



## INVESTIGATING TRANSFORMATIONS OF PUBLIC PLACES IN PLANNED URBAN DEVELOPMENTS: COMPARATIVE CASE STUDY OF BIDHANNAGAR & NEWTOWN, KOLKATA

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### RESEARCH ARTICLE



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#### Abstract

*Transformations* of an urban area can provide vital insights into its developmental directions. *Public Places (PPs)* in an urban area are areas accessible to the public, having a multitude of activities. *Planned Urban Developments (PUDs)* are expected to withstand the test of time and follow the developmental direction, as charted in their original master plans. Although *Public Places (PP)* are more prone to *Transformations*, they are a neglected area of scrutiny in urban studies due to the lack of documentation. The *Transformations of PPs in PUDs* are an even less studied topic, since *PUDs* are considered to be already planned. Therefore, as established by review of existing literature, the *Transformations of PPs in PUDs* are crucial areas of scrutiny in urban research. Following this, the current paper attempts to contextualize the *Transformations* through study of the evolution of the *PPs* in *PUDs* from selected case studies from the Kolkata Region and its peripheral areas, which is the largest urban agglomeration in West Bengal, India. The study deploys a mixed methodology of primary survey as well as secondary data collection methods. The two chosen case studies of Bidhannagar (planned) and Newtown, have been chosen since both are were conceived and developed post-independence, through government intervention and are situated near the Kolkata city core. Through the study of aspects like planning, evolution, morphology, and transformation, the two studied *PUDs* have been compared, attempting to arrive at a relative assessment and inference. The comparative study reveals that homogenous, coherent planning with more human scale development leads to more accessible, distributed, diverse *PPs*. On the other hand, progressive, large-scale planning with more high-rises and gated complexes leads to more privatized, exclusive *PPs*. An improved understanding of the transformative processes that take place in *PPs* of *PUDs* is the overarching aim of the research work and the paper is an elementary step in that direction.

**Keywords:** *Transformations, Public Places (PPs), Planned Urban Developments (PUDs), Bidhannagar, Newtown*

#### Introduction

*Transformation* is the complex processes of radical, systemic change (of an urban area) across multiple dimensions (Hölscher & Frantzeskaki, 2021). Examining *Transformations* of an urban area can provide vital insights into its developmental directions. One common misinterpretation of the terminology of '*Transformations*' is that, it is often loosely used to indicate a specific surgical 'intervention' to a space. Essentially, '*Transformations*' is an umbrella term for all spatial changes to an urban area, happening over time. In the history of the existence of an urban area, it is likely to have gone through various spells of densification, sprawl, specific interventions, growth and decline to contribute to its overall transformation. Except for city or regional level morphological studies, it is immensely difficult to find historical documentation of spatial transformation. This is the reason why urban transformation is such a challenging domain of study. However, over the recent decades there has been major advancements in geographic information systems (GIS), remote sensing, and satellite imagery. This has created a great opportunity for experts to capture spatial transformation with the help of geo-referenced data and maps (Hölscher & Frantzeskaki, 2021). Alongside, these tools are increasingly being used to predict and forecast spatial and land use transformations (Pijanowski, Brown, Shellito, & Manik, 2002). The literature available on *Transformations* is generated not only by urban development experts but also geographers, urban sociologists, economists, designers, and ecologists. The methods of spatio-temporal analyses are different due to the varied perspectives in these research fields. The result is a non-consensus on what is meant by '*Transformations*' and methods of studying it.

**Public Places (PPs)** in an urban area are areas accessible to the public, having a multitude of activities. A growing body of literature highlights many ecological, social, cultural and economic benefits provided by public places (Coppel & Wüstemann, 2017) (Novara, 2017). Vibrant public places help build a sense of community, culture, and identity. Beyond the social and health benefits, these places are promising locations for economic activities, community congregation, and tourism promotions. The assessment of a PP is a complex process often requiring a multi-layered & multi-dimensional approach (Carmona, Magalhães, & Hammond, 2008). PPs are a widely researched topic in urban research, with many researchers theorizing on the aspects necessary to make successful public places. Many models have also been developed thus far. These include: the Publicness Evaluation Model (PEM) model (Lopes, Cruz, & Pinho, 2019), the Public Space Index (Mehta, 2014) and the Star Model of Publicness (Varna & Tiesdell, 2010). However, although *Public Places (PP)* are more prone to *Transformations* (Nel & Landman, 2021), they are a neglected area of scrutiny in urban studies due to the lack of documentation as well difficulty in classification through land-use studies.

<b>By Form/ Morphology</b> Zuckers (1959)	<ul style="list-style-type: none"> <li>• Closed Space</li> <li>• Dominated Space</li> <li>• Nuclear Space</li> <li>• Grouped Space</li> <li>• Amorphous Space</li> </ul>
<b>By Ownership</b>	<ul style="list-style-type: none"> <li>• Privately Owned</li> <li>• Publicly/Govt. Owned</li> <li>• Hybrid Ownership</li> <li>• Semi-Public Spaces</li> <li>• Privately owned public open space (POPOS)</li> </ul>
<b>By Activity/ Use/ Function</b> Carr et al (1992)	<ul style="list-style-type: none"> <li>• Community Open Spaces</li> <li>• Greenways &amp; Parkways</li> <li>• Atrium/ Indoor Market Spaces</li> <li>• Everyday Spaces</li> <li>• Waterfronts</li> <li>• Public Parks/ Playgrounds</li> <li>• Squares &amp; Plazas</li> <li>• Memorials</li> <li>• Markets/ Bazaars/ Kiosks</li> <li>• Streets/</li> <li>• Mixed Use</li> </ul>
<b>By Origin</b>	<ul style="list-style-type: none"> <li>• Natural/Man-made/Hybrid</li> </ul>

Figure 1: Various Classifications of Public Places  
Source: Author, 2022

**Planned Urban Developments (PUDs)** are habitations which are conceived, based on some specific requirements. They include road facilities, drainage, open space, mass management patterns, and so forth. Transformational studies are also challenging because spatial changes can be caused by a complex web of factors as well as the lack of temporal data and the tediousness of longitudinal studies. *Planned Urban Developments (PUDs)* are expected to withstand the test of time and follow the developmental direction, as charted in their original master plans. India has had an illustrious past PUDs starting from Mohenjo-Daro, Harappa from the Indo-Saraswati Civilization (ancient) to Vijaynagara (medieval) and Jaipur (modern). In the post-colonial world, Chandigarh (India) Bhubaneshwar (India), Islamabad (Pakistan), Naypyidaw (Myanmar), Abuja (Nigeria) Brasília (Brazil) are all *PUDs*, built in the past half century to meet the aspirations and needs of their respective. Considering them to be ‘already planned’, *PUDs* and especially their *PPs* are studied to a lesser extent than their organic counterparts. *PPs* in *PUDs* are expected to be adequate in infrastructural provisions. They are also expected to manage vehicular and pedestrian traffic better as well as be regulated more strictly by bye-laws. But, whether they (a) react better to market forces; (b) respond to the local character of the place; (c) aid societal cohesion and (d) encourage democracy of space, remain to be assessed.

**Transformations of PPs in PUDs** are critical indicators of the developmental trend more critically than residential and private areas of PUDs. Therefore, as established by review of existing literature, the *Transformations* of *PPs* in *PUDs* are crucial areas of scrutiny in urban research which elicit a greater probe. To this end, a study has been initiated to explore the *Transformations* that typically take place in *PPs* of *PUDs*. Following this, the current paper attempts to contextualize the *Transformations* through study of the evolution of the *PPs* in *PUDs* from selected case studies from the Greater Kolkata Region and its peripheral areas, which is the largest urban agglomeration in West Bengal, India. The region has multiple PUDs which were conceived and implemented in different times, making it an apt selection for the case studies. Kolkata is a mature metropolis in the eastern part of India, which began as three small settlements – Kalikata, Govindpur and Sutanuti in the 1600s. Eventually, in the 1800s, Kolkata became the nerve centre of the British Empire leading in commercial and administrative activities for the British crown, as well as the capital city of undivided India. As a result, many parts of Kolkata were meticulously planned including Dalhousie Area, Bhawanipore, Chowringhee etc. Even today, many of these areas bear their colonial names and characteristics. Post independence (1950s-60s), Bidhannagar was planned as a satellite township in the north-eastern fringes of the region, to create residential quarters for the burgeoning population (Bardhan & Chatterjee, 2016). In the 1980s-90s, Newtown was planned, further expand

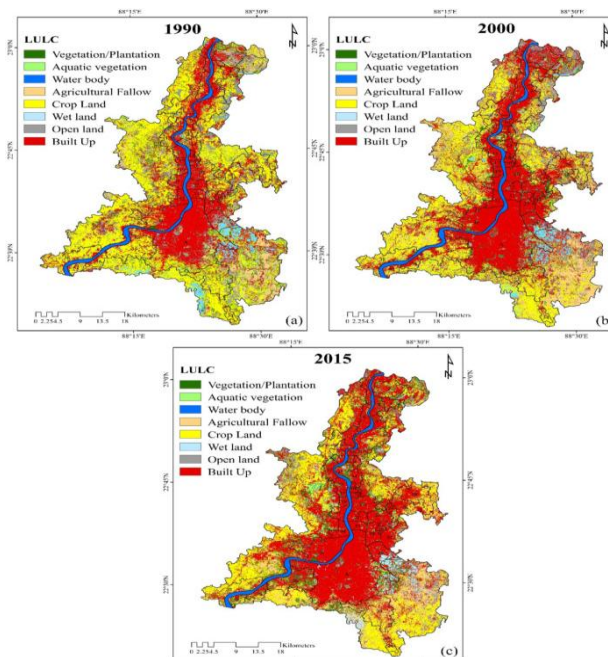


Figure 2: Urban Expansion of KMA | Source: <https://www.sciencedirect.com/science/article/abs/pii/S0048969718305631>

the city and satiate demand for more housing. To maintain a parity in comparison, only the above-mentioned post-independence (post 1947) PUDs, which were developed through government intervention and near the Kolkata city core have been chosen.

The discussion is divided into three major sections. The first and second sections deal with Bidhannagar (planned) and Newtown, deep-diving into the various aspects of the PUDs, the PPs they house and their transformational journeys. The third section, collates the aspects for the two PUDs, arriving at a comparative analysis. To understand, the Transformations, although, challenging, an attempt has been made to briefly describe the history and evolution of the two PUDs. Next, the planning and morphology of the two PUDs have been carefully studied, since the fabric of a PUD is distinctly different from that of an organic development. Thereafter, an attempt has been made to map the major PPs in the identified PUDs with a focus on their accessibility, activities, and amenities (Shee, Nag, & Mitra, 2025). Finally, various aspects of the two studied PUDs have been compared, attempting to arrive at a relative assessment and inference.

The study hinges mostly on secondary data and maps available in the public domain. Opensource Google historical Imagery has been used to study the changes in the urban fabric. Primary reconnaissance survey conducted in the month of August 2025 has been instrumental in understanding the current developmental state of the PUDs and their PPs. The study can be useful starting point for all future researchers aiming to study the Transformative processes for any PP in a PUD through field studies. Finally, an improved understanding and insight into the world of PPs in PUDs is envisaged as the ultimate outcome of the study.

### Discussion

Bidhannagar (planned) was conceived and constructed in the 1960s and 1970s, while the development of Newtown began three decades later in the 1990s. Both townships are in the eastern fringe of the Greater Kolkata Region and administratively only partially included in the Kolkata Metropolitan Area (KMA). The forthcoming sections elaborate on the two selected case examples culminating at a comparative analysis.

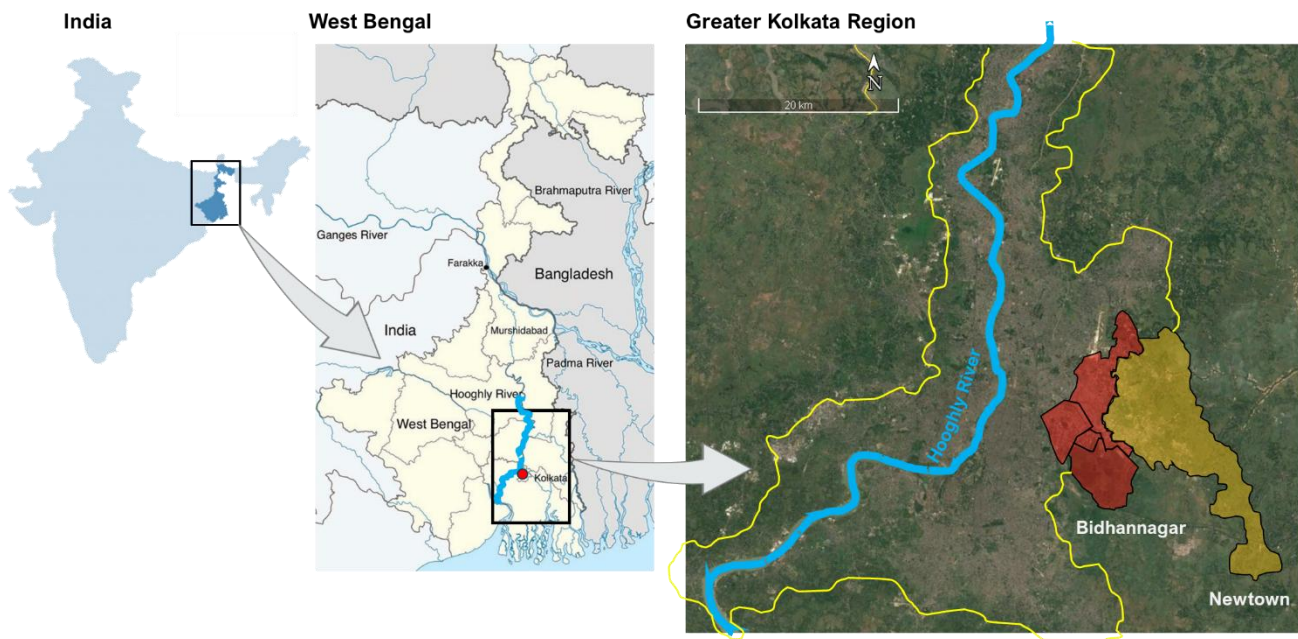


Figure 3: Location of Bidhannagar & Newtown relative to Greater Kolkata Region superimposed on Google Earth Imagery | Source: Generated by Author, 2025

### Case Study 01: Bidhannagar & its PPs

#### Background

Bidhannagar (planned) is a planned township in the north-eastern fringe of Kolkata, West Bengal which was developed by massive reclamation of Salt water lakes and marshlands in the 1960s. The plans to expand Kolkata by reclaiming the adjoining salt water lakes date back to the 1830s and led to the formation of a “Salt Lake Reclamation Company” in 1865. However, due to lack of funds, the plans were never actualized (East Kolkata Wetlands Management Authority, n.d.).



Figure 4: The Salt Water Lake by Thomas Prinsep in 1827 (The British Library) | Source: <https://www.bl.uk/onlinegallery/onlineex/apac/other/largeimage68372.html>

Post independence, faced with massive refugee influx and acute housing crisis, the Chief Minister of West Bengal, Dr. Bidhan Chandra Roy rekindled the idea of reclaiming the salt water lakes to make a new township. Netherlands Engineering Consultants (NEDECO) was tasked with preparation of a DPR on the feasibility of the project, following which, a Yugoslavian firm was chosen to carry out the said reclamation in 1959 (Banerjee, Sengupta, Kar, Banerjee, & Chattopadhyay, 2022). Prior to development of the township, the land which was supposedly leased to zamindars, who agreed to donate the same to the Government. While the reclamation work began in 1962, the works on physical infrastructure like water supply, sewerage, drainage etc. started in 1967 (Banerjee S. , 2018). Conceptualized as a residential township for the middle class, Bidhannagar (planned) today has emerged as an economic, administrative, commercial & recreational hub of Kolkata, particularly, its north and eastern fringes. During the reclamation and development phase, Bidhannagar (planned) was under the administration of the Irrigation and Waterways Department of the Government of West Bengal (Bardhan & Chatterjee, 2016). Post development, Bidhannagar (planned) (or Bidhannagar) was under the purview of South Dum Dum Municipality. Later, the township came under the wings of the Urban Development Department of West Bengal and subsequently in 1989, a Notified Area Authority (Bidhannagar Notified Area Authority) was set up. Finally in 1992, a separate Municipality Authority was constituted for Bidhannagar (planned) (Chatterjee, 2016) (Banerjee S. , 2018). In 2015, in view of increasing population and commercial as well as institutional developments, Bidhannagar Municipal Corporation (BMC) was constituted including Duttabad, Sukantanagar, Nayapatti, Mohisbathan etc. Currently, BMC covers around 55.51 Sq. Km of land area catering to around 6.5 lakh residents (Bidhannagar Municipal Corporation, n.d.). Interestingly, at present, with the inclusion of surrounding areas, only a fraction of BMC is planned.

### Study

The planned township of Bidhannagar (planned) is roughly the shape of a kite, with physical extremities at approximately 4.5-5 kms. The total planned area is around 13 sqm, which around a quarter of the total geographical spread of BMC. The total area is divided into 5 sectors which are further divided into 73 blocks. Each of the blocks ranged from three hundred to a few thousand individual houses housing a central park/playground at its center. Additionally, a Central Park is located at the centre of the township, covering an area of around 100 acres (Bardhan & Chatterjee, 2016). The township was positioned as a satellite growth for Kolkata with a neat grid-iron hierarchical road network, segregated residential zones and a central green. Sector 5 (marked in magenta in Fig 05) was a later addition, planned initially as Salt Lake Electronics Complex by West Bengal Electronics Industry Development Corporation Limited (WEBEL) in the 1990s. The morphology and character of Sector 5 is markedly different from the rest of the planned areas of Bidhannagar. The key characteristics of the urban fabric of Bidhannagar (planned) were:

- **Grid-Based Street Network** – As per the original master plan of Bidhannagar (planned), there were 7 types of roads (Types VII to I) with ROWs varying from 9m to almost 50m, following principles of hierarchical road network. For a typical residential block, the internal local roads were Type VI or VII (9-12m), with the periphery of the block having wider collector roads. The road abutting the Central Park as well the central Spine (4th Avenue) were the widest at almost 50m. There were rotaries at the intersections to ensure smooth uninterrupted traffic flows. Almost 23% of the area is designated to the road network (Bardhan & Chatterjee, 2016) with proper hierarchy of streets and grid-iron morphology. Except very few portions of Colonial Kolkata, this arrangement of roads was new and in contrast to the organic, labyrinthine street patterns of older Kolkata neighbourhoods.

### BIDHANNAGAR MUNICIPAL CORPORATION

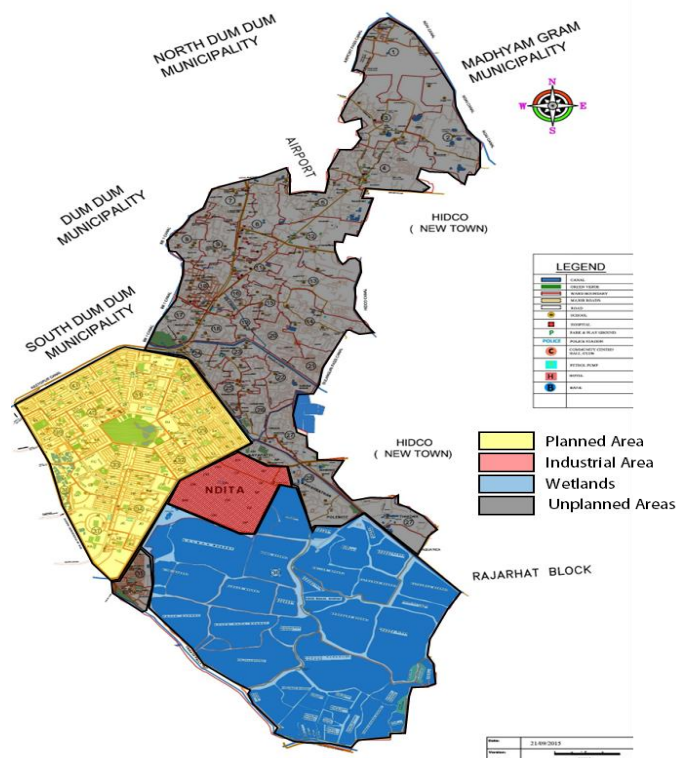


Figure 5: Map of BMC Area | Source: <http://www.bmcwb.gov.in/index.php/about-us/bmc-map> & edited by Author,



Figure 6: Location of Green Spaces in Bidhannagar (planned), Kolkata | Source: Google Earth, illustrated by Author, 2023

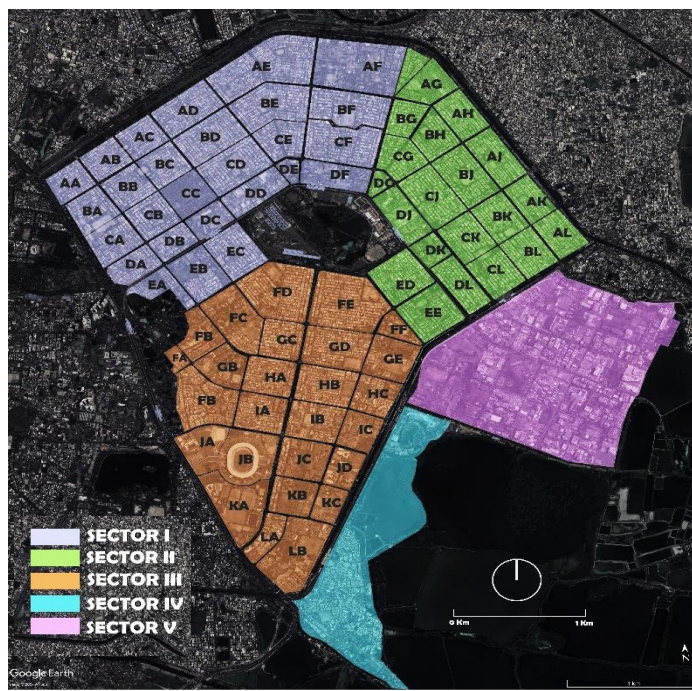
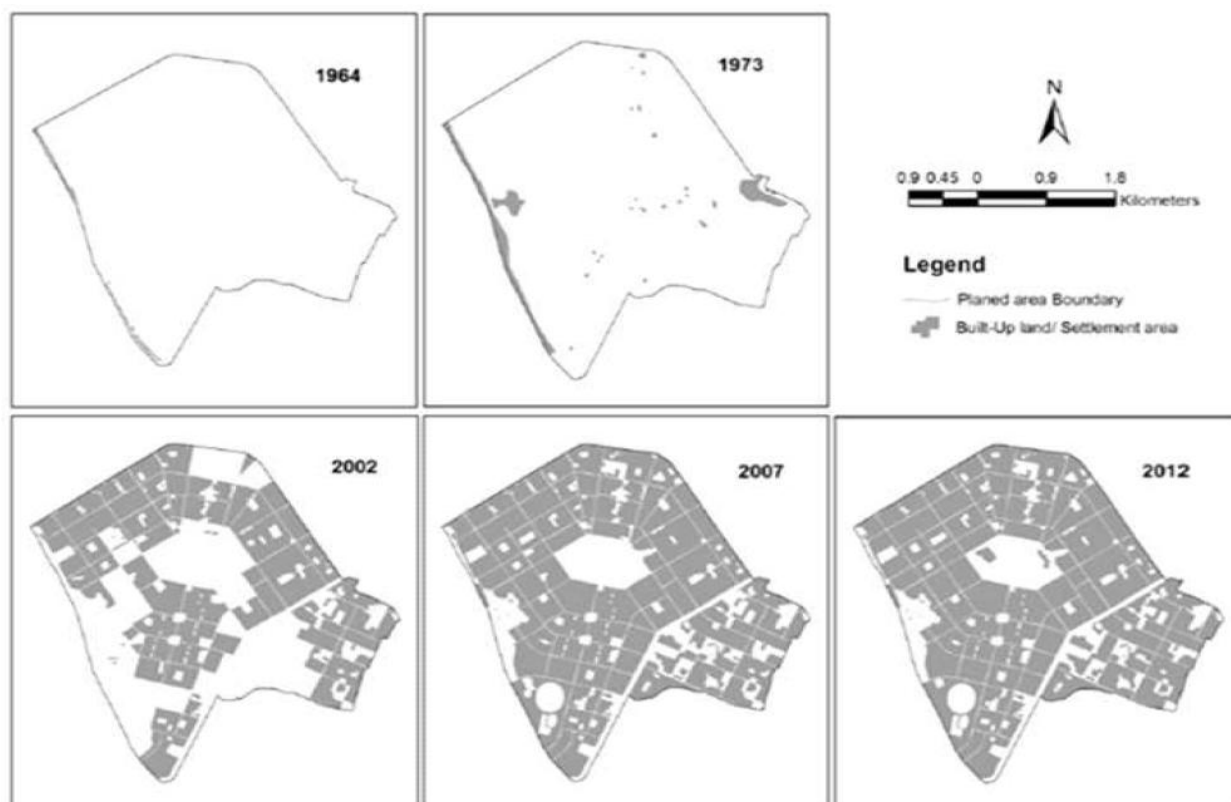


Figure 7: Map of Planned Area of Bidhannagar (planned) (Bidhannagar) | Source: Base Map from Google Earth, Map prepared by Author, 2023

- **Residential Block Structure** – A typical residential block was rectangular measuring anywhere between 200m to 600m on each side. Each block housed 300-500 individual houses and sometimes more. The urban fabric was characterized by individual plotted residential development with markets, schools, parks, and other social and recreational infrastructure at designated locations within the township. The residential ‘blocks’ have smaller greens and community markets for easier access of services for its inhabitants.
- **Organized Green Spaces** – The plan of Bidhannagar (planned) accommodated a large lung space called the Central Park. The park acted as a lung space for the settlement and along with the other parks constitute a healthy 12% of the entire land use (Bardhan & Chatterjee, 2016). Beyond this, every residential block housed more a dedicated playground to cater to the neighborhood.
- **Robust Physical Infrastructure** – Bidhannagar (planned) also boasts of a robust network of physical infrastructure including water supply, storm water drainage, sewerage network, and solid waste management system.
- **Organized planned community markets** - Around 15 community markets are scattered evenly across of the township for the convenience of the residents. Markets, green parks and community spaces were designed to be within walkable limits of every household.

All the non-residential areas of Bidhannagar (planned) can be considered PPs. However, over the last three to four decades, some areas and locations evolved to become transportation, commercial and recreational hubs. The paper intends to focus on the overall transformative journey of such places. The township started getting its first inhabitants in the 1970s and mostly the 1980s and finally started gaining a critical mass of inhabitants by the 1990s. Till then, the township was primarily a residential satellite town for Kolkata. With the development of Sector V as an industrial and services hub as well as the development of commercial hubs like City Centre 1 (shopping mall) and transport hubs like Karunamoyee (International Bus Stands), Bidhannagar (planned), started gaining a new character. By the 2000s, through land-use patterns were pre-determined, due to the robustness of infrastructure and lower density as compared to Kolkata, the township started attracting commercial development. Around the same time, the State Government, started allowing for part-conversion of residential plots to accommodate the tendency of commercialization. By the 2010s, the process accelerated and today, the township is a bustling hub of commercial, recreational, and institutional activities, with its own micro-economy and not merely a satellite development for Kolkata. The introduction of Metro services, the development of Newtown to the east of Bidhannagar (planned) have accelerated the process of commercialization. Currently, the rigid land use of the township, as promoted in the initial master plan has been broken by encouraging mixed land use in its residential blocks. This change has fuelled the local economy of Bidhannagar (planned), a facet vital to the growth of any settlement. The subsequent paragraphs delve deeper into two specific PPs: (i) Karunamoyee Area which is the most important transport hub of Bidhannagar (planned) and (ii) City Centre 1 Area which is a vital commercial hub Bidhannagar (planned).



*Figure 8: Spatial Growth of Salt Lake | Source: URBAN MORPHOLOGICAL STRUCTURE OF BIDHANNAGARA PLANNED SATELLITE TOWNSHIP OF KOLKATA, WEST BENGAL*

- Karunamoyee Area** – Karunamoyee, along with GD and AJ Blocks are the three original and major bus terminals of Bidhannagar (planned). Retrieval of old maps and retraced masterplans from the original, however, do not suggest the presence of any bus terminus (Tošković, 2020). Instead, it is indicated as the central green space for the entire township. Over the decades, out of the three, Karunamoyee has emerged as the most important transport node for the planned township. The bus terminus at Karunamoyee was operationalized sometime in the 1990s. Eventually, the terminus handled traffic from major inter-city, intra-state and inter-state destinations like Puri (Odisha), Digha, Asansol, Siliguri, Durgapur etc. Later, in 1999, an international bus terminus was inaugurated with bus service from Kolkata to Dhaka. Further chunks from the Central Park were apportioned for a cricket academy, a mela (fair) ground, a swimming pool, a metro car shed, eating into half the central lung space. Additionally, some deviations from the original land-use and allotment are also visible. Karunamoyee, having become the most important transport node for Bidhannagar (planned) has also witnessed a development of a metro station which became operational in 2020. The famed Kolkata International Book Fair was shifted to the Mela Ground in 2018 and as a result has gone through several rounds of informal street vendors eviction drives. Today, as our study suggests, many of the street vendors have returned along with auto, rickshaw stands on all four corners of the main intersection. Commuters from across Bidhannagar (planned) converge at Karunamoyee before dispersing to the various corners of the city.
- City Centre 1 Area** – City Centre 1 is a mixed-use development in DC block in Bidhannagar (planned) covering a span of approximately 6.77 acres. Retrieval of old maps and retraced masterplans from the original, suggest mixed use development with a trade centre flanked by residential areas (Tošković, 2020). Before City Centre 1 came into existence in the 2000s, anecdotes from old residents suggest barren land with howls of jackals being a common feature. In fact, the whole of Bidhannagar (planned) was a quaint township devoid of traffic, congestion, chaos and cacophony (Sarkar, 2022). City Centre 1, the first mall in Bidhannagar (planned) constructed between 2001-2004, transformed Bidhannagar (planned) from a quiet, peaceful satellite township to a bustling commercial hub attracting visitors from the main city. The years after City Centre 1, from 2005 to the present times, saw colossal change in footfall, traffic, and commercialization of Bidhannagar (planned).



*Figure 9: The transformations of Central Park and Karunamoyee area, Bidhannagar (planned) | Source: Google Earth Historical Imagery*

Alongside, the operationalization of City Centre 1, the construction of metro stations also started. Finally, the metro station at City Centre 1 was operationalized in early 2020. Currently City Centre 1 node is one of the busiest nodes of planned Bidhannagar (planned), having undergone tremendous transformation over the past 3 decades. Today, as our study suggests, City Centre 1 node has become a fulcrum of commercial, institutional, and recreational activities. There is some deviation noticed from the original master plans, with the residential areas flanked by City Centre 1 being converted into commercial or mixed-use development. Some of the adjacent plotted residential plots were never auctioned and remain empty and under the ownership of the Government. Informal eateries and shops have taken over these empty plots.

### **Inference**

The case study reveals that the Transformations of the PPs in Bidhannagar (planned) are mostly a resultant of commercialization and market forces, with other developments being incidental to the commercialization. Some of the inferences are:

- Although the land-uses were predominantly pre-decided in the master plans, commercialization of the Ground Floors of residential properties have been witnessed over the past 2 decades, especially in City Centre 1 Area.
- Due to the humungous increase in dependence of private vehicles and car ownership, on-street parking has become a big challenge in the township.
- Over the decades, the central lung space, Central Park, adjoining both the City Centre 1 Area and Karunamoyee Area have been slowly chipped away to make way for metro car-sheds, fair-grounds, swimming pool, cricket academy etc. which is a deviation from the original master plan
- Para-transit stations like rickshaws, autos as well as encroachments, informal kiosks and on-street parking all occupy the street, turning the character of the planned development into that of an organic development.

### **Case Study 02: Newtown & its PPs**

#### **Background**

Newtown is a planned township in the eastern fringe of Kolkata, which was developed from two erstwhile villages of Rajarhat and Bhangar, comprising mostly of agricultural land and waterbodies in the 1980s-90s (West Bengal Housing Infrastructure Development Corporation Limited (HIDCO), 2020) (Biswas & Singh, 2017). Unlike Bidhannagar (planned), which was developed in the 1960s, the mandate for Newtown was quite different. Newtown, was and is being developed in phases, not merely as a satellite residential town, but a self-sustaining town with its own CBD. The first development was in the form of three housing projects in the three Action Areas (I, II & III) of Newtown, which was developed by the West Bengal Housing Board (WBHB) (Deb, 2022). The intention was to spur development simultaneously in the three corners of Newtown with JV housing projects, where the HIG housing units would cross-subsidize the LIG & EWS units. Thereafter, West Bengal Housing Infrastructure Development Corporation Limited (HIDCO) & New Town Kolkata Development Authority (NKDA), the development & administrative bodies of Newtown were established in the 1990s-2000s. Envisioned as a smart, technology-driven town for the future, Newtown is a bustling development with major institutions, offices, state-of-the-art infrastructure (like bicycle ecosystems, smart infrastructure, advanced surveillance systems etc.). Currently around 7000 acres of land have been acquired, the process having started in the mid-1990s (West Bengal Housing Infrastructure Development Corporation Limited (HIDCO), 2020). The initial land acquisition was carried out by WBHB and later handed over to HIDCO, upon its formation. Later, in 1999, based on a cabinet decision, the Govt. Company, HIDCO was established with shareholding by WBHB, GoWB, WBIDC and a few other stakeholders. While HIDCO is entrusted with developmental activities of Newtown, NKDA was established in 2005, as the municipal and administrative body of Newtown (West Bengal Housing Infrastructure Development Corporation Limited (HIDCO), 2020). Later, Newtown was included the Smart City Mission, a flagship mission of the Government of India. To implement and operationalize smart city projects in Newtown, a separate Special Purpose Vehicle (SPV), New Town Kolkata Green Smart City Corporation Limited (NKGSCCL) was established. HIDCO and NKDA is assisted by Public Health Engineering Department (PHED), Irrigation and Waterways (I&W) Dept, West Bengal State Electricity Dept for various services and infrastructure.

#### **Study**

Newtown is divided into 4 Action Areas (I, II, III & IV) as well a dedicated Central Business District (CBD) area. Action Area I, being nearest to Bidhannagar (planned), started developing first and today is almost entirely completed. Action II & III as well as the CBD are in a mature stage of development, with most of the land already developed/ under development/ allotted. Action Area IV, which crucially connects Newtown with the main bypass of Kolkata, is in planning stage. Due to the progressive land acquisition process, the morphology of Newtown is more irregular than that of Bidhannagar (planned). Further, the phased planning of Newtown has meant that the morphology is more heterogenous than that of Bidhannagar (planned).

- *Residential Development* – The urban grain of Newtown is starkly different from that of Bidhannagar (planned). This is because, unlike Bidhannagar (planned) which focused on individual plots, Newtown adopted the co-operative land ownership pattern with 8 to 64 apartments in a single land parcel and bigger housing complexes. There are limited number of individual plotted developments in Newtown.
- *Mixed Land-use* – Unlike Bidhannagar (planned)'s, rigid land-use pattern, Newtown adopted the principle of mixed land-use, combining residential, commercial, institutional, and recreational functions within precincts.
- *Organized Green Spaces* – Like Bidhannagar (planned), Newtown has a central green, albeit irregular in shape called Eco-park. The park spans over almost 500 acres, much bigger than Central Park (Bidhannagar (planned)) and includes a 100-

acre waterbody, a zoo, a children’s park, themed gardens and much more. Apart from Eco- Park, Newtown also has many more dedicated parks, green verges and recreational zones. However, unlike Bidhannagar (planned), due to the absence of block system, community level playgrounds are limited.

- **Robust Physical Infrastructure** – Having been conceived in the 1990s and 2000s, Newtown, is being planned with emphasis on digital governance and technology-driven infrastructure (Newtown Kolkata Green Smart City Corporation Limited, 2026). Newtown has dedicated water supply network, storm water drainage, solid waste management & sewerage network. Additionally, being conceived as a smart city, Newtown has fiber-optic infrastructure, intelligent traffic management systems, drone surveillance, EV charging stations, smart streets etc. (Newtown Kolkata Green Smart City Corporation Limited, 2026).
- **Organized planned community markets** – Similar to Bidhannagar (planned), Newtown has around 12 Community Markets, most of which are currently concentrated in Action Area 1. The markets are not even spread throughout Newtown, owing to the same reason of progressive planning and development.

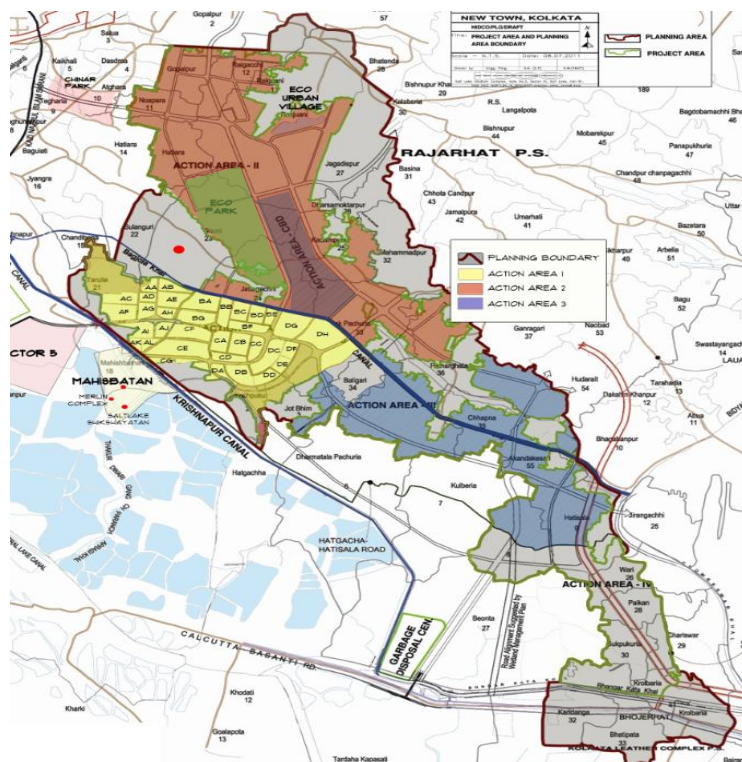


Figure 10: Map of Newtown & Rajarhat Planning Area (RPA) | Source: Author, 2024



Figure 11: Google Images of Newtown (Left) and Bidhannagar (planned)(Right) | Source: Google Images

The paper intends to focus on the overall transformative journey of such places. Action Area II and III, is primarily a residential zone with large scale housing projects and numerous smaller builders, exhibiting vertical development with tower clusters dominating the skyline. In between the Action Area I, II and III, there are dedicated recreational areas (Eco- Park), institutional areas (major hospitals, colleges, schools, convention centres etc.), Silicon Valley, a fin-tech hub, and a CBD. The township started getting its first inhabitants in the late 1990s and early 2000s and finally started gaining a critical mass of inhabitants by the 2010s. Unlike, Bidhannagar (planned), the industrial and services hub as well as commercial hubs were developed almost in parallel with the residential developments. The metro services are currently being developed (The Metro Rail Guy, 2025). Unlike Bidhannagar (planned), the process of commercialization is going hand-in-hand with residential development in Newtown. Compared to Bidhannagar (planned), Newtown is still in a nascent stage with the process of planning, land acquisition, land allotment, and development happening. Today, Newtown has turned into CBD, with people from all over Greater Kolkata, travelling to the township for work, education, and recreation. The subsequent paragraphs delve deeper into two specific PPs: (i) Biswa Bangla Gate Area which is the most important transport hub of Newtown and (ii) Central Mall Area which is a vital commercial and recreational hub Newtown.

- **Biswa Bangla Gate Area** – Today the BB node, just like the Karunamoyee in Bidhannagar (planned) has become the most important transportation node of Newtown. The area has undergone tremendous transformation over the past decade to become a hub of institutional, commercial, and recreational activities. Retrieval of old master plans from 2005, suggest that

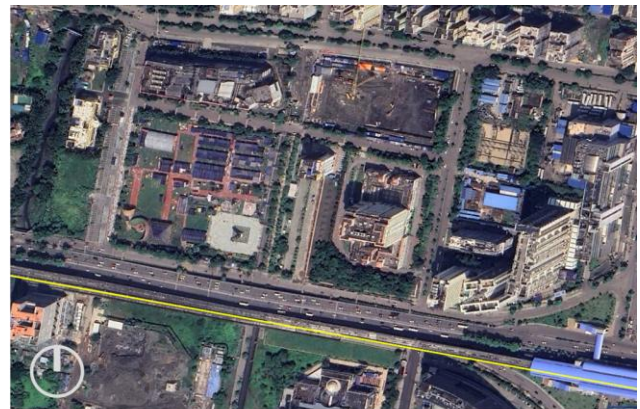
the area was originally intended for residential development, except the north-eastern quadrant, which was intended for educational/institutional or cultural use. The BB Gate was built in 2013, with the vision of building an iconic structure in Newtown. The structure itself has become an identity for Newtown, representing the aspirations of a modern, smart, technology-driven city through its unique form and monumentality. Initially planned in 1999, the location was shifted many times due to various reasons from upcoming metro stations to land related issues before finalizing Narkelbagan (the erstwhile name of this area). The design was commissioned and completed in 2017-18. The original design had a globe to be affixed at the centre, which was scraped after it fell during construction in November 2017. Initially named the 'Kolkata Gate', the gate structure currently houses a hanging restaurant, gallery and viewing decks. The MAR, Newtown (currently called the Biswa Bangla Sarani) has currently become major transport spine for Newtown as well as Kolkata, since it spans over 33 kms from the Kolkata Airport to Garia, through the Eastern Metropolitan Bypass (EM Bypass). In the Newtown stretch and over the BB Gate, the MAR has a massive 59 m ROW.

- **Central Mall Area** – The City Square Node (earlier known by several other names including Hometown, Central Mall area, Clock Tower area etc.) is a bustling commercial and recreational node of Newtown. Retrieval of old master plans from 2005, suggest that the area was originally intended for commercial development. Over the past 2 decades, the area has gone through tremendous development. In 2009, the first mall (Hometown) was inaugurated. In 2015, in an attempt to create an interactive public zone and give the area a sense of place, a clock tower was erected, along with a skating rink. Eventually, the ground was converted into a mela ground and a place to host the annual Newtown Sarbojonin Pujo (the most celebrated Durga Puja Pandal of Newtown). In 2021, based on a National Design Competition, Street no. 106 was pedestrianized and fitted with slides, swings, seesaws, merry go rounds and other outdoor play equipment.

Additionally, a performance zone and food truck zone was developed to create vibrant interactive zones and community spaces (New Town Kolkata Green Smart City Corporation Limited, 2023).



Retrieved from Google Earth Historical Imagery, 2011



Retrieved from Google Earth Imagery, 2025

*Figure 12: Google Earth Satellite Imagery | Source: Google Earth*

### **Inference**

The case study reveals that the Transformations of the PPs in Newtown are still in an emerging stage. Unlike, Bidhannagar (planned), the PPs are less walkable and car-centric. Some of the inferences are:

- The roads being wider and with a greater number of gated colonies, on-street parking is not a big issue in the PPs still.
- Central Mall Area has deviated significantly from the original Master Plan and has now become a fair ground as compared to the original plan of a community park. The area has become a commercial and recreational hub of the township
- The Biswa Bangla Gate structure of Newtown has become the icon and identity of Newtown. It is observed that that area, although primarily a transport hub like Karunamoyee Area in Bidhannagar (planned), has also developed into a unique recreational zone with its wide medians, rooftop restaurant and green pockets.

### **Comparative Analysis**

The homogenous morphology and fabric of Bidhannagar (planned) can be attributed to the fact that the entire land parcel was planned coherently, and unlike Newtown, at one go. Bounded by canals, the development area was clearly demarcated and known during the planning process. As the study reveals, the planning of Newtown was in stark contrast to Bidhannagar (planned). Newtown has been developed with a mixed land-use approach, PPs are often deeply intertwined with residential zones. Action Area 1, first and most developed zone, houses most of the locations which have evolved to become transportation, commercial and recreational hubs. Newtown is in a nascent stage of development still, with Action II & III still developing. Action Area I, having been in existence for 3 decades show some signs of initial saturation. Land allotment and development have reached a mature stage. The following chart presents a comparative analysis between the two case studies.

**Table 1: Comparative Analysis of Bidhannagar (planned) and Newtown | Source: Author, 2025**

#	Aspect	Bidhannagar (planned)	Newtown
1.	Timeline	Conceived in the 1950s-60s. Developed in the 1960s-70s. Have undergone half a century of transformation	Conceived in the 1980s-90s. Developed in the 1990s-2000s. AA-II and AA-III still under rapid development. AA-I has undergone two decades of transformation
2.	Land Acquisition	Large-scale reclamation of saltwater lakes and marsh lands. The land acquisition was undertaken in one go.	Land acquisition of native settlements and agricultural lands. The land acquisition was undertaken in a phased manner, following existing laws and statutes.
3.	Purpose	Planned as a satellite township for Kolkata. Has now emerged into a self-sustaining settlement with its own economy.	Planned as an independent self-sustaining settlement, with its own Central Business District, which is currently under development
4.	Morphology	Homogenous morphology since the entire land parcel was planned coherently and in one go.	Due to the progressive land acquisition process, the morphology of Newtown is more irregular than that of Bidhannagar (planned).
5.	Land use	Initially a rigid land use pattern with segregated uses. Currently, this has been broken by encouraging mixed land use in its residential blocks	Adopted the principle of mixed land-use, combining residential, commercial, institutional, and recreational functions
6.	Street Network	7 types of roads (Types VII to I) with ROWs varying from 9m to almost 50m, in radial pattern and following principles of hierarchical road network.	Roads not strictly grid-iron pattern, but mostly based on hierarchical road network. The Major Arterial Road (MAR) at almost 60-70m is the major spine, from which sub-arterial roads emanate.
7.	Physical Infrastructure	Boasts of a robust network of physical infrastructure including water supply, storm water drainage, sewerage network, and solid waste management system	Dedicated water supply network, storm water drainage, solid waste management & sewerage network. Additionally, also being conceived as a smart city with many advanced technologies.
8.	Organized Green Spaces	Contains a large lung space called the Central Park as well as smaller community parks and playgrounds at the neighborhood level.	Contains two large lung spaces called Eco-Park and Eco Urban Village as well as smaller community playgrounds, bigger parks, green verges, green medians etc.
9.	Major Public Places	Initially, the most PPs were community markets, parks and playgrounds. Slowly, some have emerged into major commercial and transport nodes	PPs were designed to become major commercial, transport and recreational hubs
10.	Transformation	Transformations are mostly a resultant of commercialization and market forces, with other developments being incidental to the commercialization.	The settlement is still in nascent stage and future transformations are likely to hinge on the economic activities

The comparison reveals the difference in intentions and planning of the two PUDs and how that affected the Transformations of their PPs. Additionally, after the initial master plans have been implemented, the process of commercialization sets in, sooner or later, unless it is controlled through development control regulations. Therefore, in that sense, a PUD and its PPs face the same market forces like its unplanned counterparts.

### Conclusion

The analysis of the Transformations of PPs is tied up with the analysis of its wider setting: the city. Bidhannagar (planned) and Newtown represented the aspirations of its government & citizens from two distinct time-periods – 1960s (post-independent, socialist development) and 1990s (post liberalization, new urbanism). Specifically, the PPs of these two townships reflect not just different planning approaches, but fundamentally different conceptions of what a city should be. Both have hugely accelerated Greater Kolkata’s eastward extension, which mostly comprised of wetlands acting as the ‘kidneys’ of the city. While Bidhannagar (planned) took 3 decades for the commercialization process to start, in Newtown, the process began right from its inception. The Community greens and community markets of Bidhannagar (planned), were walkable and closely connected with the residential spaces. As a result, the streets are highly walkable. In case of Newtown, since most residential development is gated, roads lack walkability and community spaces are missing at the neighbourhood level with usage of cars being far more

than Bidhannagar (planned). The commercial hubs of Bidhannagar (planned) were more modest and humbler, catering mostly to the needs of the local community, whereas, in Newtown, the commercial hubs are monumental in scale and highly designed. The nature of PPs shapes the society that inhabits it. The study showcases that the two townships present an excellent case examples of how planning and development can affect the Transformations of PPs in PUDs. The study also reveals that homogenous, coherent planning with more human scale development leads to more accessible, distributed and diverse PPs. On the other hand, progressive, large-scale planning with more high-rises and gated complexes leads to more privatized, exclusive and less accessible PPs. Commercialization of PPs is another aspect of this study which transforms the nature of PPs. As the study has shown, once the process of commercialization starts, it gains speed rapidly and makes PPs more exclusive, unless it is controlled. Future PUDs can take cue from the two townships to drive the developments of their PPs in desired directions.

The forthcoming part of the overall study will focus on delving deeper into specific PPs in Bidhannagar (planned) and Newtown through exhaustive primary study and secondary data. Specific sites will be chosen for closer observations and condition survey. Further research can also focus on: (i) The impact of metro services on the PPs in the PUDs and their transformations thereof; (ii) The comparative study of PUDs in Kolkata with similar developments across different geographies; (iii) The location and accessibility of PPs in PUDs and the impact on their Transformations; (iv) Commercialization of PPs in PUDs and the impact on their Transformations thereof; (v) The impact of morphology of PUD on its PPs and their Transformations thereof; (vi) etc. An improved understanding of the transformative processes that take place in PPs of PUDs is the overarching aim of the research work and the paper is an elementary step in that direction. The study can also become a springboard to investigate the genericness or the specificity of such Transformations.

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