

# Investigating the Role of Public Private Partnership in Urban Project

*Case: Ahmedabad Municipal Corporation (AMC), Ahmedabad, Gujarat*

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**Abstract:** Public-private partnership is one of the execution methods of investment and delivery of public services. Along with civilization and economic development, financial entities are motivated towards investment projects in the light of new challenges, such as the development of social environment. A mixture of economic, social and environmental factors enables Organizations to ensure sustainability. The purpose of this article is to investigate role of public-private partnerships projects (PPP) in shaping the sustainable development of the region of Ahmedabad Municipal Corporation (AMC). The basis for conclusions on the above subject is the study of PPP solutions as determinants shaping the sustainable development in AMC through Urban projects. The study presents analysis of AMC's projects and PPP's role in financing, operation, maintenance and implementing the Urban projects in the studied region. It also shows that where else the PPP interventions can be done for betterment of the place.

**Key Words**–Public Private Partnership, Ahmedabad Municipal Corporation, Urban Projects.

## I. INTRODUCTION

Large cities strive to maximize their economic and social potential. The society expects modern cities to be ecofriendly and smart, taking advantage of all their unique features and qualities. The “green city” trend, complemented with the “smart city” one, paints a picture of a multifunctional place of work and rest with a good transport system. However, in order to have a city without traffic jams, with huge green areas and all modern amenities, it is essential to completely redesign the solutions applied so far.

Smart, eco-friendly cities are characterized by the following:

1. application of renewable energy,
2. electric transportation,
3. smart management of power consumption [city lights, traffic management],
4. smart management of supplies,
5. management of recycling and waste,
6. rational use of available space (depending on city location and character),
7. Public safety (intelligent monitoring).

Public-private partnerships, shortened as PPPs in this review, are contractual arrangements in which the private sector assists in supplying a public facility or service by providing funding or working leadership. There are three sectors involved in PPPs. They are, first, the public sector, which may include one or all levels of government, and, second, the private sector, which includes business and investor organizations. The third sector is defined as nongovernment, social, and community-based institutions, and it may also include people living near a heritage site.

Public-private partnerships have gained in recognition over the last twenty years as a means for governments to manage the cumulative costs and responsibilities of services or ventures traditionally delivered by the public sector. These partnerships have been commonly employed in the core infrastructure areas of energy, water, transportation, and telecommunications to deliver necessary public services. With their expansion in use, the successes and failures of PPPs are becoming more seeming, and there has been an increase in argument as a result; nonetheless, PPPs continue to be proposed as a worth of filling the gap between the need for public services and the willingness or ability of governments to pay for them.

## II. PUBLIC PRIVATE PARTNERSHIP

While there's not any single definition of PPPs, they typically ask long-term, contractual partnerships between the general public and personal sector works, specifically targeted towards financing, designing, implementing, and operating infrastructure facilities

and services that were traditionally provided by the general public sector. These collaborative projects are built around the proficiency and capability of the project partners and are based on a contractual agreement, which ensures appropriate and mutually agreed allocation of resources, risks, and returns.

The Government of India defines a Public Private Partnership as:

“Public Private Partnership (PPP) Project means a project supported a contract or concession agreement, between a Government or statutory entity on the one side and a personal sector company on the opposite side, for delivering an infrastructure service on payment of user charges.”

#### **A. Models of Public Private Partnerships**

Agreements between public and personal entities take many shapes and sizes for both new and existing services. At one end of the spectrum may be a management or contract. Where a personal company is paid a fee for a service. At the opposite end is full privatization or divestiture (outright sale), where a government sells assets to a private company. Outsourcing has become another popular option; here a private company might handle a facet of service, like billing, metering, transport, or maybe cleaning. When there is development of a more diversified pool of emerging market investors and operators with local expertise, Hybrid Models are used. These models often believe simpler contractual arrangements and blend public and personal money to diversify risks. The following models are used in recent years for partnership projects:

- Design Build (DB): Under this model, the government contracts with a personal partner to design and build a facility in accordance with the wants set by the govt. After completing the power, the govt assumes responsibility for operating and maintaining the facility. This method of procurement is additionally mentioned as Build-Transfer (BT).
- Design Build Maintain (DBM): This model is analogous to Design-Build except that the private sector also maintains the facility. The public sector retains responsibility for operations.
- Design Build Operate (DBO): Under this model, the private player designs and builds a facility. Once the power is completed, the title for the new facility is transferred to the general public sector, while the private sector operates the power for a specified period. This model is also referred to as Build-Transfer-Operate (BTO).
- Design Build Operate Maintain (DBOM): This model combines the tasks of design-build procurements with the operations and maintenance of a facility for a specified period by a private sector companion. At the top of that period, the operation of the power is transferred back to the public sector. This method of procurement is also referred to as Build Operate-Transfer (BOT).
- Build Own Operate Transfer (BOOT): the govt grants a franchise to a personal partner to finance, design, build and operate a facility for a selected period of your time . Ownership of the facility is transferred back to the general public sector at the top of that period.
- Build Own Operate (BOO): the govt grants the proper to finance, design, build, operate and maintain a project to a personal entity, which retains ownership of the project. The private entity isn't required to transfer the power back to the govt.
- Design-Build-Finance-Operate/Maintain (DBFO, DBFM or DBFO/M): Under this model, the private sector designs, builds, finances, operates and/or maintains a replacement facility under a long-term lease. At the top of the lease term, the power is transferred to the general public sector. PPPs can also be used for existing services and facilities in addition to new ones.

#### **B. Objectives of Public Private Partnership**

PPP's can appear as a win-win for the general public also because the private sector and most knowingly, the citizen. PPP's seek to deal with limitations of both the sectors and therefore the main reason for PPP projects' increased importance are:

- Limited Resources and Finances: Limitations of public resources and partial capacity to meet the infrastructure gap.
- Need for various institutional mechanisms: This includes incorporating the spirit of personal effectiveness into providing services for the general public.
- Unbiased risk allocation and mitigation: Shared risk allocation may be a principal feature of a PPP project. PPP projects allow sharing of various sorts of risks between the private and public sector.
- Complementary roles and drivers: Putting it somewhat simplistically, the general public sector is mainly driven by the 'public good', the private sector by 'profit'.
- PPP projects allow both the sectors to unite and make these seemingly contradictory goals work together. As an illustration, land acquisition and environmental clearances are best obtained by governments, and the private sector can deliver much faster, if such clearances are handled by the govt.

### ***C. Advantages of Public Private Partnership***

Accurately arranged PPP projects can bring profits to both public and private actors. Value for Money pre-implementation analysis offers information on the sought financial outcome of a project. Non-financial (socio-economic) profits of PPP schemes usually are not included in the Value for Money analysis, but can result greater than under conventional procurement.

Advantages for Public Sector:

- Arrangement of a private partner ensures incomplete financing of the project cost and thus lifts the burden off the public budget.
- Private capital limits the risk of ending construction due to lack of financing and increases the chance for development of the infrastructure.
- New modern technologies are applied in the case of projects executed in public-private partnerships than in the case of public-only projects.
- Efficient project and HR management reduces the investment time and cost.
- Political pressures are reduced due to the involvement of the private sector.
- Marketing benefits, covering both the energies of the local government to search for private financiers and therefore for external financing sources as well as inspiration of cooperation with the private sector.

Advantages for Private Sector:

- Opportunity to implement projects characterized by high return on investment rate that would be then impossible.
- Chance of collaboration with the public sector broadens the knowledge and experience of the private partner who may later use them in other projects.
- Marketing Benefits.

### **III. PROFILE OF AHMEDABAD MUNICIPAL CORPORATION**

The study area selected is the city of Ahmedabad. Ahmedabad, situated in Gujarat state of India, has a population of 6.3 million and is the seventh largest metropolitan area of India. Initially, the area of Ahmedabad was 190 sq. km which has now increased to 446 sq. km. With this increase in area and sprawl, there was certainly a dire need of provisions of infrastructure and connectivity. It has seven major roadways, one expressway and five rail networks. A new corridor between Ahmedabad and Pune has recently emerged, connecting the city to other metropolitan cities including Vadodara, Surat and Mumbai. All these factors have resulted in the axial growth of the region.

The city of Ahmedabad, now the seventh largest metropolis in India and the largest in the state of Gujarat, was founded in 1411 AD as a walled city on the eastern bank of the river Sabarmati. Historically Ahmedabad has been one of the most important centers of trade and commerce in western India. It is also a major industrial and financial city contributing about 14% of the total investments in all stock exchanges in India and 60% of the total productivity of the state. It is the home of several scientific and educational institutions of national, regional and global importance. The city has a great architectural tradition reflected in many exquisite monuments, temples and modern buildings.

#### ***Ahmedabad Municipal Corporation***

Ahmedabad is a historical and industrial city of Gujarat. After acquiring the status of a mega city, its rate of growth and development has surprisingly increased. The Ahmedabad Municipal Corporation or the AMC, established in July 1950 under the Bombay Provincial Corporation Act, 1949, is responsible for the civic infrastructure and administration of the city of Ahmedabad. The corporation is headed by a Municipal commissioner, an IAS officer appointed by the government of Gujarat. He wields the executive power of the house. For administrative purposes the city is at present divided into 6 zones - central, east, west, north and south and new west zone. Each zone is further split into wards. There are at present total 48 wards. Each ward is represented by 4 corporators. An election is held to elect corporates to power after every 5 years. The mayor heads the party with the largest number of corporators elected.

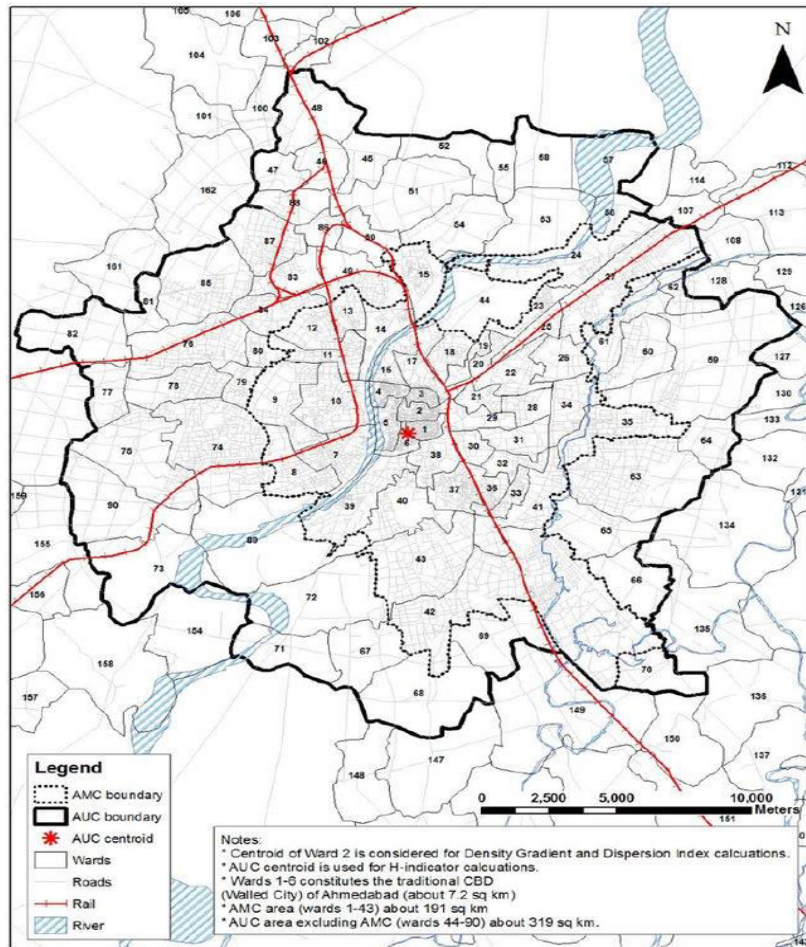


Figure 1: City Map of Ahmedabad

### Strengths of Ahmedabad

Ahmedabad is the 7<sup>th</sup> Largest Metropolis in India which is largest In State of Gujarat, founded in 1411AD as walled city on eastern bank of Sabarmati. It is Home of Several Scientific and Educational Institutions of National, Regional and Global importance. With the Expansion city caters its services to around 63.57 lakh population and density of 11895 per sq. km. The percentage of Notified slum population is 4.49%. Ahmedabad has 6 zones spread in 48 wards represented by 4 members each (192 elected members)

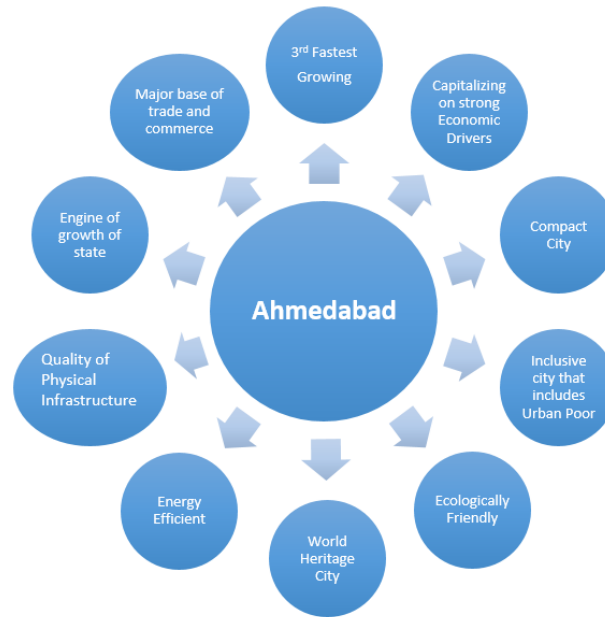


Figure 2: Strengths of Ahmedabad city.

**IV. CASE STUDIES OF AMC URBAN PROJECTS**

**PPP for Slum Networking**

In 1995, AMC initiated Slum Networking Project through a unique partnership between Ahmedabad Municipal Corporation and NGOs. The objective of the Slum Networking Project was to transform the urban environment with the approach to provide basic infrastructure services at the household and slum level in an affordable and sustainable way.

This initiative was very successful and AMC received The Dubai International Award for, in 2005, Best Practice to improve the living Environment. The Main Partners of the pilot project were Arvind Mills, SAATH, and AMC Initially. Cost Of the project was Rs. 250.14 lakhs

Table 1: Participants of Slum Communities

Sr. No.	Name of Slum	Zone	Number of No Households (approx)
1	Sanjay Nagar Na Chhapra (near Anil Starch	North	200
2	SankalchandMukhi Ni Chali (Behrampura)	Central	500
3	Pravinnagar-Guptanagar (Vasna)	West	1500
4	Kachwadi Ni Chali and Santokbai Ni Chali (Chamanpura	North	1100
	Total number of households		3300

The SNP program as on November 2006, has reached 8,703 families, making a significant contribution in the lives of 43,515 people in 41 slum communities of Ahmedabad. SNP program of Ahmedabad city is an example of strong and substantial partnership among various stakeholders of the civil society who engaged themselves in providing better physical



quality of life to its poor fellow citizens. It is also an excellent example of how, when a government body is willing to enter into strong and meaningful partnerships, many elements of good governance such as equity, transparency and accountability

**PPP for Transport**

The Sardar Patel Ring Road was conceptualized in the revised Development Plan of 2001 of Ahmedabad Urban Development Authority. The out most ring road encircling Ahmedabad Urban agglomeration was conceptualized to –

- Reduce traffic congestion on arterial and peripheral road so Ahmedabad
- Segregate regional and urban traffic
- Increase connectivity of Ahmedabad city areas to the region
- Guide the development and expansion of Ahmedabad.
- The revised Development Plan proposes an additional 64 sq. km of urbanizable land over the next 10 years. This area has been contained within the ring road.

**Project Component and Phasing:**

Phase I includes two laning of the entire stretch and four laning of major structures.

Cost : Rs. 230 crore

Status : Commenced in 2001 and completed in 2006

Phase II (PPP Project) includes extension of existing two lanes to four lanes.

Cost : Rs. 378 crore

Status : Four laning is being done on BOT model. The BOT document was floated in February, 2006 and work was awarded to a joint venture. Private participation for: Junction development, Plantation along the road, Toll tax collection, Signage development

The PPP model and its financial configurations as discussed above reflects the sustainability of the project. It is a win-win situation for all stakeholders AUDA, the BOT concessionaire, the city traffic, the transporters and above all the original land owners who consented to give away their lands.

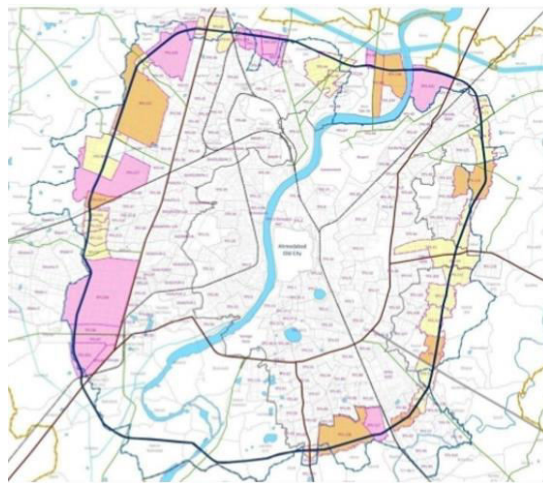


Figure 3. Map Showing S.P. Ring Road

**PPP for Solid Waste Management**

This are some of the examples of projects done with public private partnership in solid waste management.

Table 2: AMC Projects of Solid Waste Management with PPP

Sr. No	Name of Project	Current Status report of Project	Structure (BOO/ BOOT etc.)	Date of Award/ Likely award	Name of Private Developer	Concession Period (years)	Date of Commencement	Project Cost ( Actual) in Rs crore
1	Processing Plant	Completed/	BOO	1997	Excel Industries Ltd.		1997	10

		Operational						
2	Processing Plant	Completed/ Operational	BOO	2007	UPL Djai Power Ltd.		2007	21
3	Processing Plant	Completed/ Operational	BOO	2009	Creative Eco Recycle Port Pvt. Ltd.		2009	100
4	Processing Plant	Completed/ Operational	BOO	2010	Hanjar Biotech Engineers Ltd.		2010	50
5	Collection, Transport & Final Disposal of Bio Medical waste	Completed/ Operational	Service	2004	SembRamky Environmental Management Pvt. Ltd.		2004	
6	Collection, Transport & Final Disposal of Bio Medical waste	Completed/ Operational	Service	2004	Pollucare Bio Medical waste Management Pvt. Ltd.		2004	
7	Collection, Transport & Final Disposal of Hotel waste	Completed/ Operational	Service	2008	Sahara Public Health Organization		2008	
8	Collection, Transport & Final Disposal of Hotel waste	Completed/ Operational	Service	2008	Abhishek Sanitation SahakariMandali Ltd.		2008	
9	Collection, Transport & Final Disposal	Completed/ Operational	O & M	2009	of MSW by Jigar Transport Co.		2009	25
10	Collection, Transport & Final Disposal	Completed/ Operational	O & M	2009	of MSW by Om Swachta Corporation		2009	

## V. PPP INTERVENTION IN MANEK CHOWK

### *Introduction to Manek Chowk*

Streets play multifunctional roles to satisfy wide selection of objectives. One exemplar exits at Manek Chowk unitedly act as connecting space, cultural house, open space, interaction area, and business space.

Manek Chowk situated within the heart of historic walled city: Ahmedabad, Gujarat. It is situated between two nationwide protected monuments, the Tombs of the King and Queen of Ahmedabad. Manek Chowk is a ancient business center and additionally one in all the foremost important public areas of the walled town. It contains of formal and informal business activities, non-secular and cultural sentiments, and a vivacious public life. The enterprise in Manek Chowk is as previous because the town of Ahmedabad. Its central location and straightforward accessibility ar the most reasons for the enterprise to flourish.

A large proportion of holiday makers at Manek Chowk are pedestrians or non-motorized transit users. Throughout the height business hours, on a mean, one person per second enters or exits Manek Chowk. Manek Chowk is supportive a wonderful urban public house developed on ancient planning principles and thrives as a vivacious anchor community house within the contemporary context. The activities within the public place modification many times during a day to serve specific desires and provides approach for effective usage of place.

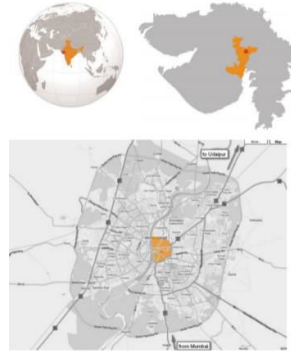


Figure 4: Location of Manek Chowk

### Activities

The central area of Manek Chowk plays host to different activities throughout day and night. The area is clean early within the morning around 6:00 am. Cows and buffalos wander in this space and feed on the organic waste and grass brought by its owner. The native residents participate in feeding the cows as it is taken into account holy to feed a cow at the beginning of the day in several parts of the country. Water is crammed up in buckets by the spout that is found at the middle of the court. These stuffed buckets are then unbroken outside each shop by a typical employed helper. These buckets are used throughout the day because the outlets area unit not equipped with wash basins. Either aspect of the central house is flanked by jewelry outlets, with the central space used for parking by the shopkeepers.

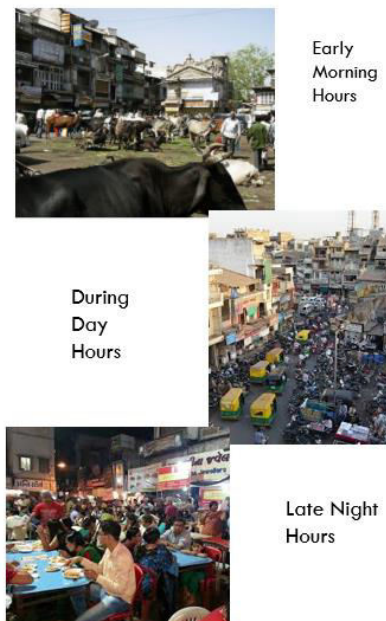


Figure 5: Activities throughout the day

They perform throughout the day, i.e. 11:00 am to 6:00 pm. Informal vendor's line up selling everyday things like plastic accessories, clothes, and spices. Within the evening, parking reduces because the shopkeepers head back to their residences and this house is then taken over by food vendors World Health Organization have selected spaces allotted over the years. Customers come from all around Ahmedabad to relish the street food. Electricity is borrowed from the adjoining outlets. Throughout the day, carts and equipment area unit keep close to the topographic point space behind the shops. The road gutters function laundry areas for the peddling carts. The food court functions until 3:00 am within the morning.

The food vending space spills out on the far side this central house to the southern sq. and conjointly to the world close to the northern parking zone. The activities of the day then repeat cyclically. It's this multi-ownership and multiplicity of varied activities that creates this house kinetic.



**Stakeholders**

When it comes to redevelopment of Manek Chowk with public private partnership, stakeholders play a very important role for public participation in it because it helps in making better and sustainable project by identification of issues and better implementation of project. Public Participation also gives a Tangible solution to the project and participatory approach to the planning of area. Identified stakeholders of Manek Chowk are:



Figure 6: Stakeholders of Manek Chowk

**Identified Issues and Strategies for Manek Chowk**

There are five major issues are identified for the pedestrian intervention in Manek Chowk for better movement of vehicles and pedestrians, strategies are given for same.

*1. Parking*

**Issues:** Current parking activity within the Chowk space occupies the valuable public areas within the historic walled town. Short term two wheeler parking occupies considerable quantity of public house, it is critical to know that whereas parking supports economic activities, it is also deterring folks from visiting the world. As Manek Chowk is losing its importance, the net economic impact of conveyance parking is highly negative. Parking occupies 25% of the zone area. This percentage is a important amount when related with other uses in the Chowk throughout the day. Random parking serves as obstruction for pedestrians.

**Strategies:** Introduce priced parking and provide selected on street parking areas for delivery goods. Government plots (PWD office, fire station) identified beyond 500 m radius to accommodate more parking.

*2. Traffic Movement*

**Issues:** The transport management problems which are discovered in Manek Chowk are:

- Dominance of vehicles publically areas
- High level of conflict between pedestrians and vehicles o

- High route movement
- Lack of efficient circulation patterns
- Over presence of parking
- Presence of unorganized hawking activities that scale back effective house offered for pedestrians and vehicles

Traffic blockages created at numerous junctions and prohibited two-way streets slows down the traffic heading to queue up of vehicles. Walk across increases conflict areas between vehicles and pedestrians thereby decelerating down the traffic.

**Strategies:** Development of paved pedestrian areas as clear public area & segregated walkways. Pedestrianizing central area of Manek Chowk and re-directing the traffic to retain the vehicular connectivity. Traffic calming measures like bollards, geometric correction, raised intersections, tactile paving etc.

### 3. Public Spaces

**Issues:** Due to many obstacles and lack of signage, most roads remain unidentified to visitors. No provision of shaded area, seating areas and amenities such as toilets & drinking water. No constant pedestrian footpaths.

**Strategies:** Provision of shaded area, seating areas and amenities such as bathrooms & drinking water. Provision of general lighting for public areas. Organize existing service lines, sewage and solid waste management for street hawking activities.

### 4. Vending

Street vending activities are an indivisible half of the streetscape and heritage of Manek Chowk, they're additionally connected to the living of number of individuals and plays an important role in providing offer of reasonable product and food which successively contributes to market and economic activities of walled town. Hence they need to be accommodated as a part of development method.

**Issues:** Commercial activity in Manek Chowk thrives not only because of its formal retail sector, but also due to the presence of informal vending. There are approximately 86 hawkers in the area. There are problems that hawking activities tend to occupy larger foot print of area. Circulation between the formal and informal looking areas is troublesome to navigate.

**Strategies:** Selected paved areas for hawkers/ street vendors to put their stalls and Provision of services (drainage and electricity) for better working of vending areas.

### 5. Heritage Character

**Issues:** The presence of heritage elements cannot be felt. The condition of heritage structures is deteriorating.

**Strategies:** Clearing surrounding area of monuments & paved walkways. Special lighting of monuments can be done and Urban style guidelines for development of heritage frontage and collection should be formed.

### PPP Structure for Manek Chowk

Manek Chowk project should be develop under Build, Own, and Operate and Transfer basis. For the purpose of efficiency, effectively execution and maintaining of project, an SPV should be formed. A concession agreement of Design, Build, Finance, Operate, Maintain and Transfer (DBFOM) should be used after recovery of predetermined return.

In this model, the private sector designs, builds, finances, operates an asset, then leases it back to the government, typically over a 25 – 30 year period. Public sector long-term risk is reduced and the regular payments make it an attractive option to the private sector. Within this model, the private partner is responsible for conservation of the historic buildings, construction or addition of new buildings or structures, and complete financing and operation of the project under a long-term lease.

#### Construction:

This included the design and implementation of the road, including the pavement, pedestrian lights, medians, separators, road furniture, seating facilities and toilets facilities.

#### Management, Operation and Maintenance:

This includes fee collection from shop keepers, association and vendors, operating public toilets, traffic regulation and maintenance of the area. It also includes special maintenance activities such as eliminating potholes in the pavements, replacing drainage structures, road markings and signage, cleaning lanes, shoulders, right-of-way strips, structures, maintaining operational installations for waste collection facilities. Conservation works include cleaning of monument, special lighting.

### ***Risk Factor***

Private sector entities are generally looking for the presence of four key factors (the “four Cs”) that assist them in reducing risk when redeveloping sites or areas involving historic areas, buildings, or sites:

- clarity
- certainty
- consistency
- consultation and open communication

Risk allocation between partners:

- Revenue risk – Private Developer
- Construction risk – Private developer
- Regulatory/contractual risk;
- Political risk - Government
- Environmental/archaeological risk - Government
- Public acceptance risk – Private Developer
- Sustainability risk. – Private developer

### ***Financial Recommendation***

Project can also take advantage of private sector philanthropy, even in situations where there is no clear return on investment, this is strong incentives for private sector actors to finance public space projects. Donation can also be raised from NGOs working for informal sector and organization for heritage conservation like ASI, NMA or UNESCO. Following the initial donation, the project will primarily be funded by private investors, led by local developers, through which their investments can increase the overall value of future developments. SPV can be permitted to earn from advertisements, hoardings and other commercial activities at the area. Revenue collection can be done from parking charges and charges from goods vehicles. Fees can be taken from Shop owners, Vendor and association in terms of betterment charges for provision of physical Infrastructure. Incentives can be provided to the private developer for better provision of infrastructure from public entity in terms of FSI, etc.

## **VI. CONCLUSION**

In all PPPs, the general public sector is motivated by the necessity to deliver a public service, whereas the non-public sector is most frequently primarily motivated by the potential for money profit. Examples of PPPs and private sector financing in urban public space development projects, which have yielded positive results, include the redevelopment of parks and squares and improvements to public buildings such as libraries, hospitals and schools. Many Urban Projects are also successfully delivered in AMC with Public-Private Partnership. Supporters of private sector involvement point to the possibility of circumventing fragmented and bureaucratic state and municipal departments, which may follow narrow mandates and fail to coordinate between themselves when managing public spaces. In such instances, private sector cooperation could offer more efficient managerial approaches, spanning various sectors and bypassing bureaucratic hurdles. Importantly, the aim is often to foster a secure environment where both public and private institutions can operate.

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