



Institute of Architects Bangladesh

# **Recommendations for Improving Urban Environment of Dhaka**



Institute of Architects Bangladesh

# Contents

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## Disclaimer

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## Background

### 1. Background

Institute of Architects Bangladesh (IAB), as the professional body of architects, always tries to extend its support in making Dhaka a livable city. In order to bring positive changes in the urban built environment, IAB leaders have started dialogues with the Honorable Mayors of both Dhaka North and South City Corporations since last few years. Mayors have visited IAB Centre on various occasions and held meetings with the Executive Committee (EC) members to discuss different issues for the improvement of the environment of the city. Mayor Md. Sayeed Khokon of Dhaka South City Corporation (DSCC) met EC members on the occasion of a Jury for the Urban Design Competition on Mirpur Road Dhaka organized by DSCC in association with IAB in January 2017. Late Mayor Annisul Huq of Dhaka North City Corporation (DNCC) also attended programmes in IAB. Lately in August 2019, Mayor Atiqul Islam of Dhaka North City Corporation (DNCC) visited IAB and sought advice on uplifting and maintaining streets, landscaping and urban design elements in Dhaka city in a sustainable way.

To respond to the request, the Environment and Urbanization Aware-

ness Committee of IAB organized a workshop in September, 2019. A pool of experts with diversified professional experience and affiliations were invited to participate in the workshop. The experts gave suggestions and discussed about the priorities to improve urban environment of Dhaka city keeping in focus the physical environment. The recommendations included both short- and long-term urban design and urban management activities aligning with existing city development plans. Some of those activities are expected to be planned and implemented by the city corporations themselves, some will require collaborations with other agencies and organizations to improve living experiences of the citizens of Dhaka city. This publication is compilation of the workshop findings.

The committee headed by Dr. Farida Nilufar, assisted by committee members Dr. Huraera Jabeen, Architect Md Masusul Islam, Architect Sajal Chowdhury, Architect Mahfujul Hoque, Ar. Mohammad Fuad Abdul Qaium and Architect Quazi Fahima Naz contributed in organizing the workshop and compiling the findings under the guidance of EC members.

### Mayors at IAB



## Local Government (City Corporation) Act 2009

1. Protection and management of public water-bodies
2. Establishment and management of public markets
3. Construction and maintenance of public roads and footpaths with drainage
4. Lighting and additional urban facilities to improve transportation paths
5. Management of traffic to ensure safety for their citizen
6. Establishment and maintenance of parks and public recreational facilities
7. Providing public safety from fire and disasters
8. Taking initiatives and creating awareness about public health and education
9. Controlling contagious diseases

## 2. Responsibilities of City Mayors

The Local Government (City Corporation) act 2009 describes responsibilities of Mayors of both City Corporations and Pourashavas. According the act, detail activities of City Corporations of Dhaka encompasses many aspects that ensure physical and mental well-being of citizens, provide services, manage and improve physical development of the city, encourage educational and cultural activities and manage disaster and crisis etc. Examples of these responsibilities created a preamble to for the recommendations made in this publication to improve the urban environment of Dhaka city.

## Recommendations from Institute of Architects Bangladesh (IAB)

### 3. Recommendation on Topics

- 3.1 WALKABILITY AND LIVELY STREETS**
- 3.2 TRAFFIC AND TRANSPORT**
- 3.3 WATERBODIES, RIVERBANKS AND EMBANKMENTS**
- 3.4 PARKS, PLAYGROUNDS AND PUBLIC SPACES**
- 3.5 WASTE MANAGEMENT**
- 3.6 URBAN FACILITIES**
- 3.7 LANDSCAPE**
- 3.8 ECOLOGY AND ENVIRONMENT**
- 3.9 URBAN GOVERNANCE**

### 3.1 WALKABILITY AND LIVELY STREETS



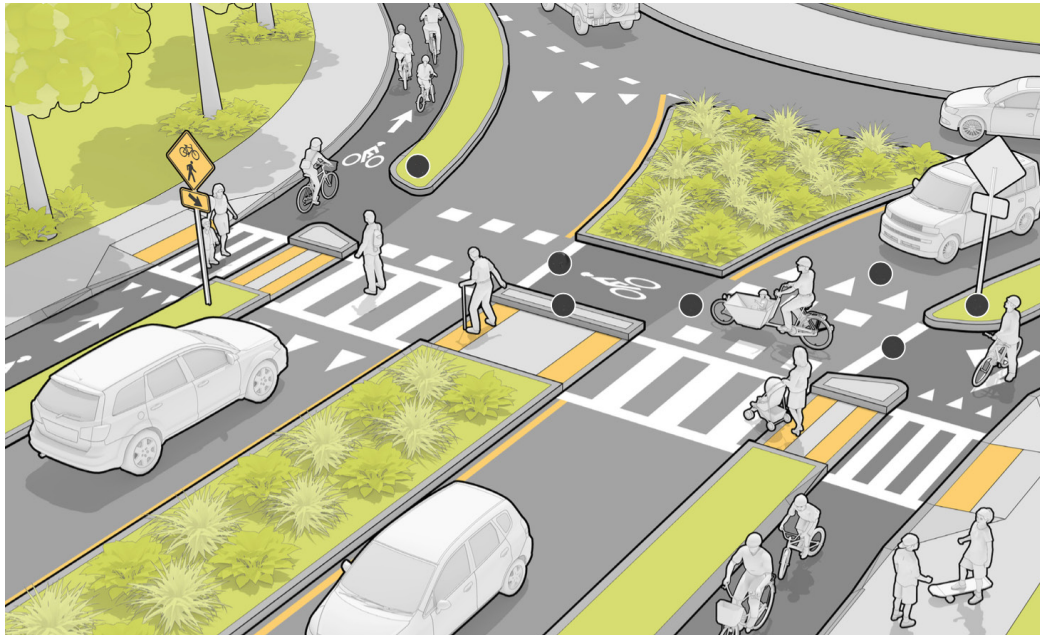
#### Short Term

- Extend the development of walkable paths throughout the city.
- Design pedestrian walks as comfortable and enjoyable environment with adequate space for walking, without obstacles, use of appropriate surface materials, and protection from sun and rain and keeping them clean.
- Incorporate pedestrian facilities and amenities in the public right-of-way including wider sidewalks, street trees, pedestrian-scaled lighting and signs, landscape, and street furniture.
- Ensure safe and easy pedestrian crossings with crossings at-grade, signals, bridges and underpasses.
- Use pedestrian amenities, such as curb extensions and textured paving, to delineate key pedestrian crossings.
- Ensure ease of movement for people of all age groups and with special physical conditions.
- Integrate pedestrian walks with public and other transportation paths and stops as well as public spaces and landmarks.
- Clarify neighborhood roadway intersections through the use of special paving and landscape.

Image source : <https://bengal.institute/research/footpath-design-guideline/>



### 3.1 WALKABILITY AND LIVELY STREETS



#### Long Term

- Prioritize pedestrian over vehicular movement in development planning.
- Use design standards to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity.
- Plan for providing convenient, safe, well-marked, and attractive pedestrian connections from the public street to building entrances.
- Encourage locating buildings on the site in such a manner so that they reinforce street frontages. Discourage use of walls, gates and other barriers that separate residential neighborhoods from the surrounding community and commercial areas.
- Provide guidelines and incentives for designing walls and fences to add visual interest to the streetscape and enhance the pedestrian experience, for example, public art, pedestrian-scale windows and entrances, signs, and street furniture.
- Encourage placement of active uses, such as retailers, restaurants, cultural facilities and amenities, and other various services, on the ground floor of buildings in areas where the greatest levels of pedestrian activity are sought. Planning efforts should be directed for vibrant, commercial main streets that serve as neighborhood destinations, community resources, and conduits to the different transit systems.
- Respect the context of historic buildings, landmarks, and areas that give a community a sense of place or history.
- Encourage planning with provision for public space in the form of plazas, greens, gardens, pocket parks, amphitheaters, community meeting rooms, public facilities and services, and social services in mixed use developments.

Image source : <https://tooledesign.com/expertise/design-guidance-and-manuals/>

## 3.2 TRAFFIC AND TRANSPORT

### Short Term

- Encourage better traffic management with lanes for different types of vehicles and speed.
- Establish and manage bus lanes and bus-stops with signage and bus-bays.
- Plan for motorized and non-motorized vehicular routes and restrictions with connectivity.
- Prepare neighborhood-level transportation plans aligning with the city-wide routes and plans.
- Encourage introducing E-ticket system in all public transports.
- Designate road side parking based on pick-and off-pick hours in areas with wider roads.



Image Source : <https://globaldesigningcities.org/publication/global-street-design-guide/designing-streets-people/designing-transit-riders/transit-facilities/>

## 3.2 TRAFFIC AND TRANSPORT

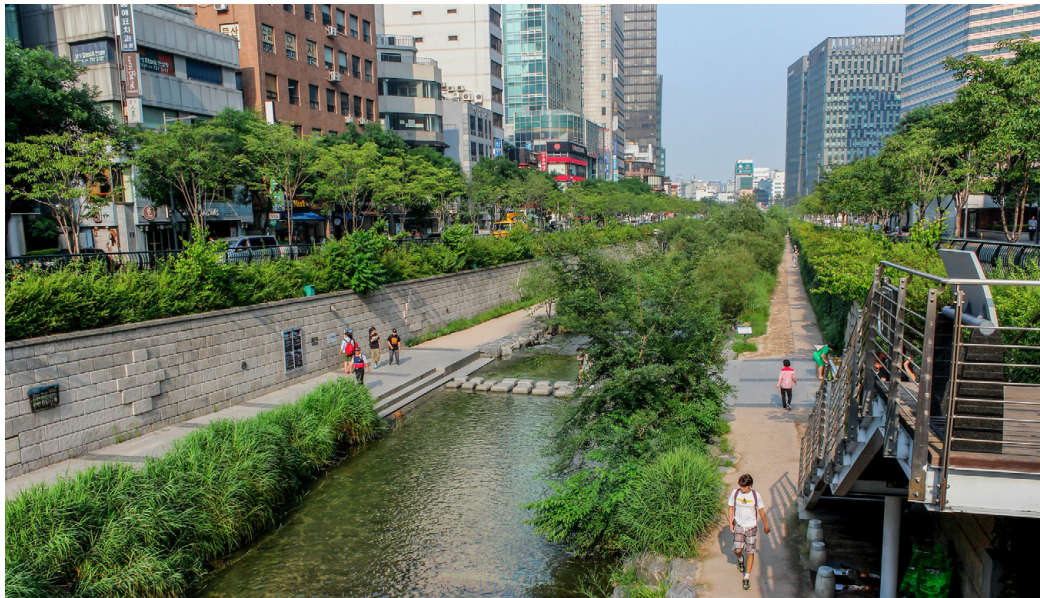


### Long Term

- Plan expansion and extension of existing transport routes and networks to connect to proposed transit stops (both MRT and BRT).
- Use road design standards and guidelines, at least for major roads and intersections with special attention to road geometry.
- Encourage non-motorized and water-based transports to reduce pollution.
- Share and manage commercial, residential, and public parking facilities where possible to manage parking for greater efficiency. Construct multilevel parking facility in commercial areas.
- Promote use of pervious surface materials to reduce runoff and infiltrate storm water, use trees and other landscape elements to provide shade and screening in parking areas.
- Design clear and attractive pedestrian pathways and signs that link parking and destinations.
- Lease out management of transportation terminals under of City Corporation authority to professional agencies through competitive process.

Image Source : <https://thethaiger.com/thai-life/top-10/top-ten-things-to-know-about-the-bangkok-skytrain-bts>

### 3.3 WATERBODIES, RIVERBANKS AND EMBANKMENTS



#### Short Term

- Clean up existing ponds, canals, river and riverbanks from deposits of waste.
- Ensure sustainable protection and maintenance of those waterbodies through budget allocation, raising awareness and involving community in management.
- Initiate activities for freeing waterbodies and water-edges from encroachment and encouraging their usage with visible public gains, for example, use as public open spaces, safe and walkable paths, water-based transportation routes.
- Identify waterbodies with potentials for development.

#### Long Term

- Reclaim and widen all channels and canals used for storm-water drainage to ensure unobstructed runoffs and avoid water-logging.
- Conceive the city's canals and rivers as a network of navigable waterbodies rather than as drainage network.
- Planning to transform riverbanks and adjoining areas of waterbodies as accessible, safe and socially inclusive public spaces.
- Review planning and development of eastern embankment considering the learning from western embankment. Drainage planning developed by Institute of Water Management (IWM) can be considered in this regard.

Image Source : [https://www.reddit.com/r/CityPorn/comments/ajfmlo/cheonggyecheon\\_a\\_7mile\\_long\\_stream\\_that\\_runs/](https://www.reddit.com/r/CityPorn/comments/ajfmlo/cheonggyecheon_a_7mile_long_stream_that_runs/)

### 3.4 PARKS, PLAYGROUNDS AND PUBLIC SPACES



#### Short Term

- Continue development of parks and playgrounds under city corporations creating positive changes throughout the city.
- Free parks, playgrounds and open spaces from encroachment to make them accessible to public.
- Allocation of budget and human resources for maintenance and cleaning of parks, play grounds and public spaces.
- Involvement of local community for sustainable operation and maintenance of those.

#### Long Term

- Integration of parks and playgrounds with other public facilities and transportation routes.
- Conservation and development of the oldest parks of the city as ecological parks.
- Asset planning and management of city corporations to identify, design and implement land owned by them to develop for public benefits, for example, markets, public entertainment and community facilities as well as generating revenue.
- Explore opportunities for wetland based regional parks on the peripheries in the absence of land area within high-density core-city area.
- Ensure public spaces are easily accessible and open to all both physically and financially.

Image Source : <https://www.facebook.com/jolshobujedhaka/photos/p.1291789187661355/1291789187661355/?type=1&theater>

## 3.5 WASTE MANAGEMENT

### Short Term

### Long Term

- Organize door to door collection of wastes.
  - Encourage community participation in waste management. Support community-based organizations and micro enterprises to manage small-scale waste recycling. Segregate recyclables at the sources, ensuring their cleanliness and quality.
  - Construct and maintain Secondary Transfer Stations (STS) in each Ward.
  - Initiate awareness programs on environmental sanitation, personal hygiene and health consciousness.
  - Improve capacity of city corporation staffs and employees on better waste management.
- Manage biodegradable waste scientifically. Convert food wastes into useful eco-friendly compost.



Image Source : <http://www.residuosprofesional.com/wp-content/uploads/2014/03/galdakao.jpg>

## 3.6 URBAN FACILITIES



### Short Term

- Construct more public toilets to meet demands and ensure their sustainable maintenance.
- Design signage for both pedestrian and vehicles to provide directions, designate neighborhoods and their identities, direct vehicular and pedestrian circulation, guide rules of conduct, where appropriate behavior control is necessary.
- Provide lighting from a variety of sources at appropriate intensities and qualities for pedestrian circulation, visibility, safety and security.

### Long Term

- Minimize the visual and functional impact of utility systems and equipment on streets, sidewalks, and the public realm. Convert overhead utility wires and poles, and overhead structures such as those associated with supplying electric, communication, community antenna television, or similar service to underground.
- Locate and consolidate traffic operational features such as streetlights, traffic signals, control boxes, street signs and similar facilities on poles, to minimize clutter, improve safety, and maximize public pedestrian access, especially at intersections and sidewalk ramps.
- Carefully plan for locating other street utilities such as storm drains to allow proper placement of the vertical elements.
- Develop more childcare providing facilities and primary schools within walkable distance in different communities.

Image Source : <https://www.flickr.com/photos/wat-raidbd/albums/72157660752905548/>

## 3.7 LANDSCAPE



### Short Term

- Preserve large plants while widening the roads. Electricity lines, cable networks should not hinder their development.
- Encourage use of native species for plantation beside or on footpaths/roads.
- Intensify the programs of roadside and street side planting and landscaping of open spaces and recreational areas.
- Identify incidental spaces, nodes, pockets of spaces to be developed as parks, open green spaces and public plaza and corners with shades.
- Involve local community in maintenance and development of urban landscaped areas.

### Long Term

- Use topographical survey to design areas for landscaping and formulate rules to control Sustainable City Landscaping.
- Encourage and provide incentives to promote landscaping and beautification programs in residential, commercial and industrial areas.
- Initiate appropriate planning and strategies for integrating rivers and canals as environmental amenity and feature of the city's urban design and landscape. Coordinate redesigning of roads, sidewalks, and open spaces of adjacent developments to integrate and rehabilitate embankments.

Image Source : <https://www.dhakatribune.com/bangladesh/dhaka/2017/07/30/hatirjheel-project-responsible-waterlogging>



## 3.8 ECOLOGY AND ENVIRONMENT



### Short Term

- Take initiatives to reduce both indoor and outdoor air pollution, sound pollution, and water contamination.
  - Raise awareness about mental health issues from public health concerns.
  - Relocate and discourage establishment of polluting industries inside the city.
  - Preserve and enhance remaining natural elements of the city, for example, wetlands, canal, lakes, natural landforms and features.
  - Encourage maintaining and increasing grain water soak-able surfaces in any development.
- Create a network of green and blue infrastructure linking open space and landscape to define and link communities.
  - Ensure ecological cycle on the canal/river edges by ground covers ensuring water infiltration and percolation, instead of constructing concrete edges.
  - Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.
  - Link public attractions, open space and other destinations together by connecting them with trail systems, cycle path, landscaped boulevards, designed parks, and/or natural open space, as appropriate. Protect views from public roadways and parklands to natural areas and scenic vistas.

### Long Term

- Carefully preserve a balanced eco-system in the city.
- Plan and implement conservation of Dhaka's natural environment.

Image Source : <https://inhabitat.com/7n-architects-unveil-designs-for-edinburghs-fountainbridge-masterplan/>

### 3.9 URBAN GOVERNANCE

#### Short Term

- Emphasize on human resource management within city corporation and depend on their own expertise rather than employing for short-term or through other means.
- Explore opportunities within existing planning control, bylaws and codes to develop public facilities to provide services to the citizens.

#### Long Term

- Aim for institutional capacity building to facilitate coordination between government and autonomous organization as well as the private sector, the civil society, the community, development partners and international agencies for good governance.
- Advocate for separate mandate and jurisdiction as city corporation with more capacity for development planning and control as the local government.
- Encourage more public participation in decision-making and planning.



Image Source : <http://stage.heartland2050.org/blog/page/7/>

## List of Participants

### 4.1 Experts

- Urban Environmental Activist  
**Ar. Iqbal Habib**  
Vitti Sthapati Brindo
- Urban Development  
**Ishita Alam Abonee**  
World Bank
- Urban Planner  
**Prof. Dr. Md. Ghulam Murtaza**  
Centre for Urban Studies (CUS)  
**Prof Dr. Md. Musleh Uddin Hasan**  
Associate Professor, Dept. of URP,  
BUET  
**Dilbahar Ahmed**  
Planner, DNCC
- Waste Management  
**Dr. Tariq bin Yousuf**  
Project Director, DNCC
- Urban Governance & Infrastructure  
**Eng. Md. Nurullah**  
Formar Chief Eng, DSCC
- Public Health  
**Dr. Aliya Naheed**  
Head, Non-communicable diseases, ICDDRB
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**Ar. Niaz Ahmed**  
Consultant, DAP Project, RAJUK
- Urban Infrastructure  
**Saiful Alam**  
IWM
- Landscape Design  
**Ar. Rabiul Islam**  
GOAAT

## List of Participants

### 4.2 IAB Executive Council Members

**Ar. Jalal Ahmed**  
President

**Ar. Mamnoon Murshed Chowdhury**  
Vice- President (National Affairs)

**Ar. Ehsan Khan**  
Vice- President (International Relations)

**Ar. Nowajish Mahbub**  
General Secretary

**Ar. Nabi Newaz Khan**  
Assistant General Secretary

**Ar. Masud Ur Rashid**  
Treasurer

**Ar. Mohammad Arefeen Ibrahim**  
Secretary, Education

**Ar. Bayejid Mahbub Khondker**  
Secretary, Profession

**Ar. Tofayel Md. Sarower**  
Secretary, Membership

**Ar. Sheikh Itmam Soud**  
Secretary, Publication & Publicity

**Ar. M Taufiqur Rahman Khan**  
Secretary, Seminar & Convention

**Ar. Mohammad Sazzad Hossain**  
Secretary, Heritage & Culture

**Ar. Dr. Farida Nilufar**  
Secretary, Environment & Urbanization

**Ar. Najm-ul Latif**  
Chairman  
Chittagong Chapter

**Ar. Kazi Golam Nasir**  
Immediate Past President

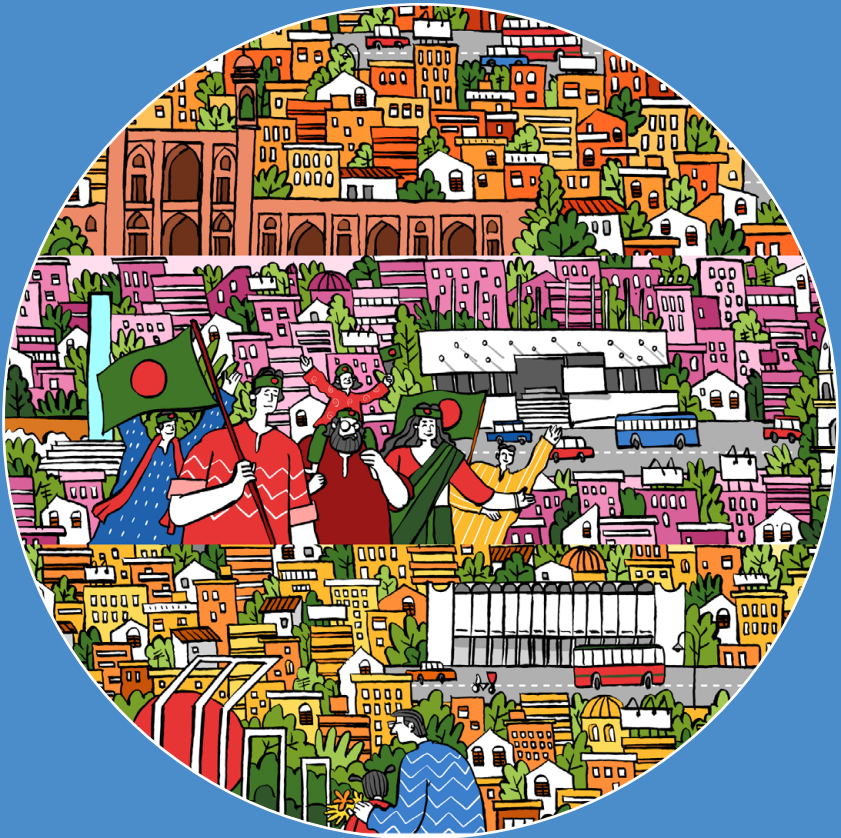
## Conclusion



### 5. Conclusion

The urban challenges currently faced in Dhaka have multiple dimensions. Architects always take the responsibility in creating livable cities along with other professionals. While the City Mayors are struggling to serve the citizens within their limitations; and often seeking expert opinions from architects, the Institute of Architects Bangladesh (IAB) takes it as their responsibility to support the city authorities with their professional knowledge and cooperation. Through the workshop arranged in August 2019, IAB has come up

with some concrete recommendations in improving the urban environment of Dhaka. This booklet gives a summary of presently considered aspects that seems essential for making Dhaka a livable city.



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