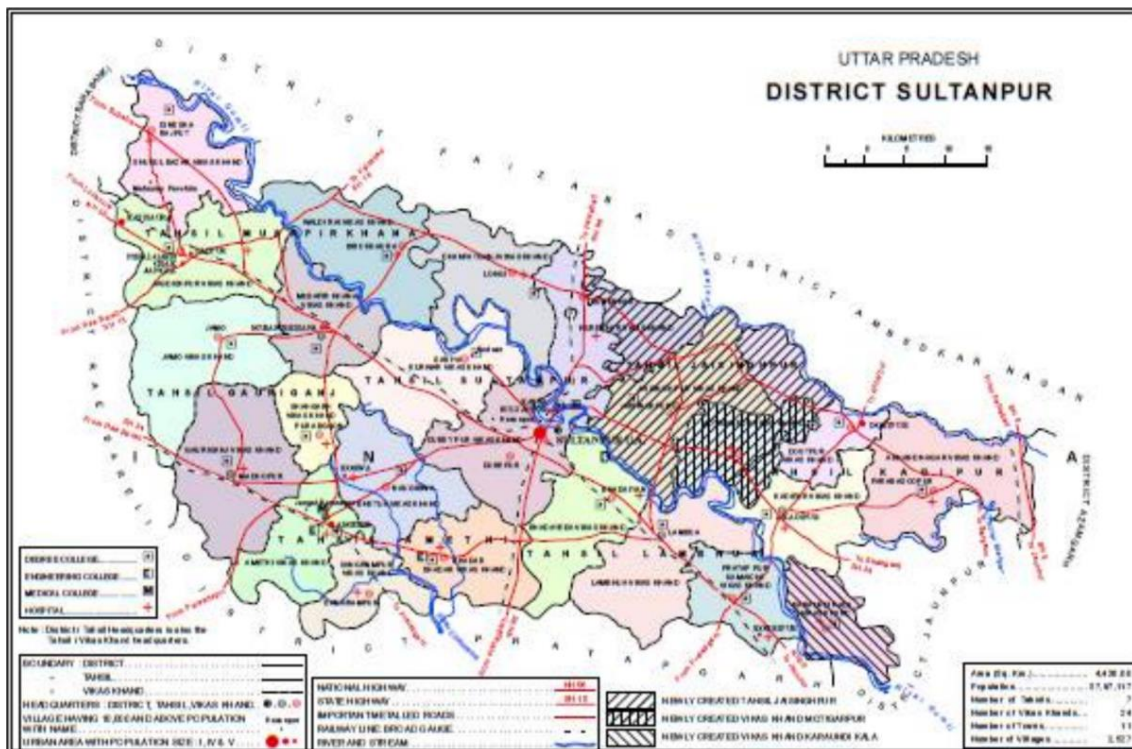
Map of India & Uttar Pradesh

Source: Google



Map of Chowk Sultanpur

Source: Google Earth



Map of Chowk Sultanpur

ABSTRACT

The shift toward pedestrian-oriented urban development has gained momentum as cities across the globe recognize the multiple benefits of walkable environments. This thesis investigates the socio-economic impact of establishing a walkable zone in the Central Business District (CBD) of Sultanpur City, a mid-sized urban center in Uttar Pradesh, India. The study aims to evaluate how pedestrian-friendly infrastructure influences economic activity, property values, social interaction, and overall urban livability.

Using a mixed-methods research design, the study combines field surveys, pedestrian volume counts, stakeholder interviews, and spatial analysis to assess the existing conditions and project the potential benefits of enhanced walkability. The findings reveal that improved pedestrian infrastructure contributes to increased foot traffic, higher sales for local businesses, improved public health, and greater community cohesion. Additionally, proximity to walkable areas positively affects real estate values and creates more inclusive public spaces.

The thesis concludes that implementing walkable zones in Sultanpur's CBD can serve as a catalyst for sustainable urban development, stimulating both economic and social growth. It provides practical recommendations for urban planners and local authorities to reimagine the city's core as a people-centric, vibrant, and economically resilient space.

AIM

The aim is to improve how people move around in Sultanpur's commercial core, making it easier and safer for everyone to walk. We'll look at how current efforts to encourage walking are doing and find ways to make it even better. This means figuring out how these pedestrian-friendly initiatives affect safety, access, businesses, and the everyday experience of people living, working, and visiting the area.

OBJECTIVES

1. Understand the current state of pedestrian infrastructure and how walkable the CBD of Sultanpur is today and explore how walkable areas affect local businesses, jobs, and property values.

safe they feel, using surveys and field visits.

3. Explore how walkable areas improve air quality, reduce noise, and promote better health by adding green spaces and landscaping to make walking more pleasant.

4. Suggest urban planning strategies to create a more walkable and inclusive CBD in Sultanpur.

Evaluate Current Walkability:

Assess the existing conditions of pedestrian infrastructure in the commercial area, including sidewalks, crossings, signage, and amenities.

Identify barriers to walkability, such as traffic congestion, lack of pedestrian facilities, and safety concerns.

Surveys and observations to understand pedestrian patterns, preferences, and behaviours in the commercial area.

Assess Economic Impact:

Examine the relationship b/w pedestrianization and local business performance, including foot traffic, sales.

Evaluate case studies from other cities that have implemented pedestrianization to draw parallels and lessons.

Identify Safety Concerns:

Evaluate accident data and safety incidents involving pedestrians in the commercial area.

Propose measures to enhance safety, such as improved lighting, signage, and traffic calming measures.

Involvement of Stakeholders and Community:

Involve local residents, business owners, and community organizations to gather diverse perspectives and insights.

Design Interventions

Design proposals are pedestrian-friendly infrastructure, including pedestrian-only zones, improved crossings, and public spaces.

Policies and initiatives that support walkability, such as zoning changes, traffic regulations, and public transport enhancements.

Environmental Benefits

The environmental impacts of increased pedestrianization, including reductions in air pollution and noise levels.

Increasing the green spaces and landscaping that enhancing the pedestrian experience.

Key Components

a. Infrastructure Changes

- **Designated Pedestrian Zones:** Establish specific areas where vehicle access is restricted or limited during peak hours.
- **Traffic Management:** Implement traffic diversion strategies and adjust traffic signals to accommodate changes.
- **Pedestrian Pathways:** Develop wide, well-maintained sidewalks, pedestrian crossings, and traffic calming measures.

- **Public Amenities:** Install benches, street lighting, signage, and landscaping to enhance the pedestrian experience.

b. Accessibility and Connectivity

- **Transport Integration:** Ensure seamless connections with public transportation, including bus stops and cycle paths.
- **Accessibility Features:** Incorporate features such as ramps and tactile paving to accommodate all users, including those with disabilities.

c. Economic and Social Impact

- **Business Support:** Provide support for local businesses during the transition, including promotional campaigns and temporary adjustments.
- **Community Engagement:** Involve local residents, business owners, and stakeholders in the planning process to address concerns and gather input.

d. Environmental and Aesthetic Enhancements

- **Green Spaces:** Create or enhance green areas, such as parks or plazas, within the pedestrian zone to improve air quality and aesthetics.
- **Sustainable Practices:** Incorporate eco-friendly materials and practices in the redevelopment of public spaces.

e. Regulatory and Enforcement Measures

- **Policy Development:** Develop and implement policies governing vehicle access, parking regulations, and enforcement mechanisms.
- **Monitoring and Evaluation:** Set up a system for monitoring the impact of pedestrianization on traffic patterns, business activity, and public satisfaction.

SCOPE

Geographical Focus:

- Centralized on **Chowk and its surrounding areas** within **Sultanpur's CBD**, which is a hub of commerce, mobility, and social activity.

Key Areas of Assessment:

1. **Pedestrian Infrastructure & Accessibility**
 - Evaluating the availability, quality, and usability of footpaths, crossings, signals, and urban furniture.
2. **Economic Impact on Local Businesses**
 - Assessing how walkability affects shop footfall, informal vending, sales volume, and job opportunities.

3. **Real Estate & Property Values**
 - Exploring correlations between improved walkability and changes in land/property value perceptions.
4. **Social & Cultural Vibrancy**
 - Understanding how a pedestrian-friendly environment enhances community interaction, safety, and inclusiveness.
5. **Mobility Behavior & Traffic Patterns**
 - Examining shifts in travel modes, congestion levels, and traffic calming as pedestrian zones are introduced.
6. **Public Perception and Stakeholder Feedback**
 - Collecting insights from residents, business owners, visitors, and municipal authorities through surveys and interviews.

Temporal Scope:

- The study covers **current walkability conditions** and uses **comparative case studies** and predictive analysis to project possible future impacts.

What the Study Does Not Cover (Out of Scope):

- Detailed environmental impact analysis (e.g., air quality measurement).
- Technical engineering design or construction feasibility.
- Broader transportation systems beyond the CBD (e.g., intercity transport).

LIMITATIONS & CHALLENGES

1. **Limited Availability of Data:**

Sultanpur, being a smaller city, lacks comprehensive and up-to-date urban mobility and economic datasets. This limited the depth of quantitative analysis, especially in areas like real estate valuation, business revenues, and pedestrian safety statistics.
2. **Short Study Duration:**

The research was conducted over a limited time frame, which restricted the ability to observe long-term impacts of walkability initiatives or to track seasonal variations in pedestrian behavior.
3. **Narrow Geographic Scope:**

The focus on the CBD of Sultanpur means the findings may not be fully generalizable to other parts of the city or other urban contexts with different demographic, economic, or spatial characteristics.
4. **Subjectivity in Perception-Based Data:**

Much of the data collected through surveys and interviews is perception-based, which may introduce bias and limit the objectivity of results regarding safety, comfort, and satisfaction.

5. Lack of Baseline for Comparison:

There was no pre-existing walkable zone in Sultanpur to compare against, requiring the thesis to rely on predictive analysis and case studies from other cities.

Challenges:

1. Community Resistance and Awareness:

Some local stakeholders and residents exhibited resistance to pedestrianization efforts due to fear of losing parking, reduced vehicle access, or disruption to traditional business practices.

2. Institutional Coordination:

Urban planning efforts in smaller cities often suffer from fragmented governance. Coordinating between municipal departments, traffic authorities, and planning bodies posed a challenge in developing integrated proposals.

3. Infrastructure and Budget Constraints:

Sultanpur lacks adequate pedestrian infrastructure, and budgetary limitations can hinder the implementation of walkable zones even if the socio-economic benefits are clear.

4. Balancing Multiple Interests:

Designing a walkable zone required balancing the needs of pedestrians, street vendors, shopkeepers, and motorists—each with conflicting priorities and concerns.

5. Urban Space Constraints:

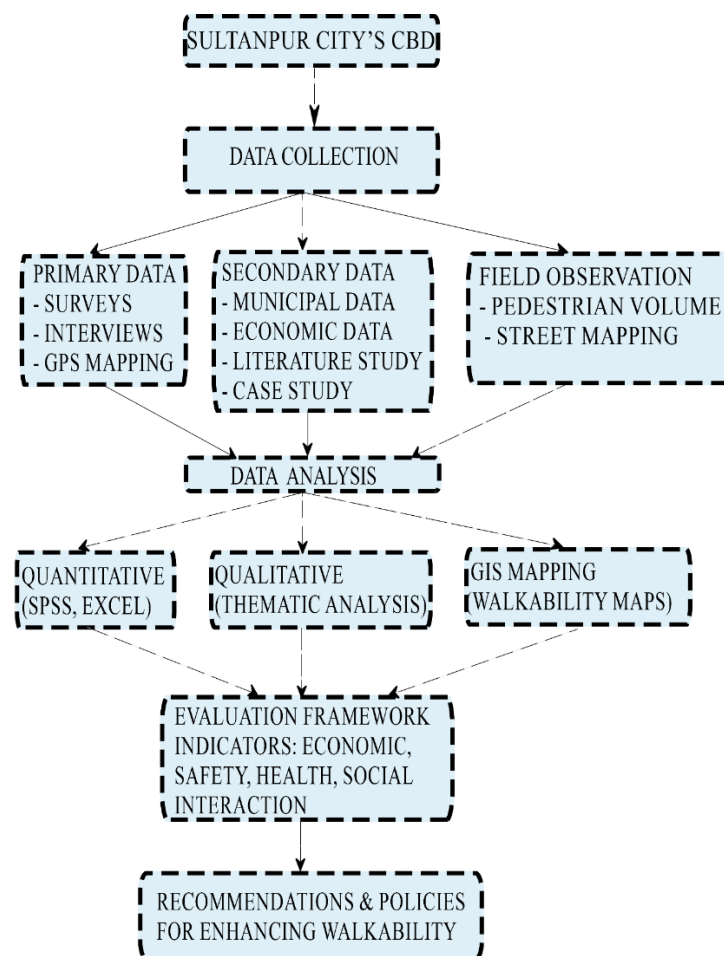
The narrow and congested nature of existing streets in Sultanpur's CBD made it difficult to envision large-scale pedestrian-only transformations without extensive redesign.

Chapter - 2

Methodology

METHODOLOGY

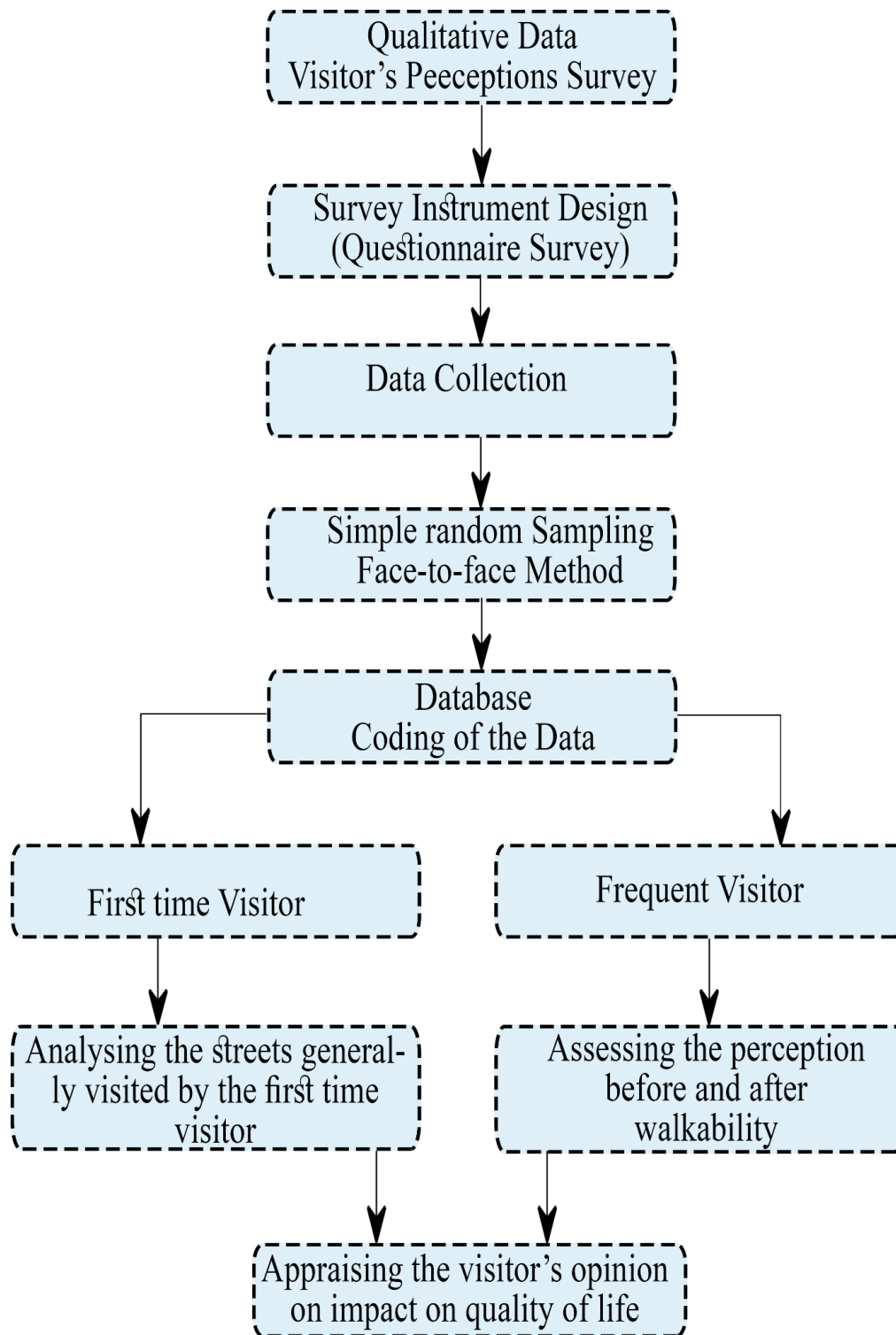
A street designed to cater to the needs of all users and uses, through equitable allocation of road space is considered as a “complete street”. Drafting a methodology for the design of complete street is complex owing to the several stakeholders involved in the design and implementation process. Though there are guidelines available for design of pedestrian infrastructure and performance evaluation of the same, hardly any guidelines are available in India which describes how to perform complete street studies. The scope of this study is limited to making an assessment of the existing scenario post implementation of the project and to quantify the impact. A methodology has been drafted accordingly to meet the scope of the study and the same is depicted in the following chart.



FLOW CHART SHOWING METHODOLOGY

1	Design Aspect	Improvement in the street layout in terms of design, amenities and other facilities	
2	Pedestrian Studies	Pedestrian Usage	<ul style="list-style-type: none"> • Pedestrian volume count survey - 24 hours survey on 9 days [5 weekday and 2 weekends]
		Pedestrian Sidewalk service	<ul style="list-style-type: none"> • Pedestrian flow studies • Peak Hours • Pedestrian Level of Service [PLoS]
		Pedestrian Comfort	<ul style="list-style-type: none"> • Qualitative Assessment • Walkability Index [WI]
3	Bicycle and Motor vehicle Studies	Vehicle Usage	<ul style="list-style-type: none"> • Vehicle volume count survey - 24 hours survey on 9 days [5 weekday and 2 weekends]
		Speed	<ul style="list-style-type: none"> • Travel time studies
4	Parking Studies	Parking Usage	<ul style="list-style-type: none"> • Identification of parking facilities • On-street parking surveys • Parking demand of street • Parking lot utilization
5	Adjacent land use and activities	Street activities and nature	<ul style="list-style-type: none"> • Shops/residence etc.
6	Public Opinion Survey	Users opinion on project	<ul style="list-style-type: none"> • Pedestrians • Motor vehicles • Land use owners/shops • Bicyclists • Residents

PROPOSED STUDIES/DATA COLLECTION



FLOW CHART FOR VISITOR'S OPINION

Chapter - 3
CASE STUDY &
LITERATURE STUDY

CASESTUDY & LITERATURE STUDY

M.G. ROAD GANGTOK

Gangtok, the Sikkim capital & an administrative hub of Sikkim, situated at the north eastern of India. At an height of approx 5,500 ft (1650 meters.) MG Marg, named after Mahatma Gandhi is a plaza-like main market area of Gangtok and is a prominent highlight of Sikkim's tourism industry, it is around 60 feet wide no-vehicular zone. The street is flanked by posh shops, cafes and restaurants on both sides, with hundreds of people moving across or sitting on the benches, this half kilometre long pedestrian stretch acts as a major hub of social interactions. People go around buying, dining, relaxing and taking leisure walks across the street. The entire area is a litter-free and smoke-free zone. MG Marg is also known as 'London Street' because of the ambience created by Victorian-style street lights, paved pathways and bakery shops across the street.

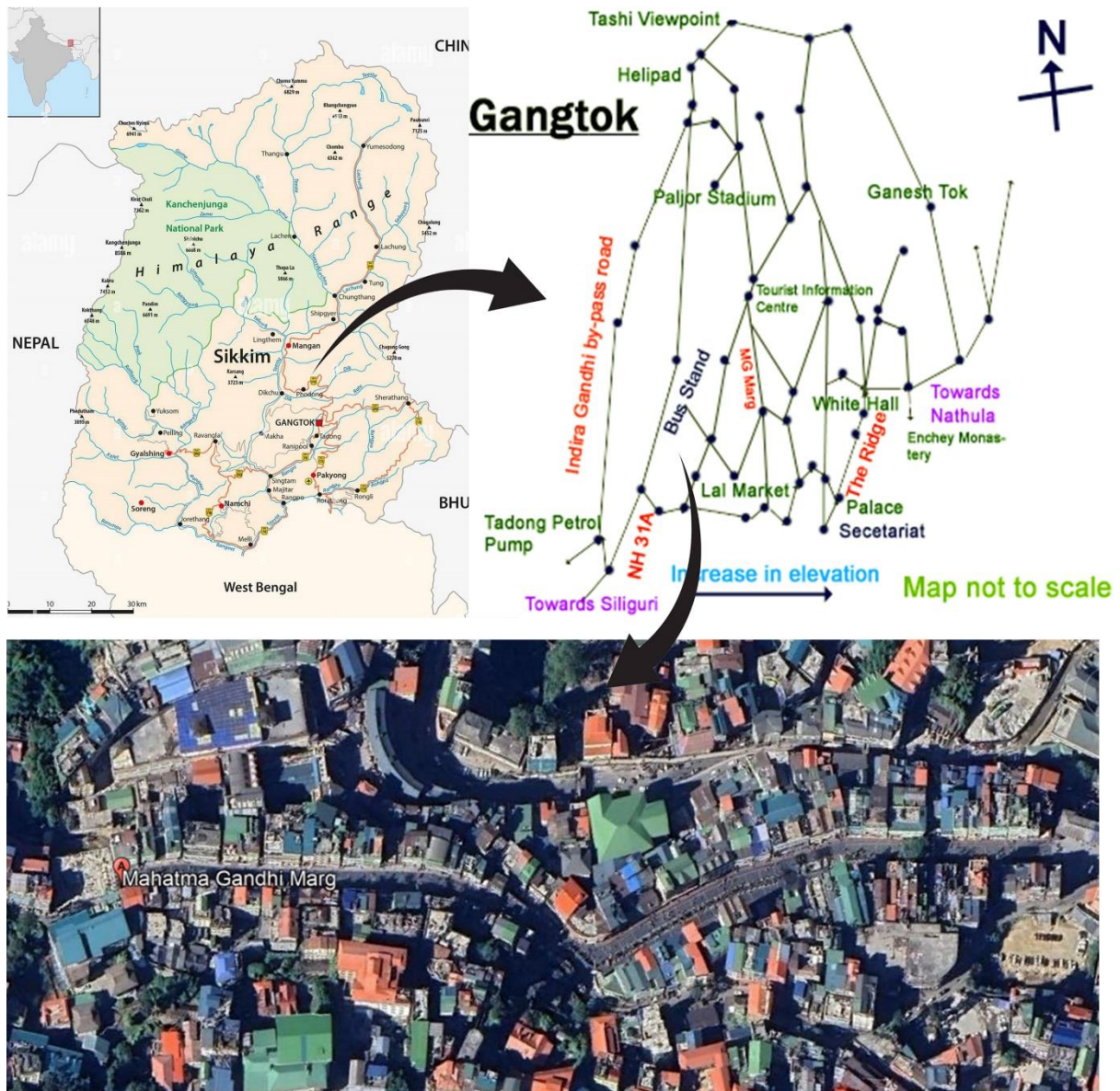


Namnang Road diversion that gives access to MG Marg

Accessibility — MG Marg is accessible from Namnang Road which is a major road passing through the city. The road diverges into two separate roads just a few metres before the start of MG Marg.

Throughout the middle of MG Marg, planters and pots have been placed on a slightly raised band. The big planters hold short-height conifer trees, small pots are planted with seasonal

flowering plants while middle-sized planters have dwarf conifer shrubs in them. Most of these plants have low-water requirements and tolerance for cold weather and winds.



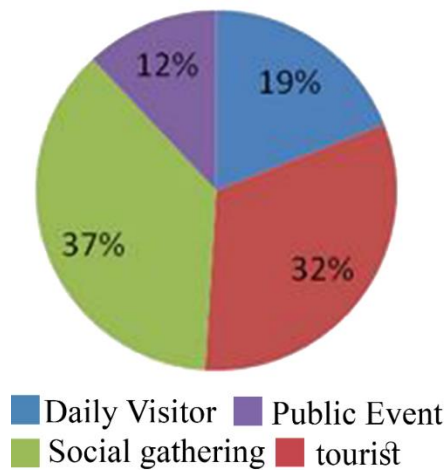
Area - 954 Sq.Km.

Population - 283583

Languages - Nepali, Sikkimese, Lepcha, tamang, Limbu, Rai, Newari, Gurung, Magar, Sunwar and English

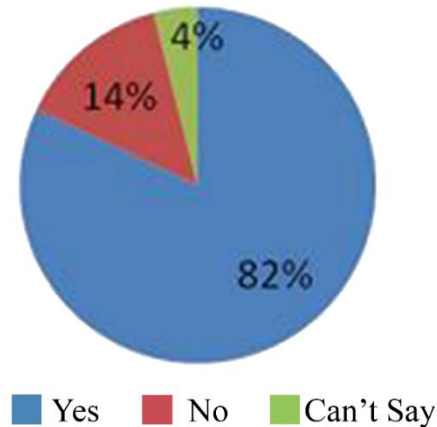
Survey analysis

Purpose of visit



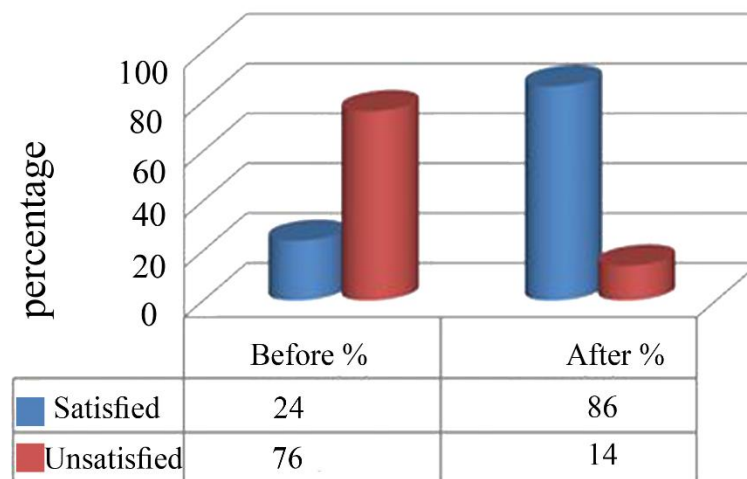
Most of the visitors who come to mg road are daily visitors followed by tourist that is 32 % and least are the people who come for public event that is only 12 %.

Merachant opinion regarding the benifitted due to pedistrianisation



Response of the merchant regarding the benefitted due to pedestrianisation is as 82 % say its positive response and 14 % says its negative response where as 4 % merchants have no idea .

Satisfactory level(Public)



It was a survey in the public about their satisfaction level regarding this area before it became pedestrianised and after the responses are as 76 % people were not satisfied before its pedestrianised and after it became pedestrianised 86 % people were satisfied.



Starting of MG Marg facing the main road



Planters & pots of different shapes, sizes & designs



Fixed benches bolted to the ground.





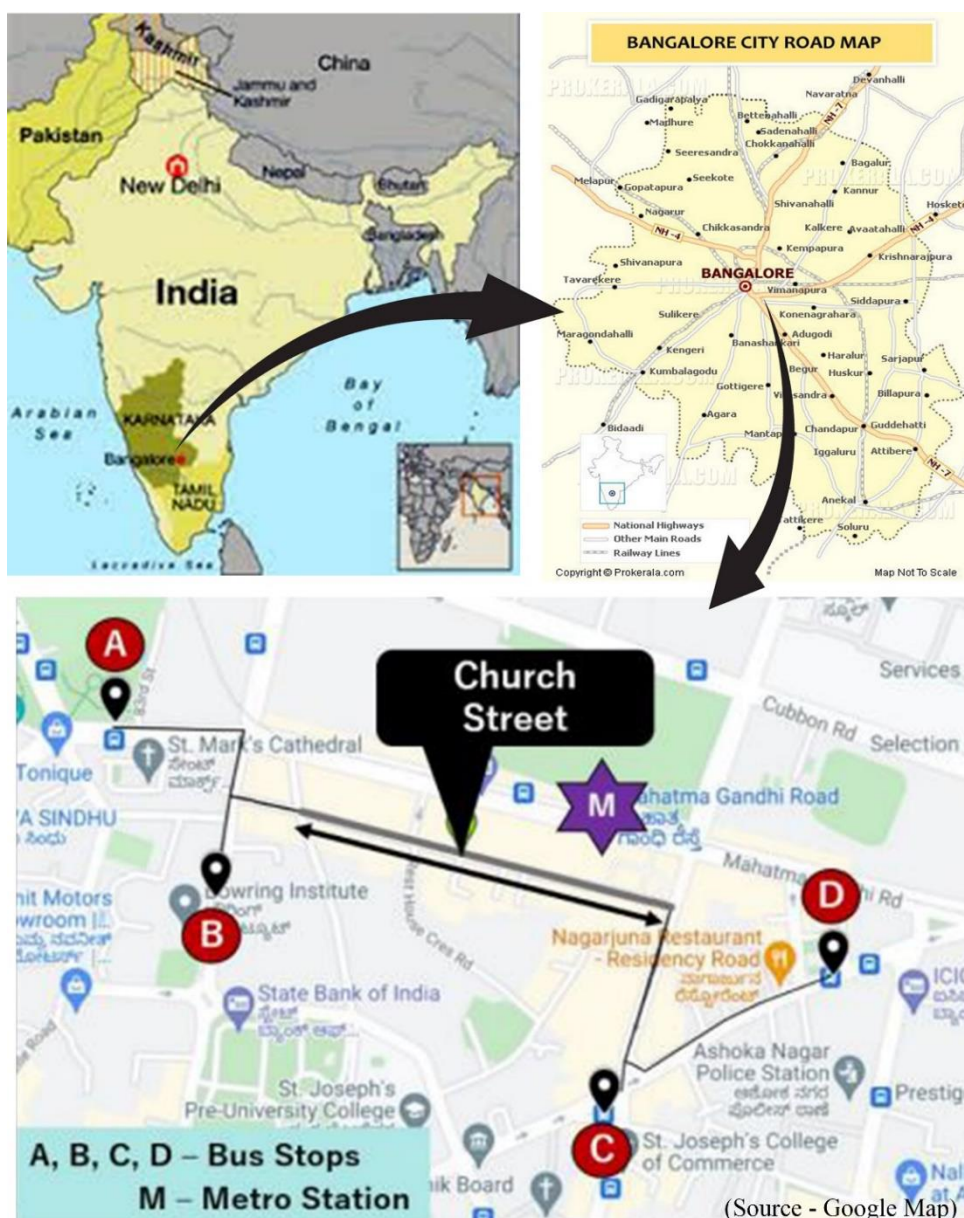
1. Increased interest among tourists to visit the pedestrian only zones due to easier, safer, and more comfortable movement
2. Increased sales and benefit for the merchants due to increase in visitors, as pedestrians require far less space than cars
3. Lower pollution levels (both air and noise) at pedestrian only zones
4. More independent movement and active play amongst the children
5. Less land taken for parking and roads – more land available for green or social space

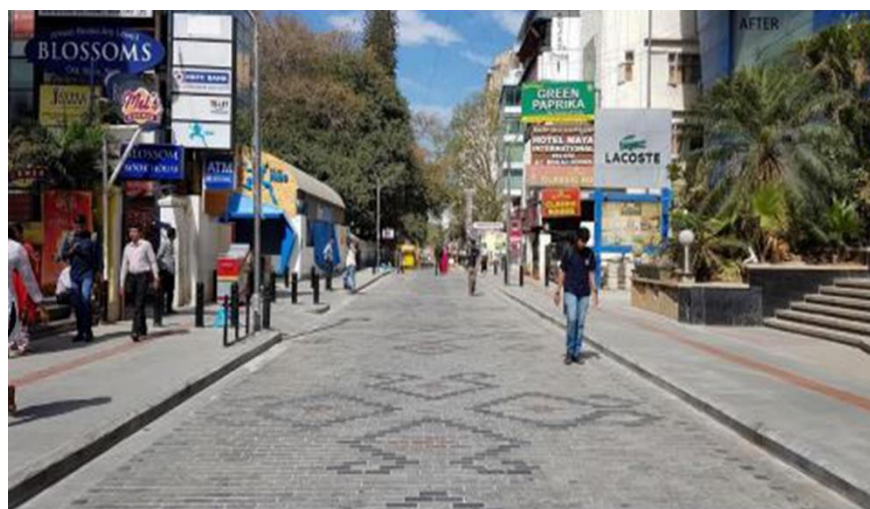
CHURCH STREET BANGLORE

Church Street is one of the busiest streets in Bangalore's Central Business District. Church street is between Brigade Road and St.Mark's Road, which runs parallel to M.G Road, and its distance is 750 metre. The street is a "tourist hot point" and one of the city's key revenue generators.

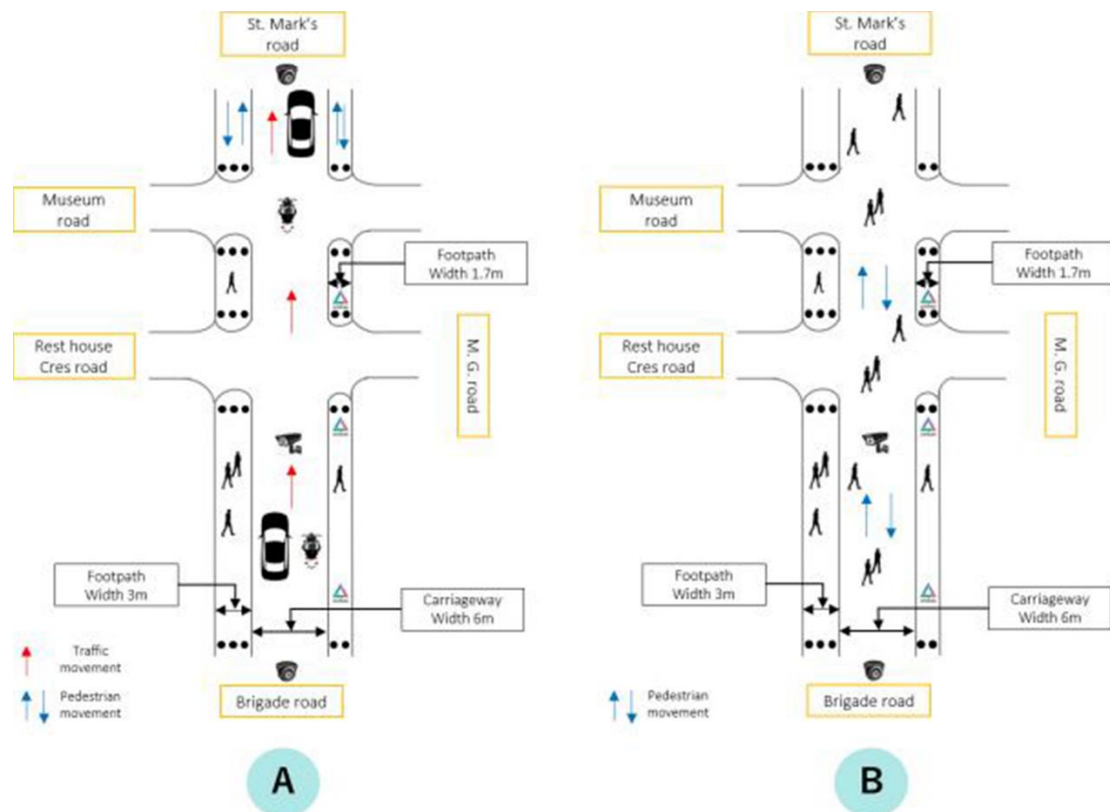
It is a good example of Pedestrian- friendly roads. It has commercial establishments on either side of the streets in the form of shops, restaurants. It has metro station entry. Sidewalks for pedestrian movement and street though meant for pedestrian allows light vehicles.

buildings. Commercial streets traditionally had all the parameters of public space like children's playing, women chatting and even merchants were playing.

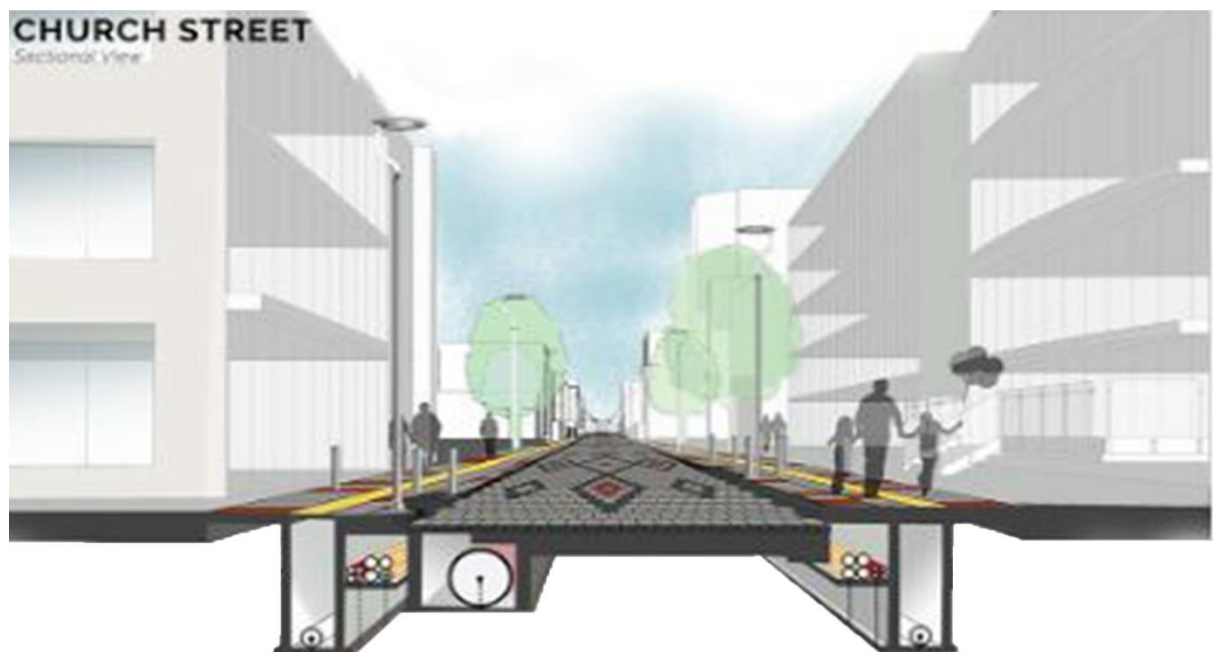




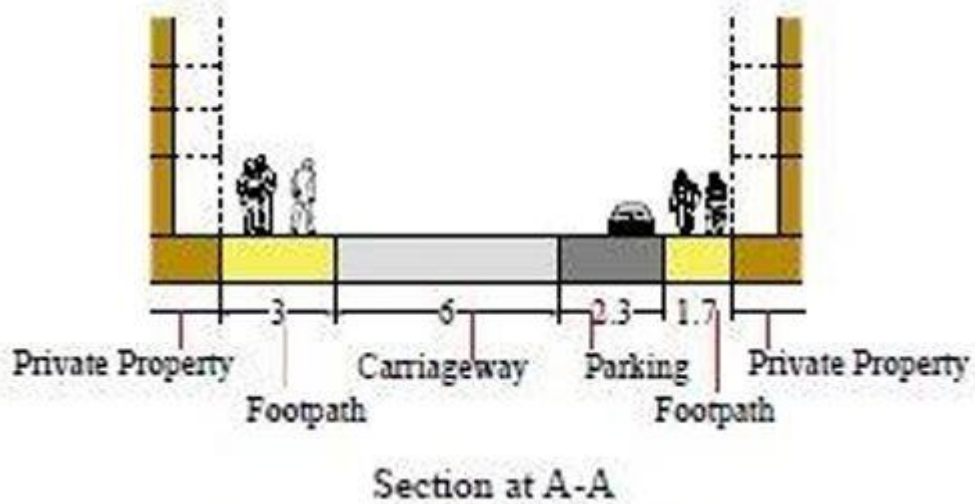
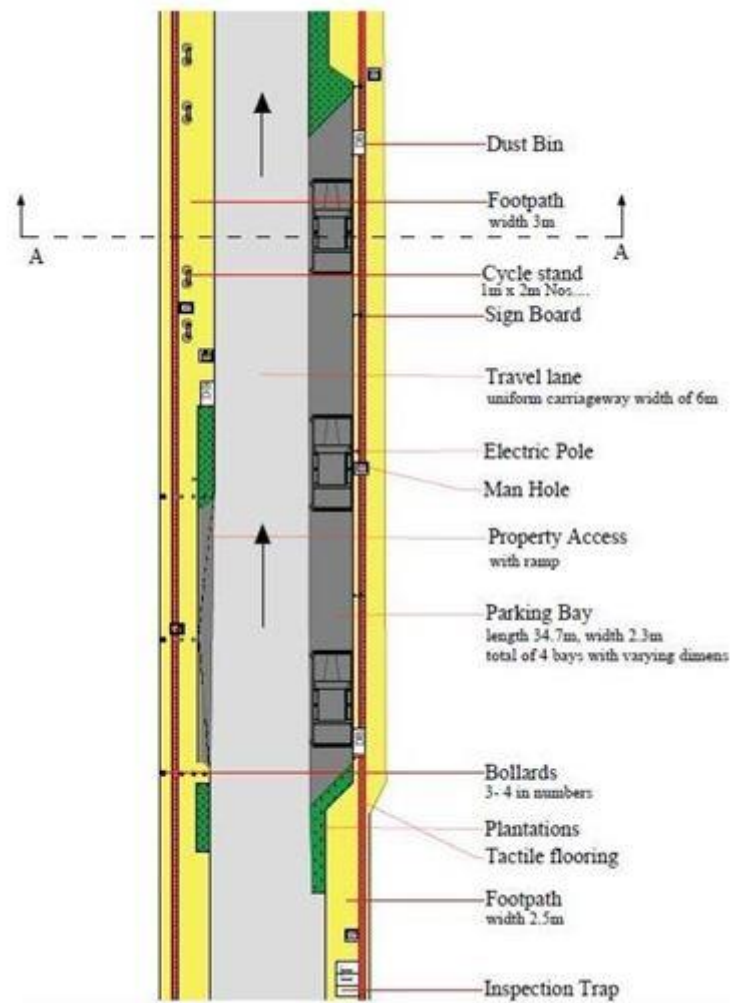
Church Street Before & After

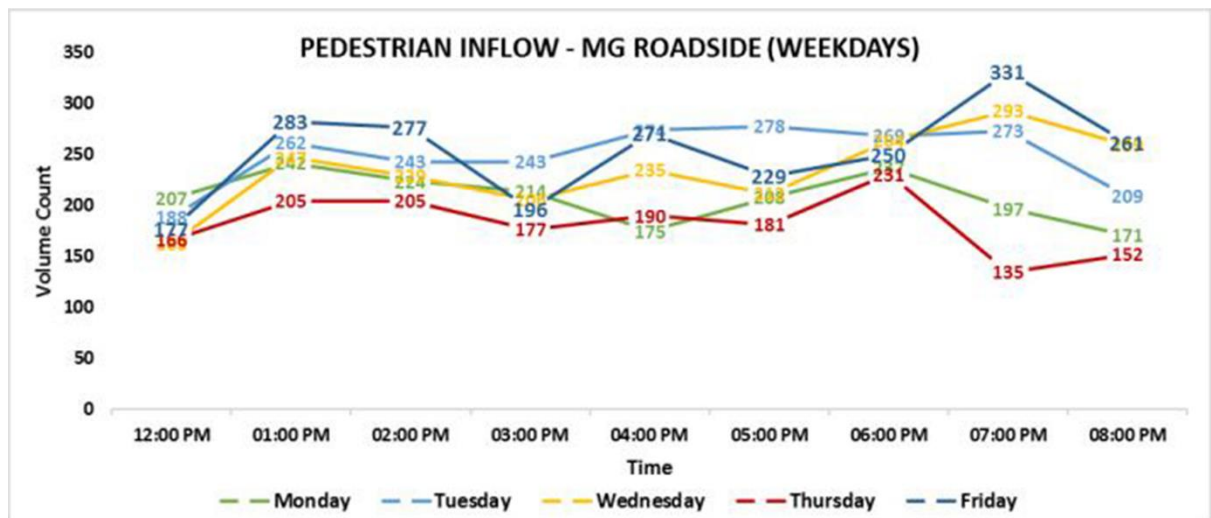


Church Street Before & After

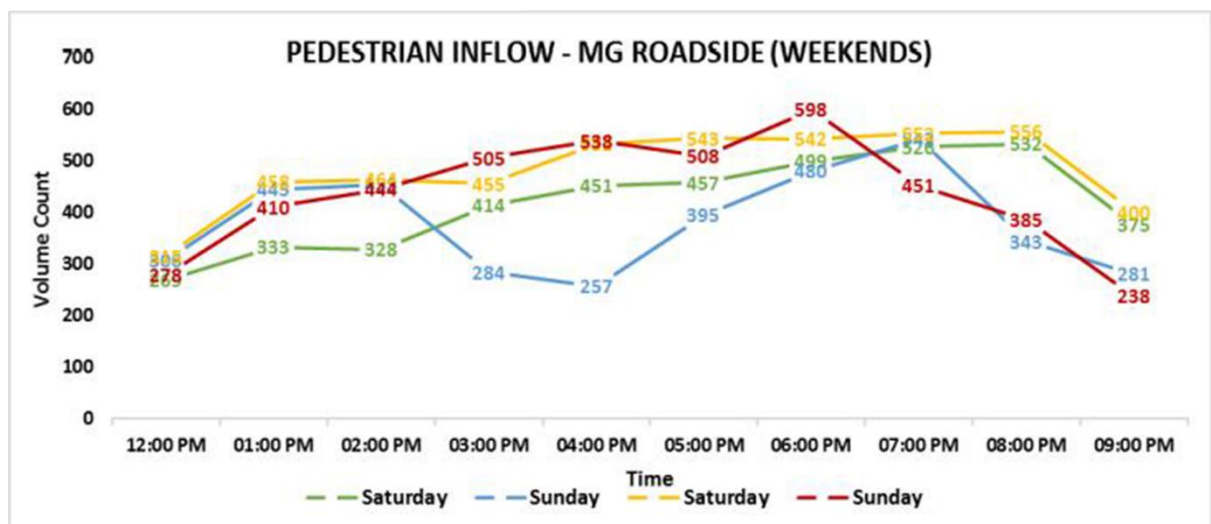


Street Section Of Church Street





Pedestrian Inflow Movement from MG Road on Weekdays



Pedestrian Inflow Movement from MG Road on Weekends

1. Residents of Church Street were given passes for their vehicles to enter Church Street on weekends during pedestrianization.
2. There are two cut roads within the study stretch.
3. On a regular day, the street is a one-way street, and the traffic flows from Brigade Road to St. Marks Road. The street has eight parking bays (varying capacity) for both two wheelers and cars, mostly occupied in total capacity.

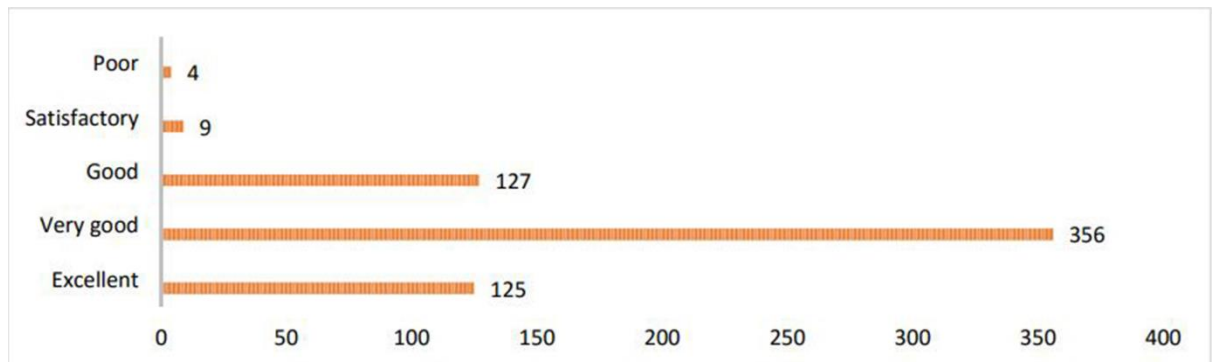


Outdoor Dining Of Church Street



View Of Church Street

USER'S WALKING COMFORT



Overall walking experiences of pedestrian users on the redesigned street, 97% rated their experience as good quality.

Stroget, Copenhagen Denmark

The neo-classical architecture developed in the 1800s provides the city with an identity. Until 1962, all the streets and squares of central Copenhagen were used intensively for vehicle traffic and parking, and were under pressure from the rapidly growing fleet of private vehicles.

The pedestrianization of Copenhagen began with the city's main street, Strøget, which was converted in 1962 as an experiment. The conversion of the 1.15 km-long main street into a pedestrian street was seen as a pioneering effort, which gave rise to much public debate before the street was converted. "Pedestrian streets will never work in Scandinavia" was one theory. "No cars means no customers and no customers means no business," said local business owners. "don't tell anyone, no-one will notice it," Gehl said" (CPHpost (n.d.))

Population: 0.5 million Length: 1.15 km (0.7 mi)

Right-of-Way: 10–12 m Context: Mixed-use

Maintenance: Several repavings since 1963



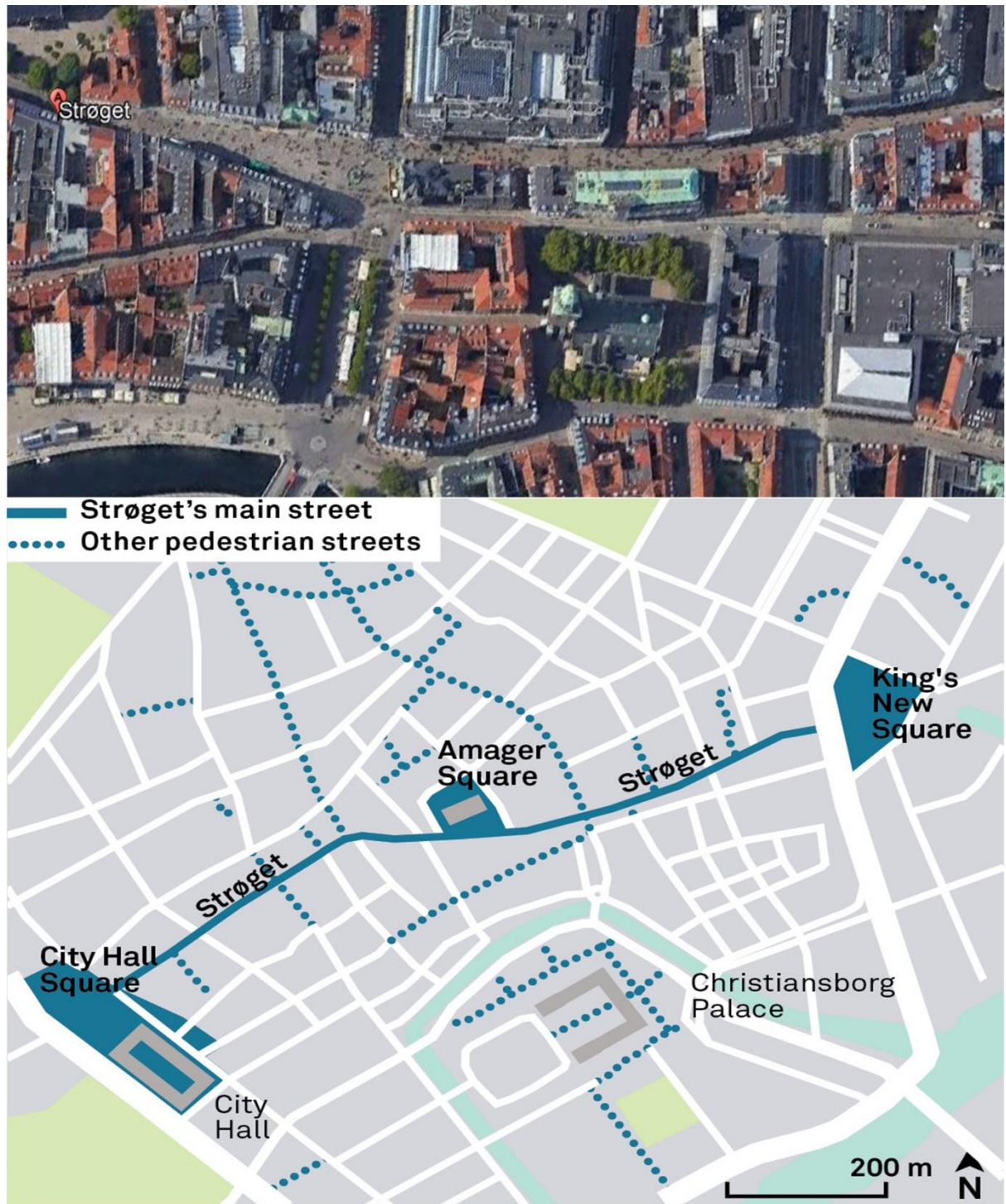
Copenhagen Before 1962

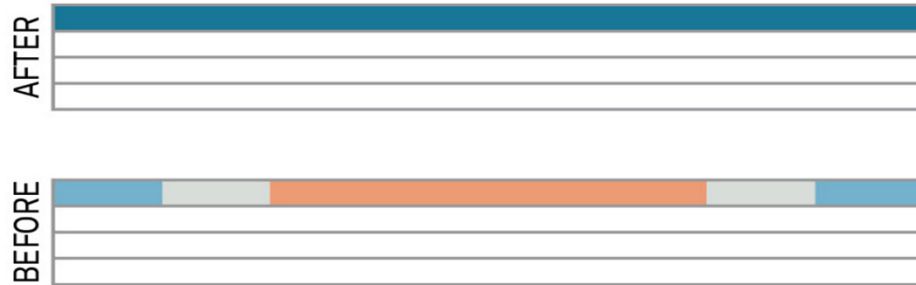
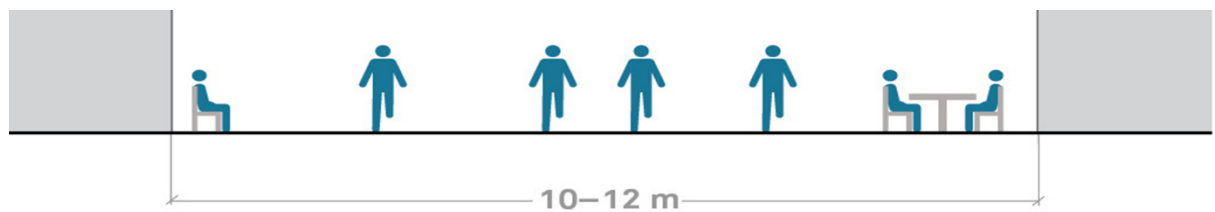


Copenhagen today

Key Elements

1. Removal of all traffic from the street.
2. Removal of curbs and sidewalks, addition of new paving.
3. Consolidation of street furniture to facilitate pedestrian movement.





User legend:

 Pedestrian space	 Mixed traffic
	 Parking

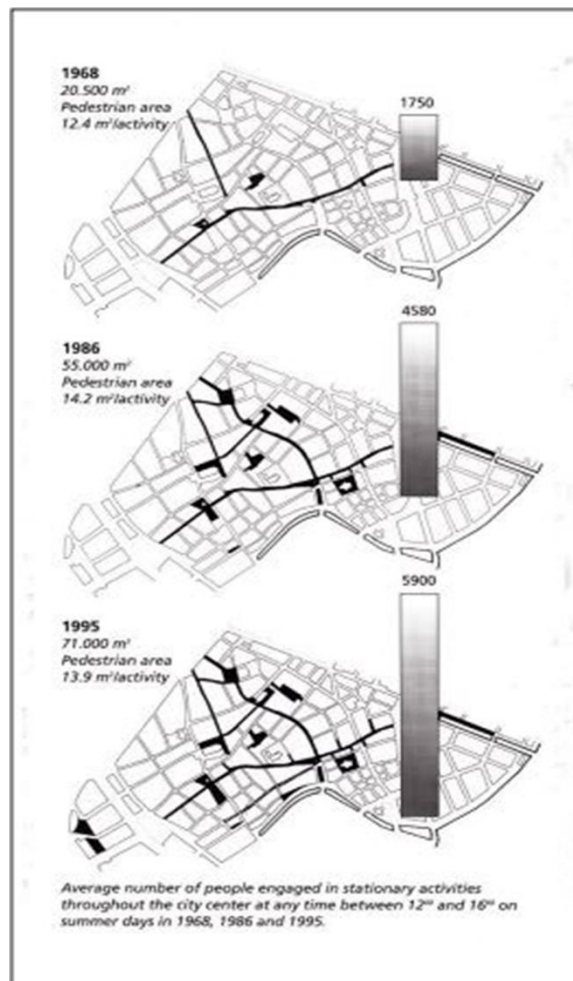
Street Section Of Stroget, Copenhagen

Goals

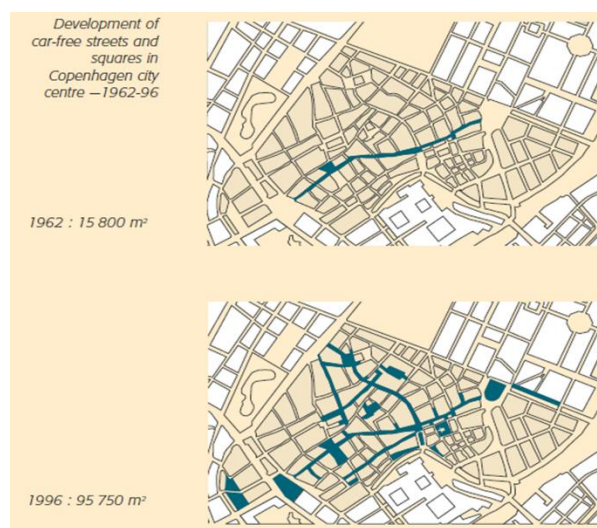
1. Improve connectivity in the city center.
2. Provide a high-quality and attractive environment.
3. Create a space that supports businesses.
4. Encourage a diverse range of people to live and spend time in the city center.
5. Revitalize the city's forgotten alleyways by turning them into vibrant laneways.



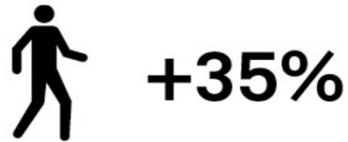
The 1.1km street in context of Copenhagen



More car-free spaces from 1968 to 1996



Map showing gradual pedestrianisation of streets in Copenhagen



Increase in pedestrian volumes in the first year after the conversion.



Increase in pedestrian space, from 15,800 m² in 1962 to 99,700 m² in 2005.



Increase in outdoor café seating, from 2,970 seats in 1986 to 7,020 in 2006.



Increase in stopping and staying activities from 1968 to 1996.



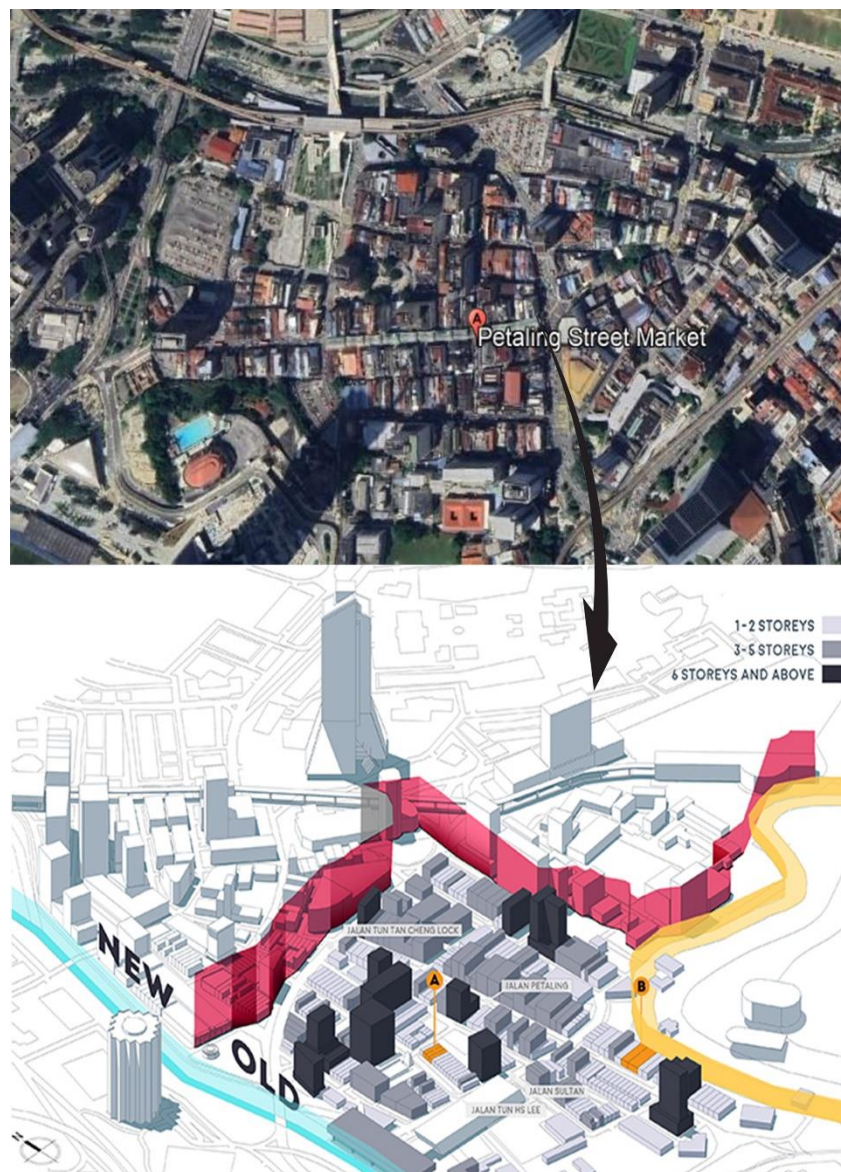
Increase in citywide pedestrian volumes to 15 min/day on average.

Conclusion

1. This pedestrianization created peaceful, yet lively, public spaces.
2. Strøget also proved that pedestrian streets can increase revenue for local retailers.
3. Establish the importance of a network of streets to enable the city to function.
4. Pedestrianised, connected streets encourage movement through the city, but it is mixed-use amenities and active edges which provide opportunity for engagement and interaction.
5. Enclosure through street form and natural surveillance make people feel safe.

Petaling Street, Kuala Lumpur

Petaling Street in Kuala Lumpur, also known as Chinatown, is facing threats to its cultural heritage from urbanization. As the area modernizes and develops economically, it is losing many aspects of its traditional Chinese culture and the architectural integrity of its historic buildings. Foreign workers now outnumber Chinese residents and traditional trades are being replaced. The area's designation as a heritage zone has not stopped deterioration of building facades and loss of cultural practices. The market is near numerous cultural landmarks including one of the largest mosques in Kuala Lumpur, Masjid Jamek, and Sri Maha Mariamman Temple, home of the Hindu Lord Murugan's Chariot. Petaling Street has many designated seating areas for eating and socializing, and it is well protected from the sun. The surrounding city is relatively blocked from sight, allowing market goers and vendors to fully immerse in the dynamic life of Petaling Street.



OLD

AND

NEW

1. The area of Jalan Petaling is maintained as it is because cultural and historical values.
2. A clear division between the facades of the old and new along Jalan Tun Tan Cheng Lok can be observed.



Petaling Street Before and After



Entrance of Petaling Street



Cross section across back lane of Penjaja Tun H.S Lee

BUILDING

1. Site A is surrounded with high rise buildings which makes lower building to blend easily in the skyline.
- 4 or more levels has potential to stand out from the buildings in the area

ISSUES

1. Overprice car parking
2. No proper way for rubbish truck
3. hawkers stall disturpt vehicle circulation.
4. Homeless people sleeping on side walks
5. Privatisation of public area.
6. Traffic Congestion causing sound pollution
7. lack of street lights
8. Lack of vegetation



BUILDING FUNCTION

1. Site A & B are dominated by shophouses with various functions.
2. Site A will be crowded as the most of the activities are happening nearby.
3. Site B is closed to the institutional & its reported to be less secure to be on the street at night.

CONCLUSION

1. The Entrance of Petaling Street acts as a focal point along the street and attracts the tourist.
walkability increases.

COMPRATIVE ANALYSIS

Street	Location	Economic Impact	Social Impact	Property Values	Design/Policy Notes
M.G. Road	Gangtok, India	Signitican increase in toot traffic and local business revenue fretail, dining, tourism-focused sho-	Vibrant gathering space for residents and tourists increased cultural activity.	Cleaner air and quieter street due to no vahicular traffic.	Carefully designed pedestrian-only zone integrated into city's tourism economy.
Church Street	Bengaluru, India	Marked increase in customer visitafor cafes, restaurants, and local retail revitalized econonic	Strengthened sense of commun-ity and inclusivity, more social gatherings.	Improved air quality and reduced noise pollution, more comfortable ermi-ronvment.	Cleaner air and quieter street sluo improved public s-pace.
Stroget	Copenhagen, Denmark	Thriving commercial activity with global and local businesses major contributor to city's economic vibrancy	Major public space fostering cultural events and social life, highly inclu-spec atmosphere,	Major reduction in car-related pollution Healthier, active urban lifestyles.	World-class example of pedestrianization well-integrated with public transit, faccessible to all.
etaling Street	Kuala Lumpur Malaysia	Boost in retall sales and tourism-related spending wuh, pre-served market cul-ture.	Enhanced sense of place and her-itage preservation Social vibrancy of a traditional market area	Improved walkability and reduced vehicle congestion, though challenges with maintaining traditional uses.	Partial pedestrianization balancing pedestrian comfort with traditio-nal street market

Chapter - 4

CITY PROFILE

CASE AREA SULTANPUR

The city of Sultanpur (which gives its name to the district) lies in latitude 26 degree 15 minutes north and longitude 82 degree 05 minutes east on the right bank of Gomti about 61 km south of Faizabad, 42 km north of Pratapgarh and 138 km south-east of Lucknow. It is on the branch line of Lucknow-Jaunpur section of the Northern Railway (broad gauge) passing through Sultanpur, Jafrabad and Jaunpur. Another branch line of the same railway connects it with Faizabad and Allahabad. Metalled road connects it Faizabad, Shahganj (district Jaunpur), Jaunpur, Pratapgarh, Raebareli and Lucknow. District road connects Sultanpur with Amethi. The original town was situated on the left bank of the Gomti. It is said to have been founded by Kusa, son of Rama, and to have been named after him Kusapura or Kusabhavanpur. This ancient city has been identified by General Cunningham with the Kusapur mentioned by Hiuentasang, the Chinese traveller. He states that there was in his time a dilapidated stupa of Ashoka and that Buddha taught here for six months. There are Buddhist remains still visible at Mahmoodpur, a village, 8 km distant to the north-west of Sultanpur. The town subsequently fell into the hands of Bhars, who retained it until it was taken from them by Musalmans in the 12th century. About seven hundred and fifty years ago, it is said, two brothers, Sayid Muhammad and Sayid Ala-ud-Din, horse dealer by profession, visited eastern Avadh and offered some horses for sale to Bhar Chieftains of Kusabhavanpur, who seized the horses and put the two brothers to death. This came to the ear of Ala-ud-Din Khilji, who would not allow such an outrage to pass unpunished. Gathering a mighty force, therefore, he set out for Kusabhavanpur and took revenge by killing most of the Bhars by strategem adopted after a long drawn siege. Kusabhavanpur was reduced to ashes and the town of Sultanpur, so called from the rank of the victor, rose upon its ruins. This town was finally raised to the ground during the military operations connected with the reoccupation of the province in consequence of the inhabitants having been concerned in the murder of British officers at the outbreak of the freedom struggle of 1857. Before annexation a military station and cantonment were established on the right bank of the river in a village then known as Girghit but more commonly called by officials Sultanpur or Chhaoni Sarkar and by the rustic population Kampu or the Camp. The present town of the Sultanpur has been developed at this site. In this city there are two parks, one maintained by Soldiers', Sailors' and Airmen's board and other privately maintained known as Chimanlal Park. A library called Vinayak Mehta library, aided by Municipal Board is the only library in the city. It is run by the Vinayak Mehta Library Trust Association and contains over 10,000 books.

In Chowk there is a clock tower. On the bank of Gomti is Sitakund, where Sita bathed as she accompanied her husband (the Lord Rama) on his exile. Bathing fairs are held there in Chaitra and Kartika. In civil lines opposite the collectorate is a church known as Christ Church which was opened and consecrated on the 16th November 1869. Next to the church, on the south side, stands Victoria Manzil, built in commemoration of the first jubilee of Queen Victoria. Now it is called as Sunder Lal Memorial Hall and it houses the office of the Municipal Board. A stadium, named as Pant stadium has been built in the city in 1954-55.

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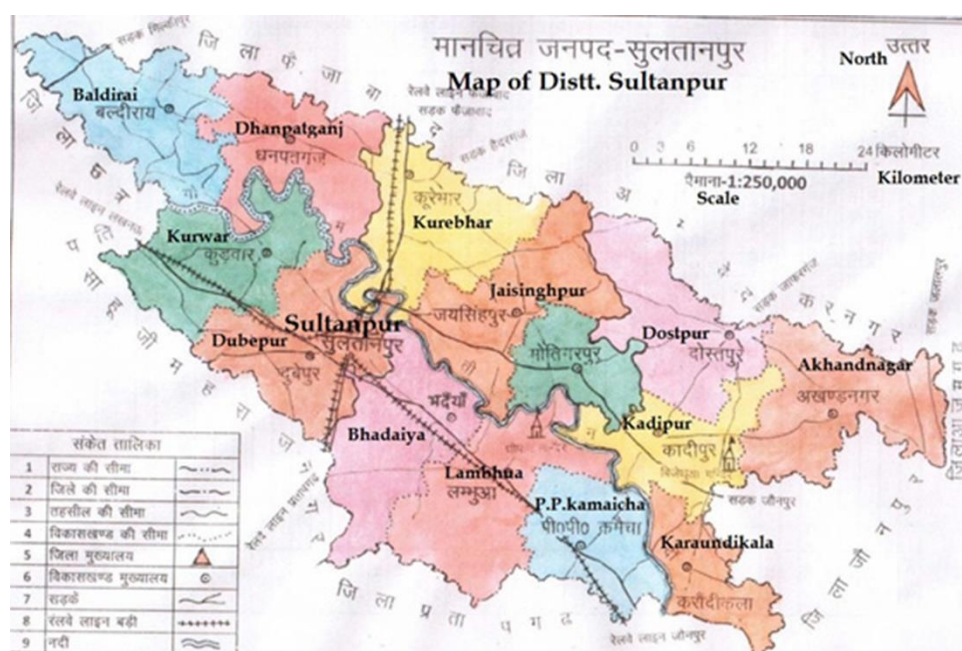
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AIR CONNECTIVITY



1. Ayodhya International airport(60 KM)
2. Prayagraj Airport(90 KM)
3. C.C.S. International Airport, Lucknow(140 KM)
4. Lal Bahadur Shastri Airport, Varanasi(138 KM)

Demography



Tehsil Map Sultanpur

Description	2011	2001
Population	37.97 Lakhs	32.15 Lakhs
Actual Population	3,797,117	3,214,832
Male	1,914,586	1,623,819
Female	1,882,531	1,591,013
Population Growth	18.11%	25.01%
Area Sq. Km	4,436	4,434
Density/km2	856	725
Proportion to Uttar Pradesh Population	1.90%	1.93%
Sex Ratio (Per 1000)	983	980
Child Sex Ratio (0-6 Age)	922	941
Average Literacy	69.27	55.75
Male Literacy	80.19	70.49
Female Literacy	58.28	40.86
Total Child Population (0-6 Age)	563,373	616,861
Child Proportion (0-6 Age)	14.84%	19.19%

Sultanpur Houseless Data

In 2011, total 1,213 families live on footpath, Total Population of all who lived without roof at the time of Census 2011 numbers to 5,514

Year	Projected Population	
2011	3,797,117	37.97 Lakhs
2021	4,380,000	43.82 Lakhs
2022	4,430,000	44.39 Lakhs
2023	4,480,000	44.88 Lakhs
2024	4,530,000	45.31 Lakhs
2025	4,560,000	45.67 Lakhs
2026	4,590,000	45.98 Lakhs
2027	4,620,000	46.25 Lakhs
2028	4,640,000	46.48 Lakhs
2029	4,660,000	46.67 Lakhs
2030	4,680,000	46.84 Lakhs
2031	4,690,000	46.98 Lakhs

Projected Population

	Ward	Population
1	Sultanpur Ward No - 1	4531
2	Sultanpur Ward No - 2	5843
3	Sultanpur Ward No - 3	5368
4	Sultanpur Ward No - 4	4384
5	Sultanpur Ward No - 5	4266
6	Sultanpur Ward No - 6	5587
7	Sultanpur Ward No - 7	3726
8	Sultanpur Ward No - 8	3634
9	Sultanpur Ward No - 9	4931
10	Sultanpur Ward No - 10	3537
11	Sultanpur Ward No - 11	4288
12	Sultanpur Ward No - 12	4319
13	Sultanpur Ward No - 13	4150
14	Sultanpur Ward No - 14	6141
15	Sultanpur Ward No - 15	4382
16	Sultanpur Ward No - 16	4642
17	Sultanpur Ward No - 17	3642
18	Sultanpur Ward No - 18	4577
19	Sultanpur Ward No - 19	5594
20	Sultanpur Ward No - 20	3442
21	Sultanpur Ward No - 21	3518
22	Sultanpur Ward No - 22	3192
23	Sultanpur Ward No - 23	3233
24	Sultanpur Ward No - 24	3693
25	Sultanpur Ward No - 25	3020

Ward Wise Population

1. 623,523 families residing in Sultanpur district
2. 5.3% people live in Urban areas & 94.7% live in the Rural areas
3. No. of Blocks: 14
4. No. of Nagar Panchayats: 4
5. No. of Tehsils: 5
6. No. of Municipalities: 1
7. No. of Wards: 25
8. Total area of Sultanpur district is 4436 km².,thus the density is 1400 people per Km sq.
10. No. of Gram Panchayats: 986
11. No. of Villages: 1765

Climate

The climate is semi-arid with very hot summer and equally cold winter season.

The max temp goes beyond 44°C, and min around 34°C.

Winds are mostly from the east or south-east.

TOURIST PLACES

1. Parijaat Vriksh



2. Dhopap Temple

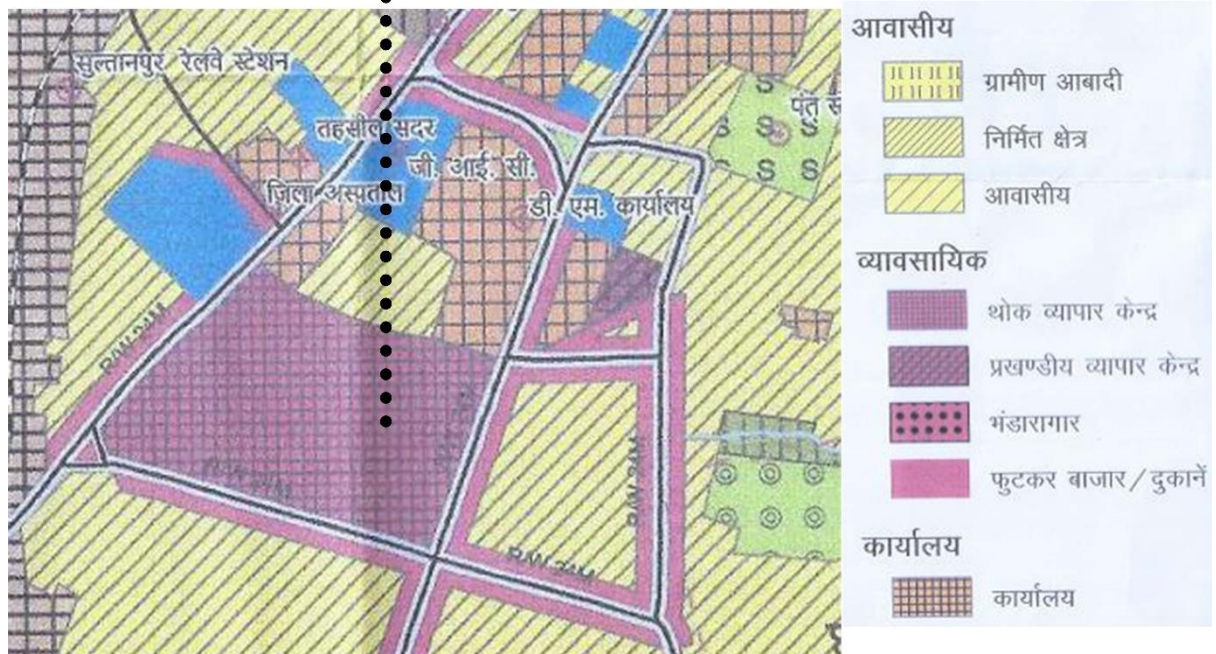


3. Bijethua Mahaviran Temple





Master Plan Sultanpur



Land Use of Case Area (Wholesale Business Center)

Payagipur Chauraha

2.8 KM from Clock Tower
Junction of Varansi Ayodhya
Prayagraj and Lucknow
Highway & Sultanpur City



Amhat Chauraha

2.8 KM from Clock Tower
Junction of Amethi, Varanasi
Ayodhya and Lucknow
Highway & Sultanpur City



Clock Tower, Sultanpur (CBD)

Vegetable & Fruits Market
100 M far



Government Hospital

100M from Clock Tower



Sultanpur Railway Station

600M from Clock Tower



Shahganj Chauraha

Entrance for the Case area

One of the famous & crowded temple
Hanuman Garhi
1000M from Clock Tower(In our case area)



Post Office Sultanpur

650M from Clock Tower

Sultanpur Railway Station

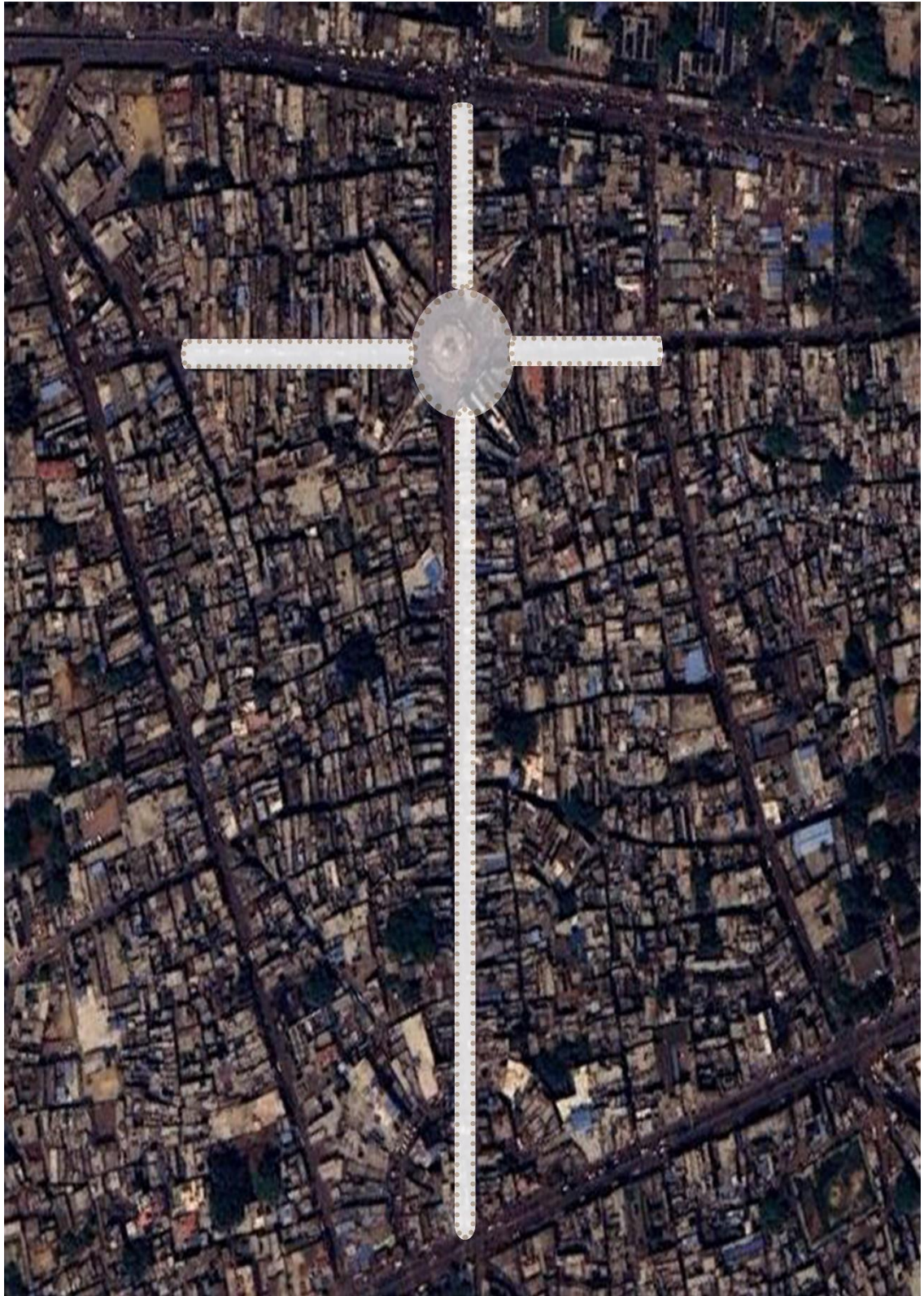
600M from Clock Tower



Sitakund & Gola Ghat

1.7KM from Clock Tower

SURVEY AND ANALYSIS OF CASE AREA



SURVEY OF CASE AREA

1.	Total Road Width	10 to 12 M Wide
2.	Land use	Wholesale trade centre
3.	Public Toilets	Not Exist
4.	Building Type	Mixed Use
5.	No. Of Floors	G+1, Mezzanine, G+2, G+3, G+4.
6.	Pedestrian	Not exist (encroached by hawkers & Shops)
7.	Vehicle Parking	On Road (Parking are not available).
8.	No. of shops	2875
9.	Shops Type	Jewellery, Grocery, Sweets, clothing, footwear, Hardware, Cosmetics, Mobile & Electronics etc.
10.	Existing Temple	Hanuman Garhi
11.	Hawkers Type	Sweets, fast food, fruits, vegetables etc.
12.	Garbage Disposal	Garbage Disposable is not in the proper way.
13.	Restriction of goods Vehicle	No(small vehicles like pickups) Large Vehicles Trucks - Not allowed.
14.	Street Lights	Available
15.	Types of Movement	Walking, Bicycle, Motor Bike, Manual Riksha, E-Riksha, Car, Goods Vehicles.
16.	Total No. Wards	4(Ward 1 to Ward 4)
17.	Total Population	20,126

Issues

1. Encroachment by Shopkeepers & Hawkers on both side of the road.
2. Traffic Congestion due to encroachment and parking of vehicles on the Road.
3. Create lots of Pollution (Sound, Air).
4. Not Availability of green spaces like parks even trees are not exist on road side.
5. Unavailability of parkings for the residents as area used as Business purpose.
6. Unavailability of public toilets.
7. Social Interaction Between the people decreases.

1. Poor Pedestrian Infrastructure

- **Narrow, encroached footpaths** or complete absence of dedicated walkways.
- Frequent **obstruction by street vendors, parked vehicles**, and shop extensions.
- **Lack of ramps, tactile paving, and proper kerbs** makes the area inaccessible for differently-abled or elderly people.

2. Traffic Congestion and Unsafe Environment

- Heavy mix of **vehicular and pedestrian traffic**, especially during peak hours, leading to unsafe crossing and movement.
- **Lack of signalized pedestrian crossings or zebra lines** makes road crossing dangerous.
- High risk of **accidents and traffic conflicts**, discouraging walking.

3. Informal Economy Struggles for Space

- Street vendors and informal businesses are vital to Chowk's local economy but often **compete for limited space** with pedestrians and vehicles.
- No organized vending zones or policy support for micro-entrepreneurs.

4. Low Environmental Quality

- **Air and noise pollution** due to constant honking, idling engines, and congestion.
- **Poor waste management**, overflowing garbage bins, and lack of street furniture or greenery diminish the appeal of the public realm.

5. Declining Public Life and Social Interaction

- Chowk has potential as a public square, but its current design discourages social activities, resting, or cultural events.
- Absence of **seating areas, shaded spots, or safe zones** for people to pause and interact.

6. Economic Underperformance

- Though foot traffic is high, **lack of organized pedestrian movement** affects business experience and sales.
- Businesses face challenges due to chaotic surroundings, reduced customer comfort, and inconsistent access.

7. Weak Institutional Response

- **Lack of integrated urban design policies** or planning vision for Chowk as a pedestrian-friendly area.
- Poor enforcement of traffic rules, building regulations, and encroachment removal.



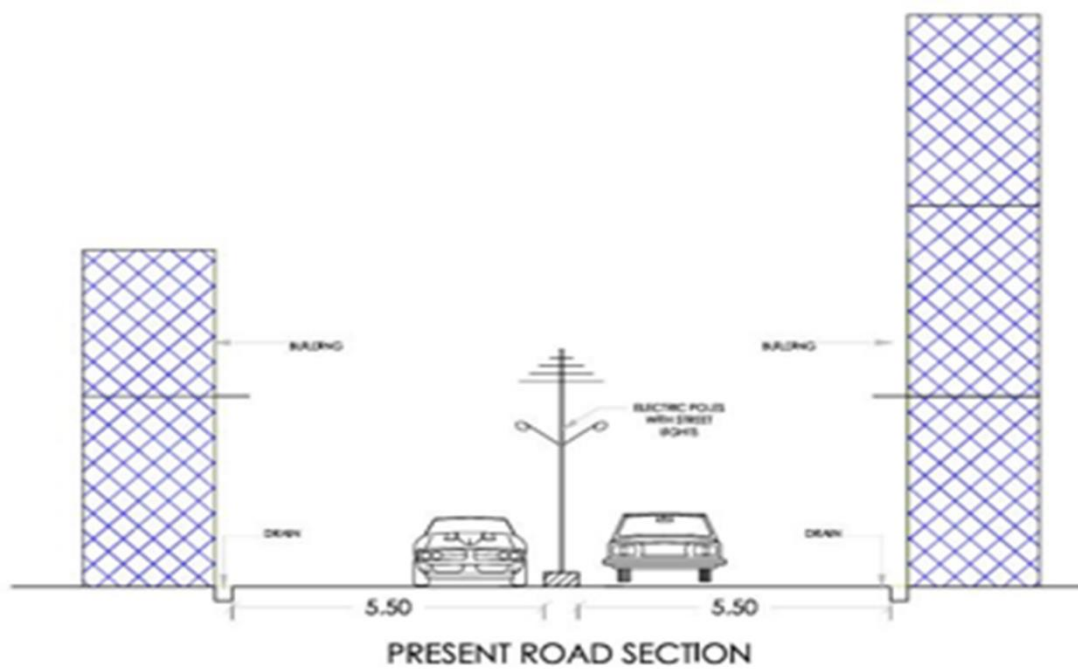
Mixed use Buildings



Encroachment by hawkers & shops On Road Parking



Garbage near Clock Tower



SURVEY AND ANALYSIS OF CASE AREA

S.NO.	Monday	Tuesday	Wedndy	Thursdy	Friday	Saturdy	Sunday
1 Morning	2,300	7,500	2,700	3,000	3,500	6,000	14,500
2 Afternoon	3,100	6,300	4,600	3,900	6,300	4,800	10,200
3 Evening	5,400	7,000	3,800	4,100	7,600	5,100	12,600
4 Night	4,200	5,400	6,700	5,000	3,400	6,900	9,300

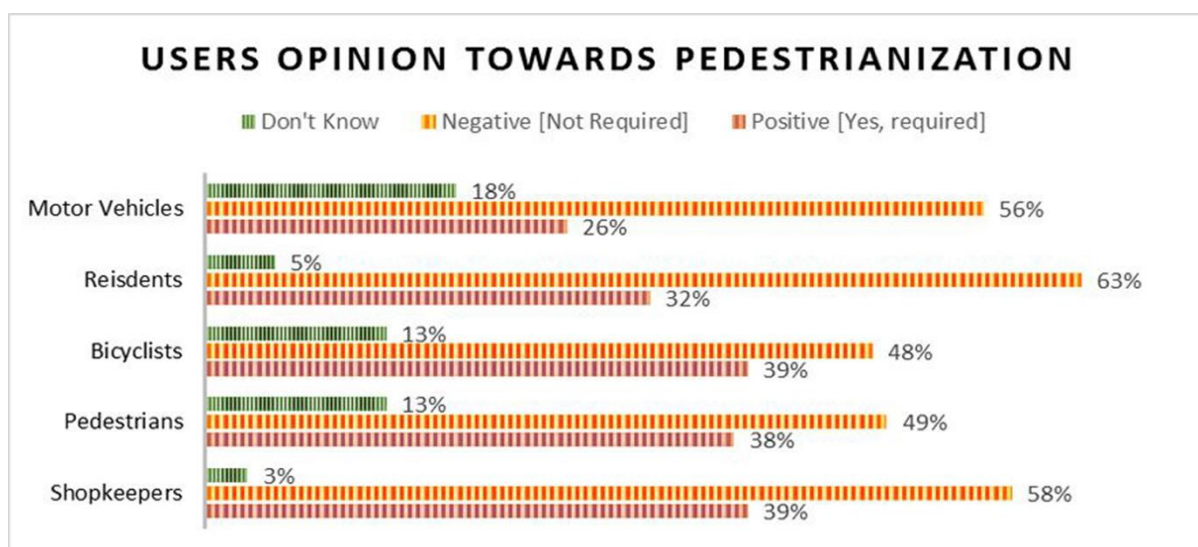
Table representing the weekly footfall in Chowk, Sultanpur, Uttar Pradesh

Week	Monday	Tuesday	Wednesy	Thursday	Friday	Saturday	Sunday	Total Weekly Footfall
Week 1 (Before Pooja)	9,000	7,500	6,000	6,500	7,000	8,500	13,000	57,500
Week 2 (Durga Pooja Week)	52,000	66,000	48,000	38,000	90,000	72,000	69,000	4,35,000
Week 3 (Post Pooja)	7,000	10,500	8,000	8,500	9,000	10,500	12,000	65,500

Table representing the weekly footfall in Chowk, Sultanpur, Uttar Pradesh During Durga Pooja

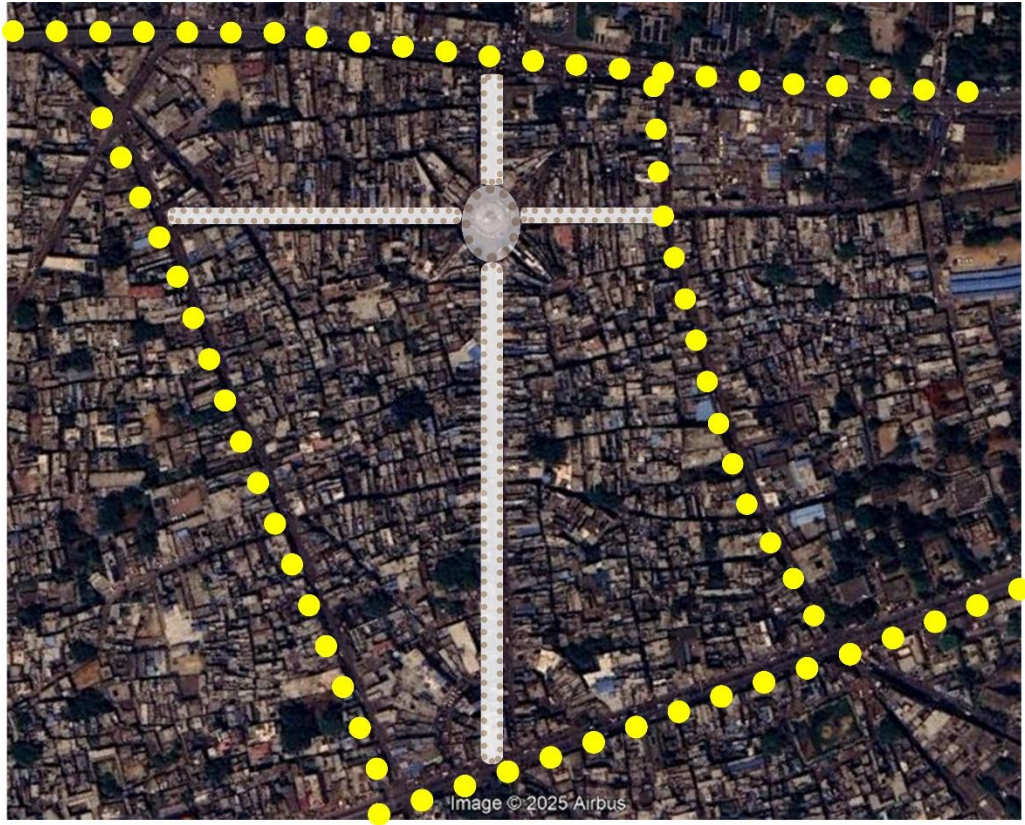
S.NO.	Monday	Tuesday	Wedndy	Thursdy	Friday	Saturdy	Sunday
1 Morning	600	1,500	750	1,100	900	1,100	500
2 Afternoon	1,100	1,400	1250	1,900	1,300	1,300	1,050
3 Evening	1,400	1,200	1,350	1,100	1,400	1,100	1,250
4 Night	800	950	1050	800	1,100	900	1,300

Table representing the weekly Bike Movement in Chowk, Sultanpur,



Chapter - 5

PROPOSALS AND POLICY



Alternate Road Network For Vehicular movement to stop the vehiclec eNtering in the no vehicle zone of CDB.



Shifting old bus stand from city centre to outside of city for people travelling to Lucknow, Kanpur, Varansi, Prayagraj and other regions of the state to reduce traffic congestion and proposed a multi-level parking having a small bus stand for people travelling to Ayodhya, Gonda, Gorakhpur and other regions of the state.



1. Restriction of vehicular movement during day time i.e. Reduce traffic congestion and pollution.
- shopkeepers & shopkeepers.
3. Construction of better walkways having green spaces, landscapes sitting spaces and playing areas for childrens.
4. Creating spaces for hawkers and vendor to support local business (like street food, crafts, groceries etc.)
5. Time restrictions for goods vehicle for loading and unloading the goods.
6. Providing basic facilities like toilets, drinking water.
7. Garbage collection facilities by small vehicle for neat and clean street.
8. Use of proper signages for indications.
9. Provision of Passes for vehicles to the residents for entering at given time.
10. Provision of EV carts and small bikes for rent to generate revenue.
11. Arts on wall that shows the culture of old city.
12. Providing Parking for Police and emergency Services.
13. Creating proper Drainage system that will also help in the conservation of rain.

1. Creation of a Dedicated Walkable Zone in the CBD

- **Proposal:** Identify and redesign key streets such as Chowk, Station Road, and Civil Lines into pedestrian-priority zones.
- **Policy:** Implement pedestrian-only hours or zones through city bylaws; promote “car-free days” in core markets.

2. Street Design Improvements (Complete Street Policy)

- **Proposal:** Redesign roads to accommodate all users—pedestrians, cyclists, vendors, and differently-abled individuals—following *Complete Street* principles.
- **Policy:** Adopt a local version of the *National Urban Transport Policy (NUTP)* to guide inclusive, multimodal street design.

3. Public Realm Enhancement

- **Proposal:** Introduce wide, obstruction-free sidewalks, green buffers, street lighting, seating, signage, water fountains, and shaded rest zones.
- **Policy:** Mandate universal accessibility (as per *MoHUA's Harmonized Guidelines*) in all street and market area upgrades.

4. Formalization of Street Vending Zones

- **Proposal:** Designate and regulate specific vendor zones with fixed stalls, waste bins, and basic services without obstructing pedestrian flow.
- **Policy:** Enforce the *Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014* with local town vending committees (TVCs).

5. Improved Traffic Management and Parking Policy

- **Proposal:** Divert through-traffic away from core pedestrian streets using ring road systems and smart signage.
- **Policy:** Develop a **Smart Parking Strategy**, including multi-level parking outside walkable zones and strict enforcement of no-parking zones in CBD.

6. Integration with Public Transport

- **Proposal:** Create pedestrian connections from bus stands and rickshaw zones to CBD through dedicated walking corridors.
- **Policy:** Align walkability improvements with city-level *Mobility Plan or Smart City Plan* if applicable.

7. Safety and Surveillance Measures

- **Proposal:** Install CCTV surveillance, proper night lighting, and emergency assistance poles in high-footfall zones.
- **Policy:** Collaborate with police for a pedestrian safety cell and urban design guidelines ensuring visibility and openness.

8. Economic Revitalization of Local Businesses

- **Proposal:** Offer incentives like façade improvement grants, business promotion zones, and tax rebates for shop owners contributing to street improvement.
- **Policy:** Include walkability enhancements in the **City Development Plan (CDP)** or **Master Plan revisions**, linking them to economic and tourism goals.

9. Awareness and Community Participation

- **Proposal:** Engage local shopkeepers, vendors, residents, and youth in participatory design workshops and feedback sessions.
- **Policy:** Institutionalize *Public Participation Frameworks* in pedestrian improvement projects as per *AMRUT guidelines*.

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Questionnaire

Part A: Respondent Profile

1. **Name (optional):** _____
 2. **Age:**
☐ Under 18 ☐ 18–30 ☐ 31–45 ☐ 46–60 ☐ 60+
 3. **Gender:**
☐ Male ☐ Female ☐ Other
 4. **Occupation:**
☐ Student ☐ Salaried ☐ Self-employed ☐ Vendor ☐ Homemaker ☐ Retired ☐ Other: _____
 5. **Residence:**
☐ Within CBD ☐ Nearby areas (within 2 km) ☐ Outside Sultanpur
 6. **Do you visit Sultanpur's CBD regularly?**
☐ Yes ☐ No
 7. **Frequency of visit:**
☐ Daily ☐ Weekly ☐ Occasionally ☐ Rarely
-

Part B: Travel Behavior & Walkability

8. **Main purpose of visit to the CBD:**
☐ Shopping ☐ Work ☐ Education ☐ Leisure ☐ Transit ☐ Other: _____
9. **Usual mode of travel to the CBD:**
☐ Walk ☐ Bicycle ☐ Auto-rickshaw ☐ Bus ☐ Two-wheeler ☐ Car ☐ Other: _____
10. **How far do you usually walk in the CBD area?**
☐ Less than 500m ☐ 500m – 1 km ☐ More than 1 km
11. **Do you feel safe walking in the CBD?**
☐ Always ☐ Sometimes ☐ Rarely ☐ Never
12. **Do you face any difficulty while walking in the area? (You can select multiple)**
☐ Encroachments ☐ Poor footpaths ☐ Traffic ☐ Lack of signage ☐ Poor lighting ☐ Others: _____
13. **Rate the following on a scale of 1 (Very Poor) to 5 (Excellent):**

Aspect	1	2	3	4	5
Footpath quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public seating & rest zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Street lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accessibility for all users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part C: Perceptions on Socio-Economic Impact

14. Do you believe that improving pedestrian facilities will benefit local businesses?
☐ Yes ☐ No ☐ Not sure
15. Would you prefer a car-free walkable zone during certain hours?
☐ Yes ☐ No ☐ Maybe
16. What changes would encourage you to walk more in the CBD?
☐ Wider footpaths ☐ More crossings ☐ Better lighting ☐ Reduced traffic ☐ Greenery ☐ Others: _____
17. Do you think property values will increase if the area becomes more walkable?
☐ Yes ☐ No ☐ Not sure
18. How do you think walkable zones affect community life?
☐ Improve it ☐ No effect ☐ Worsen it ☐ Not sure
19. Would you support the government in creating walkable zones in Sultanpur CBD?
☐ Strongly support ☐ Support ☐ Neutral ☐ Oppose ☐ Strongly oppose
20. Any suggestions to improve the walkability of Sultanpur CBD?
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