

別添 **A**: ダッカにおける不動産の状況

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## 1 Land Property System in Dhaka

1.1. From the time when the beginning of the human civilization all social, economic and cultural activities developed involving land. Land is considered a most important and valuable component of urban system. The step of urbanization in the developing country over the next decades is expected to be very rapid. Especially in mega cities, urbanization process is closely associated with economic aspects and at the same time push up the demands for serviced land for various kinds of urban uses, infrastructure and services.

1.2. Dhaka is the largest city of Bangladesh and core of the political, social and economic activity. The main stream of urbanization process of Bangladesh is focused on towards this capital. To cope up with the heavy pressure of development, Dhaka is in vital need of accurate and systematic information about its land market. Most of the land market of Dhaka is controlled by private land owners and real estate developers. And it is very difficult to control over the land price and systematic way of purchasing. It is very difficult to manage and operate land transaction process with old-dated land transection system, taxation structure.

1.3. The administrative structure of land management in Bangladesh is built around three basic functions: ( i ) record keeping, ( ii ) registration, and ( iii ) settlement. These functions of land administration are maintained by various departments of two Ministries, The Ministry of Land (MoL) and The Ministry of Law, Justice and Parliamentary Affairs (MLJP). While the MoL discharge most of the land-related activities including survey, collection of land development tax, arbitration process, the MLJP mainly records land mutation and transfers.

1.4. Land registration is a deed of maintenance of a public register, which is a record of an isolated transaction. Sub-Register (SR) registers transfer of any parcel of land through a deed with stamp on the property value as Immovable Property Transfer Tax (IPTT). When any deed is registered in Registration office, Land Transfer (LT) notice is to be sent to the Office of Assistant Commissioner's (AC, Land) Office. Mutation is the process of revising and updating the Record-of-Rights (ROR) on transfer of land ownership and on subdivision and amalgamation of landholdings. The AC (Land) working under Deputy Commissioner (DC) updates or revises partially these land records through mutation process.

1.5. After the finalization of land records in survey operation the Directorate of Land Record and Survey (DLRS) under MOL sends *khatians*, *mauza* maps to the DC office that preserves them in the District Record Room which is maintained in AC (land) Office. These Land Records provide the base to conduct further survey and preparation of master plan, structure plan, infrastructure development plan, valuation of property tax, etc.

1.6. The land administration system should be made stronger and transparent. And land record preparation, updating of ROR and land transfer registration are the integral parts of land administration and these should be coordinated well. However, at present the responsible ministries and agencies involved for land management and administration work independently with little coordination among them. The whole process is age-old land management so it is manual, laborious and time intensive. Multiplicity of documents or records of right maintains in different offices under different un-coordinated ministries. Moreover, ROR or *Khatian* is not conclusive evidence of ownership, and these merely

provide basis for possession at the recording time.

## 2 Right of land

1.7. British colonial rulers established feudalism in this Subcontinent deeply. In 1875 they enacted 'The Survey Act, 1875' and under this act a survey namely 'The Cadastral Survey' was conducted from 1888 to 1938 throughout the then Bengal presidency province of India. Records of Rights i.e. RoR/ khatians were prepared by this survey operation. All particulars of land, including name of the owners/ zamindars, occupants, description of land, and amount of revenue were described in those khatians. Copies of those records were preserved in the district record room and zamindars' tax office i.e. kachari or tahsil offices.

1.8. On the other hand newly appointed feudal lords/ Zamindars started exploitation and mismanagement in land administration. People became tenants/ rayats rather than citizen and started struggling. They struggled for survival. Once it turned into movement against feudalism/ zamindari system. As a result the then British government enacted a law namely 'The Bengal Tenancy Act, 1885' to ensure tenants' right. Peasants' occupancy right to land was addressed by this law; mutation for tenants to land records was provisioned. Due to this act tenants' name was been written in survey records as occupants. But it was not implemented properly. As a result of continuous struggle and movement of the peasants an inquiry commission was established after enactment of 'The Government of India Act, 1935' by the British government. This commission recommended to acquire all zamindaris with due compensation and bring the peasants/ rayats directly under the government. This recommendation was implemented by government of the east Bengal, state of Pakistan, after independence in 1947. The then government enacted 'The East Bengal States Acquisition and Tenancy Act, 1950' and acquired all estates with all rent receiving interests and thereby brought all peasants/ rayats directly under the government as the owners of land.

1.9. According to National Land Policy 2016, All Land in Bangladesh shall be classified as Private, State, Public and Community Land.

1.10. **Private Land:** Private land denotes land held by and individual or other legal entity under freehold or leased tenure.

1.11. **State Land:** State land refers to agricultural and non-agricultural *Khas* land that the state manages on behalf of public.

1.12. **Public Land:** Public land denotes all land owned by the Government including its agencies and allotted for a specific public use. Public land may also be allotted for large-scale development projects implemented under public-private sectors partnership.

1.13. **Community Land:** Community land denotes land lawfully or customarily held, managed and use by specific social or religious entities in a defined geographic location. To promote tenure security and sustainable utilization of land resources, the Government shall map and document agricultural land or pastureland owned and managed by specific community and incorporate such land into the formal land registries.

## 3 Land Property Registration system

1.14. All over Bangladesh, land properties have been in sale-resale for hundreds of years,

the process gradually becoming more and more formal as the space available for development shrinking unabatedly. There were times in the past, not very long ago during our immediate previous generation, when one or two cubit of land along the common aisle (earthen ridge divide) would be relinquished by the peace-loving, simple village people in turn to avoid disputes and quarrels with People who are met almost every sunrise. But the scenario has drastically changed with the introduction of the so-called Free Market Economy and more particularly its convenient interpretation by the opportunists. People are much more selfish and self-centered now than ever before. Blood-feud and murder are not uncommon in incidents regarding land.

1.15. In rural and secondary/tertiary towns, this registration process is administered by Sub-Registry Office. There are prices fixed for land according to category and utility but these are seldom followed. Actual prices are either higher in most of the cases; or in poor socio-economic and sleepy economic activity areas, prices are rather lower than the government price. This author paid more prices to his seller elder brother than was printed in government documents.

1.16. In cities and large towns, this process is accomplished by Bhoomi (Land) Offices.

#### Steps in Land Registration

<b>1. Verification of the record of rights from AC Land Office</b>
<b>2. Application for Mutation on Property to AC Land</b>
<b>3. Investigation by the AC Land's Office on Khatian or RoR (Records of Rights )</b>
<b>4. Obtaining the Non-encumbrance certificate</b>
<b>5. Preparing transfer deed and payment of stump</b>
<b>6. Paying registration fee, VAT, and other taxes</b>
<b>7. Applying for registration at the sub-registry office</b>
<b>8. Registering the change in ownership at AC Land office</b>

#### **1) Mutation Fee:**

1.17. From July 1, 2015, the government is taking Tk. 1000 as mutation fee for each khatian (RoR). This amount is much larger than the earlier one of Tk. 245. This increased rate would discourage land owners to do mutation of their land that would put land management and determination of land ownership in jeopardy. Moreover, this increased rate would increase corruption as well.

#### **2) Registration Fee:**

1.18. According to THE INCOME TAX ORDINANCE, 1984 (XXXVI OF 1984) [As amended up to July, 2014]

1.19. [53H. Collection of tax on transfer, etc. of property.- (1) Any registering officer responsible for registering any document of a person under the provisions of clause (b), (c) or (e) of sub-section (1) of section 17 of the Registration Act, 1908 (XVI of 1908) shall not register any document unless tax is paid at such rate as may be prescribed in relation to the property to which the document relates and on which stamp-duty is chargeable under Stamp Act, 1899 (II of 1899) by the person whose right, title or interest is sought to be transferred, assigned, limited or extinguished thereby, at the time of registration of such document:

1.20. Provided that the rate of tax shall not exceed taka ten lakh and eighty thousand per katha (1.65 decimal) for land, taka six hundred per square meter for any structure, building, flat, apartment or floor space on the land, if any, or four per cent of the deed value, whichever is higher.

#### **4 Registered Land Price and Actual Land Price**

1.21. Land Transaction is made through the office of the Sub-Registrar land transaction record kept in every Sub-Registry office. Every Sub- Registry office has a government stated minimum price of Land transaction. No one can buy land from other less then govt. stated price of that area where transaction will be occurred. But this official price are usually far below then the real market price.

1.22. Since Registration fees in Bangladesh are quite high, this makes registration cost high for land purchasers. The impact of this high fee is felt more prominently in areas where land price is quite high. In such a situation, deed writers tempt land purchasers to show lower land prices and thus encourage them to evade tax. The registry officials tacitly approve their wrongdoings without taking any disciplinary measures.

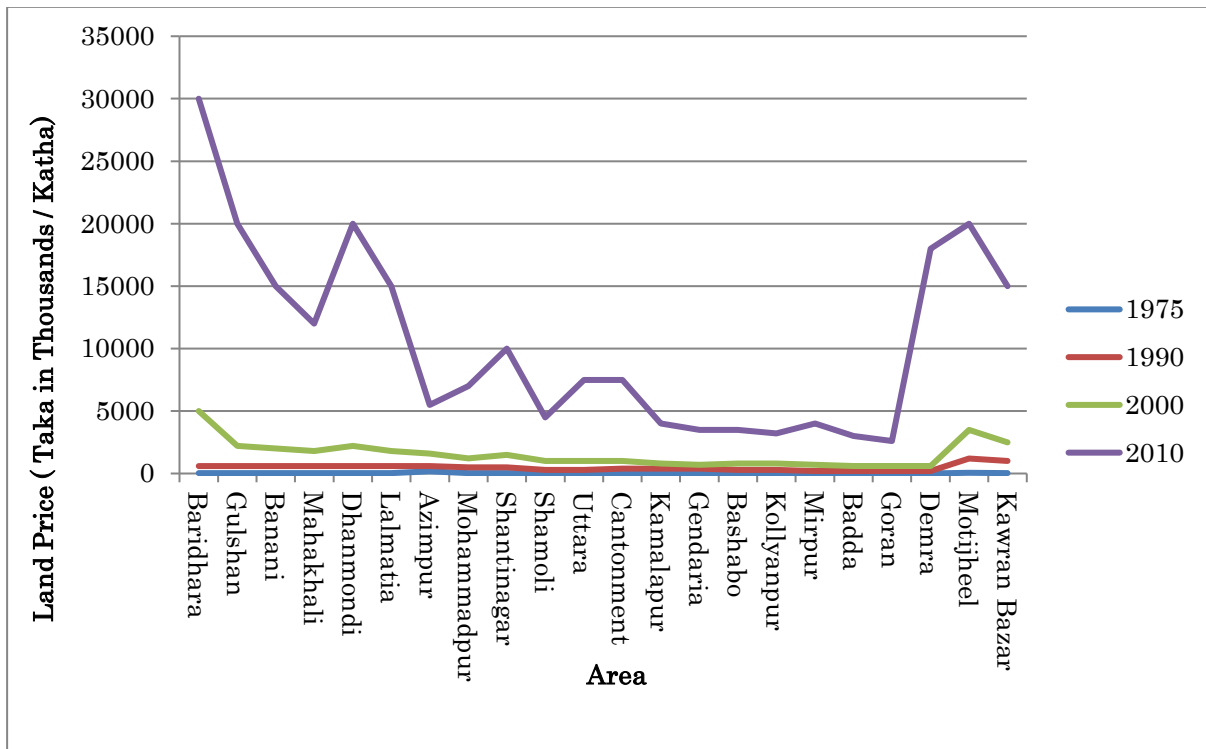
1.23. Since the registration fee is paid on basis of official land price, every year Government is deprived of a huge amount of revenue from land transaction. Discrepancy between the official and actual land price should be eliminated by establishing and effective Land Information System which will result in better management of land and revenue collection.

#### **5 Trend of Land Price in Dhaka City**

1.24. Dhaka has experienced an exceptional increase of land value since the early seventies. But the value of land in Dhaka City, mainly in the central area, has increased at a rate very much higher than the rate of any other commodity after 1990. After 2000, the rise in land price became steeper.

1.25. In Figure1 Land value of Dhaka city has drastically increased in last decade are shown.

Figure 5.1 Chronological changes in Land Price of Different area of Dhaka



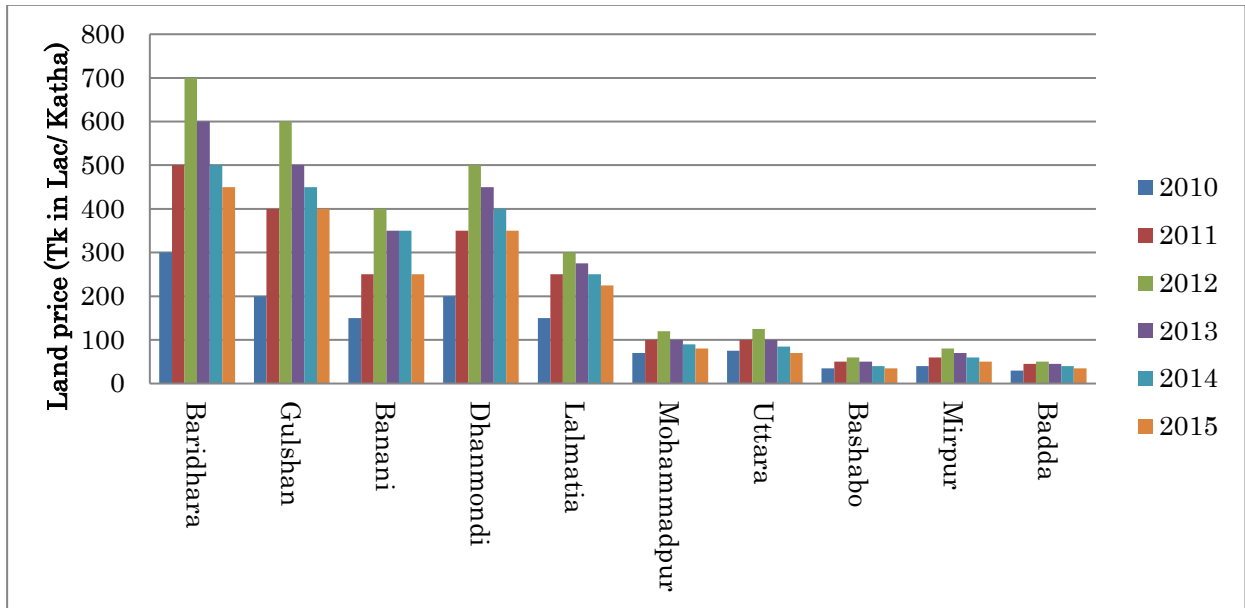
Data Source: Sheltech (pvt.) Ltd. 2010

1.26. With the increase of population in Dhaka the housing demand is getting an expansion, thus further increasing the value of housing units. As a result, the settlement area of the city is increasing and people are getting more inclined at the outskirts. As a result the surrounding areas of the city are also experience a rise in the land price.

1.27. From 2010 to 2015, Land Market is very much fluctuated. Fluctuating rate was higher in 2012 due to real-estate land development and housing projects all around the Dhaka city. The activities of Real estate companies have been responsible for the high price of land because they pay a much higher price for a good piece of land.

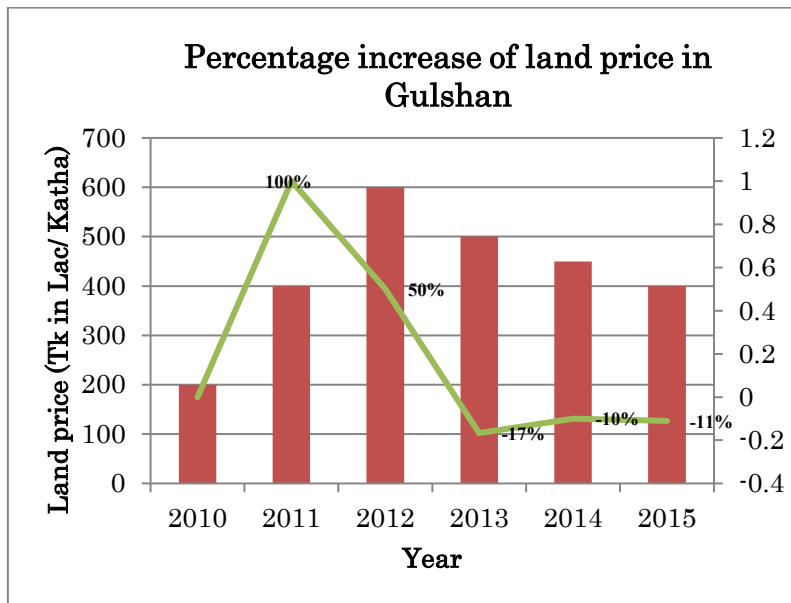
1.28. Land use transformation is one of the key factors to increase land price of some area in Dhaka city. For Example, the transformation of land use of Dhanmondi residential area to commercial use has made its land price higher than any other planned areas. Gulshan, Banani also in same trends. Baridhara Residential area is use mainly for diplomatic mission like embassy and highly secured, planned residential area. It is the cause of high land price within this area among all over the Dhaka city. Land price comparison of different area of Dhaka from 2010 to 2015 is shown in Figure 5.2.

**Figure 5.2 Land Price comparison of different area of Dhaka (2010-2015)**

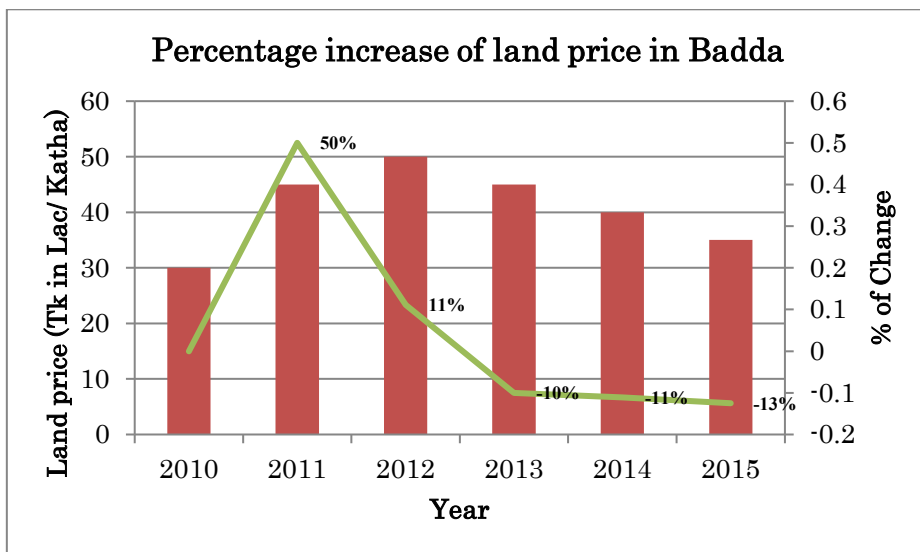
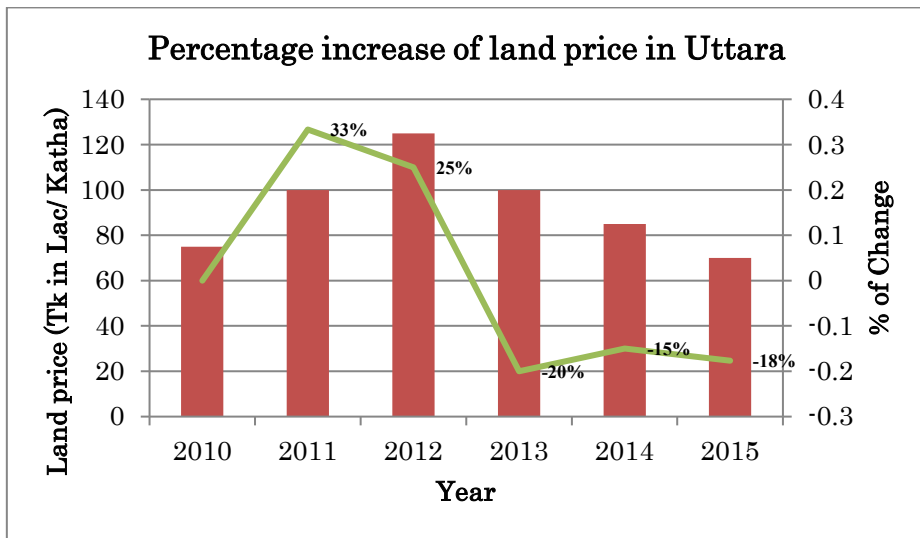
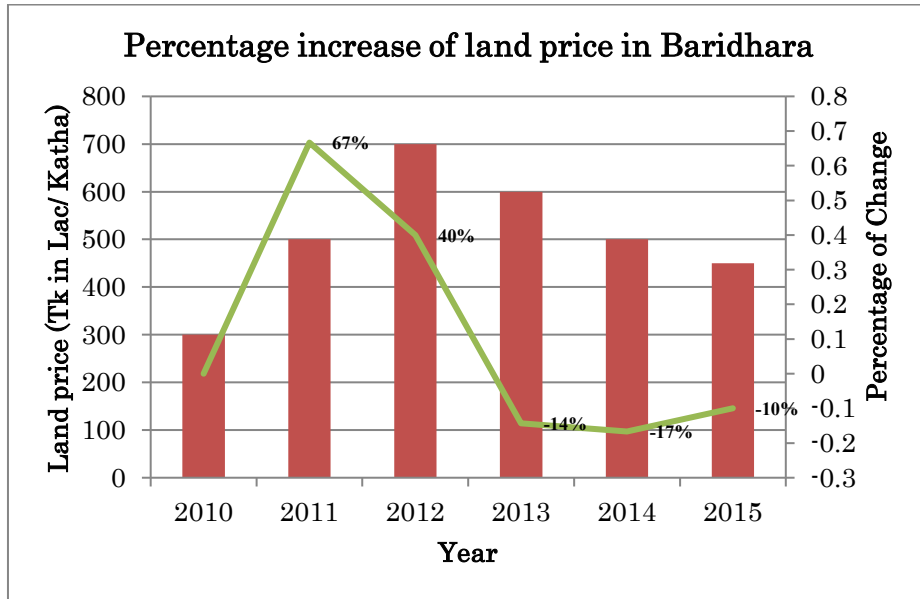


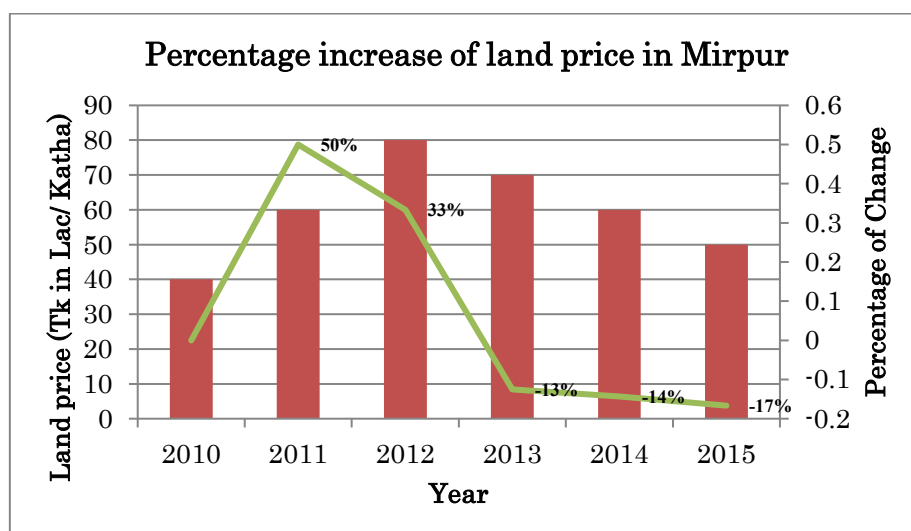
Data Source: Sheltech (pvt.) Ltd. 2016

1.29. Figures shown in below provide some idea regarding the percentage increase of land price in some prominent area of Dhaka since 2010 to 2015.









## 6 Land Property Related Law

### 6.1 TRANSFER OF PROPERTY ACT, 1882

1.30. According to section 58(a) of the Transfer of Property Act 1882, A mortgage is the transfer of an interest in specific immovable property for the purpose of securing the payment of money advanced or to be advanced by way of loan, an existing or future debt, or the performance of an engagement which may give rise to a pecuniary liability.

- The transferor is called a mortgagor;
- The transferee a mortgagee;
- The principal money and interest of which payment is secured for the time being are called the mortgage-money; and
- The instrument (if any) by which the transfer is effected is called a mortgage-deed.

1.31. According to section 53-D TP Act, 1882, an immovable property under registered mortgage must not be re-mortgaged or sold without the written consent of the mortgagee, and any re-mortgage or sale made otherwise must be void. [Amended by the Act 26 of 2004]

1.32. **TYPES/ FORMS OF MORTGAGE:** According to Section 58 of T P Act, 1882, the types of mortgage are discussed below:

1. **Simple mortgage [Section: 58(b) of TP ACT 1882]:-** Where, without delivering possession of the mortgaged property, the mortgagor binds himself personally to pay the mortgage-money, and agrees, expressly or impliedly, that, in the event of his failing to pay according to his contract, the mortgagee shall have a right to cause the mortgaged property to be sold and the proceeds of sale to be applied, so far as may be necessary, in payment of the mortgage-money, the transaction is called a simple mortgage and the mortgagee a simple mortgagee.
2. **Mortgage by conditional sale [Section: 58© of TP ACT 1882]:-** Where, the mortgagor ostensibly sells the mortgaged property –
  - ✓ on condition that on default of payment of the mortgage-money on a certain date the sale shall become absolute, or

- ✓ on condition that on such payment being made the sale shall become void, or
- ✓ on condition that on such payment being made the buyer shall transfer the property to the seller,

1.33. The transaction is called a mortgage by conditional sale. However, no such transaction shall be deemed to be a mortgage, unless the condition is embodied in the document which effects or purports to affect the sale. In order to determine that a document is a mortgage by conditional sale, the following tests, though not exhaustive, should be applied:

- ✓ The existence of debt.
- ✓ The period of repayment, a short period being indicative of a sale and a long period of a mortgage.
- ✓ The continuance of the grantor in possession indicates a mortgage.
- ✓ A stipulation for interest on payment indicates a mortgage.
- ✓ A price below the true value indicates a mortgage.
- ✓ A contemporaneous deed stipulated for convenience indicates a mortgage, but one executed after a lapse of time points to a sale.

3. **Usufructuary mortgage [Section: 58(d) of TP Act 1882]:-** Where the mortgagor delivers possession or expressly or by implication binds himself to deliver possession of the mortgaged property to the mortgagee, and authorizes him to retain such possession until payment of the mortgage-money, and to receive the rents and profits accruing from the property or any part of such rents and profits and to appropriate the same in lieu of interest or in payment of the mortgage-money, or partly in lieu of interest or partly in payment of the mortgage-money, the transaction is called a usufructuary mortgage.

4. **English mortgage [Section: 58© of TP Act 1882]:-** Where the mortgagor binds himself to repay the mortgage-money on a certain date, and transfers the mortgaged property absolutely to the mortgagee, but subject to a proviso that he will re-transfer it to the mortgagor upon payment of the mortgage-money as agreed, the transaction is called an English mortgage.

5. **Mortgage by deposit of title-deeds [Section: 58(f) of TP Act 1882]:-** Where a person in the town of Dhaka, Narayangonj and Chittagong and in other town which the government, by notification in the Official Gazette, specify in this behalf, delivers to a creditor or his agent documents of title to immovable property, with intent to create a security thereon, the transaction is called a mortgage by deposit of title-deeds.

6. **Anomalous mortgage [Section: 58(g) of TP Act 1882]:-** A mortgage, an English mortgage or a mortgage by deposit of title-deeds within the meaning of s 58 of the TP Act is called an anomalous mortgage.

1.34. Rights and Liabilities of Mortgagor [Sections 60-62, 83 of TP Act 1882]:-

- Right of mortgagor to redeem [Section:60 of TP Act 1882];
- Redemption of portion of mortgaged property [Section:60 of TP Act 1882];
- Right to redeem separately or simultaneously [Section:61 of TP Act 1882];
- Right of usufructuary mortgagor to recover possession [Section: 62 of TP Act 1882];
- Power to deposit in court money due on mortgage [Section:83 of TP Act 1882];
- Right to money deposited by mortgagor.

1.35. **RIGHT OF MORTGAGOR TO REDEEM:**-According to s 60 of TP Act, at any time after the principal money has become due, the mortgagor has a right, on payment or

tender, at a proper time and place, of the mortgage-money, to require the mortgagee-

- ✓ to deliver to the mortgagor the mortgage-deed and all documents relating to the mortgaged property which are in the possession or power of the mortgagee,
- ✓ where the mortgagee is in possession of the mortgaged property, to deliver possession thereof to the mortgagor, and
- ✓ at the cost of the mortgagor either to re-transfer the mortgaged property to him or to such third person as he may direct, or to execute and (where the mortgage has been effected by a registered instrument) to have registered an acknowledgement in writing that any right in derogation of his interest transferred to the mortgagee has been extinguished.

1.36. **REDEMPTION OF PORTION OF MORTGAGED PROPERTY:-** Section 60 of TP Act also provides that a person interested in a share only of the mortgaged property is not entitled to redeem his own share only, on payment of a proportionate part of the amount remaining due on the mortgage, except only where a mortgagee, or, if there are more mortgagees than one, all such mortgagees, has or have acquired, in whole or in part, the share of a mortgagor.

1.37. **RIGHT TO REDEEM SEPARATELY OR SIMULTANEOUSLY:-** According to s 61 of TP Act, a mortgagor who has executed two or more mortgages in favor of the same mortgagee shall, in the absence of a contract to the contrary, when the principal money of any two or more of the mortgages has become due, be entitled to redeem any one such mortgage separately, or any two or more of such mortgages together.

1.38. **RIGHT OF USUFRUCTUARY MORTGAGOR TO RECOVER POSSESSION:-** Section 62 of TP Act provides that in the case of a usufructuary mortgage, the mortgagor has a right to recover possession of the property together with the mortgage-deed and all documents relating to the mortgaged property which are in the possession or power of the mortgagee,-

1.39. where the mortgagee is authorized to pay himself the mortgage-money from the rents and profits of the property,-when such money is paid;

- ✓ where the mortgagee is authorized to pay himself from such rents and profits or any part thereof a part only of the mortgage-money,-when the term (if any) prescribed for the payment of the mortgage-money has expired and the mortgagor pays or tenders to the mortgagee the mortgage-money or the balance thereof or deposits it in court.

1.40. **POWER TO DEPOSIT IN COURT MONEY DUE ON MORTGAGE:-** Section 83 provides that at any time after the principal money payable in respect of any mortgage has become due and before a suit for redemption of the mortgaged property is barred, the mortgagor, or any other person entitled to institute such suit, may deposit, in any court in which he might have instituted such suit, to the account of the mortgagee, the amount remaining due on the mortgage.

1.41. **RIGHT TO MONEY DEPOSITED BY MORTGAGOR:-** The court shall thereupon cause written notice of the deposit to be served on the mortgagee, and the mortgagee may, on presenting a petition (verified in manner prescribed by law for the verification of plaints) stating the amount then due on the mortgage, and his willingness to accept the money so deposited in full discharge of such amount, and on depositing in the same court the mortgage-deed and all documents in his possession or power relating to the mortgaged

property, apply for and receive the money, and the mortgage-deed, and all such other documents so deposited shall be delivered to the mortgagor or such other person as aforesaid.

1.42. Where the mortgagee is in possession of the mortgaged property, the court shall, before paying to him the amount so deposited direct him to deliver possession thereof to the mortgagor and at the cost of the mortgagor either to re-transfer the mortgaged property to the mortgagor or to such third person as the mortgagor may direct or to execute and (where the mortgage has been effected by a registered instrument) have registered an acknowledgement in writing that any right in derogation of the mortgagor's interest transferred to the mortgagee has been extinguished.

1.43. Rights of the Mortgagee: [Sections: 67-72 of TP Act 1882]:-

1. **Right to Foreclosure or sale:-** Section 67 of TP Act provides that in the absence of a contract to the contrary, the mortgagee has, at any time after the mortgage-money has become due to him, and before a decree has been made for the redemption of the mortgaged property, or the mortgage-money has been paid or deposited, a right to obtain from the court a decree that the mortgagor shall be absolutely debarred of his right to redeem the property, or a decree that the property be sold. A suit to obtain a decree that a mortgagor shall be absolutely debarred of his right to redeem the mortgaged property is called a suit for foreclosure.
  - However, nothing of the above provisions shall be deemed-
  - to authorize any mortgagee other than a mortgagee by conditional sale or a mortgagee under an anomalous mortgage by the terms of which he is entitled to foreclose, to institute a suit for foreclosure, or a usufructuary mortgagee as such or a mortgagee by conditional sale as such to institute a suit for sale; or
  - to authorize a mortgagor who holds the mortgagee's rights as his trustee or legal representative, and who may sue for a sale of the property, to institute a suit for foreclosure; or
  - to authorize the mortgagee of a railway, canal, or other work in the maintenance of which the public are interested, to institute a suit for foreclosure or sale; or
  - to authorize a person interested in part only of the mortgage-money to institute a suit relating only to a corresponding part of the mortgaged property, unless the mortgagees have, with the consent of the mortgagor, severed their interests under the mortgage.
2. **Mortgagee when bound to bring one suit on several mortgages:-** Section 67A provides that a mortgagee who holds two or more mortgages executed by the same mortgagor in respect of each of which he has a right to obtain the same kind of decree under s 67, and who sues to obtain such decree on any one of the mortgages, shall, in the absence of a contract to the contrary, be bound to sue on all the mortgages in respect of which the mortgage-money has become due.
3. **Right to sue for mortgage-money:-** Section 68(1) provides that the mortgagee has a right to sue for the mortgage-money in the following cases and no others, namely,-
  - where the mortgagor binds himself to repay the same;
  - where, by any cause other than the wrongful act or default of the mortgagor or mortgagee, the mortgaged property is wholly or partially destroyed or the security is rendered insufficient within the meaning of s 66, and the mortgagee has given

the mortgagor a reasonable opportunity of providing further security enough to render the whole security sufficient, and the mortgagor has failed to do so;

- where the mortgagee is deprived of the whole or part of his security by or in consequence of the wrongful act or default of the mortgagor;
- Where, the mortgagee being entitled to possession of the mortgaged property, the mortgagor fails to deliver the same to him, or to secure the possession thereof to him without disturbance by the mortgagor or any person claiming under a title superior to that of the mortgagor.

1.44. However, in the case referred to in clause (a), a transferee from the mortgagor or from his legal representative shall not be liable to be sued for the mortgage-money. Section 68(2) provides that where a suit is brought under clause (a) or clause (b) of sub-section (1), the court may, at its discretion, stay the suit and all proceedings therein, notwithstanding any contract to the contrary, until the mortgagee has exhausted all his available remedies against the mortgaged property or what remains of it, unless the mortgagee abandons his security and, if necessary, re-transfers the mortgaged property.

**4. Power of sale when valid:-** Section 69 provides that a mortgagee, or any person acting on his behalf, shall, subject to the provisions of this section have power to sell or concur in selling the mortgaged property or any part thereof, in default of payment of the mortgage-money, without the intervention of the court, in the following cases and in no others, namely:

- where the mortgage is an English mortgage, and neither the mortgagor nor the mortgagee is a Hindu, Muslim or Buddhist or a member of any other race, sect, tribe or class from time to time specified in this behalf by the Government, in the Official Gazette;
- where a power of sale without the intervention of the court is expressly conferred on the mortgagee by the mortgage-deed and the mortgagee is the government; or schedule bank as defined in Art 37 of the Bangladesh Bank Order 1972; and
- where a power of sale without the intervention of the court is expressly conferred on the mortgagee by the mortgage-deed and the mortgaged property or any part thereof was, on the date of the execution of the mortgage-deed, situate within the town of Dhaka or in any other town or area which the Government may, be notification in the Official Gazette, specify in this behalf.

1.45. However, as s 69(2) provides, the above power of sale must not be exercised unless and until –(i) notice in writing requiring payment of the principal money has been served on the mortgagor, or on one of several mortgagors, and default has been made in payment of the principal money, or of part thereof, for three months after such service; or (ii) some interest under the mortgage amounting at least to Tk 500/- is in arrear and unpaid for three months after becoming due: Provided that the power of a schedule bank under clause (b) of s 69(1) as mentioned above should further be subject to such conditions as may be prescribed in this behalf by notification in the official Gazette by the Government in consultation with the Bangladesh Bank.

**5. Rights of mortgagee in possession:-** Section 72 of TP Act provides that a mortgagee may spend such money as is necessary –

- ✓ for the preservation of the mortgaged property from destruction, forfeiture or sale;
- ✓ for supporting the mortgagor's title to the property;
- ✓ for making his own title thereto good against the mortgagor; and
- ✓ when the mortgaged property is a renewable lease-hold, for the renewal of the lease; and may, in the absence of a contract to the contrary, add such money to the principal money, at the rate of interest payable on the principal, and, where no such rate is fixed, at the rate of nine percent per annum:

1.46. Provided that the expenditure of money by the mortgagee under clause (2) or clause (3) shall not be deemed to be necessary unless the mortgagor has been called upon and has failed to take proper and timely steps to preserve the property or to support the title.

1.47. Where the property is by its nature insurable, the mortgagee may also, in the absence of a contract to the contrary, insure and keep insured against loss or damage by fire the whole or any part of such property, and the premiums paid for any such insurance shall be added to the principal money with interest at the same rate as is payable on the principal money or, where no such rate is fixed, at the rate of nine per cent per annum. But the amount of such insurance shall not exceed the amount specified in this behalf in the mortgage-deed or (if no such amount is therein specified) two-thirds of the amount that would be required in case of total destruction to reinstate the property insured.

**6. Liabilities of mortgagee in possession [Section:76 of TP Act 1882]:-**

According to s 76 of TP Act, when, during the continuance of the mortgage, the mortgagee takes possession of the mortgaged property, -

- ✓ he must manage the property as a person of ordinary prudence would manage it if it were his own;
- ✓ he must try his best endeavors to collect the rents and profits thereof;
- ✓ he must, in the absence of a contract to the contrary, out of the income of the property, pay the government revenue, all other charges of a public nature and all rent accruing due in respect thereof during such possession, and any arrears of rent in default of payment of which the property may be summarily sold;
- ✓ he must in the absence of a contract to the contrary, make such necessary repairs of the property as he can pay for out of the rents and profits thereof after deducting from such rents and profits the payments mentioned in clause © and the interest on the principal money;
- ✓ he must not commit any act which is destructive or permanently injurious to the property;
- ✓ where he has insured the whole or any part of the property against loss or damage by fire, he must, in case of such loss or damage, apply any money which he actually receives under the policy or so much thereof as may be necessary, in reinstating the property, or, if the mortgagor so directs, in reduction or discharge of the mortgage-money;
- ✓ he must keep clear, full and accurate accounts of all sums received and spent by him as mortgagee, and, at any time during the continuance of the mortgage, give the mortgagor, at his request and cost, true copies of such accounts and of the vouchers by which they are supported;
- ✓ his receipts from the mortgaged property, or, where such property is personally occupied by him, a fair occupation-rent in respect thereof, shall, after deducting the expenses properly incurred for the management of the property and the collection of rents and profits and the other expenses mentioned in clauses © and (d), and interest thereon, be debited against him in reduction of the amount (if any) from time to time due to him on account of interest and, so far as such receipts exceed any interest due, in reduction or discharge of the mortgage-money; the surplus, if any, shall be paid to the mortgagor;
- ✓ when the mortgagor tenders, or deposits in the manner hereinafter provided, the amount for the time being due on the mortgage, the mortgagee must, notwithstanding the provisions in the other clauses of this section, account for his receipts from the mortgaged property from the date of the tender or from the earliest time when he could take such amount out of court, as the case may be, and shall not be entitled to deduct any amount therefrom on account of any expenses incurred after such date or time in connection with the mortgaged property.

## 6.2 THE REGISTRATION ACT, 1908

1.48. The following documents shall be registered, if the property to which they relate is situate in a district in which, and if they have been executed on or after the date on which, this Act came or comes into force, namely:- (i) instruments of gift of immoveable property, (ii) declaration of heba under the Muslim Personal Law (Shariat); (iii) other non-testamentary instruments which purport or operate to create, declare, assign, limit or extinguish, whether in present or in future, any right, title or interest, whether vested or contingent, to or in immoveable property

1.49. **Explanation** – In the case of an assignment of a mortgage the consideration for the deed of assignment shall be deemed to be the value for registration.

- Non-testamentary instruments (other than the acknowledgement of a receipt or payment made in respect of any transaction to which an instrument registered under clause (o) relates) which acknowledge the receipt or payment of any consideration on account of the creation, declaration, assignment, limitation or extinction of any such right, title or interest; and
- instrument of mortgage referred to in section 59 of the Transfer of Property Act, 1882;
- leases of immoveable property from year to year, or for any term exceeding one year, or reserving a yearly rent;
- non-testamentary instruments transferring or assigning any decree or order of a Court or any award when such decree or order or award purports or operates to create, declare, assign, limit or extinguish, whether in present or in future, any right, title or interest, whether vested or contingent, to or in immoveable property;
- instrument of partition of immovable property effected by persons upon inheritance according to their respective personal laws;

1.50. instrument of sale in pursuance of an order of the Court under section 96 of the State Acquisition and Tenancy Act, 1950]

1.51. Provided that the Government may, by order published in the official Gazette, exempt from the operation of this sub-section any leases executed in any district, or part of a district, the terms granted by which do not exceed five years and the annual rents reserved by which do not exceed fifty taka.

- ✓ Nothing in clauses (b) and (c) of sub-section (1) applies to-
- ✓ any composition deed;
- ✓ any instrument relating to shares in a Joint Stock Company, notwithstanding that the assets of such Company consist in whole or in part of immoveable property
- ✓ any debenture issued by any such Company and not creating, declaring, assigning, limiting or extinguishing any right, title or interest, to or in immoveable property except in so far as it entitles the holder to the security afforded by a registered instrument whereby the Company has mortgaged, conveyed or otherwise transferred the whole or part of its immoveable property or any interest therein to trustees upon trust for the benefit of the holders of such debentures
- ✓ any endorsement upon or transfer of any debenture issued by any such Company
- ✓ any document not itself creating, declaring, assigning, limiting or extinguishing any right, title or interest to or in immoveable property, but merely creating a right to obtain another document which will, when executed, create, declare, assign, limit or extinguish any such right, title or interest
- ✓ any decree or order of a Court except a decree or order expressed to be made on a compromise and comprising immoveable property other than that which is the subject-matter of the suit or proceeding
- ✓ any grant of immoveable property by the Government
- ✓ any instrument of partition made by a Revenue-officer



- ✓ any order granting a loan or instrument of collateral security granted under the Land Improvement Act, 1871, or the Land Improvement Loans Act, 1883
- ✓ any order granting a loan under the Agriculturists' Loans Act, 1884, the Bangladesh Krishi Bank Order, 1973 or under any other law for the time being in force relating to the advancement of loans for agricultural purposes, or any instrument under which a loan is granted by a co-operative society for any such purpose, or any instrument made for securing the repayment of a loan so granted
- ✓ any endorsement on a mortgage-deed acknowledging the payment of the whole or any part of the mortgage-money, and any other receipt for payment of money due under a mortgage
- ✓ any certificate of sale granted to the purchaser of any property sold by public auction by a Civil or Revenue-officer
- ✓ any counter-part of a lease, where the lease corresponding thereto has itself been registered
- ✓ Authorities to adopt a son, executed after the first day of January 1872, and not conferred by a will, shall also be registered.

### 6.3 ON-AGRICULTURAL TENANCY ACT, 1949

- A non-agricultural tenant may hold non-agricultural land for- (a) homestead or residential purposes; (b) manufacturing or business purposes; or (c) religious or other purposes.
- Notwithstanding anything contained in any other law for the time being in force or in any contract, where any non-agricultural land is held under a lease in writing for a term of not less than twelve years specified in such lease, the tenant holding such land shall, on the expiration of the period so specified, be entitled to the renewal of such lease for perpetuity on such fair and reasonable rent as may be determined.
- if the non-agricultural land comprised in any tenancy is held specifically for any religious purpose for any period under a lease in writing in which such purpose is specified, then such tenancy shall be deemed: Provided that the tenant holding such land shall not be ejected by his landlord from such land except on the ground that he has used such land for any purpose other than the said religious purpose or has not used the land for the said religious purpose for more than three years.
- an under-tenant shall, subject to the provisions of this Act, be liable to ejection on one or more of the following grounds, and not otherwise, namely:- (a) on the ground that he has used the non-agricultural land comprised in his tenancy in a manner which renders it unfit for use for any of the purposes (b) on the ground that the term of his lease has expired when he holds the non-agricultural land under a written lease.
- Every transfer of non-agricultural land held by a non-agricultural tenant or of any portion or share thereof shall, except in the case of a bequest or a sale in execution of a decree or of a certificate signed under the Public Demands Recovery Act, 1913, be made by registered instrument, and a Registering officer shall not accept for registration any such instrument unless the sale price or, where there is no sale price, value of the land or portion or share thereof transferred is stated therein, and unless it is accompanied by- (a) a notice giving the particulars of the transfer in the prescribed form, together with the process fee prescribed for the service thereof on the landlord who is not a party to the transfer, and (b) such notices and process fees as may be required by sub-section (4).

- If a portion or share of the non-agricultural land held by a non-agricultural tenant is transferred, one or more co-sharer tenants of such land may, within four months of the service of notice issued under section 23 and, in case no notice had been issued or served, then within four months from the date of knowledge of such transfer, apply to the court for such portion or share to be transferred to himself or to themselves, as the case may be.
- If any non-agricultural tenant holding any non-agricultural land desires that evidence relating to any improvement made in respect thereof be recorded, he may apply to the prescribed Revenue-officer and such Revenue-officer shall thereupon, at a time and place of which notice shall be given to the parties, record the evidence.
- No non-agricultural tenant shall be ejected from the tenancy or from any non-agricultural land which he holds except in execution of a decree of a competent Civil Court.

#### **6.4 East Bengal State Acquisition and Tenancy Act, 1950**

1.52. East Bengal State Acquisition and Tenancy Act 1950 a law relating to tenancies to be held under the state and other matters connected therewith. Prior to its enactment, agrarian law of Bengal mainly consisted of the Bengal permanent settlement regulations of 1793 and the bengal tenancy act 1885. The Permanent Settlement regulations made zamindars owners of their land subject to payment of a fixed amount of their land revenue to the government and they were entitled to collect rent from their subordinate tenants, who were again entitled to create subordinate interests. Permanent Settlement regulations 1793 created a landed aristocracy, which was supposed to be loyal to the British regime. Bengal Tenancy Act of 1885 defined the rights and liabilities of the tenants in relation to their superior landlords.

1.53. The permanent settlement outlived its utility and there was a demand for agrarian reform, which culminated in the formation of a Land Reform Commission in 1938 under the chairmanship of Sir Francis Floud. Floud commission was assigned to report, amongst other things, whether it was practically desirable for the government to acquire all superior interest to bring actual cultivators into direct contact with the government. The recommendation of Land Revenue Commission remained under consideration of the government. To implement the decision, Bengal State Acquisition Tenancy Bill was introduced on 10 April 1947 but no further progress was made because of Partition of Bengal. After Partition, East Bengal State Acquisition and Tenancy bill was framed and published on 31 March 1948. It was then referred to Special Committee of the House. Thereafter the bill was passed and it got the assent on 16 May 1951.

1.54. Under the scheme of the Act, the government became the only landlord to acquire all rent receiving interest by phases. By operation of section 3 of the Act, all holders of land became directly tenants under the government and they are described as malik (owner), but all interest in subsoil right to minerals, hats, bazaars, forests, fisheries and ferries are vested in the government. The said law authorizes the government to own and manage hats, bazaars, ferries, fisheries, etc.

1.55. The Act is composed of 152 sections divided into five parts and nineteen chapters. Chapter 1 deals with definitions. Chapter II contains special provisions for acquisition of

interest of certain rent receivers. It enabled the government to acquire all rent receiving interest vested in the government. Chapter III deals with provisions regarding land held in lieu of service. Chapter IV deals with preparation of record of rights by incorporating change in consequence of operation of provisions of State Acquisition and Tenancy Act and the changes caused by transfer and inheritance. Chapter V deals with alternative methods of acquisition of compensation assessment roll and record of right and it came into force in different parts of the country by notifications. Chapter VA deals with the preparation of compensation assessment roll in respect of properties acquired under chapter II. Chapter VI deals with authorities for the preparation of compensation assessment roll. Chapter VII describes the process of revision of compensation assessment roll and decision regarding disputes with regard to compensation. Chapter VIII gives the method of payment of compensation. Chapter IX provides provisions relating to arrears of revenue, rent and excise. Chapter IXA describes special provisions relating to arrears of rent. Chapter X describes provisions relating to indebted rent receivers. Chapter XI deals with law relating to settlement of government land and miscellaneous matters.

1.56. Chapter XII deals with the consequences of coming into force of part V of the Act at different parts of the country at different times. Chapter XIII describes the incidence of holding of raiyats, effect of alluvion and diluvion, preemption and restriction of transfer by aboriginal persons. Chapter XIV provides assessment, enhancement and reduction of rent. Chapter XV deals with provisions relating to amalgamation, subdivision and consolidation of holding. Chapter XVI relates to provisions as to rent and its realization. Chapter XVII relates to procedure for maintenance and revision of record of rights. Chapter XVIII provides for procedure relating to jurisdiction, appeal, revision and review. Chapter XVIIIA relates to special provision for exemption of rent for place of worship, graveyard and Chapter XVIII B relates to special provision for exemption of land revenue in respect to agricultural land up to 3.52 hectare. Chapter XIX relates to rule making power and the schedule of the act and regulations, which have been partly or wholly repealed.

1.57. In consequence of introduction of the State Acquisition Act, there exists no intermediary interest between the government and tenant, the government has become the only landlord and the cultivators were relieved of the baneful effect of subinfeudation and intermediate class. The service tenures in vogue in Bengal, more particularly in the district of sylhet, were done away with. Acquisition of rent receiving interest has been done under a scheme of payment of compensation to zamindars and intermediary interest holders. Initially, the law had imposed ceiling in land holding at 13.48 hectare, which was increased threefold but by further amendment. The said ceiling was later reduced to 8.79 hectare per family. The law had abolished zamindari system but a hierarchy of revenue officials substituted it with the Board of Land Administration at the top and revenue officers, now called Assistant Commissioners (Land), at the bottom. Collector and Deputy Commissioner acted as the heads of revenue administration at the district. An Additional Deputy Commissioner (revenue), one revenue deputy collector, and a number of tahsildars, kanungos and surveyors assist Deputy Commissioner or collector. The enactment was followed by legal battles in the court, particularly of the zamindars and landholders, who did not immediately give in, and the government had to resort to innumerable amendments to eliminate the intermediary interest holders between the government and the tenants.

1.58. Bangladesh is a delta land and is constantly washed by innumerable rivers. The present law deals with the question of new formation by accretion and reformation in old situ. Earlier accretion to any holding from public navigable river used to enhance the holding of the landholder. The reformation in old situ within 20 years would revert to the old tenant. But after liberation of Bangladesh, accretion enhanced the domain of the government and in case of diluvion, the tenant is entitled to abatement of rent and in case of reformation of situ within 30 years, old tenant is given priority in resettlement if the land regained exceeds the ceiling imposed by law. However, under the act, only the landless cultivators are entitled to get settlement of government land gained by accretion or otherwise.

1.59. Under State Acquisition of Tenancy Act, khatiyani is prepared in the names of respective tenants directly under the government and the Act provides for a process of updating khatiyani in the names of the persons by transfer, inheritance, and settlement from government. That Act provides a process of pre-emption of land by a co-sharer of contiguous tenant if the transfer is made to any stranger. The Act also provides a scheme of precedence of any co-sharer by inheritance against any co-sharer by purchase. This provision of pre-emption was first introduced as a part of general law incorporated in Bengal Tenancy Act of 1885 relating to agricultural tenancy. However, pre-emption for non-agricultural tenancy is governed by the provision of non-agricultural tenancy act.

## **6.5 Acquisition of Waste Land Act, 1950**

- Whenever it appears to the Government that any waste land is needed or is likely to be needed for any public purpose, a notification to that effect shall be published in the official Gazette, and the Collector shall cause public notice of the substance of such notification to be given at convenient places on or near the land.
- Any person interested in any land as being needed or likely to be needed for a public purpose, may, within fifteen days after the issue of the notification, object to the acquisition of the land.
- Whenever any land shall have been declared to be needed for a public purpose, the Government, or some officers authorized by the Government in this behalf, shall direct the Collector to take order for the acquisition of the land.
- The Collector shall then cause public notice to be given at convenient places on or near the land to be taken; stating that the Government intends to take possession of the land, and that claims to compensation for all interests in such land may be made to him.
- At any time after the expiration of fifteen days from the publication of the notice, the Collector may take possession of the land, which shall thereupon vest absolutely in the Government free from all encumbrances.
- In determining the amount of compensation the Collector shall be guided by the following provisions, namely:-
- If the land does not yield any income, the immediate owner of the land shall receive compensation at the rate of rupees ten per acre;
- if the land yields any income, the immediate owner of the land shall get compensation

of an amount equivalent to five times the net annual income to be determined in the manner prescribed or ten times the annual rent paid by occupancy raiyats for an equal area of cultivated land in the neighborhood which the Collector may select as being appropriate for the purpose, whichever is greater;

- In either case, the superior landlords shall get compensation of an amount equivalent to ten times their respective net annual incomes from such land determined in the prescribed manner on the basis of the rental value of such land.
- The Government shall be at liberty to withdraw at any time from the acquisition of any land, before the award has been made.

## 6.6 Bangladesh Land Holding (Limitation) Order, 1972

- No family shall be entitled to retain any land held by it in excess of one hundred standard bighas in the aggregate and all lands held by it in excess of that quantity shall be surrendered to the Government; and no family 10[or body] shall be entitled to acquire any land by purchase, inheritance, gift, heba or otherwise which, added to the land already held by it exceeds one hundred standard bighas in the aggregate.
- The Government may relax the limitations, if, (a) a co-operative society of farmers where the members thereof surrender their ownership in the lands unconditionally to the society and cultivate the lands themselves; (b) land used for cultivation of tea, rubber or coffee 11[ or covered by orchards]; (c) an industrial concern holding land for the production of raw materials for manufacture of commodities in its own factories; (d) any other case where such relaxation is considered necessary in the public interest.
- A family holding a total quantity of land in excess of one hundred standard bighas in the aggregate shall have the option to select the lands to be surrendered to the Government being in excess of one hundred standard bighas: Provided that all lands mortgaged to the Government, the Agricultural Development Corporation, the Agricultural Development Bank, the House Building Finance Corporation or a Co-operative Society shall be included within the quantity of land which the family is entitled to retain under this Order, to the extent they can be covered by such quantity, and shall not be so surrendered.
- Land Reforms Ordinance, 1984
- No malik (land owner) who or whose family owns more than sixty standard bighas of agricultural land shall acquire any new agricultural land by transfer, inheritance, gift or any other means.
- If any malik acquires any new agricultural land in contravention of the provisions of this section, the area of land which is in excess of sixty standard bighas shall vest in the Government and no compensation shall be payable to him for the land so vested, except in the case where the excess land is acquired by inheritance, gift or will.
- No person shall purchase any immovable property for his own benefit in the name of another person.

- Where in the rural areas any khas land fit for being used as homestead is available, the Government shall, in setting such land, give preference to landless farmers and labourers: Provided that not more than five kathas of such land shall be allotted for such purpose to any individual.
- No person shall allow another person to cultivate his land and no person shall cultivate the land of another person on condition of sharing the produce of such land between them unless they execute a contract for such cultivation in such form and manner as may be prescribed.
- No person shall cultivate the land of another person except under a barga contract or complete usufructuary mortgage or as a servant or labourer.
- The produce of any barga land shall be divided in the following manner, namely (a) one-third shall be received by the owner for the land; (b) one third shall be received by bargadar for the labour; (c) one-third shall be received by the owner or the bargadar or by both in proportion to the cost of cultivation, other than the cost of labour, borne by them.
- Where the owner intends to sell the barga land, he shall ask the bargadar in writing if he is willing to purchase the land.
- No bargadar shall be entitled to cultivate more than fifteen standard bighas of land.

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## 1. INTRODUCTION

This report is the Preliminary Conceptual Planning of the Proposed Gabtoli Mass Rapid Transit (MRT) Station. It presents the preliminary conceptual plan for the development of the station as a transit hub. The aim remains on exploring how to develop a Transit Oriented Development (TOD) for the community around the proposed Gabtoli MRT station to closely connect the neighborhoods and orient towards a quality transit service with a view of efficiently connecting the Gabtoli community with the rest of Dhaka metropolitan region.

The conceptual planning strategies includes the following:

- A summary of the rationale for TOD planning in Gabtoli MRT station area;
- General principles of conceptual planning;
- Conceptual plans and illustrations of access to the station; and
- Implementation strategy.

## 2. THE PLANNING CONTEXT

### 2.1. The planning area

The Government of Bangladesh and the Japan International Cooperation Agency are planning to construct a MRT line that will connect the eastern and western parts of Dhaka. The Gabtoli MRT station will be one of the station in the line. The station will be integrated with the existing Gabtoli Bus Terminal and developed as a multi-modal transit hub, taking advantage of the different types of transportation facilities that are there in the area and are expected to expand in future.

The Gabtoli terminal complex is envisioned to be a multi-modal facility- integrating metro rail station with inter-district buses and passengers, intra-city (local) buses and passengers, cars, non-motorized transport (e.g., rickshaws), and pedestrians.

Gabtoli Bus Terminal connects the capital city Dhaka with 46 of the 64 districts of the country. At present, the terminal serves almost one fourth of the passengers who use inter-district transport from five (5) different terminals of the city. The bus services connect mostly of north and south-western parts of the country. The bus terminal and adjoining facilities are located on approximately 55,000 m<sup>2</sup> land area (calculated from Google earth).

It is also envisaged to accommodate other public functions (e.g. formal and informal retail, commercial etc.).



## 2.2. The users

The Gabtoli bus terminal area (and spill overs) accommodate around 3,000-3,500 buses daily. The survey conducted for this report found that of the total 3,333 buses and human haulers using the bus terminal, about 77 percent remain in operation; hence 1,730 inter-district buses operate during the two peaks of four hours each (4-7 am and 4-7 pm). On the other hand, 244 small buses and human haulers serve the city users.

Each of these buses carry on average between 50-60 passengers; therefore, Gabtoli receives around 150,000 - 210,000 passengers per day. Also, an estimated 18,000 to 26,000 visitors accompany the passengers. Based on findings, approximately 10,000 passengers use the terminal during peak hours of early morning and evening.

Majority of the residents surrounding the bus terminal in Gabtoli rely on the terminal-related activities and services. The socio-economic study revealed that around 79 percent of the surveyed households belonged to this group who relied on the bus terminal for livelihood and employment. Majority of them are employed as drivers, unskilled or low- skilled laborers, or are engaged in informal economic activities, such as hawking, among others. Most them either walk or use non-motorized vehicles to come to the terminal.

Daily 3,000-3,500 Buses and other public vehicles use the terminal and surrounding stops.

On an average, 1,730 inter-district and 244 local buses operate during the peak eight hours of both morning and evening.

Approximately, 150,000-210,000 passengers use the terminals and stops daily.

On an average, 10,000 passengers use the terminal facilities during peak hours.

79% of the residents of the adjoining neighborhood depend on the terminal for their livelihood.

Table 1: Number of buses operating at present

Type	In operation			Under maintenance			Total	% in operation	In operation during off-peak (16 hours)		In operation during peak (8 hours)	
	A/C	Non-A/C	Total	A/C	Non-A/C	Total			%	Number	%	Number
Large bus	89	1,285	1,374	27	339	366	1,740	79%	21%	289	79%	1085
Medium bus	-	838	838	-	280	280	1,118	75%	23%	193	77%	645
Dhaka service bus	-	307	307	-	118	118	425	72%	27%	83	73%	224
Human Haulers	-	32	32	-	18	18	50	64%	38%	12	62%	20
<b>TOTAL</b>	89	2,462	2,551	27	755	782	3,333			536		1975

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## 2.3. Travel pattern

The present Gabtoli bus terminal is used by inter-district buses only. They operate in 88 routes, where 61 routes are greater than or equal to 100 km long. Since buses along these routes take some time to reach their destination, the number of round trips undertaken (e.g., from origin to destination and back) is lower. Passengers buy ticket from 174 counters in the terminal.

The local buses and human haulers serving the city stops on roads around the terminal to drop-off or pick-up passengers. Although Gabtoli is the end location of the routes; however, there are no designated bus stops or lay-over facilities for local buses in the terminal. They operate mostly in two routes a) Gabtoli to Jatrabari via Firmgate, Shabagh, Motijheel, Saidabad; and b) Gabtoli to Sadarghat via Asadgate, Azimpur, and Gulistan.

Of the 88 routes the inter-district buses serve, 61 are considered as long-distance for traveling equal or more than 100km.

Local buses and human haulers run along two routes connecting other transportation hubs.

## 2.4. Transit connections

Passengers using Gabtoli Bus Terminal, usually, transfer from/to local buses, human hauler, private cars, and CNG driven tri-wheelers in roads near the terminal or walk to the nearest convenient locations to access different transportation of other routes. There is no designated area in the terminal to interchange between inter-district and local buses. The drop-off/pick-up bay is used by cars and CNG-driven three wheelers.

Non-motorized vehicles are not allowed in the Dhaka Aricha Highway - the only access road to the bus terminal; hence they sporadically use the terminal. Passengers and neighborhood residents of Gabtoli who work in the terminal either walk to the terminal or use non-motorized vehicles to come up to the main road and then cross to the terminal. An underpass, located in front of the terminal is the only safe crossing for pedestrian.

At present, some interchange between different modes takes place informally but they are not defined neither supported by any facilities.

A water-taxi landing station is located within one (1) km of the terminal. Twelve waterbuses ply from Gabtoli to Shadarghat along the Turag river twice a day. Nevertheless, access to the landing station is difficult discouraging passengers for inter-change between road to water-based transportation.

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## 2.5. Bus parking facilities

Bus parking facilities inside the terminal are not adequate for the number buses using the terminal. The spillover of buses cause traffic disruptions as buses drop-off/pick-up passengers from small individual bus counter and waiting facilities along the highway. Some operators own or rent private garage around the terminal. Many buses simply park on surrounding roads.

The approximate 125 bus parking and bay area are not adequate to serve the operating buses.

Parking area are used for repairing and maintenance.

## 3. GENERAL PRINCIPLES FOR PRELIMINARY CONCEPTUAL PLAN

### 3.1. Vision for Gabtoli area

The visions for the Gabtoli area have been derived considering the location, economic significance, socio-economic characteristics, and potentials for development in the future.

Gabtoli is one of the busiest transport hubs in Bangladesh. The Gabtoli bus terminal connects 46 north and south-western districts of Bangladesh. Many local buses run between Gabtoli and other parts of the city. In addition, the Turag river connects Gabtoli with western parts of Dhaka city through a circular waterway. Gabtoli also serves as a hub for goods transportation, particularly, goods for daily consumption and construction industry.

A transportation and service lifeline for the city

A multi-modal facility coupled with MRT service in Gabtoli will significantly facilitate travel of business travelers and visitors from different districts of the country to Dhaka City. The multi-modal facility will replace the current and inadequate bus terminal.

Centering MRT station, the Gabtoli neighborhood area has the potential to be developed as a mixed-use area that would create livelihood and opportunities for current residents, facilitate access to basic public facilities and services, and link the community to the rest of the Dhaka city. Neighborhood and city-level mass services, for example, hospitals, educational institutes, public recreational and commercial centers, may use opportunities created by the MRT. For these to take place, the quality of urban space and the infrastructure and facilities in the neighborhood will

People-centered neighborhood development

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need to be improved and land use will have to be enhanced and made efficient to prioritize people in the overall development.

Gabtoli is a significant location to access economic opportunities particularly by the poor. A number of them are engaged in informal economic activities related to the bus terminal and associated services. The development of the Gabtoli neighborhood needs to be inclusive, rendering significant considerations to the space needs of residents for economic activities in the development as well as affordability of housing within proximity as is present and benefiting them.

Dhaka city is exposed to both pluvial and fluvial flood risks. Gabtoli, especially the south side of the bus terminal is designated as the flood water retention area connected with the flood flow zone of the city to reduce city's flood risks. However, illegal encroachments are increasing risks of losing this essential flood retention area. On the other hand, the land around the vast water-body has not been utilized to their fullest potential. The neighborhood to the north of the terminal is a very high density development that developed with community's initiatives without any public recreational facilities.

Flood resilient development of under-utilized build-up landscape

The MRT station will need to take into consideration the high flood risks, especially since the MRT will be grade separated in this station. The station development may take advantage of the presence of the water body for development of the under-utilized built-up landscape.

### 3.2. Objective of the station

Gabtoil MRT station as a multi-modal transportation hub need to consider the following:

- position of interchange in transport networks in existing site to fulfill its transport function.
- interchange layout for seamless transfer.
- access modes in order of priority – walk, feeder services, local buses etc.
- improvement options of existing roads in the neighborhood for Transit Oriented Development.

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### 3.3. Guiding principles

In order to generate guiding principles and possible space demands, some assumptions were made based on the existing context. No projections were made as MRT is expected to increase number of users and the projected number is subject to in-depth studies beyond the premise of this report.

#### **Number of passengers using and waiting in the transit hub**

Based on the number of buses using the terminal and the peak usage hours, it is estimated that 217 inter-district and 30 local buses and human haulers will serve about 10,000 passengers per hour. Judging from evidence in South Asian region, between 30-40 percent of these passengers usually interchange to MRT, hence about 3,500 passengers from the inter-district buses will use the MRT per hour during the peak. If it is assumed that, since these passengers are not commuters, their average waiting time is 30 minutes. The local transport users usually wait between 8-10 minutes. Calculating from the numbers it is expected that the transit hub will need waiting area for at least 4,700 -5,000 passengers waiting in the premise as shown in Table 2.

Table 2: Number of passengers using the transit hub

Type	Average number of bus per hour during peak	Passenger per hour during peak	Passenger per hour changing to MRT (35%)	Time passenger wait in waiting area (min)	Number of passenger in waiting area per hour
Large bus	136	6784	2374	30	3392
Medium bus	81	2420	847	30	1210
Dhaka service bus	28	840	294	10	140
Human hauler	2	50	17	10	8
Total	247	10094	3533		4750

#### **Ticketing and waiting facilities**

Further assumptions are made on the number of passengers waiting for pick-up or boarding buses approximately 5,500-6,000 m<sup>2</sup> area will be required for waiting. In general, if one out of every four passengers in the waiting is assumed to buy inter-district bus ticket from the terminal while one out of every ten passengers to buy ticket for MRT the space demand for ticketing and waiting facilities will require at least 1,300 - 1,500 m<sup>2</sup> for ticketing facilities as shown in Table 3.

Table 3: Calculation of waiting and ticketing facilities

Type	Number of passenger in waiting area per hour	Area per passenger in waiting (m <sup>2</sup> )	Total area for waiting (m <sup>2</sup> )	Number of passenger in bus ticketing area	Number of passenger in MRT ticketing area	Ticketing area for inter-district bus (m <sup>2</sup> )	Ticketing area for MRT (m <sup>2</sup> )
Large bus	3392	1.2	4070	848	237	763	214
Medium bus	1210	1.2	1452	302	85	272	76
Dhaka service bus	140	0.9	126		29	0	26
Human hauler	8	0.9	7		2	0	2
Total	4750		5656		353	1035	318

#### **Platform for MRT**

The Bangladesh National Building Code suggest to allocate 0.15 m<sup>2</sup> area per passengers using any transport terminal. Calculating from the 3,500 passengers using the MRT per hour, approximately 530 m<sup>2</sup> area needs to be allocated. Also, usually a three-car MRT, as suggested for Dhaka, need at least 85m running way.

Table 4: Area for MRT platform

Type	Number of passenger per hour during peak	Number of passenger per hour changing to MRT	Total platform area (m <sup>2</sup> )
Large bus	6784	2374	356
Medium bus	2420	847	127
Dhaka service bus	840	294	44
Human hauler	50	17	3
Total	10094	3533	530

#### **Number of bus bays and maneuvering area**

The number of required bus bays, 108 for inter-district and 8 for local bus and human hauler are calculated based on the assumption that the long-distance buses will need 30 minutes to drop-off/pick-up passengers. Based on the number of buses using the terminal during peak hours of morning and evening, it is estimated that more than 7,000 m<sup>2</sup> area will be required for buses. For maneuvering, usually the same area will be required as drive-ways. The calculations are shown in Table 5.

Table 5: Number of bus bay and area

Type	Number in operation during peak (8 hours)	Average number per hour during peak	Average interval time (min)	Number of bay required	Average area per bay (m <sup>2</sup> )	Total area for bus bay (m <sup>2</sup> )
Large bus	1085	136	30	68	70	4749
Medium bus	645	81	30	40	50	2016
Dhaka service bus	224	28	15	7	50	350
Human hauler	20	2	15	1	30	19
<b>TOTAL</b>	1975	247		116		7134

**Parking area**

The existing bus parking area is inadequate, an estimated 68 buses can use bays while additional 65 buses can be parked within the premise (counted from the google map). At present buses are allowed to remain within the premise for 30 minutes and many of the parking area is used for maintenance and repairing. The exiting proportion of buses that lay idle for maintenance is about 23 percent. In the proposed transit hub if assumption is made for 4 hours lay over period for inter-district buses, parking facilities will be required for more than 350 buses. Some of the local buses which will be laid over in the terminal will need additional parking facilities. The total parking facilities will require at least 30,000 m<sup>2</sup> area. Considering the site area to be 55,000 m<sup>2</sup> it is expected that there will be need for multi-level bus bay and parking areas for inter-district buses. In that case, additional area will be required for movement of buses between layers. In addition, MRT and introducing other functions will require parking facilities for private cars and taxi.

Table 6: Parking number and area

Type	Total number of bus in operation	Number of bus parked in terminal	Average parking area (m <sup>2</sup> )	Total parking area for buses	Total maneuvering area (m <sup>2</sup> )
Large bus	1,740	229	49	11,221	7,855
Medium bus	1,118	140	35	4,888	3,422
Dhaka service bus	425				
Human hauler	50				
<b>TOTAL</b>	3,333	369		16,109	11,277

**Supporting facilities**

Apart from these key functions the transit hub will require supporting facilities for operation and maintenance of the hub.

**4. ACCESS TO THE STATION**

Gabtoli station development will include the MRT station, inter-district bus terminal, local bus-stops and roads surrounding the site to develop following TOD. The efficiency of the transit hub in Gabtoli will significantly depend on facilitating access to and from the transit hub. While analyzing the findings from the physical survey the focus remains on

- creating more thoroughfares to increase permeability into the neighborhood and connectivity with the station
- establishing a system of hierarchy—plan new road networks based on pedestrian and vehicular movement
- minimizing the number of intersection and reduce friction between different modes of transport
- identifying needs and opportunities to create a high-quality pedestrian environment and to encourage walking
- ensuring transit-related functions and needs are accommodated at the hub while creating seamless connections between all transit modes
- addressing access, loading, parking, and servicing issues to create opportunities for a viable and attractive mixed-use development

#### 4.1. Pedestrian Access

The TOD planning approach prioritizes pedestrian access and circulation within the transit hub as well as creating the provision of direct linkages, high quality pedestrian environments, and most importantly, safe and accessible sidewalks and crosswalks. The socio-economic context analysis of the Gabtoli area projected high pedestrian demand at the transit hub and transfer movements between modes within the hub - reflective of the role TOD around MRT is expected to play. The strategies and activities to support those strategies that can be applicable for Gabtoli from the established practices are summarized below.

STRATEGY	ACTIVITIES
Encourage pedestrian friendly, non-motorized access to the transit hub.	<ul style="list-style-type: none"> <li>▪ Planning Pedestrian Access Routes;</li> <li>▪ Providing generous sidewalks, particularly where pedestrian activity has been high as illustrated in PSPL survey and is anticipated to be higher in future, for example, directly around transit hub, connections between transit modes and to/from different nodes and across the neighborhood;</li> <li>▪ Identifying and improving direct pedestrian connections to the hub from the neighborhood on the other side of the road and trip origins;</li> <li>▪ Minimizing walking distances between transit modes so that all transfer movements can be accommodated within a 5-minute, or 400-metre walking radius;</li> <li>▪ Developing a streetscape plan that reflects the unique role of the transit hub while integrating with the character of the surrounding context;</li> <li>▪ Creating active frontages along major pedestrian routes to increase visual interest, provide passive surveillance, and increase street-level activity;</li> <li>▪ Providing safe pedestrian crossings, especially across the road in front of the hub. Ensuring all walkways and crossings are well marked and illuminated at night, introducing measures to increase pedestrian priority within the neighborhood;</li> <li>▪ Providing weather protection for the warm-humid climate along linkages between transit modes and at transit stops; providing street trees for shade and wind;</li> <li>▪ Providing a wayfinding and signage program to assist in pedestrian navigation in the transit hub.</li> <li>▪ Providing street furniture and other pedestrian amenities, for example, shelter, seating arrangements, waste receptacles, particularly at transit stops and passenger waiting areas.</li> </ul>
Maintain and enhance existing pedestrian connections.	
Explore opportunities for future connections across the highway and within neighborhood.	
Ensure safe, convenient and high quality pedestrian environment.	
Address conflict points between pedestrians and other road users.	

Figure 1: Pedestrian access for the neighborhood



Figure 2: Pedestrian access for the station



Figure 3: Road sections



Neighborhood roads with  
Rickshaw & cycle lane, Furnishing zone, Pedestrian zone and Front zone



Connecting roads with  
Local bus lane, Rickshaw and Cycle lane, Furnishing zone, Pedestrian zone and Front zone



Main roads with  
Local bus lane, Car lanes, Furnishing zone, Pedestrian zone and Front zone

#### 4.2. Transit access

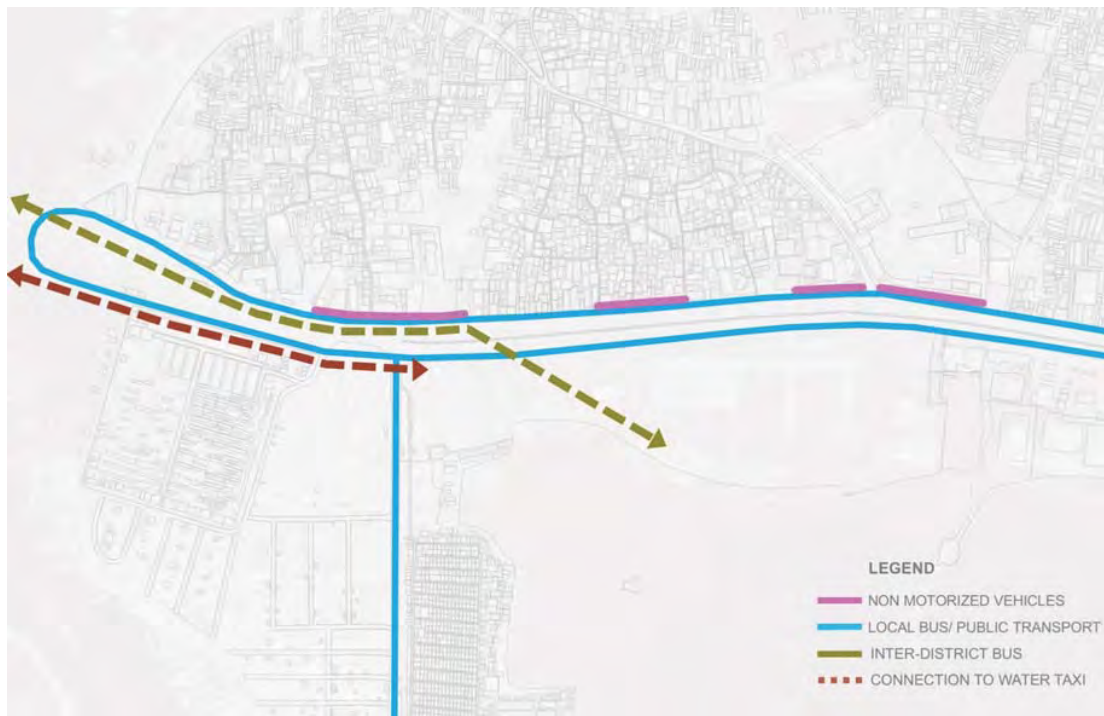
The Gabtoli station will act as gateway to Dhaka, therefore, be the transfer point between inter-district and local buses. Also through the MRT, the station will be a destination in itself for access transit services.

STRATEGY	ACTIVITIES
Create short, clear, direct, and uninterrupted connections between transit modes.	<ul style="list-style-type: none"> <li>Plan direct, barrier-free, access to the main concourse from grade separated MRT platforms;</li> <li>Provide easy connection between MRT and inter-district bus terminal.</li> <li>Plan for off-board fare vending to speed boarding;</li> <li>Design passenger information and service amenities, particularly given higher proportion of users from inter-district services who will be less familiar with the system;</li> <li>Design multiple access to MRT platform to distribute boarding along trains to reduce dwell times and delay for MRT vehicles;</li> <li>Clear demarcation of running way and pedestrian realm to reduce conflicts and safety issues.</li> <li>A grade separated inter-district bus terminal to accommodate the loading and unloading of passengers;</li> </ul>
Maximize passenger convenience and reduce barriers between modes and service providers.	<ul style="list-style-type: none"> <li>Create clear passenger queuing and waiting areas for intercity bus loading that does not conflict with other pedestrian circulation;</li> <li>Provide transit priority measures to speed up bus movements through the hub;</li> <li>Accommodate on-street transfers between local bus services to provide fast transfers between services;</li> </ul>
Allow for safe and efficient movement of transit vehicles into, out of, and through the transit hub.	<ul style="list-style-type: none"> <li>Provide an off-street facility allowing Local bus routes that terminate at the Gabtoli station to turn around and layover, if necessary;</li> <li>Ensure that multiple points for drop-off and pickup are available at the station within close proximity to weather protected waiting areas and customer service;</li> <li>Provide opportunities for operational, service, and space savings between transit service providers.</li> <li>Design bus bay space so they can be easily shared between service providers.</li> <li>Plan a designated parking area for short and extended layovers.</li> <li>Plan dedicated access to the circular water-way landing station.</li> </ul>

Figure 4: Transit access for the neighborhood

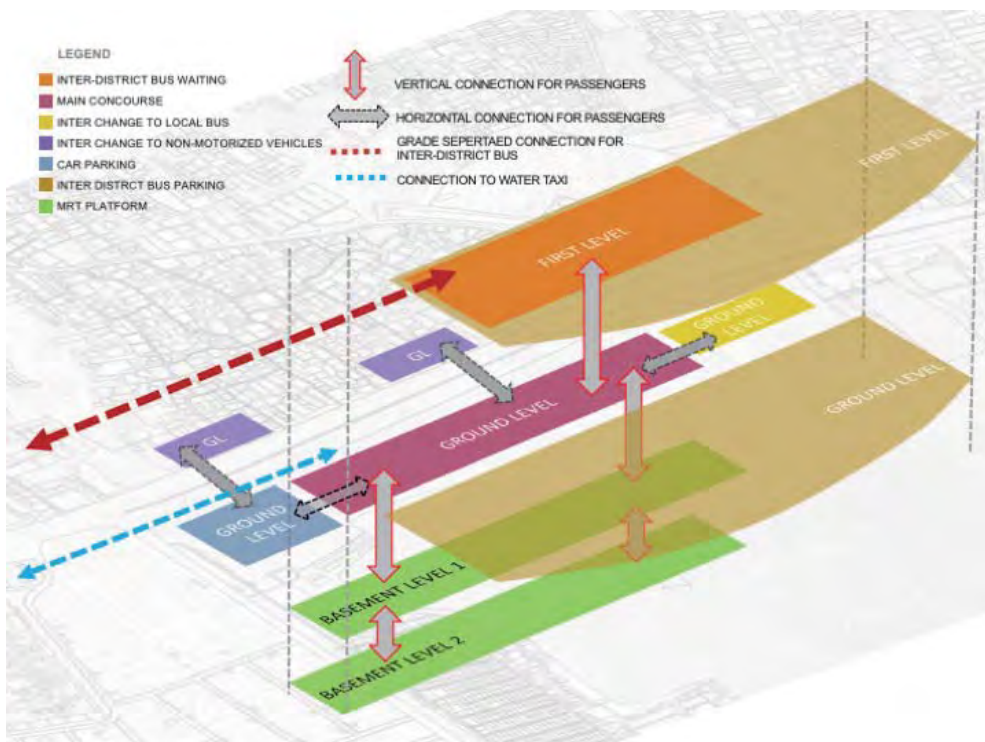


Figure 5: Transit access for the station



Development of a Preliminary Transit Oriented Development Plan for the Proposed MRT Station Area in Gabtoli: Conceptual Planning Strategies for the Station

Figure 6: Transit interchange plan



Development of a Preliminary Transit Oriented Development Plan for the Proposed MRT Station Area in Gabtoli: Conceptual Planning Strategies for the Station



### 4.3. Motorized and non-motorized vehicular access

Access of motorized vehicles, especially privately owned cars, are limited in the exiting bus terminal. However, vehicular access need to be considered at any transit hub as passengers may access the transit hub or near-by destinations for other purposes, kiss and ride, use on-site park and ride. In addition, if commercial, retail or and public amenities are integrated with the station development, parking will serve them along with the transit hub. Vehicular access will also need to take into account the service and delivery needs of the Transit Hub.

STRATEGY	ACTIVITIES
Discourage dependency on motorized vehicles.	<ul style="list-style-type: none"> <li>▪ Plan for adequate site access to on-site parking and to passenger pick-up and drop-off facilities;</li> <li>▪ Integrate delivery and service areas and accesses, including loading docks and service vehicle parking;</li> <li>▪ Design direct access to parking from the inter-district bus terminal.</li> <li>▪ Explore possibilities of a transfer point on the other side of the road for safety and better traffic management.</li> <li>▪ Limit non-motorized vehicle within the neighborhood with waiting facilities.</li> <li>▪ Plan drop-off/ pick-up points for non-motorized vehicle close to pedestrian crossings.</li> </ul>
Segregation of motorized and non-motorized vehicles.	
Mitigate traffic impacts.	
Limit traffic infiltration and on-street parking impacts in surrounding neighborhood.	

Figure 7: Vehicular access for the neighborhood



#### 4.4. Key design features

Based on the findings and guidelines the transit hub will need to include some of the following features:

- Facilities that support access for customers of all ages and abilities
- Facilities that support access for pedestrians
- Ticketing facilities
- MRT Station platform(s)
- Drop-off and pick-up bays for inter-district buses
- Waiting area for inter-district buses
- Parking facilities for inter-district buses
- Provision for short-term pick-up/drop-off of transit patrons by taxi, etc.
- Waiting shelters for all public transit routes serving the station
- Short-term lay over parking for local buses
- Administrative and operational support
- Maintenance and repairing facilities

However, in order to make the transit hub efficient and active more features can be considered, such as:

- Formal and informal retail
- Commercial
- Public entertainment
- Public amenities

#### 5. IMPLEMENTATION STRATEGY

The development of the transit hub can be phased for implementation. Some of the activities identified for the development are relatively low-cost, no regret investment, with high visibility impact. Those can be done within short- to medium- term:

- Improving/upgrading of the main road;
- Improving streetscape along the main access road;
- Upgrading infrastructure for pedestrian;
- Geometric improvement of junctions;
- Creating new pedestrian thoroughfare within the neighborhood;
- Relocating of water-taxi landing station connected with the development of streetscape along the main road;
- Organizing vending activities;

*Development of a Preliminary Transit Oriented Development Plan for the Proposed MRT Station Area in Gabtoli:  
Conceptual Planning Strategies for the Station*

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- Adopting traffic calming measures and enforcement of regulations;
- Creating a system of hierarchy for mobility;
- Activities to improve the law and order around the neighborhood.

To fully realize the potential of the multi-modal transit hub, strong political will, efficient management of transport corridor and the station will be essential. The following actions plans will be critical for strategic planning of the station.

- Management plan for operation of the multi-modal station;
- Management plan for transport corridor and enforcement of road hierarchy, modal split and safeguarding pedestrian network;
- Establish projected demand for inter-district bus terminal facilities;
- Guideline for creating pedestrian networks and implementation strategy.
- Guidelines for transformation of the neighborhood following exiting planning environment, for example, land readjustment action plan and implementation strategy, strategic plan to diversify mixed-use development and to encourage regulated private sector investment.

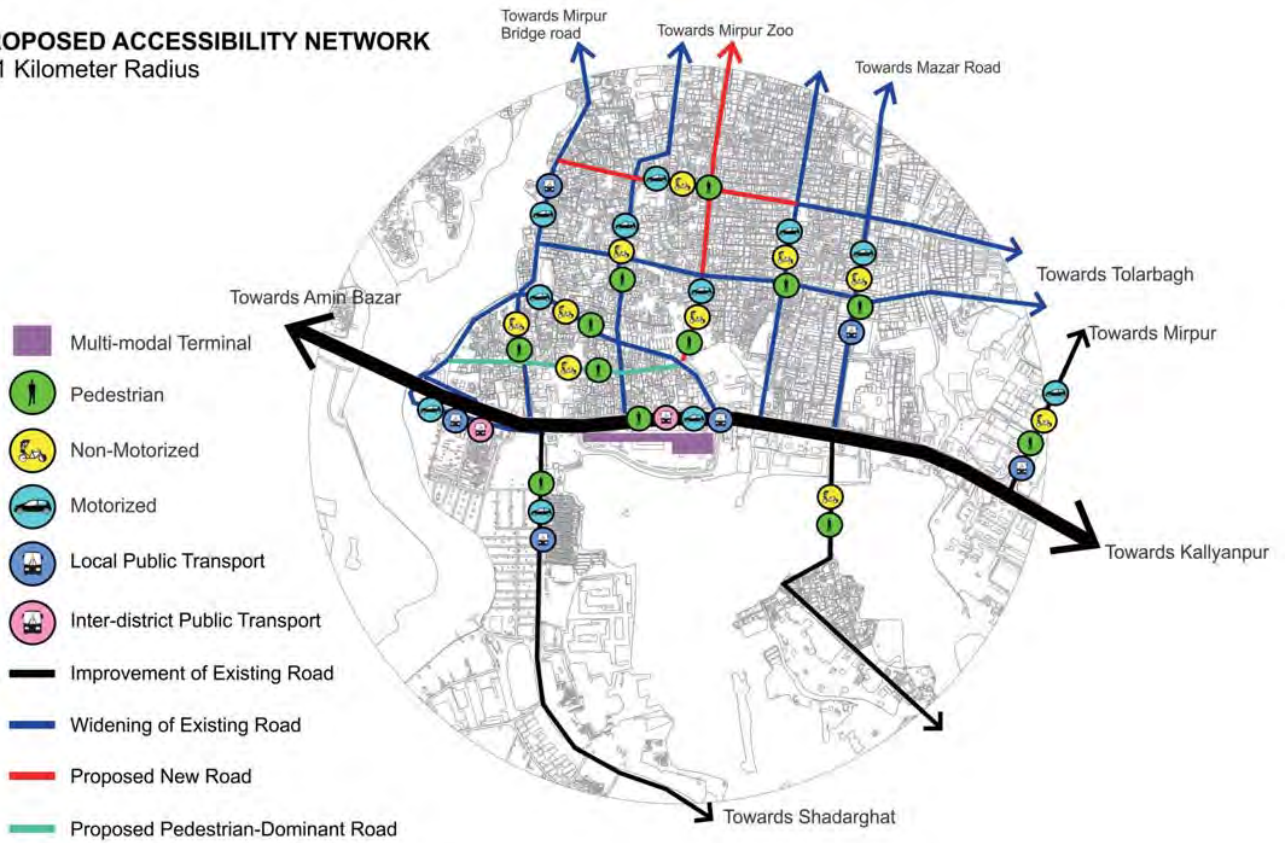
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Conceptual Planning Strategies for the Station*

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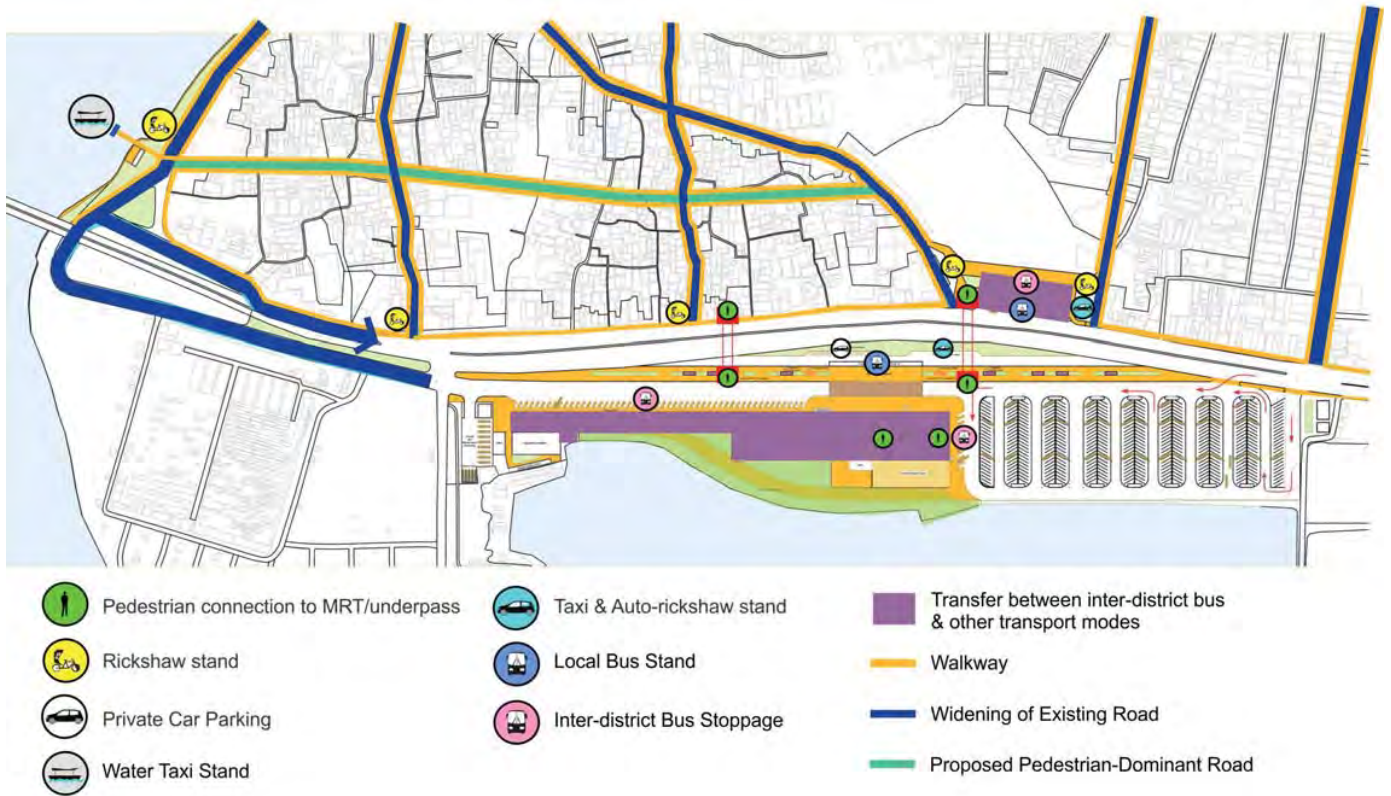


# CONCEPTUAL DESIGN GABTOLI MULTIMODAL TERMINAL

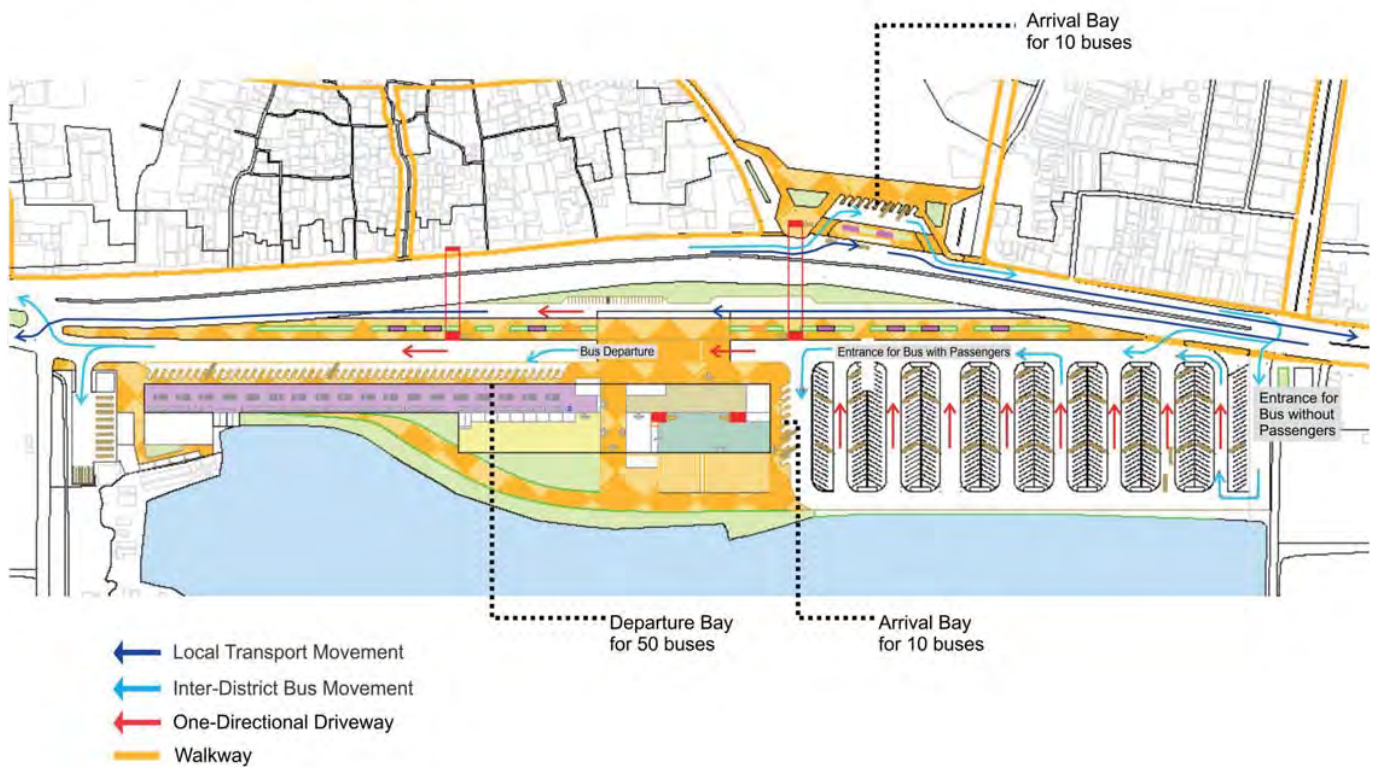
## PROPOSED ACCESSIBILITY NETWORK in 1 Kilometer Radius



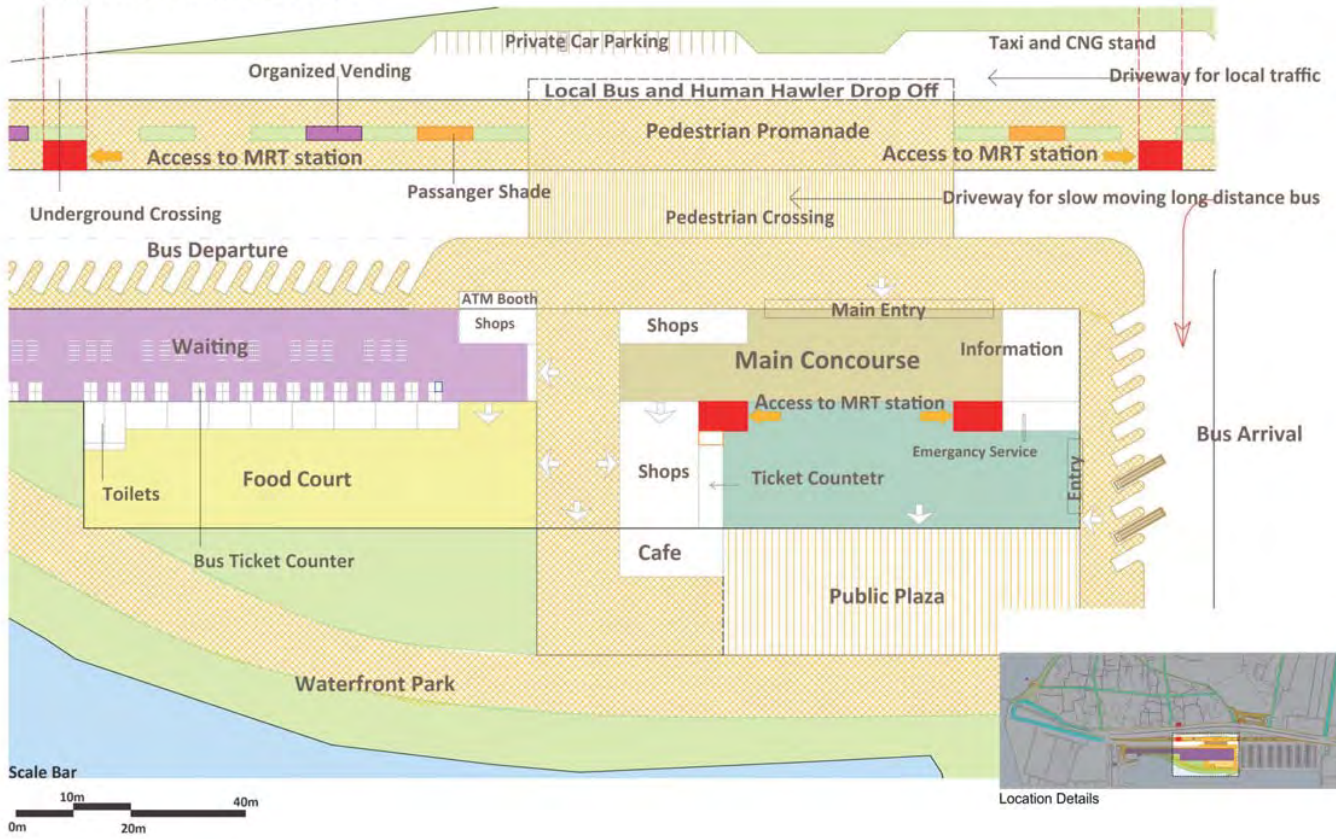
## TRANSFER POINTS BETWEEN DIFFERENT MODES



## VEHICULAR ARRIVAL & DEPARTURE MOVEMENT

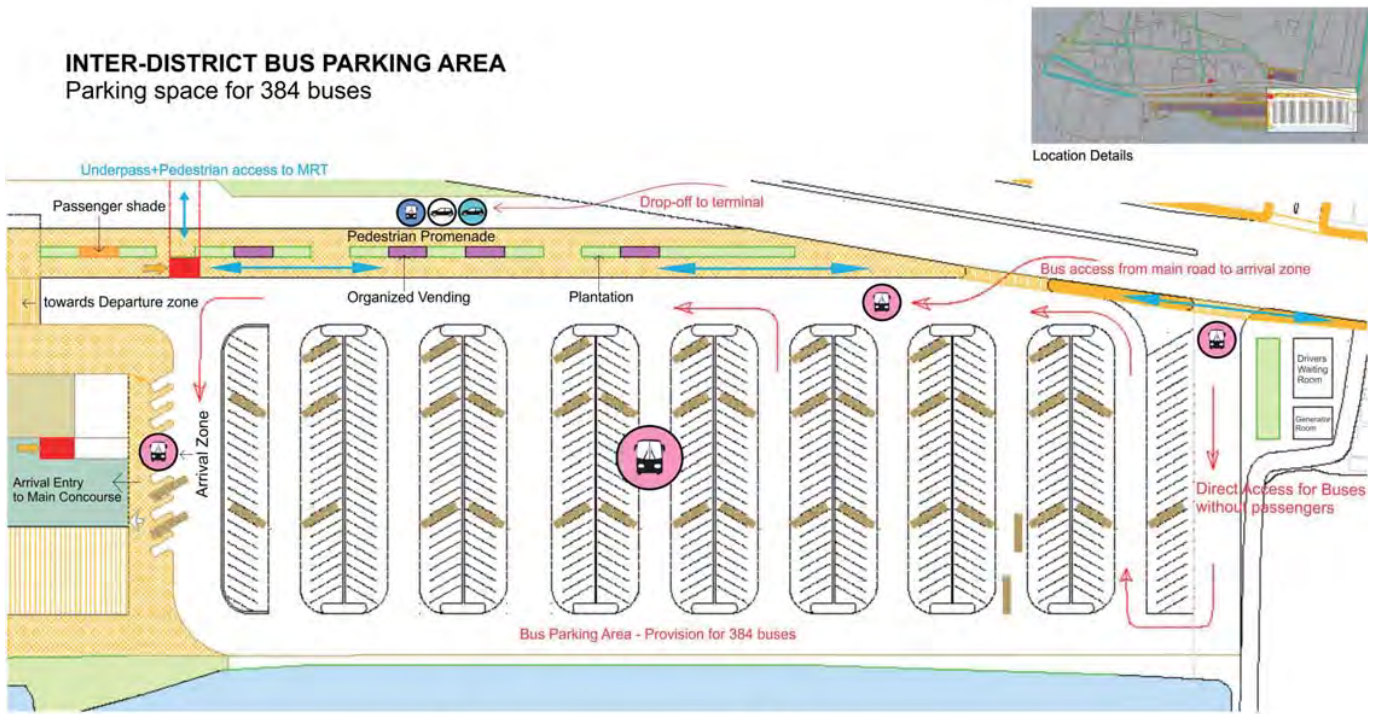


### MAIN CONCOURSE DETAIL

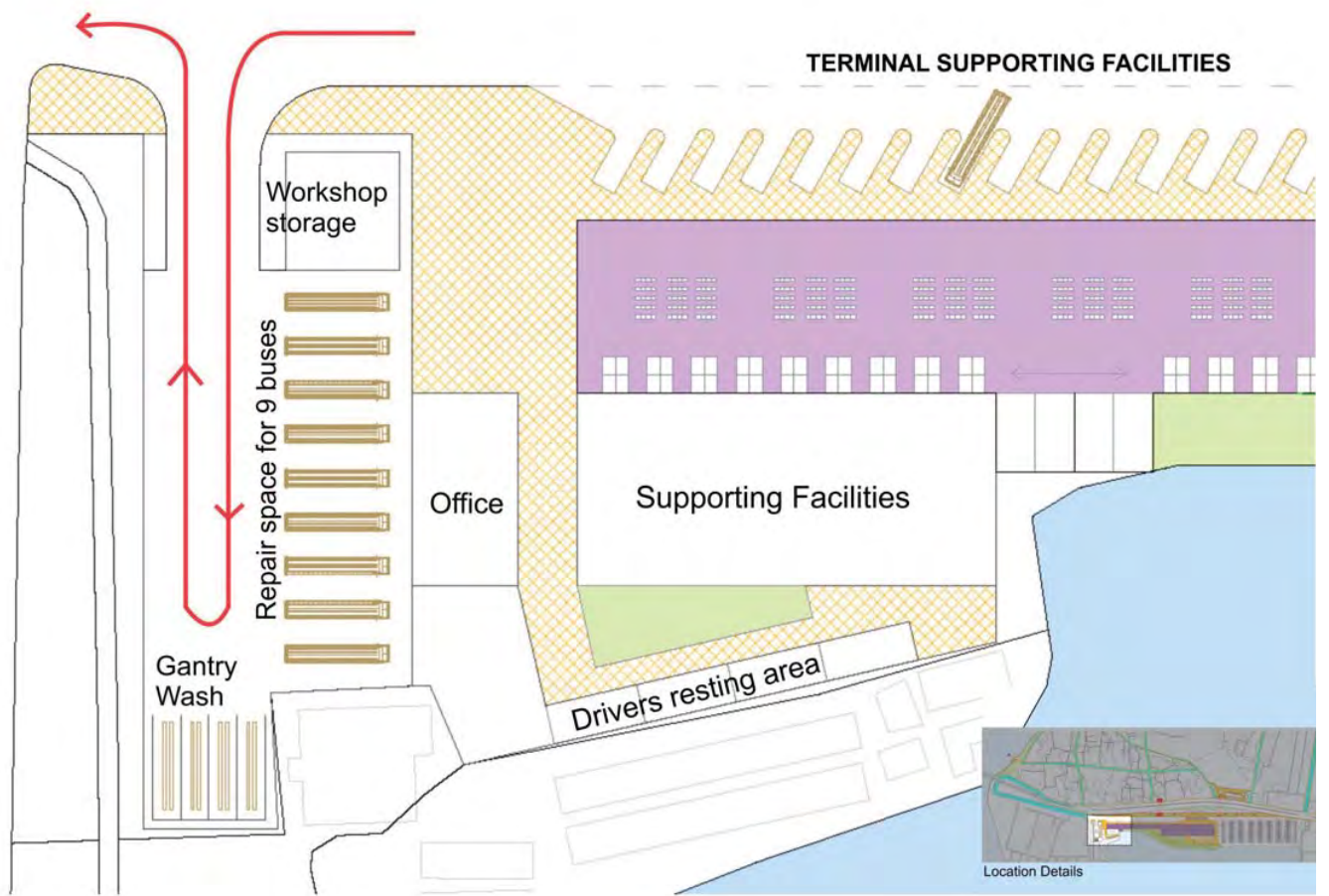


### INTER-DISTRICT BUS PARKING AREA

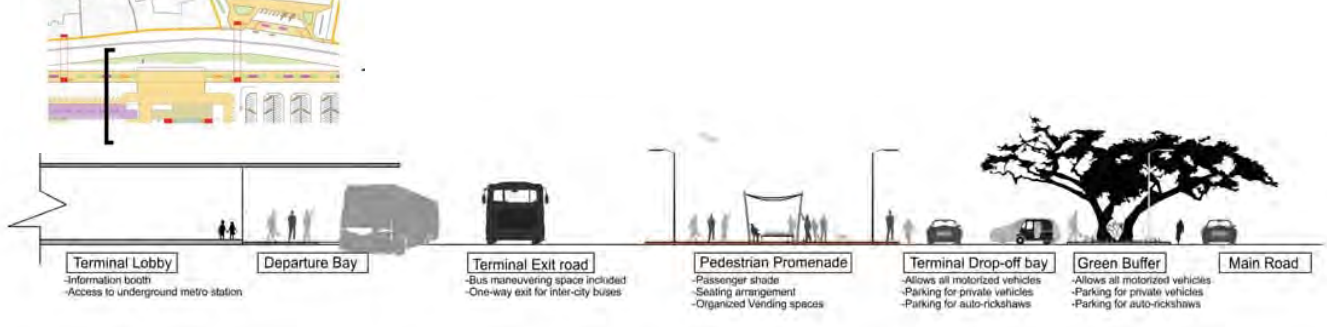
Parking space for 384 buses



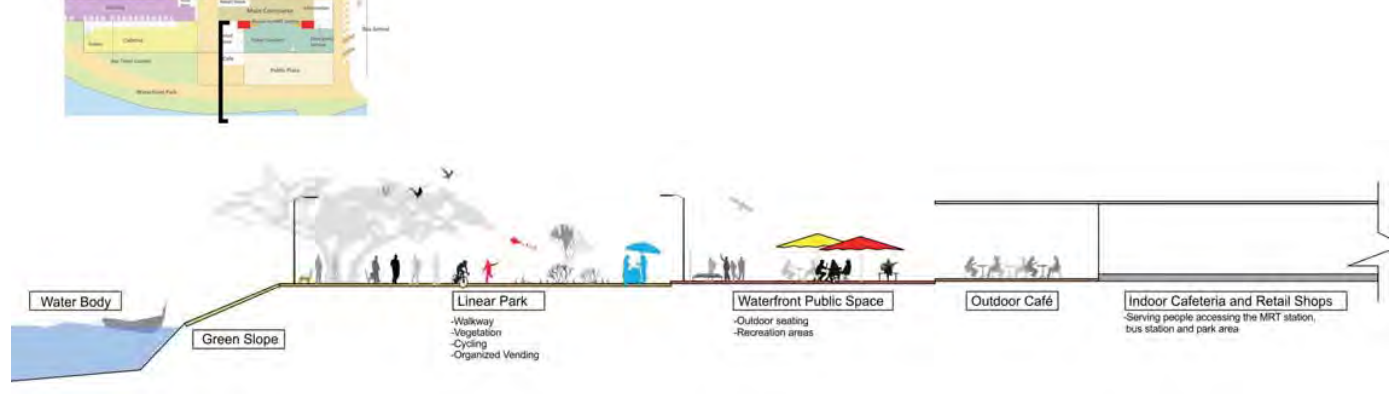
- ← Vehicular Movement
- ← Pedestrian Movement
- ← Walkway
- Private Vehicle
- Taxi and Auto-Rickshaw
- Local Bus
- Inter-district Bus



SECTION ACROSS WAITING AREA



SECTION CAFÉ & LINEAR PARK



## ANNEX 1: RESULTS OF THE PUBLIC SPACE AND PUBLIC LIFE SURVEY

### 1. The rationale for studying public space and public life

Creating cities for people is about prioritizing people. While most cities have data on vehicular traffic volume, needs and projection for the future, there is hardly any data on pedestrian and the public life that are generated around circulation paths. Urban planners and designers make decisions based on the data available and often lose focus on people. However, cities are created for people; the aim of any interventions should be on prioritizing their needs in order to make cities more livable.

The Public Space and Public Life (PSPL) survey is a tool that aims to identify and prioritize people's needs and make them visible to inform the planning process. The tool was developed by Jan Gehl, a key figure behind transformation of Copenhagen as a people friendly city for walking and biking. Gehl Institute has developed the PSPL survey protocol and has made it an open source for wider use. The PSPL survey provides two key indicators that help planners and city leaders make better decisions about what investments to prioritize to make people friendly city: (a) people's movement-- how people are walking and (b) stationary activities-- what are people doing when they are lingering in a space.

The main purpose of conducting a PSPL survey for the TOD planning for Gabtoli is to better integrate a pedestrian and public space network in the preparation of a preliminary transit oriented development (TOD) plan for Gabtoli. The tool will further help understand, perception of safety, comfort and enjoyment by users of Gabtoli. The results are expected to bring out the aspects that may help to improve the commuting experience of pedestrians and passenger's and at the same time, enhance the residents' quality of life with a view of making the Gabtoli neighborhood more inclusive, safe and vibrant.

The survey was carried out on October 25, 2017 (weekday), October 27, 2017 (weekend), and October 31, 2017 (river edge activity mapping) from 8am to 11 pm (each element was counted for 10 minutes per hour for 16 hours). It covered various locations in Gabtoli along the main road and river edge. The locations of data collection are indicated in Figure 1. The locations were chosen near different nodes and spaces where most activities happen. The key findings from the survey are described in the following sections.





## 2. Types of traffic and their volume

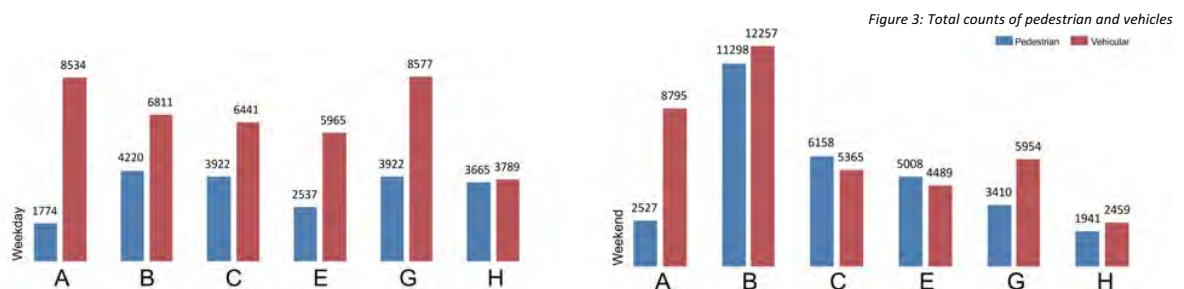
The counting survey identified that many pedestrians use the pavements and roads to walk in Gabtoli: to use the terminal, to go work, to go home, and for leisurely purposes. The vehicular traffic comprised of both motorized (car, motor-cycle, CNG driven three-wheeler, bus, human hauler, trucks etc.) and non-motorized (rickshaw, cycle, rickshaw van etc.) vehicles. The number and proportion of pedestrians, motorized, and non-motorized vehicular traffic volume tend to vary depending on the type of the road and land-use pattern along the roads. Also over weekdays and weekends, there are changes in the number of pedestrian and vehicular volumes along various points within the survey area.

### 2.1. Proportion of pedestrian vs. vehicular traffic volume

Locations A and B are along the main road to the east of the existing Gabtoli terminal, approximately 1,000 meters and 300 meters from the terminal, respectively. Location C covers the immediate area across the bus terminal, location E is the part of the main road across the cattle market to the west of the bus terminal. Locations G and H are again near nodes of important intersections to the east of the terminal. The general trend of traffic volumes across each of these locations are given below in Figure 2.



The largest vehicular counts in location A both in weekdays and weekends (83% and 71% respectively), while locations C and H shows the largest volume of pedestrian counts for both weekdays and weekends. The volume of non-motorized vehicles is the lowest relative to motorized and pedestrian volumes in all cases. There is an increase in the percentage of pedestrian volume across all locations in weekends compared to weekdays. The significant reading is the percentage volume of pedestrians in location C right at the bus terminal area, where there is high count for both weekdays and weekends. The weekend count of pedestrian percentage in location C is 53 percent as opposed to 42 percent of motorized vehicle volume.

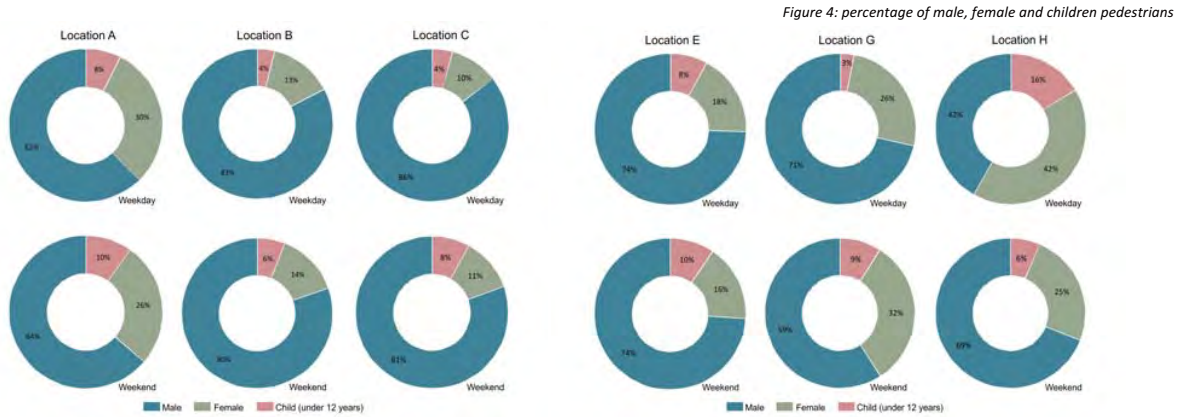


The total count for vehicles (around 40,000 per day) over weekdays and weekends are nearly the same, but the pedestrian total count per day rises from 20,000 per day in weekdays to 30,000 per day for weekends, which is an increase of 50 percent. A high ratio of vehicles is exhibited in location A and then drops in location B indicates a big portion of the vehicular traffic is going towards G. This is further reinforced by high vehicle count in location G. In locations B and C, the network path leading to the terminal shows a high ratio of pedestrians, which again drops in location E suggesting that majority of the pedestrians are using this route to access the bus terminal. The high ratio of pedestrians along the access road G and H also indicates that the people living in the neighborhood and using the route to connect to the main Gabtoli road to commute to other parts of the city. Significant reading is the total counts of both pedestrians and vehicles at location B, where it changes drastically from weekday to weekend. While the vehicular count increases by 80 percent, the pedestrian count increases by a staggering 170 percent.

## 2.2. Differences in pedestrians based on age and sex

The survey also identified difference in pedestrians based on sex and age in different locations as shown in the following diagrams.

In general, very small proportion of children (on an average 3%) form the volume of pedestrian. More children were seen using the pavements and roads near the road connecting residential area in location H as well as in location E, where the roads connect between residential areas and the Darussalam road along which many of the educational institute are located. More females were seen in location E (16%) for similar reasons. The node connecting the main road and the residential area is also more used by female (16% in location H and 30% in location A) in comparison to locations B and C near the terminal along the main road. The 500m core area of the terminal is dominated by male users. The percentage of male, female and children users of the total pedestrian counts per location is shown in Figure 4.



While the ratio of females and children remain nearly the same over weekdays and weekends (Figure 4), there are certain locations (H), where greater percentage of females are noted in weekends.

## 2.3. Numbers, peak and off-peak of traffic

The average pedestrian counts per minute at different locations are A 14.4, B 51.73, C 33.6, E 25, G 24.5, and H 18.7. In and around the terminal (location B and C) the proportion of pedestrian traffic volume remains higher towards evening, from 5-9 pm. One of the peak of pedestrian traffic was observed in location B, in between the terminal and connecting road from the residential areas during morning, from 8-9 am. In these locations, the off-peak hours are usually during noon, 12-3 pm. Location H, near the node connecting the main road and residential area, more people were observed using the pavements and roads during evening hours, from 5-7 pm.

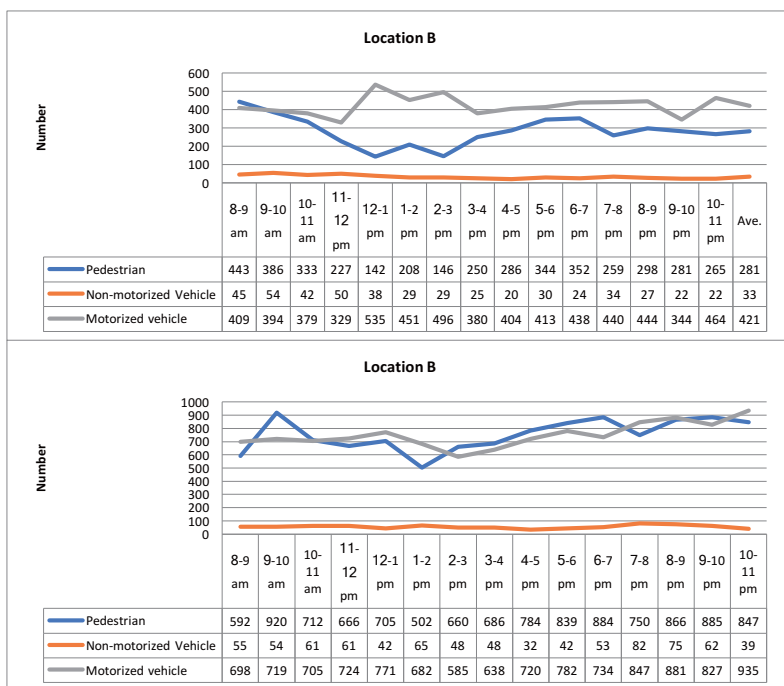
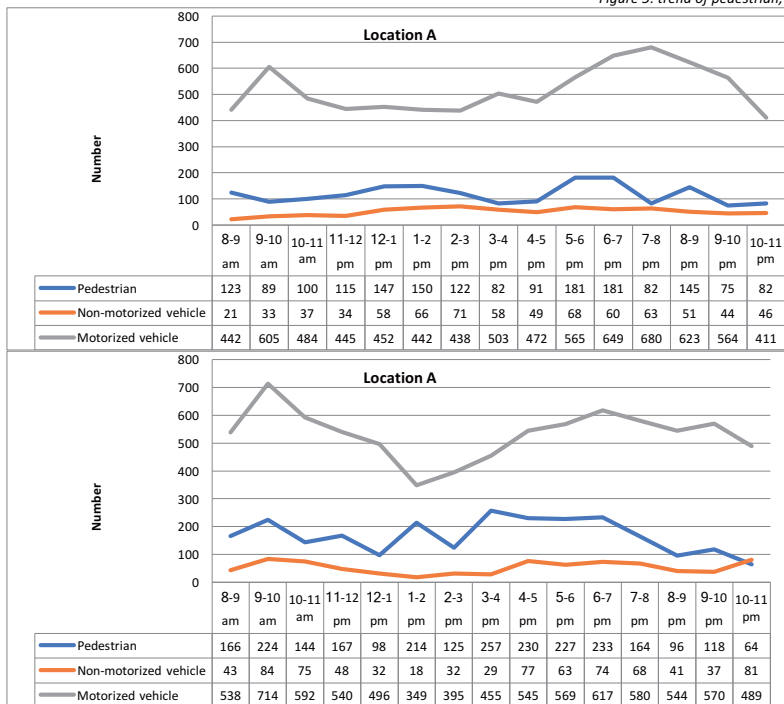
The number of motorized vehicles remains higher along the main road going towards the terminal from the city (location A, B and G). On an average the peak-hour of motorized vehicles remain towards the evening 6-8 pm; however, near the terminal the peak-hour remains during 12-3 pm. The node near location G that connect Gabtoli and other eastern area the northern part of the city remains busier than the node near location H which connect to the residential areas.

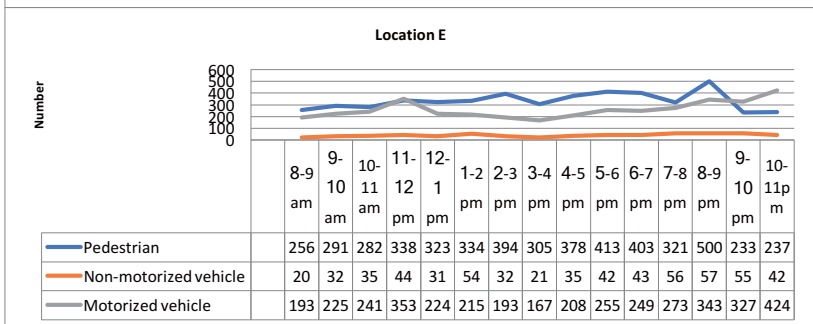
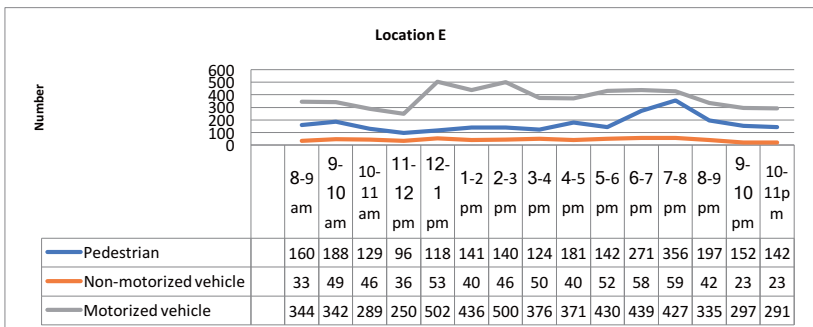
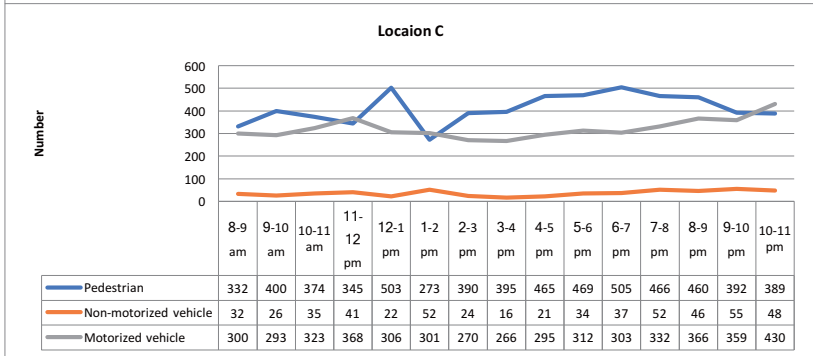
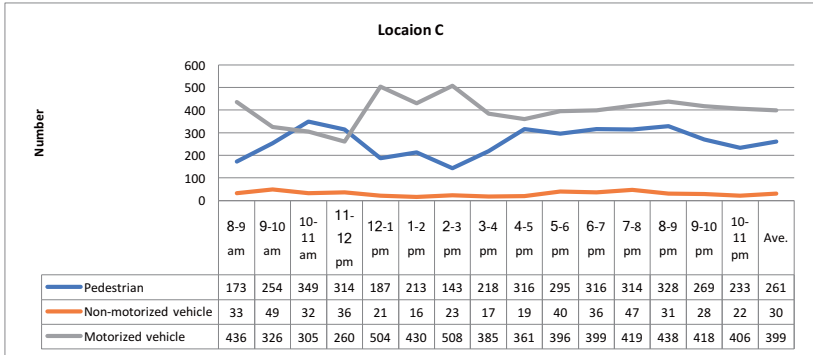
Both pedestrian and vehicular traffic volume follow similar pattern in increase or decrease during evening hours in all other location apart from H., the number of pedestrian increases there. The proportion of pedestrian decreases and motorized-vehicular increases within the 500m core area of Gabtoli around after noon (from 12-3 pm).

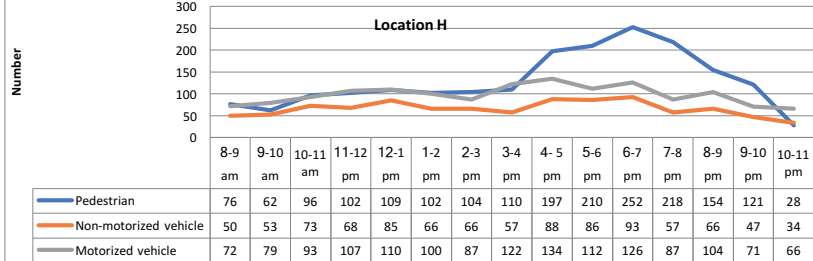
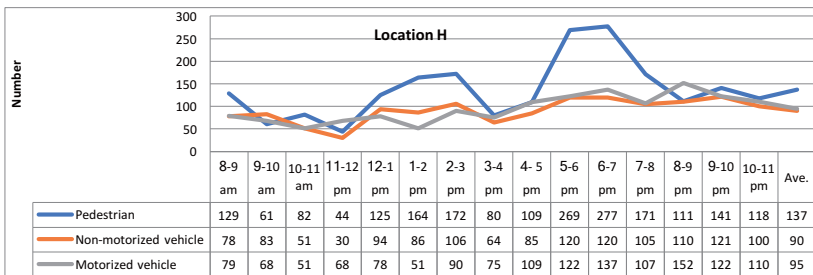
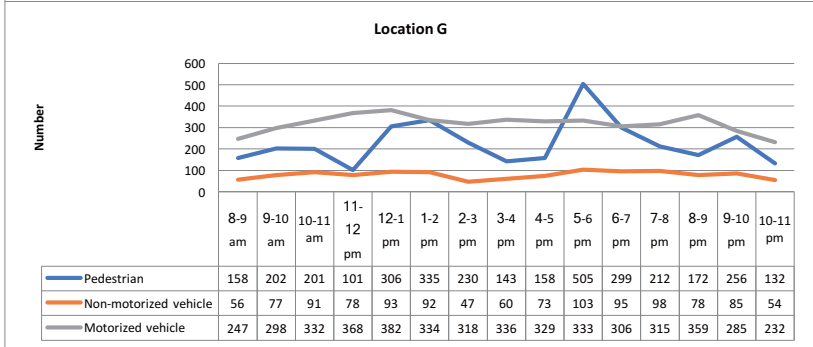
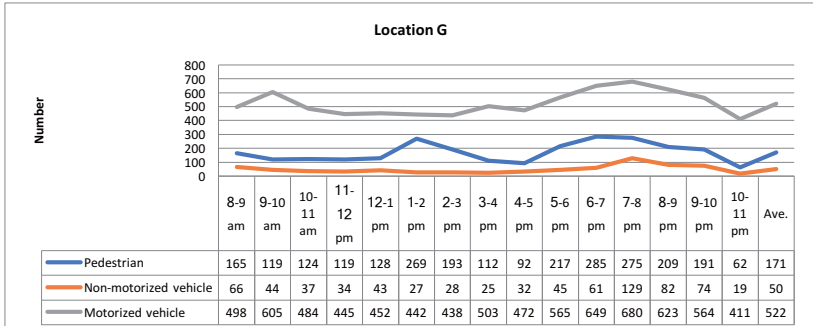
The counts for pedestrians, motorized and non-motorized vehicles across each location over time follow similar trend of peaks and troughs over the time in terms of location. Significant reading is the comparison of pedestrian and motorized vehicles in location C (bus terminal) where the count of pedestrians is greater than vehicular count for the peak hours from afternoon till evening.

Figure 5 shows the trend of pedestrian, motorized and non-motorized vehicular count over time per location for weekdays and weekends.

Figure 5: trend of pedestrian, motorized and non-motorized vehicular counts in different locations







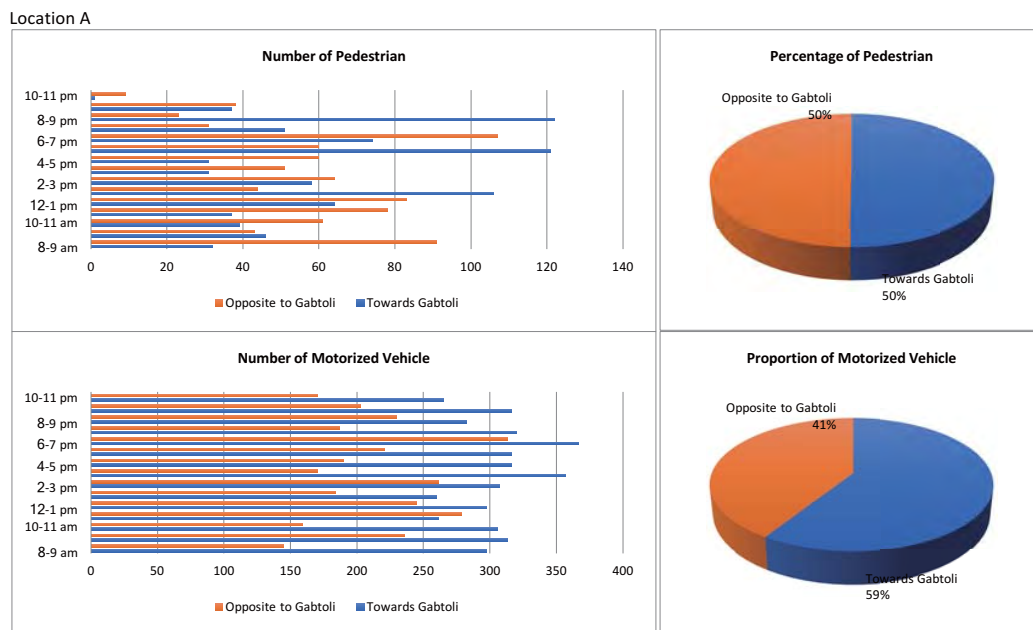
## 2.4. Direction of traffic flow

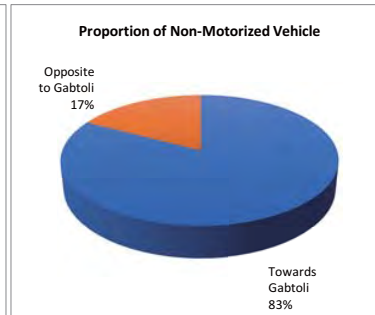
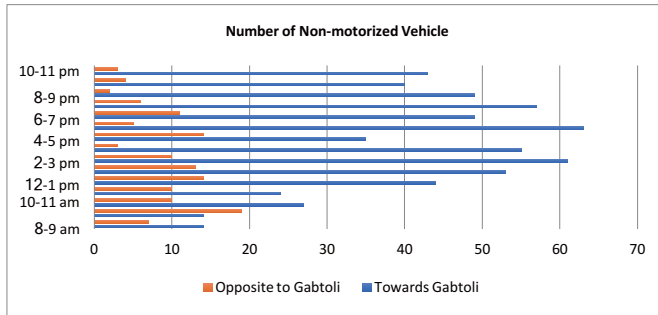
Some differences were observed in the changes in volume of traffic going towards and away from Gabtoli and other areas. As expected most pedestrian walk towards the terminal from all of the locations in the peak hours. Significant proportion of motorized traffic is generated from the terminal area that moves away from the city along the highway.

Location A exhibits greater pedestrian and vehicular movement towards the bus terminal in general compared to moving away from the terminal. Location B shows more movements of all kinds opposite to the bus terminal especially during peak hours. In location C, all kinds of movement are going away from terminal. Location E shows balance of movement towards and away from the bus terminal.

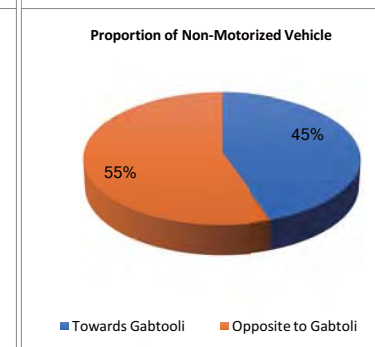
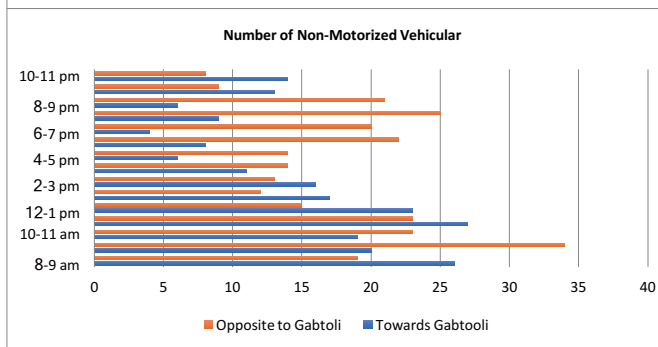
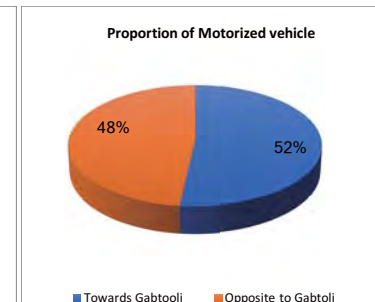
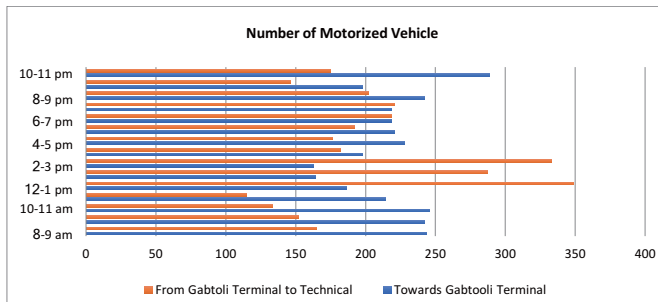
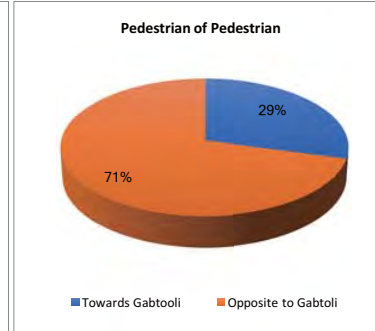
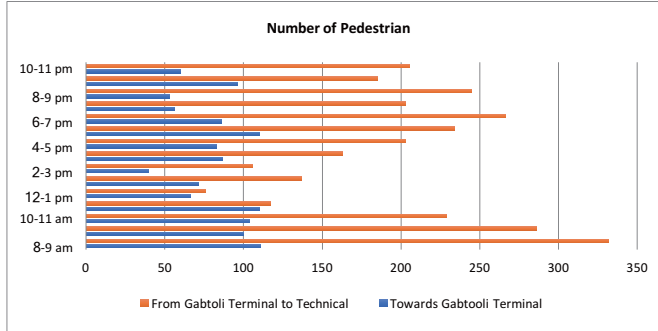
The data infers that both vehicular and pedestrian networks within 1000 meters radius of the study area are intensely used from all directions.

Figure 6: ratio of pedestrian, motorized and non-motorized counts towards and opposite Gabtoli station

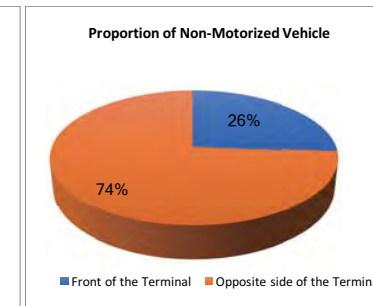
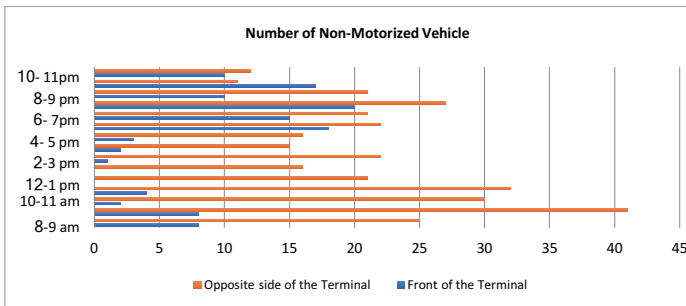
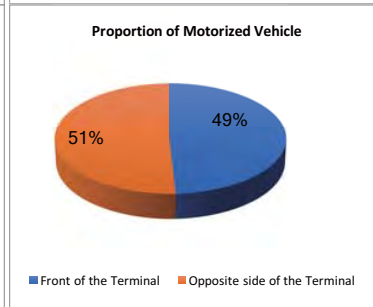
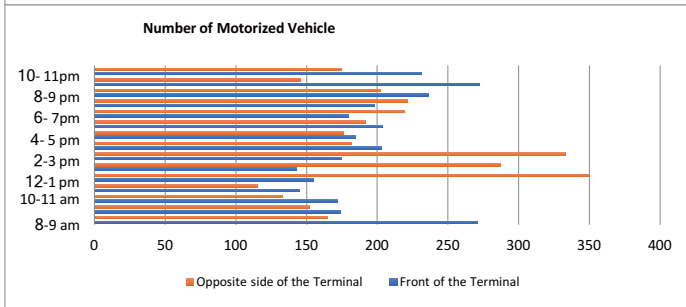
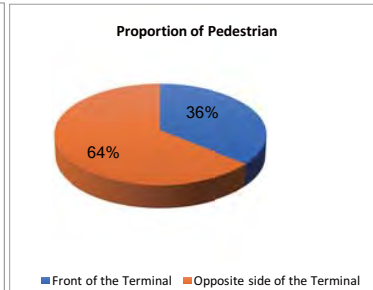
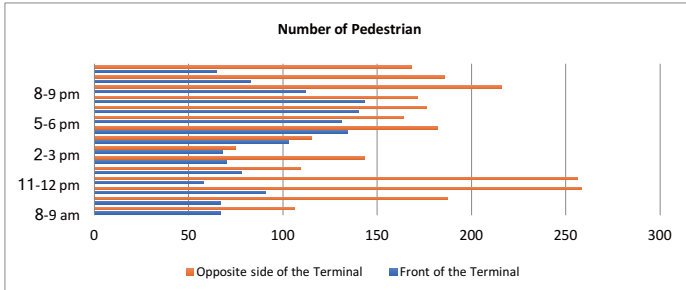




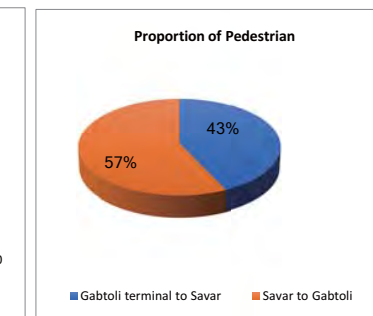
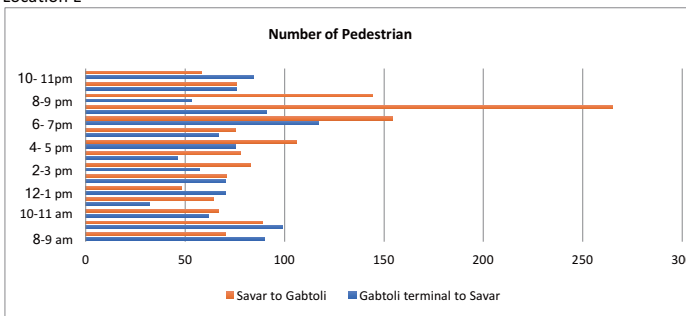
Location B



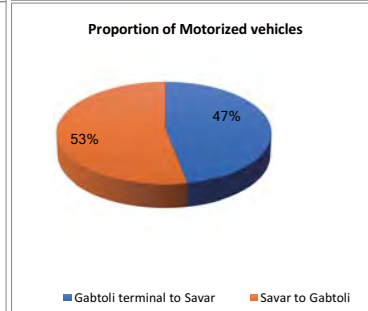
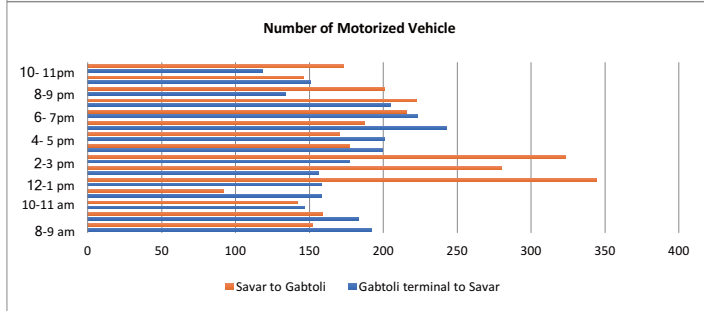
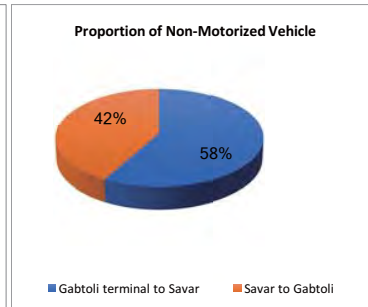
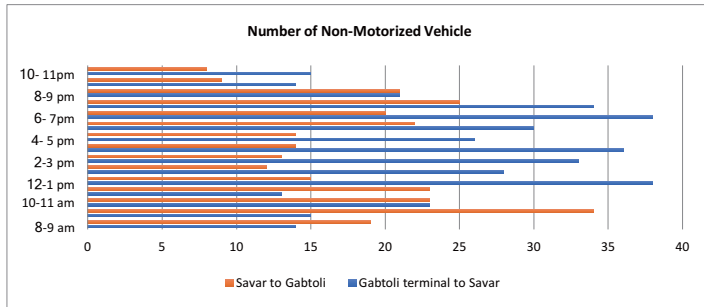
Location C



Location E





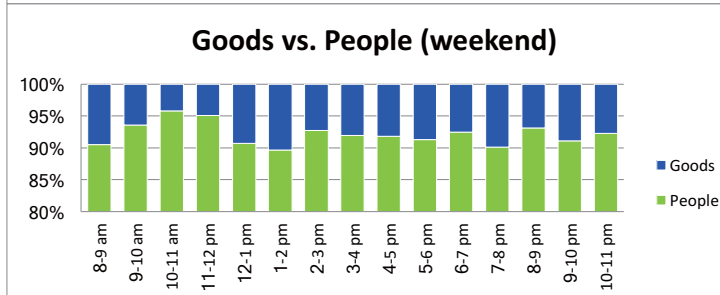
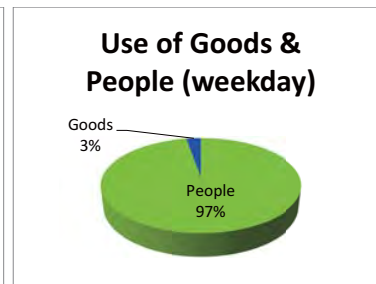
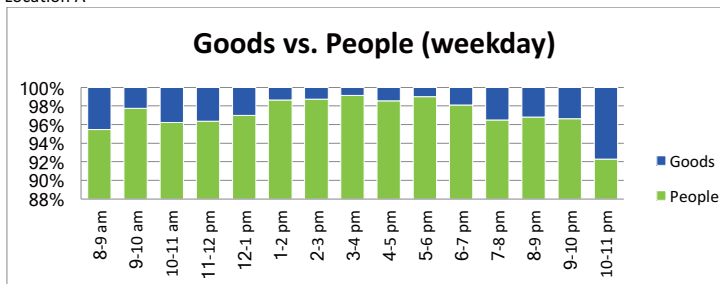


## 2.5. Proportion of people and goods carrying vehicles

Movement of goods carrying vehicles like trucks are allowed to ply within the city during 6am to 10 pm only; hence, in all of the locations the count of goods carrying vehicles were very negligible in comparison to vehicles carrying people. The example of location A shown in Figure 6 illustrate this phenomenon. The counts include smaller goods carrying vehicles like covered vans. The trends for weekdays and weekends are shown in Figure 7.

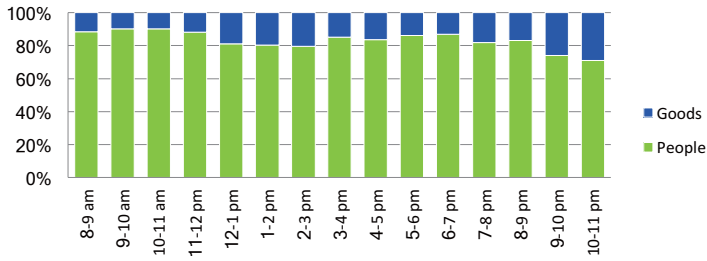
Figure 7: ratio of vehicles carrying people and goods

Location A

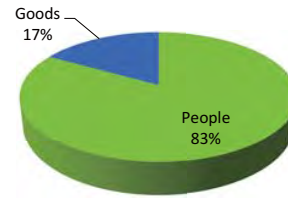


Location B

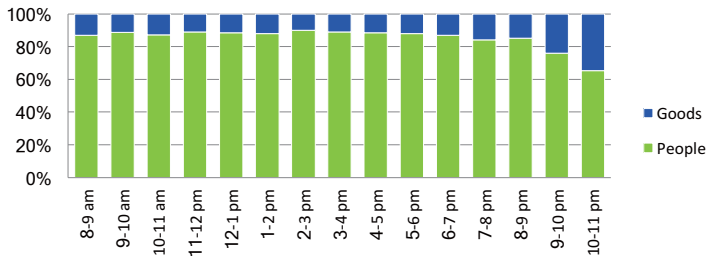
**Goods vs. People (weekday)**



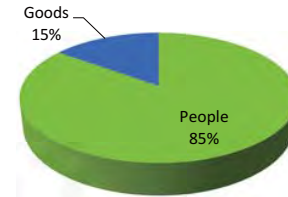
**Goods vs. People (weekday)**



**Goods vs. People (weekend)**

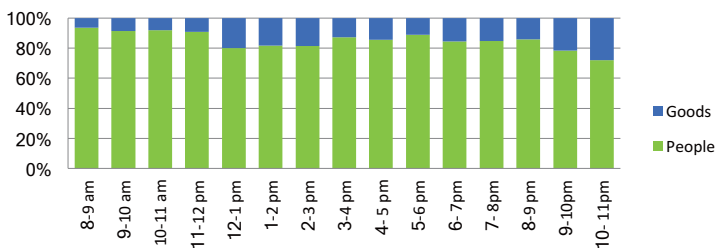


**Goods vs. People (weekend)**

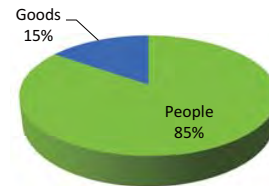


Location C

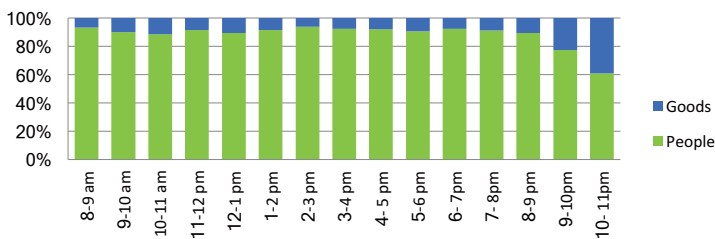
**Goods vs. People (weekday)**



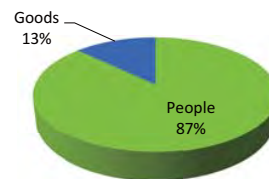
**Goods vs. People (weekday)**



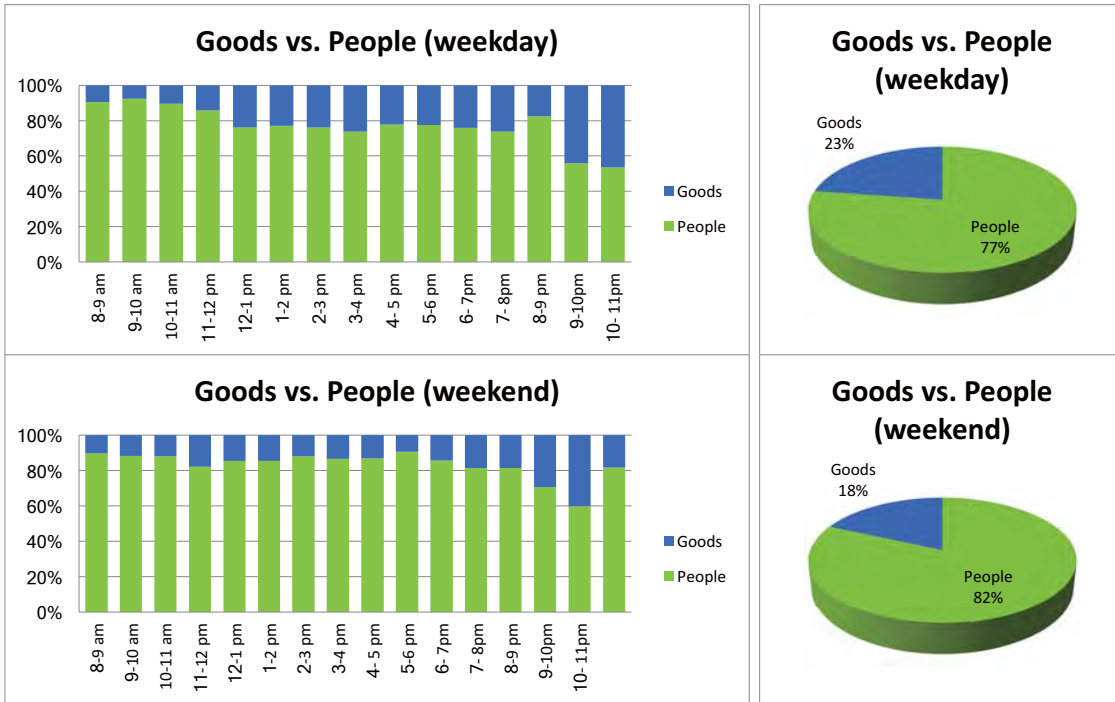
**Goods vs. People (weekend)**



**Goods vs. People (weekend)**



Location E



### 3. Combining quality criteria and place inventory

#### 3.1 Quality criteria survey and place inventory rationale

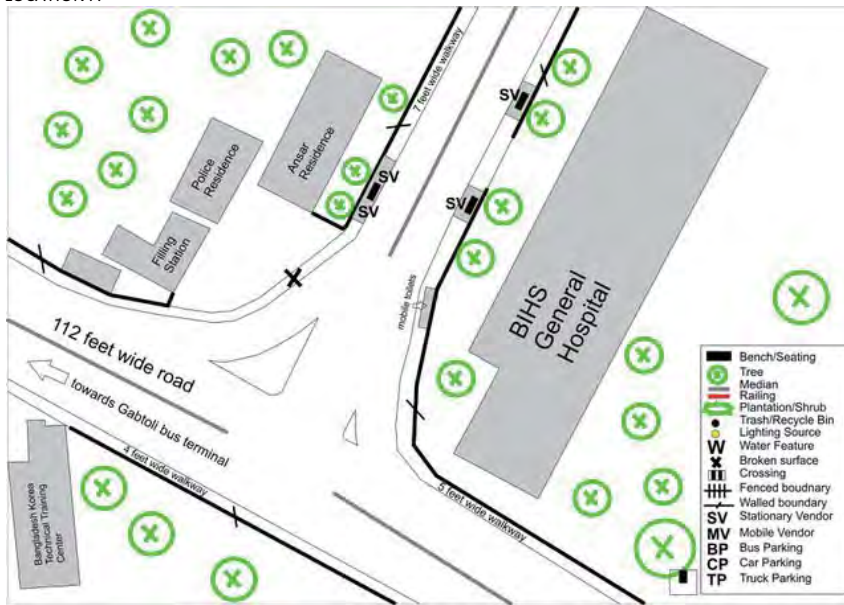
<b>PROTECTION</b>	Protection against accident	Protection against Crime	Protection against unpleasant sensory experience: noise, dust, smells, or other pollution	QUALITIES ESSENTIAL FOR ANY PLACE
<b>COMFORT</b>	Ease of accessibility	Options to stand and linger	Options for sitting	QUALITIES IMPORTANT TO HAVE FOR A GOOD PUBLIC SPACE
	Options for talking and listening/hearing	Options for play, exercise, and activities		
<b>ENJOYMENT</b>	Scale. If the place has a human scale, is it easy to get lost?	Opportunities to enjoy the positive aspects of climate and different kinds of weather	Experience of aesthetic qualities and positive sensory experiences	QUALITIES THAT MAKES A GREAT PUBLIC SPACE
<b>RATING</b>				
		POSITIVE (+)	NEUTRAL	NEGATIVE (-)
By Gehl Institute				

The 12 Quality Criteria by Gehl Institute helps analyze the functioning of the public spaces and evaluate the experiential quality of a space using the hierarchy of needs in a space: protection, comfort, and enjoyment. Protection refers to a space that provides basic protection from accidents, crime, and unpleasant sensory experience arising from noise, and dust, among others. Comfort pertains to elements that make walking, standing, sitting, seeing, and conversing easy. Enjoyment is a measurement that helps define and distinguish a great place from a good one. It includes elements that attract people to be active and make use of the positive aspects of microclimate and human scale. The user simply assesses his or her appreciation of space by providing positive, neutral, or negative value to each of the criteria. Quality criteria survey was done in 9 different locations (see figure 1). Location C was sub-divided into two. 50 respondents were interviewed from each location, culminating in a sample size of 500 participants.

The place inventory included a mapping exercise that helped take stock of the physical features in a place that support public life, such as seating, plant life, lighting, etc. It was also used as a qualitative survey tool that helped assess the experience of the space, including its overall look and feel.

When used in conjunction with counting and quality criteria survey, this can overlay evaluation of physical features and feelings with observations about who is spending time and moving through a space. This helps to draw conclusions about the interplay of these elements and to determine what kinds of interventions might improve the space.

**3.2 Results of the Place Inventory and Quality Criteria Survey**  
**LOCATION A**



- Location A is also known as the 'Technical moor'.
- This node located nearly 900 meters to the east of the Gabtoli bus terminal.
- The average width of pedestrian walkways in this location is a little more than 5 feet.
- There are no formal bus stops here, yet local buses and human howlers drop off or pick up passengers.
- Although there is lots of greenery surrounding the node, the solid walls of 8 to 10 feet seclude the greenery from public visibility.
- There are no places for public gathering outside the boundaries of these complexes
- Tea stalls take up spaces on the walkways creating hindrance to the flow of pedestrians.
- These tea stalls are the only places where people can sit and are the most active public spaces within the location.
- There are no formal zebra crossings or overpass or underpasses for people to cross the main road.

	LOCATION A		
Protection	Yellow	Yellow	Pink
Comfort	Pink	Pink	Pink
Enjoyment	Yellow	Pink	Pink

Survey respondents generally consider Location A as having negative value in terms of protection, comfort, and enjoyment. In terms of protection from accidents and crime, the respondents are generally indifferent. However, in terms of safety from unpleasant sensory experiences such as noise and dust, the respondents attached negative value. Location A is generally considered as unpleasant in terms of walking, sitting, lingering, and doing other activities. In terms of enjoyment, respondents also attached neutral to negative value.

**Location B**

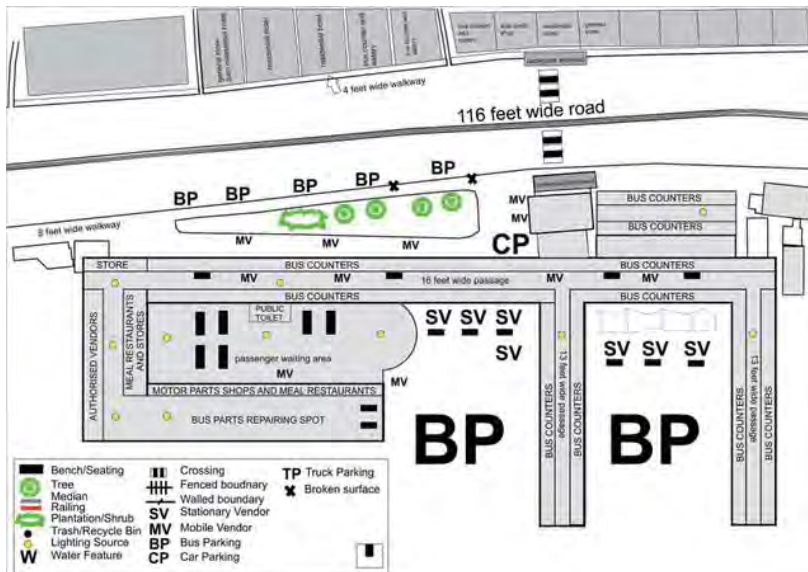


- Location B is located approximately 400 meters east of the Gabtoli.
- This location falls along the main road fronted with various mixed use activities on the north side and four (4) fueling stations on the south.
- Although the pedestrian walkway along the fueling stations is 8 feet wide, the quality of the walkway is poor and is broken in many places.
- The mixed use functions are housed in mostly 1-storey buildings, out of which most are bus counters with passenger resting areas for inter-district long routes, accompanied by small eateries and tea stalls and auto parts repairing and retail shops.
- The walkways on both sides of the road is very active with mobile crowd, but the long route buses stopping in front of their respective counters create hindrance to pedestrian movement.
- There are no mobile vendors taking up spaces of the walkways in this location. Compared to the south edge of the main road, the north part is more active and better lit due to presence of the counters and shops.
- The Shahe Mosque and Madrasah has an open green lawn facing the main road, but is not accessible by the public.

	LOCATION B		
Protection	Green	Green	Yellow
Comfort	Pink	Pink	Green
Enjoyment	Green	Green	Pink

For Location B, respondents have identified some good elements of the space. These include safety from accidents and crime, options for sitting, human scale, and possibilities to enjoy the positive aspects of climate and weather. However, respondents consider Location B as poor in terms of comfort elements: ease of access, options for standing, sitting, and lingering. The location is also considered poor in terms of aesthetic value and attractiveness.

Location C

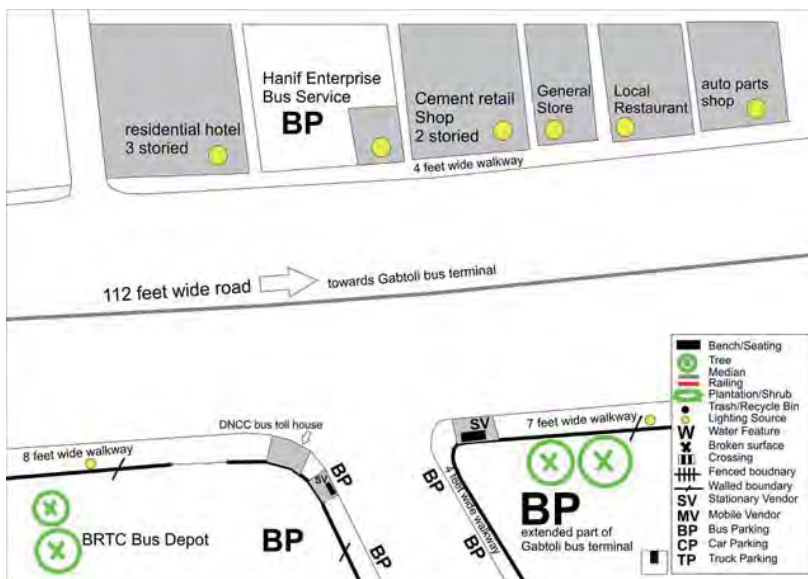


- Location C is the existing bus terminal area. There are quite a few shaded areas for the public as well as other public facilities such as food stalls and toilets.
- The shaded areas are generally well lit, but greatly lack in quality of space, and can be overcrowded especially during the peak hours of terminal usage.
- The terminal building is mostly unseen from the main road due to constant bus parking right in front of it, as they pick up passengers.
- The other side of the terminal along the main road has mainly residential hotels and restaurants.

	LOCATION C:		
Protection			
Comfort			
Enjoyment			

Respondents generally consider Location C as safe from accidents, but unsafe from noise and dust. Respondents feel indifferent when it comes to safety of the place from crime. In terms of comfort elements, the respondents are also generally indifferent. However, they think that Location C has human scale and provides opportunities to enjoy the positive aspects of climate and weather, mostly because this location provides the most shaded public spaces within the entire stretch of the main road.

Location D

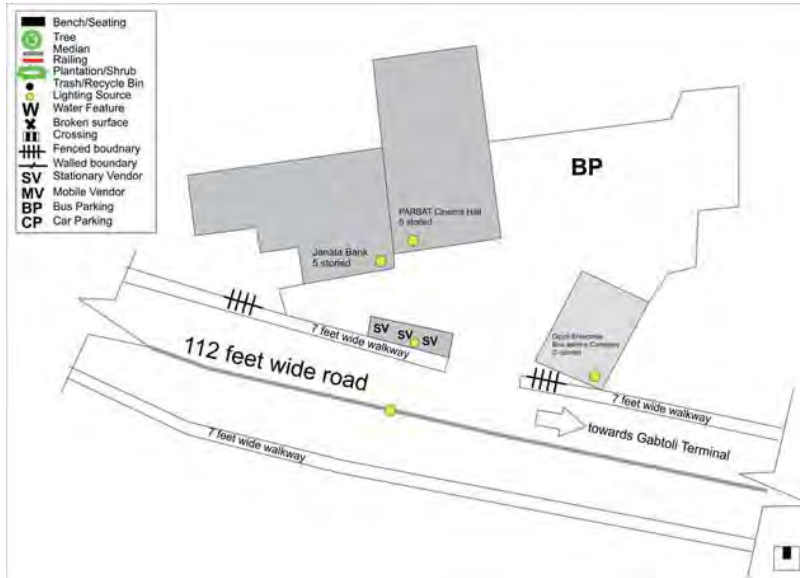


- This location is approximately 300 meters from the bus terminal.
- This location is the point where the bus terminal service road intersects with the southern part of the main road.
- There are bus depots located, and fronted with solid walls, along which the 8 feet wide walkways have been constructed.
- There are tea stalls and also the bus toll counter blocking the walkways along the main road.
- Local buses are parked along both sides of the service road.

	LOCATION D:		
Protection			
Comfort			
Enjoyment			

For Location D, respondents are indifferent in terms of the protective value of the space. They consider the location as accessible, but does not provide amenities for standing, sitting, lingering, listening, and doing activities, e.g., exercises. Moreover, they also attach negative value to enjoyment elements including human scale and aesthetic and attractiveness quality.

Location E

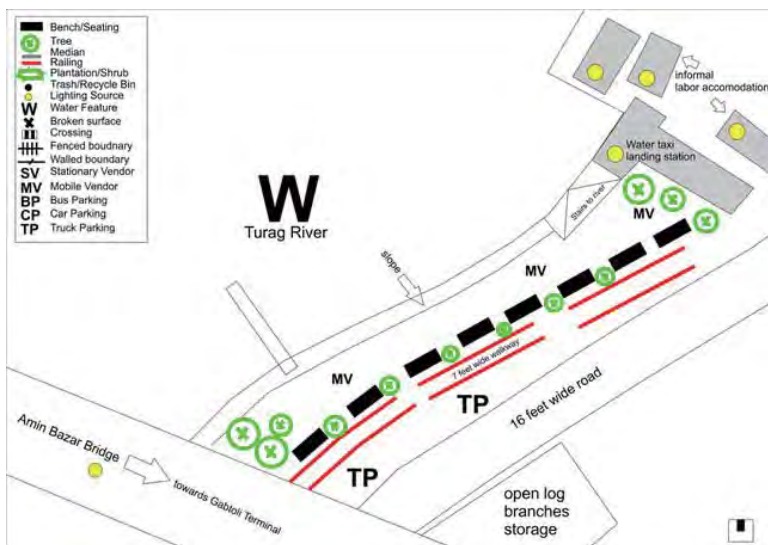


-The location also called the Parbot cinema hall area.  
 -It is located nearly 600 meters from the Gabtoli bus terminal.  
 -It is an important area for leisure activities as the Cinema Hall is located here.  
 -There are tea stalls within the compound and the same compound also houses bus parking and office for one of the prominent Bus service companies.  
 -There is serious lack of greenery, and the area is also not very well lit at night.  
 -There are no spaces for seating and interaction within the compound.

LOCATION E:		
Protection		
Comfort		
Enjoyment		

Location E is one of the two (2) locations that respondents consider as having positive value in many aspects of public space. They consider the area as safe from accidents and crime and is relatively accessible. Comfort and enjoyment elements are also present. However, protection from noise and dust, options for lingering and listening/hearing are still considered as challenges.

Location F1

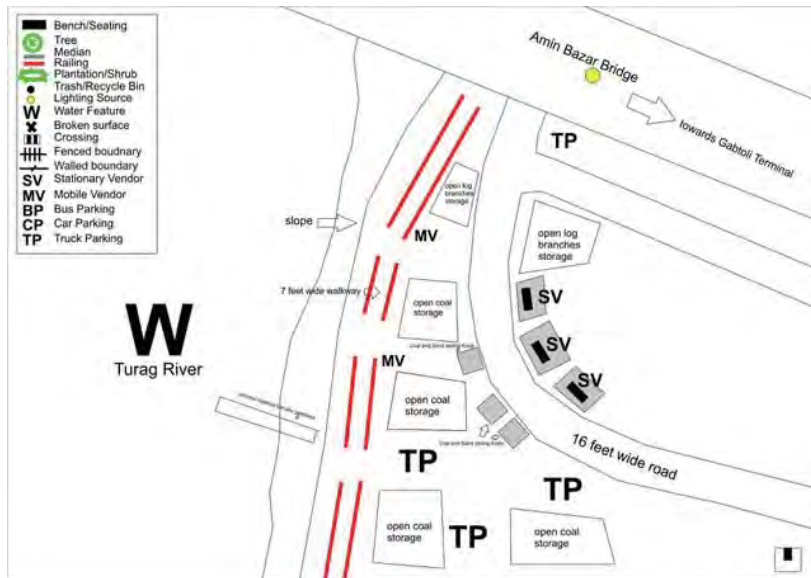


-This location is along the river Turag right under the Aminbazar bridge looking towards north.  
 -It is approximately 750 meters to the west of the Gabtoli Bus terminal.  
 -Part of the bank of the river where loading and unloading of goods via waterways is done, this area particularly serves the local community recreation and passenger service via water taxi.  
 -It is one of the few green spaces within the river bank accessible to the public, but it is difficult to reach this location as the walkable space leading to this area is virtually undefined.  
 -While the Passenger landing station is located here, but not many passengers come due to difficulty in accessibility.  
 -There are mobile vendors serving the visiting people, but the location loses people at night due to poor lighting facilities.  
 -There are benches for people to sit and interact.

LOCATION F1:		
Protection		
Comfort		
Enjoyment		

Respondents attach positive value on safety from accidents for Location F1. However, for the rest of the protection, comfort, enjoyment elements, they are indifferent or consider the location as poor.

Location F2

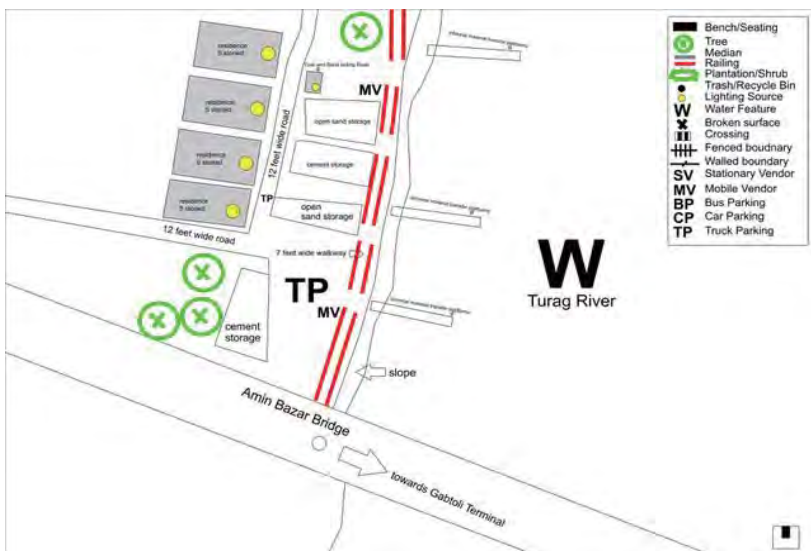


-Along the Turag river, the location is to the southern part of the Aminbazar bridge, and approximately 750 meters to the west of Gabtoli terminal.  
 -This location is vibrant with loading and unloading of construction goods, mainly coal coming via trawlers and ships.  
 -There are supporting tea stalls for the people working in the location, and the road adjoining the area is used by the trucks to carry the goods from the open storages to their destinations.  
 -This area is not very well lit, although the goods are stored open.

	LOCATION F2:		
Protection			
Comfort			
Enjoyment			

Based on responses, Location F2 exhibits a number of good public space elements. Respondents consider the location as safe from accidents and crime, easily accessible, has options for standing, sitting, and listening. It has human scale, and has provides options for enjoying the climate and weather. However, respondents consider Location F2 as poor in terms of safety from noise, dust, and bad smell, and aesthetic and attractiveness quality.

Location F3

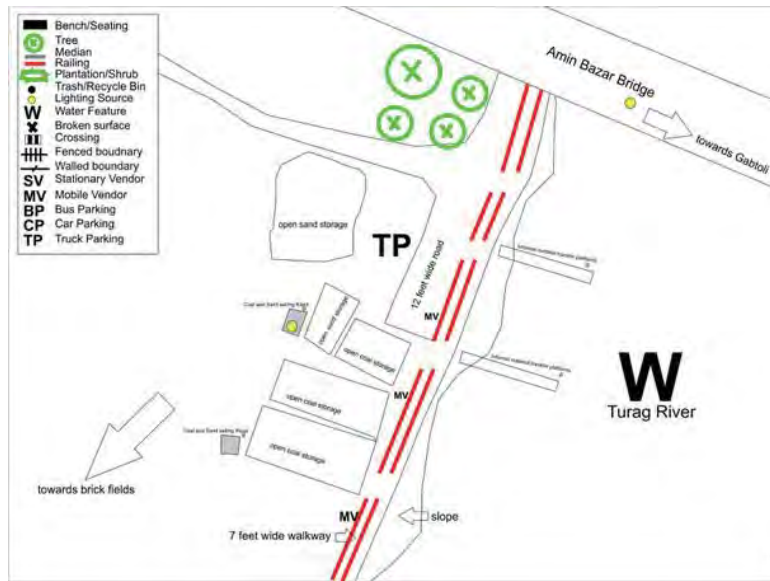


-This is on the other side of the Turag river, approximately 1000 meters from the Gabtoli bus terminal.  
 -This location is mostly occupied by construction material related work.  
 -There are no spaces for leisure activities for the people.  
 -Residential buildings are within very close proximity to the river edge.

	LOCATION F3:		
Protection			
Comfort			
Enjoyment			

Respondents consider Location F3 as safe from crime and accessible. But, they are indifferent in terms of safety from accidents, and from noise and dust. Respondents generally do not think that the location has any enjoyment elements. It does not have human scale. It does not offer opportunities to enjoy the positive aspects of climate and weather, and it does not have aesthetic value.

Location F4



This is located approximately 1000 meters to the west of Gabtoli terminal, on the other side of the Turag river. This area is mostly used for construction material operations. It is in close proximity to the brick fields, which use the coal that is stored in this area. Not so well lit, this area lacks in providing leisure facilities for the general people.

LOCATION F4:	
Protection	Yellow, Green, Yellow
Comfort	Green, Yellow, Pink
Enjoyment	Pink, Pink, Pink

For Location F4, respondents consider the area as safe from crime and easily accessible. However, they are indifferent in terms of safety from accidents, as well as protection from noise and dust. Respondents also are generally indifferent in terms of the area providing options for lingering, sitting, and doing activities. The area is generally considered as poor in terms of enjoyment elements. Respondents think that the area does not exhibit human scale, does not provide opportunities to enjoy the positive aspects of climate and weather, and does not have any aesthetic or attractiveness value.



別添 C : コムラプール駅

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## 1. INTRODUCTION

This report is the deliverable for the Preparation of Transit Oriented Development (TOD) Conceptual Strategies for Kamalapur MRT Station Area, Dhaka, Bangladesh.

The report aims, firstly, to illustrate physical survey findings of the area within one (1) km of the existing railway station, near which the proposed MRT station will be located. The findings establish the rationale for adopting TOD planning approach for the area. Secondly, to use the survey findings for generating conceptual strategic planning for TOD for the station adjoining areas. Thirdly, to demonstrate some schematic plans and sections of the station and adjoining areas that are informed by survey findings and complements conceptual strategic planning.

This report complements with the annexures on household, bus operator, rail passenger, bus passengers and pedestrian profiles of the area within 500 m of the station.

The TOD conceptual planning for Kamalapur station includes the following:

- An analysis of the planning context.
- Preliminary conceptual planning strategies for TOD.
- Schematic plans and sections of the station and adjoining areas.



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## 2. THE PLANNING CONTEXT

### 2.1. Study Background

Kamalapur area is part of Motijheel Thana, one of the administrative divisions of Dhaka city. Motijheel Thana occupies a land area of 4.69 km<sup>2</sup>. In 2011, Motijheel Thana registered a total residential population of 223,676 distributed in 36,059 households. Motijheel along with Dilkusha comprises the Central Business District (CBD) of Dhaka. The area houses more offices and business institutions than any other part of the city. Most corporate headquarters are located in the area. Many service providing, retail and commercial organizations and agencies developed in the adjoining area to support the commercial activities. In terms of employment, majority of the population (84,155) are engaged in services and 11,684 are employed in the industry.

Kamalapur will be one of the major stations of Line 1 (Gazipur – Airport – Kamalapur – Jhilmil –Purbachal – Khilkhet); and is expected to develop with intermodal gateway facilities connecting Bangladesh Railway (BR), Line 1 and Motijheel station of Line 6.

The key concept for developing the station is to leverage MRT, BR and TOD to enhance the area as a competitive multi-modal transport hub and cross cultural urban core.

The Dhaka Transport Co-ordination Authority (DTCA), from passenger forecast, predicts Line 1 to have one of the highest passenger demands - nearly 1.9 million passengers per day, and 37,770 PPHPD in 2035. The reason being Line 1 will connect the CBD of Dhaka city with the northern and southern suburbs. The line will be a combination of grade separated and underground lines and stations; Kamalapur station will be an underground station.

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## 2.2. Site Context

### 2.2.1. Socio-economic characteristics

The survey among 500 household living within 500m of the Kamalapur Railway Station showed that the average length of stay of all household- respondents in Kamalapur is 13 years. The availability of work or business opportunities is the primary reason why the household- respondents chose to live in Kamalapur. Almost half (49%) household heads work within Kamalapur area while 37 percent are working outside Kamalapur, but within Dhaka city.

The average household size in the community is 4.4 and average age of the household head is 46 years. Around 43 percent of the household heads have post-graduate degrees while 11 percent have reached or completed college education. Around 21 percent have at least attended primary or high school. The remaining 19 percent do not have any formal education; majority of them are residing in and around the Railway Station.

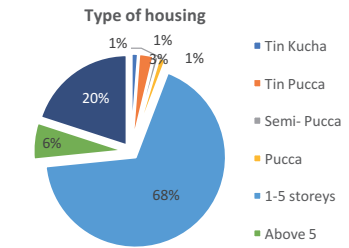
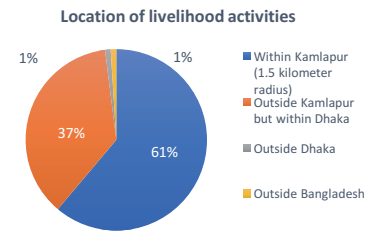
Around half of the household respondents (46%) are employed by government or private offices. Most of them live in AGB colony, Bank colony and North Mugdapara. Around 26 percent of the household heads are engaged in business activities. They mostly reside in Ahmedbag, North Mugdapara, and Kabi Jasim Road private housing. Homeless people in and around Kamalapur railway station work as laborers or transport workers while others are engaged in begging and prostitution.

The reported average monthly income of households is around BDT 65,050. However, homeless people in and around Kamalapur railway station only earn BDT 7,118 per month, which is only 11 percent of the average household income in the area. The average monthly income of households in Kamalapur area is higher than those in Dhaka City in general<sup>1</sup> in the amount of BDT 55,086.

Food and rent take up the largest share of household expenditures at 28 percent and 20 percent, respectively. Approximately, 68 percent of the household- respondents live in 1-5 storey housing structures while 20 percent are homeless. Majority use electricity for lighting (78%); most of the households have access to piped water (80 percent<sup>2</sup>); only 77 percent use private toilets while four (4) percent use shared toilet facilities. Annex 1 has more details of the findings.

<sup>1</sup> UNDP.2016. Politics, Governance, and Middle Income Aspirations Realities and Challenges: An Empirical Study

<sup>2</sup> The 20 percent comprise the homeless people in and around Kamalapur



### 2.2.2. Connectivity with the city

Kamalapur railway station is the main railway terminal connecting almost all major destinations of the country connected through rail. When the new station was built in 1968, the intention was to shift the rail tracks east of the CBD to avoid creating an east-west barrier in between the growing city.

Kamalapur is well-connected with the CBD (Motijheel and Dilkusha) through Kamalapur road and Mazar Road within the one (1) km radius. The recently constructed Culvert Road is frequently used by non-motorized vehicles. Motijheel Road and Toyenbee Road originating from the Shapla Chottor, near the proposed Motijheel station of Line 6, connect Kamalapur area with the administrative and commercial zones of the city on the east. The Toyenbee Road is almost the only major artery connecting the Kamalapur area with the commercial areas of old Dhaka on the south.

The Outer Circular Road, running along the front of the station serves mostly housing for personnel of different government organizations who use the road to go their work places. The Atish Dipankar Road running along the eastern edge of the terminal and Inland Container Depot (ICD) connect the area to Saidabad bus terminal to the South and Khilgaon residential area to the north. This road is considered as an embankment for the city on the east and connects all of the privately developed residential areas namely Maniknagar, Kadamtala and Bashabo.

Figure 2: Connectivity of Kamalapur station with the city



### 2.2.3. Land use pattern

Land use pattern within one (1) km radius area of the railway station is dominated by residential usage – both public and private. Different agencies and organizations provide housing developed by government, marked as public residential zone in the map. Bangladesh Railway also has housing for their employees within Kamalapur area.

The eastern side of the station (comprising of Ahmedbag, Mugdapara, Maniknagar, Dokkhin Bashabo and Kadamtala) are almost homogeneous in character – residential areas developed in privately owned land developed in a very organic manner with narrow streets and closely knit buildings. Different commercial and retail activities have developed along the major connections to serve the residential area.

Motijheel and Dilkusha areas outside the 500m but within one (1) km radius are densely dotted with different offices of finance and service sectors (marked in orange).

Some residential areas have developed towards the north of Motijheel (Fakirapur and Arambagh) marked as mixed used zone in the map. These are high density, low rise residential buildings, some parts of which are converted for commercial and retail usage as an extension of the Motijheel’s business activities (marked in yellow).

Land use of South Kalamapur and Gopibag, the area marked as mixed commercial zone in the map, is mostly residential, but also accommodates parking areas for privately owned inter-district buses, covered vans, trucks and repairing garages for different types of motorized vehicles.



Figure 3: Land use pattern of within one km of Kamalapur station

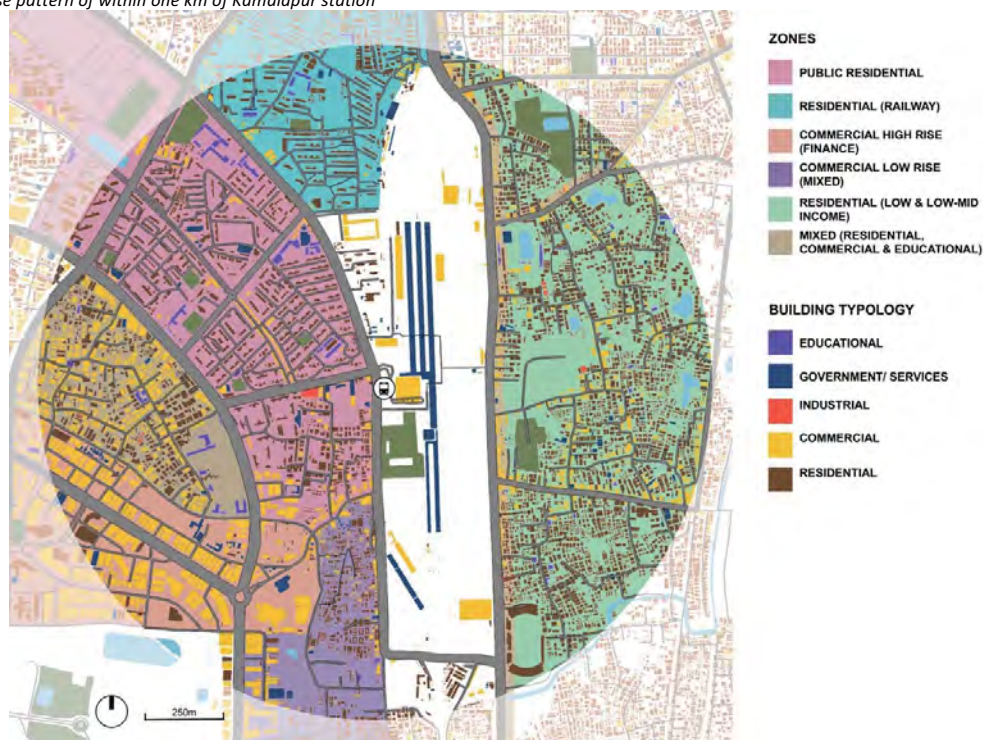


Image 1: Mugdapara



Image 2: Motijheel



Image 3: Atish Dipongkor road



Image 4: ICD and Hospital



#### 2.2.4. Pedestrian circulation pattern

Most major roads on the west side of the railway station have accessible pavements for pedestrians. Some of them are frequently used and others are not, marked in blue and yellow respectively on the map. Some of these pavements are frequently used because of the land use pattern beside them.

For example, many pedestrian use pavements of Motijheel road to for both formal and informal economic activities. On the other hand, despite DIT Avenue having accessible pavements, few pedestrians use them because of the low density walled residential area on both sides of the road. Although Mazar road has similar land use but the location of two schools, a street-side market and vendors make the pavements dynamic.

The pavements around the peripheral wall of the ICD is occasionally used by pedestrians while the other sides both of Atish Dipankar and Outer Circular Roads are frequently used. Buses and trucks parked by the pavements, and walled area without building frontage make them inaccessible and unsafe for pedestrians.

Some of the pavements naturally attract vendors. These pavements are frequently used and vendors take that advantage selling a wide range of products.

Most of the connecting roads inside residential areas do not have designed pavements even though pedestrians dominate the roads. The residential areas east of the railway station have such characters.

Figure 4: Pedestrian circulation pattern around the station and adjoining areas

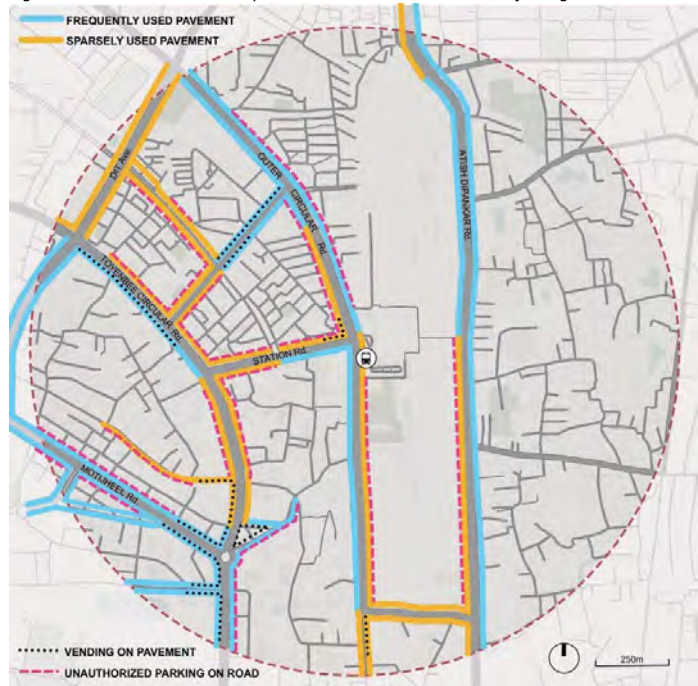


Image 5: Homeless people living in pavement



Image 6: Parking beside pavement



Image 7: Vendors in pavement and road



Image 8: Newly constructed pavement



Residents of Kadamtala, Mugdapara and Maniknagar, when they need to come to Motijheel have to travel more than one (1) kilometer since the entire railway track, the station and ICD are surrounded by a wall. The traffic halts for a long time when trains move near TT Para rail crossing.

The most convenient alternative is to walk across the platform through a foot over bridge provided by the BR. From Mugdapara, the bridge can be accessed from both side of Atish Dipankar Road. From the station side, pedestrians can access from two locations: one in front of the delivery area of the railway storage (location A) and the other one near the main terminal connected to the commuter terminal parking area (location B).

Results of the pedestrian survey in these locations show that around 47 percent of the pedestrians at the foot over bridge are from within Kamalapur area and 53 percent are from areas outside Kamalapur, but within Dhaka. The destination of the majority (94%) are within Kamalapur.

A count during morning peak and off peak hours for half an hour illustrated the nature of pedestrian users of the foot over bridge.

Time	Number in Location A	Number in Location B
8.45 – 9.15 am	1118	1246
11.00 -11.30 am	482	807

Pedestrians interviewed at the foot over bridge generally expressed dissatisfaction with their overall walking experience. Majority express that they are dissatisfied with the conditions of pavements and crossings, personal safety especially for women and children. Protection from adverse weather condition, places to sit, things to see and do; and visual appearance, options for transferring to other modes added to the list. They are neither satisfied nor dissatisfied with adequacy of pavements, street lighting, and availability of signage and street signs.

Figure 5: Location of foot over bridge across the rail track



Pedestrian survey in Location C near the BRTC depot illustrates that most pedestrian come from Kamalapur area (85%). Almost half (48%) are bound to Kamalapur area and the remain 52 percent are bound to areas outside Kamalapur, but within Dhaka.

Overall, 69 percent of the pedestrians originate within Kamalapur area while 31 percent are from other parts of Dhaka. Around 68 percent walk towards Kamalapur area while 32 percent are going outside Kamalapur area. Seventy-one percent (71%) of the pedestrians walk/travel in the area every day.

Majority of the pedestrians walk to or from work (84%) while five (5) percent go to or from school. Eight (8) percent of pedestrians express that the walk to do errands in the area. The two survey areas exhibit the same pattern.

Pedestrians interviewed in the location are generally satisfied with availability of pavements and their conditions, adequacy of street lighting, ease in transferring to other modes (bus and/or railway, and personal safety in pavements and street crossing. However, they are leaning towards dissatisfaction when asked about connectivity of the walkways towards their destinations, and protection from adverse weather conditions, places to sit, things to see and do, visual appearance, cleanliness of the surroundings. Majority of them express dissatisfaction in terms of ease in crossing the streets and availability of street signage. Annex 2 for has details of the findings.

Image 9: Foot over bridge across platform



Image 10: Access and interchange point



Image 11: Foot over bridge along platform



Image 12: Access and interchange point



### 2.2.5. Vehicular circulation pattern and parking

Majority of the residents work within Kamalapur area (61%) and they generally travel by rickshaw, minibus or walk to work.

All roads and streets in the area are two-way. Also, both motorized and non-motorized vehicles ply in these roads and streets. However, as shown on the map, some roads are dominated by motorized or non-motorized vehicles while some have almost equal presence.

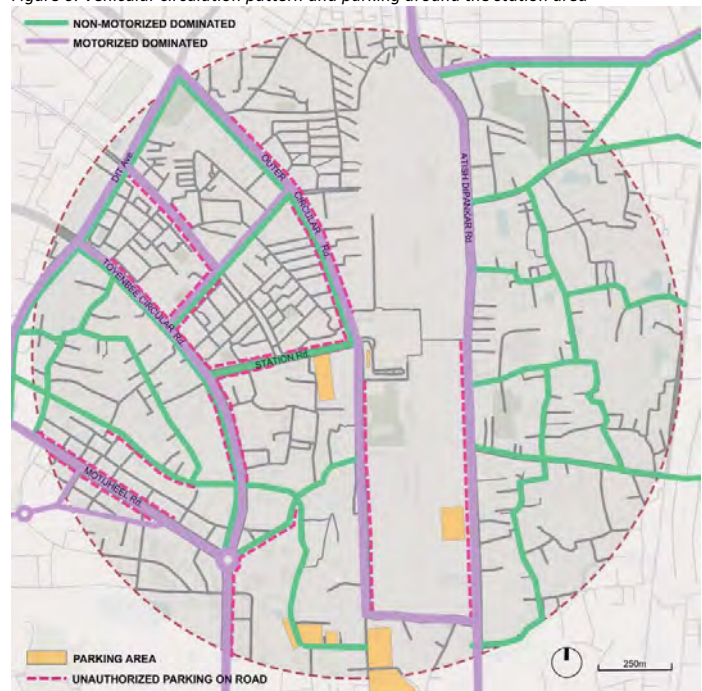
There are very few designated parking spaces for buses and trucks, and none for cars. Lack of parking space serving the CBD is one of the key challenges of the area. Cars and staff buses are parked along the roads, often during office opening and closing times.

There is a parking area for trucks using the ICD. However, it is inadequate for the number of trucks using the ICD and, therefore, they spill over to Atish Dipongkor Road.

Also, two intra-city bus routes start from Kamalapur which do not have any designated lay over space. They usually park along roads, for example along Outer Circular Road.



Figure 6: Vehicular circulation pattern and parking around the station area





### 2.2.6. Bus operation profile

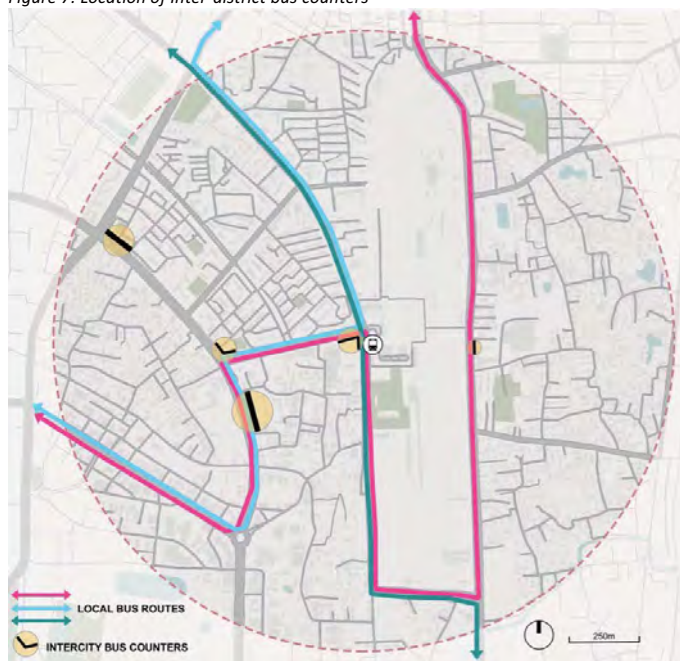
Some inter-district buses connecting south-eastern districts of the country operate from Kamalapur as spill over from the Saidabad bus terminal. Most of the bus counters or waiting areas are located along the Toyenbee circular and Atish Dipongkor roads as shown in the map.

A total of 16 bus operators operate from Kamalapur area. Majority can be considered medium-scale operators, with 44 percent owning 10-29 buses and 19 percent owning 30-49 buses. Only two operators have a fleet of 50 or more buses. In terms of bus type, the fleet of bus companies surveyed are mostly mini-buses (73%) and non-air conditioned (82% of total) buses. Only a few operators offer air-conditioned bus services. Most of the buses owned by the bus companies surveyed run on diesel (93%).

In terms of age, all of the buses are less than 10 years old. 69 percent of these buses are less than 5 years old. A study, however, indicated that determining the age of buses can be less straightforward as the age of imported buses are counted from the date of registration in Bangladesh and not by the year it was made. At the time of the survey, 89 percent of the total number of buses are operational. About 93 percent of the large buses and 86 percent of the mini buses are in operation.

The bus companies surveyed service a total of 48 routes, almost all are considered long distance (greater than or equal to 100 km). The average route length is 218 kilometers. Since buses along these routes take long time to reach their destination, buses can only make one round trip (e.g., from origin to destination and back) is 1. Fifteen (15) bus operators have one (1) ticket counter in Kamalapur. Only one operator has two (2) ticket counters. See Annex 3 for details.

Figure 7: Location of Inter-district bus counters



### 2.2.7. Bus passenger profile

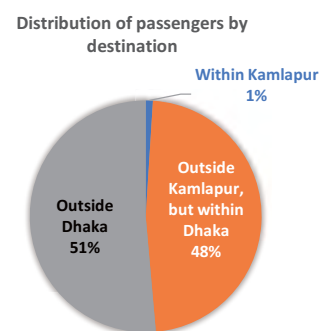
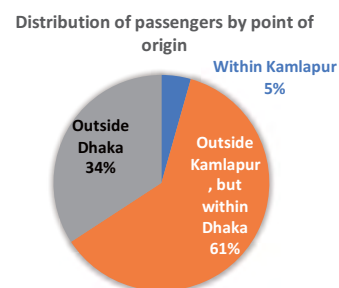
A total of 500 bus passengers of inter-district buses were surveyed in the area. Results show that the passengers are predominantly young male (90%), with average age of 33 years. They travel to visit family/friends (46%), go to/from work (17%) because majority are working as office employees (26%) or are engaged in business (26%). Around 39 percent of the trips happen once a month and 24 percent take the trip at least once a year. This shows that majority of the respondents are considered migrant population, whose familial and social ties lies outside Dhaka.

Majority of passengers (98%) riding the buses from point of origin to Kamalapur area use non-air-conditioned buses; on the other hand, from Kamalapur to destination majority use air-conditioned buses (71%). Depending on the private and public bus operators, the percentage of passengers from areas outside Dhaka varies from half to 83 percent. On average, 42 percent of the respondents originating from within Dhaka, but outside Kamalapur area take a trip to go other parts of the country.

Around 61 percent of the respondents are satisfied that the buses are accessible. Only around 40 percent of the respondents consider that buses are adequate for their travel needs. Half of the respondents disagree that buses are on schedule. The hours of service generally do not meet the respondents' needs. Around 77 percent of the respondents expressed that there is no information available that would help them determine routes and schedules. Therefore, 44 percent respondents are generally dissatisfied and 13 percent are completely dissatisfied with the reliability of bus services.

Bus passengers covered by the survey are generally dissatisfied with bus operation services in Kamalapur. More than half of them expressed dissatisfaction in 8 of 18 key areas of assessment. These include adequacy of buses, reliability of bus service, reasonableness of travel time, courtesy of drivers and bus supervisors, safety and reasonableness of driving, safety of pick up and drop off points, adequacy of waiting area, and protection of passengers from heat and rain.

Moreover, majority of bus passengers are neither satisfied nor dissatisfied in the ease of transferring from bus to bus, personal safety while riding the bus, reasonableness of waiting time, cleanliness and comfort of buses, ease in identifying buses and availability of information on bus schedule. Bus passengers have expressed satisfaction in two key areas: accessibility of buses and reasonableness of bus fares. See Annex 4 for details.



### 2.2.8. Interchange between different modes of transports

There are currently four types of interchange between different modes of transports within the study area:

- Inter-district bus ↔ Intra-city bus
- Train ↔ Non-motorized vehicles
- Motorized vehicles ↔ Non-motorized vehicles/ pedestrian
- Non-motorized vehicles ↔ pedestrian

Passengers interchanging from local transport to inter-district buses usually wait half an hour in counters. Bus passenger survey shows that they use rickshaw (24%) and CNG driven three-wheelers (11%), while the rest use local buses or private cars. Around 54 percent of the passengers expressed dissatisfaction with the relative ease in transferring from bus to bus or from bus to other modes of transport.

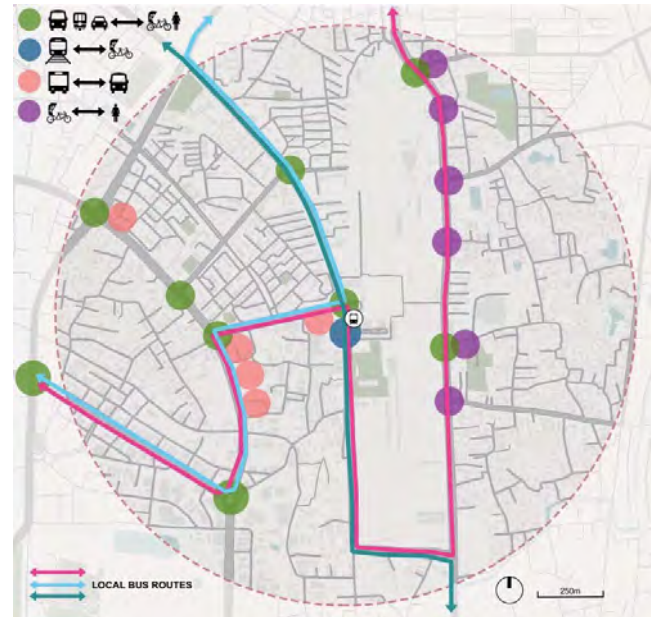
Majority of the rail passengers use local buses from point of origin to Kamalapur station (44%). Around 25 percent use rickshaws while 16 percent use other motorized vehicles. Only 2 percent passenger walk to the station.

A count of vehicles plying and stopping during weekday for six hours, ten minutes for different types of vehicles every hour in front and opposite of terminal illustrate a dominance of non-motorized vehicles.

Types	Opposite to station	In front of station	Pickup/ Drop-off area
Bus	43	17	13
Minibus	31	14	4
Human Hauler	29	6	0
CNG driven three-wheeler	253	125	163
Rickshaw	1,108	373	795
Bicycle	8	21	0

Most passengers along Atish Dipongkor road transfer to non-motorized vehicles or walk to travel inside the residential area.

Figure 8: Interchange location between different modes and bus routes



### 2.2.9. The Railway station

Kamalapur railway station, a key modernist building in Dhaka city designed by American architects Daniel Dunham and Robert Boughey, was completed in 1968<sup>3</sup>. The iconic parasol roof – a unique cusped shell concrete canopy – reminisces the form of lotus.

The roof is divided into six 25 feet square bays on each side. The roof covers a series of interlinked functional spaces: 10 platforms, 11 booking counters, several eateries and two passenger lounges. The station building offers a flexible and adaptive space with potentials for expansion of the support spaces within. A marriage between structural and spatial conception culminated in an aesthetically sound and culturally sensitive design.

In 2015-16, the Kamalapur Railway Station served over seven million passengers (around 20,000 passengers per day) and a million kilograms of goods.

Image 13: Kamalapur Railway station



Figure 9: Plan and elevation of Kamalapur railway station



<sup>3</sup> Adnan and Nahar, 2017, DAC

### 2.2.10. Rail passenger profile

A rail passenger survey conducted in December 2017, shows that majority of the rail passengers are from areas outside Kamalapur, but within Dhaka city (60%). Almost all of them are traveling outside of Dhaka. Majority of the rail passengers travel once a month (59%).

Rail passengers interviewed are generally dissatisfied with their overall rail travel experience. Majority express that they are dissatisfied with (a) personal safety while on board, (b) length of time the journey was scheduled to take, (c) comfort of the seating area, (d) frequency of trains, (e) capacity of rail cars, (f) reliability of trains, (g) reasonableness of waiting time, and (h) cleanliness and comfort of rail cars.

Rail passengers expressed satisfaction in the following areas of rail station services: adequacy of information on route and schedule, adequacy in connections with other modes of public transport, and ease in transferring from/to other modes of transport. Fare is considered reasonable.

However, they express dissatisfaction in the services and amenities provided by the Kamalapur railway station. In particular, they express dissatisfaction in: ease in buying tickets, personal security at the station, safety of women and children, safety of the surrounding area of the rail station, adequacy of wash rooms and comfort rooms for female passengers, cleanliness of the station, and provision of feedback or complaints mechanism. Rail passengers are neither satisfied nor dissatisfied in the adequacy of lighting of rail station at night and adequacy of security personnel at the station.

Rail passengers consider the following improvements: make buying of tickets easy (first priority), improve security at the rail station (second priority), and provide adequate washrooms for both male and female (third priority). Annex 5 contains details of the survey.

Image 14: Main concourse



Image 15: Interchange to motorized and non-motorized transports



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## 3. CONCEPTUAL PLANNING FOR TRANSIT ORIENTED DEVELOPMENT

### 3.1. Vision

Eastern side of the Kamalapur station (comprising of Ahmedbag, Mugdapara, Maniknagar, and Kadamtala) are sparsely connected with the proposed MRT station area, existing railway station and the commercial business district. Residential area, to the north of the station, are low-density, residents of which mostly travel short distance for work and others necessities. Area to the south of the station are within the catchment area of Motijheel station of Line 6. Potentially residents of the eastern side will be the main users of the Kamalapur station to access MRT network. However, the inadequate pedestrian foot over bridge above the railway platform is the shortest and most frequently used option for them. Local bus service and other vehicular access options for them are disrupted by railway crossing.

Connect eastern part of the Kamalapur station to the MRT network and CBD.

One of the key visions for Kamalapur will be to connect the eastern part of the TOD focus area with MRT network and CBD.

Kamalapur railway station is the main hub for railway network. BRTC bus depot located near the station is the main hub for public bus operator who operates in different districts within the country and to international destinations in India. Some of the local bus routes terminate and originate in Kamalapur. Non-motorized vehicles are allowed in all roads to serve the short-distance travel requirement of people working in CBD, traveling from residential areas to educational institutes and hospital. Yet these modes of transport are not well connected, residents and users of these transport modes identified interchange between different modes to be problematic.

Create links between different modes of transports to improve mobility.

The TOD around MRT station will establish easy interchange and seamless transfer between different modes of transports.

Government housing in Kamalapur, apart from railway housing and station yard, cover approximately 425,500 m<sup>2</sup> or 44.5 hectares of land. Most of the buildings for public-sector employees have been developed more than 50 years ago and are dilapidating. Also, the low-density development does not conform with the high demand for housing for both public and private sector employees serving the CBD. In the absence of retail and neighborhood facilities, different street-side markets have developed informally, vendors have occupied pavements obstructing pedestrian movement.

Rethink land use pattern for residential and mixed-use development.

TOD centering Kamalapur MRT station will rethink the land use pattern, especially to improve the quality of public housing, incorporate mixed-use development, and explore opportunities for partnership and affordable housing.

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### 3.2. Accessibility

#### 3.2.1. Pedestrian access to the station

The existing connection to the eastern side through the foot over bridge is inadequate and inaccessible to all. The users identified visual appearance and lack of activities among others reasons for their dissatisfaction about the bridge despite recognizing its necessity.

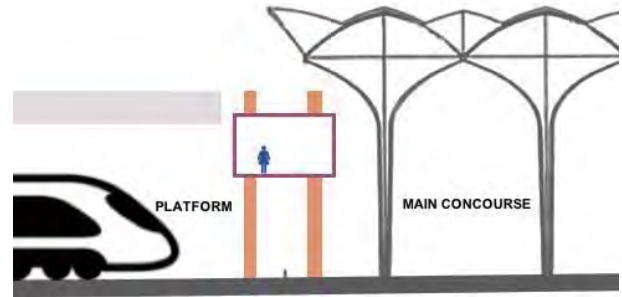
A new connection can be conceptualized in between the parasol roof of the concourse and platform as shown in figure 10. There can be different advantages – the connection will work as a shade for the connection between the concourse and platforms, pedestrian on the connection will have visual linkage to trains, seamless vertical connections can be established between elevated pedestrian way, to the railway concourse and the under-ground MRT platforms. Planning in such location will create limited disturbance to the activities of railway station, ICD and visual appearance of the iconic terminal structure.

The grade separated connection can terminate in public plaza near the Hospital in Mugdapara. In such scenario, hospital users will be able to take advantage of the MRT.

New pedestrian prioritized streets have to be created within the neighborhoods on the eastern side to make the area accessible with walking for 10- 15 mins. As a short-term strategy, some of the existing connectors can be improved with pedestrian access and interchange facilities to non-motorized vehicles. New development of the area will be guided to design new connectors.

New underground connections across the ICD area can be conceptualized without hampering the ICD's functioning. However, such option need careful consideration for making them safe with activities along the path and flood protection since flooding and waterlogging risks are higher in Mugdapara and surrounding areas.

Figure 10: Conceptual pedestrian connection between concourse and platform



The major connecting roads of western side of the station area have pavements. Some of them are used frequently, but some are not due to their poor physical conditions, street lighting and furniture; lack of activities on the street frontage. In many places vendors and other activities occupy the pavements. Unauthorized parking and lack of visibility make the pavement unsafe.

As a short-term strategy, the streetscape of Station road, Outer circular road, Toyenbee circular road and Mazar road can be improved to accommodate more pedestrian and create a pedestrian network.

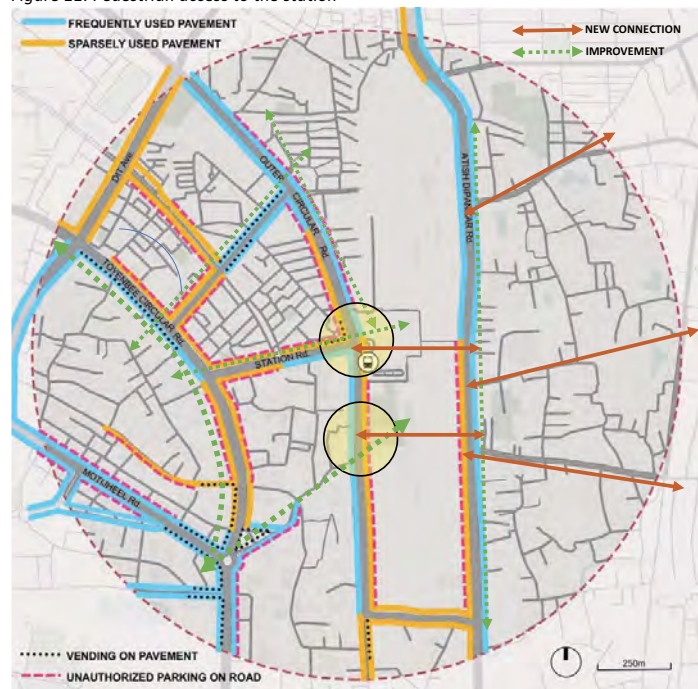
In order to better connect with the Motijheel station of Line 6 near Shapla chottor, the Culvert road can be expanded with adequate pedestrian-oriented facilities.

Organizing and managing vendors beside these pavements can make the streetscape lively and attractive.

As a long-term strategy, the government housing area can be redeveloped with mixed-used buildings and public facilities along the main connectors like the Mazar road, Station road and Culvert road.

In such scenario, one option can be to convert Station road as pedestrian only access to the MRT station which will facilitate short transfer to Motijheel station through Toyenbee circular road and provide better pedestrian access to CBD from MRT.

Figure 11: Pedestrian access to the station



### 3.2.2. Motorized vehicular access and parking

Traffic management in Motijheel and Dilkusha areas, especially in terms of parking, is already problematic. With the introduction of Motijheel station of MRT Line 6 and Kamalapur station of Line 1, it is expected that the traffic congestion will be reduced.

However, some existing roads can be better managed as one-way, some can be converted to accommodate on-street car parking. The non-motorized transport dominated roads can have interchange points for better management as well. Roads with both motorized and non-motorized vehicles can have dedicated lanes to improve speed.

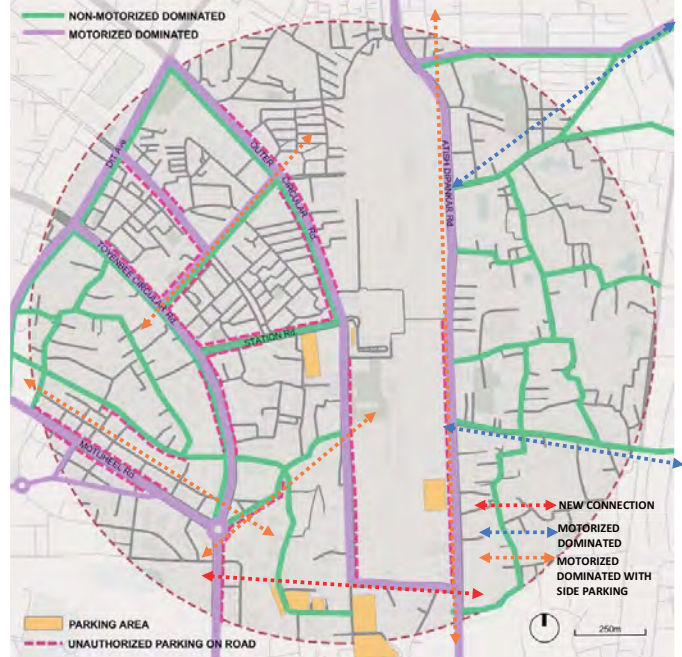
If mixed-used development is explored in place of public housing, parking guidelines and codes need to be followed to accommodate new parking needs. The development can incorporate parking lots for commercial usage to meet the demand of CBD.

New road can improve connectivity of inter-district buses travelling through Saidabad from Toyenbee Circular and Atish Dipongkor roads. A north south connection between these two roads beside private bus parking areas can ease the traffic of inter-district buses.

Saidabad bus terminal and BRTC bus depot have parking spaces, both of these terminals need to enhance traffic management to avoid spill over in the adjoining roads. Private parking garage for buses can be formalized to develop as parking lots.

ICD must develop better parking facilities for the trucks and covered vans using the depot.

Figure 12: Possible improvement in vehicular circulation pattern and parking

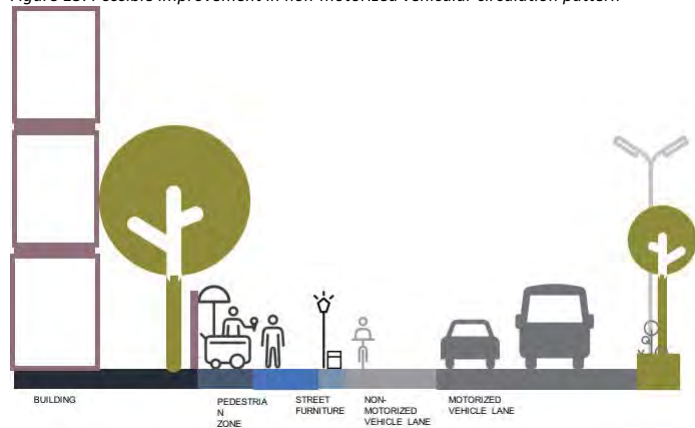


### 3.2.3. Non-motorized vehicular access and parking

The dominance of non-motorized vehicles and pedestrians going to work and other places can be considered as opportunity for TOD planning in Kamalapur.

However, non-motorized vehicular movement needs to be better managed with planning for dedicated lanes, signaling, pedestrian friendly crossing and interchange points. None of the roads should be made off-limit to non-motorized vehicles like other parts of the city. The physical survey illustrates that Mazar road, DIT road, Outer circular road and Toyenbee circular road are wide enough to accommodate lanes for non-motorized vehicles.

Figure 13: Possible improvement in non-motorized vehicular circulation pattern



### 3.2.4. Interchange between modes

Interchange between different modes need to be given priority considering the users' response from the survey. Since Kamalapur will not be developed as a multimodal transport hub, rather different modes located near-by will be connected; access to different modes and interchange will have to be designed in different locations. These points need to be designed with street lights, pedestrian crossings and signaling to make them accessible and safe.

### 3.3. Diversification of land use

#### 3.3.1. Housing development

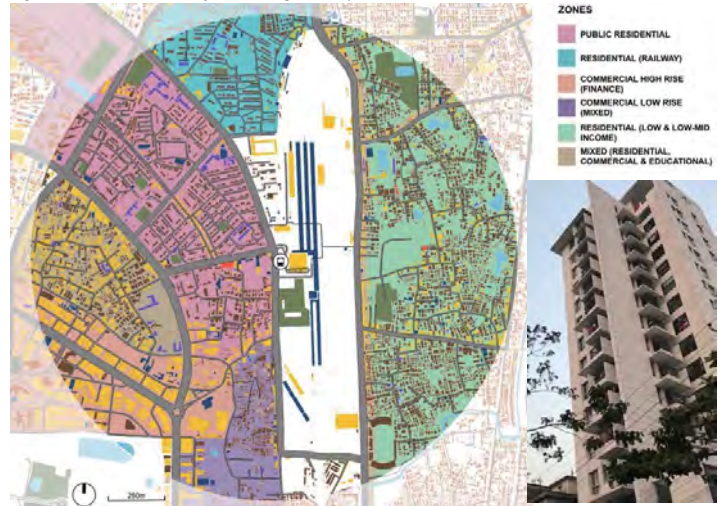
The existing government housing stock located in Kamalapur (AGB colony, T&T colony, and Bangladesh Bank colony) is situated on approximately 44.5 hectares of land, while railway housing is located on additional 42 hectares, part of which is within the one (1) km radius of the station area. Most of these public housing is low density and some in very poor conditions. New buildings are developing in isolation to address the housing demand for government employees without any comprehensive planning.

There is enormous possibility to develop the entire area through comprehensive planning for housing and supporting facilities. The land ownership by the government is an opportunity for development. The MRT station can contribute to the housing development by providing easy access to work and other facilities through Line 1.

On the eastern side of the station, high density private housing has developed by individual owners without any prior planning guidelines. The area can be redeveloped using different land management methods. There is demand for new and affordable housing with community facilities, the development by real estate developers are indication of those demands.

The eastern side of the station is part of the Eastern Dhaka, which is expected to experience major development as city's land become saturated on the other sides. Adopting TOD for the area can be seen as example of better urban living conditions.

Figure 14: Potential area for housing development



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#### 3.3.2. Mixed use development

Motijheel and Dilkusha commercial areas developed during early 50s and 60's as CBD central business district without any planning for diversified land. The area become almost dead after dark. Similarly, ICD isolates residential areas to the east of the station by the high boundary wall without any street frontage. Large part of the area become unsafe after dark. Different commercial, retail and community facilities have developed within government colony and along the main connectors of the eastern part to support the neighborhoods.

There are possibilities to diversify land use in the area and promote mixed-use development. The area on both side of the station road can be planned for such development that will encourage pedestrian activities along the main connectors to the MRT stations. A few roads can be developed for pedestrian only with retail and commercial activities with vehicular access on time sharing basis or in emergency. Similarly, Mazar road and Culvert road can be converted to have both pedestrian and vehicular access with retail and commercial activities as street frontage.

The long stretch along the Atish Dipongkor road can be developed to attract pedestrians and create interchanging points to different modes of transport. Such planned development will complement the increase in land value that usually MRT brings to any area, also serve the adjoining neighborhood.

Figure 15: Potential improvement in interchange between different modes



#### 3.3.3. Partnership for development

Mixed used development can be strategically planned to encourage partnerships among different groups, for example, public private partnership. Such development can explore affordable housing for different income groups for bringing diversity in the area.

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#### 4. SCHEMATIC DESIGN OF THE STATION

##### 4.1. Key considerations for site development

- Retain and renovate the iconic Kamalapur Railway Terminal building.
- Improve streetscape of Station road (preferably with pedestrian access only).
- Design public plaza at the entrance of MRT station.
- Improve connection across ICD and railway tracks.
- Improve streetscape of main connecting roads and streets.
- Provide parking facilities for non-motorized and motorized transport and local bus.
- Design bus stop for local bus.
- Consider future expansion of railway terminal and tracks.
- Propose new corporate office for Bangladesh Railway.
- Introduce formal and informal commercial activities.
- Retain existing greenery.



These considerations are incorporated in schematic site plan (Figure 16).

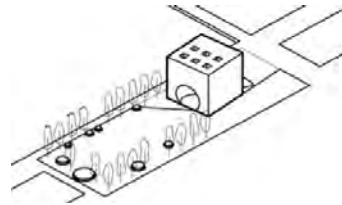
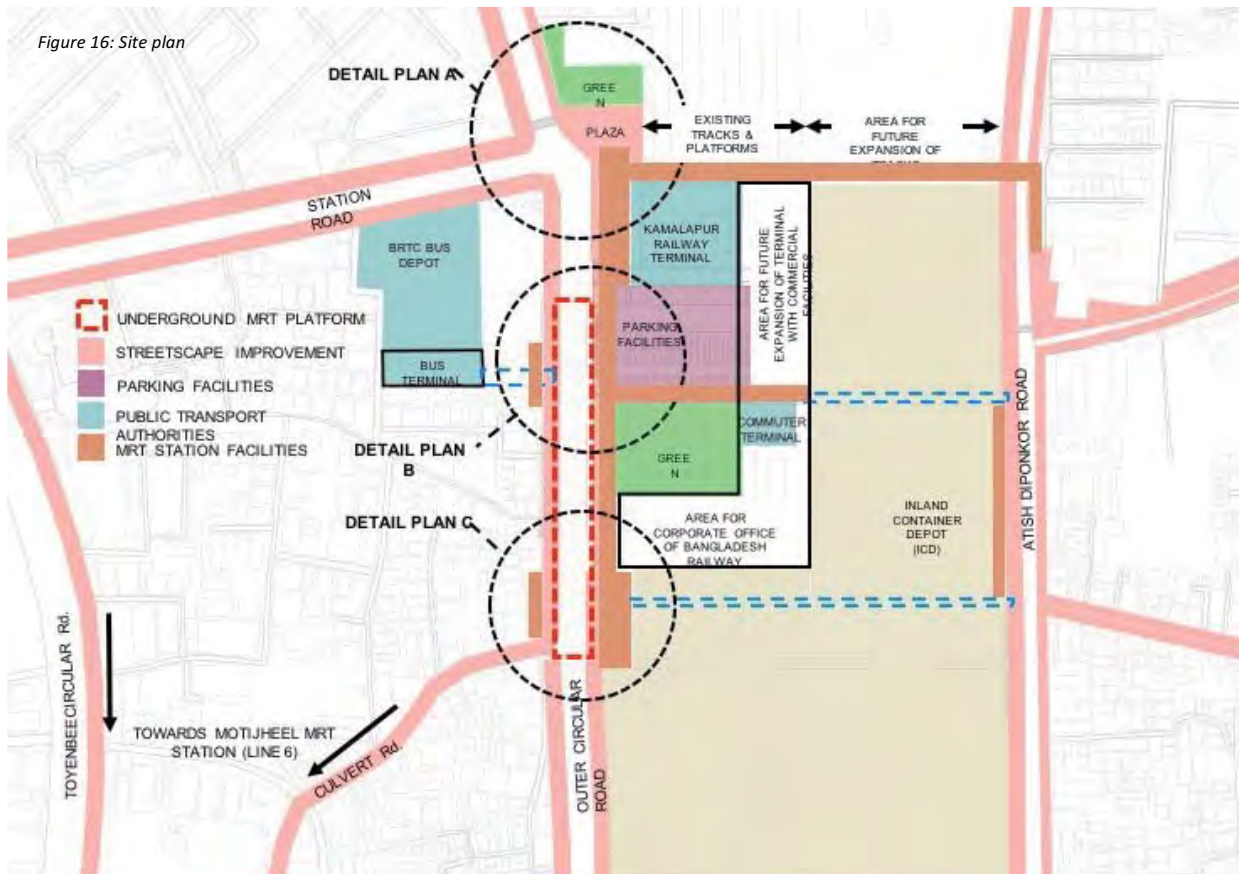


Figure 16: Site plan



#### 4.2. Connectivity and interchange between different modes of transport and MRT

The design of the Kamalapur MRT station have to consider the location and functioning of the iconic terminal buildings, both inter-district and commuter, the existing railway system and track layout, and the ICD. Also, some of the privately-owned land on the east side of Outer circular road, along which the MRT line will continue, have already been developed as high-rise commercial and residential buildings. On the west side, open green space in between the terminal building and the office of Bangladesh railway, owned by the railway is an opportunity. Other opportunities are the location of the BRTC bus depot which is an extension of the Saidabad bus terminal, connecting international destinations along with national.

The schematic design, therefore, suggests to develop an interlinked complex of activities rather than relocating all the activities under one roof as a multi-modal transit hub.

For example, the north wing of the MRT station will connect passengers with the main railway terminal, pedestrians from both east and western sides residential areas. South wing of the MRT station will connect with pedestrian and commuters from Motijheel station of Line 6, local bus users. The local bus users will be able to access the BRTC bus terminal, commuter railway terminal and the eastern residential areas.

A liner north south elongated frontage of MRT station and local bus activities will have options to take advantage of open public and green space.

Since MRT station development will need to negotiate with Bangladesh Railway for acquiring land, one incentive can be to offer them to develop extension of the terminal with commercial and public entertainment which is lacking in the area and their corporate office as an integrated building that can accommodate underground parking for the complex users.

Figure 17: Linkages between different modes of transports



#### 4.3. Pedestrian circulation

Figure 18: Conceptual Detail Plan A at the intersection of Station road and Outer circular road



1. Station road with improved streetscape on both side. This will form a main pedestrian access to the North wing of the MRT station. See Section A and B for details.
2. Existing green area with trees which will be partially retained.
3. Public plaza with organized vendors.
4. Main entry/exit of North wing.
5. Access to MRT from the foot over bridge.
6. Foot over bridge connecting eastern part of the ICD. See Figure 10.
7. Entry/ exit from the railway terminal concourse.
8. Down to MRT platform.
9. MRT station North wing.
10. Railway platform.
11. Concourse.
12. Drop-off/Pick-up zone.
13. Waiting area for non-motorized transports.
14. Drive way for motorized parking area.
15. Car parking area.
16. Underground MRT platform.
17. Existing buildings of railway.



Figure 19: Conceptual Section AA' of Station road

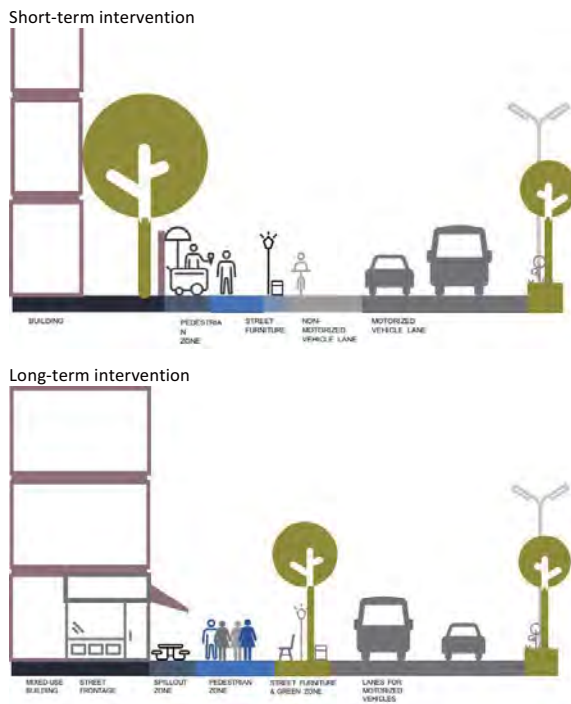
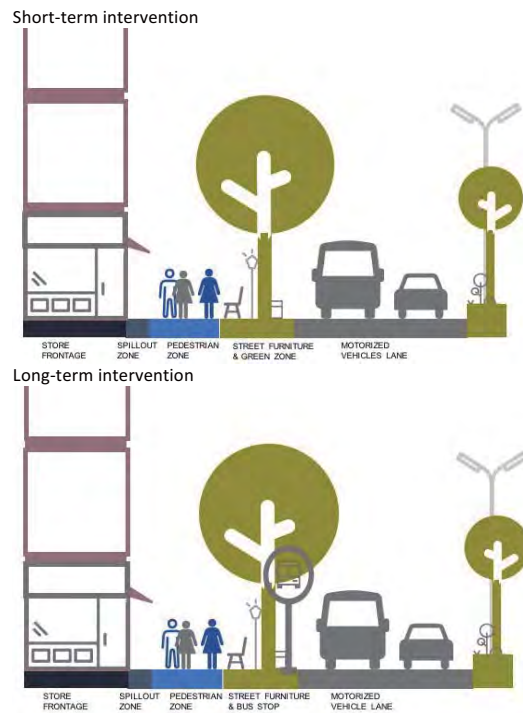


Figure 20: Conceptual Section BB' of Station road



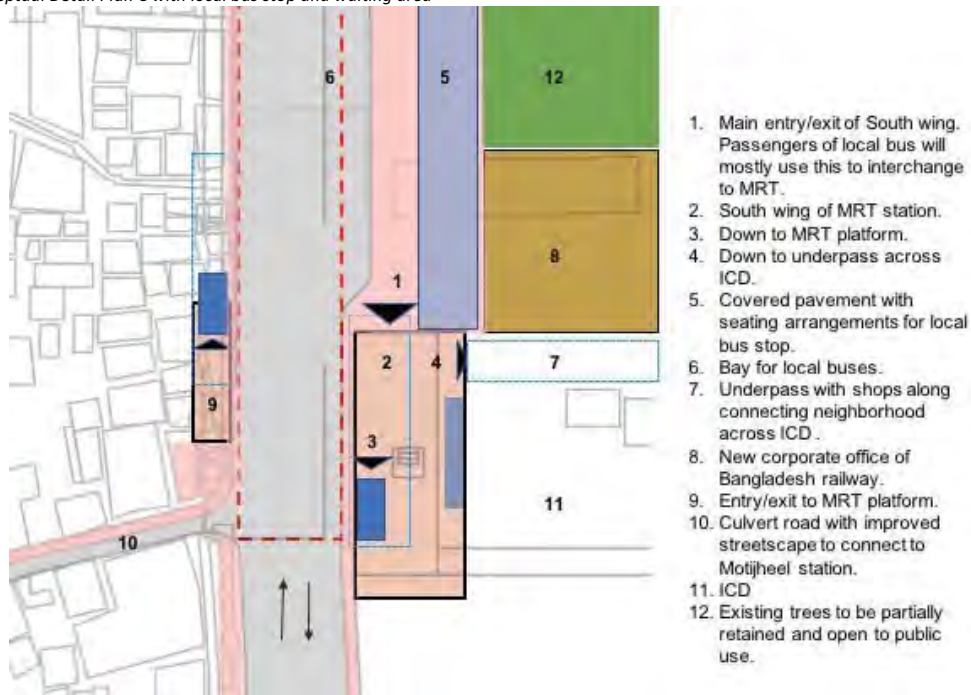
#### 4.4. Vehicular access and parking

Figure 21: Conceptual Detail Plan B with vehicular drop-off and parking



#### 4.5. Local bus stop and waiting

Figure 22: Conceptual Detail Plan C with local bus stop and waiting area



1. Main entry/exit of South wing. Passengers of local bus will mostly use this to interchange to MRT.
2. South wing of MRT station.
3. Down to MRT platform.
4. Down to underpass across ICD.
5. Covered pavement with seating arrangements for local bus stop.
6. Bay for local buses.
7. Underpass with shops along connecting neighborhood across ICD.
8. New corporate office of Bangladesh railway.
9. Entry/exit to MRT platform.
10. Culvert road with improved streetscape to connect to Motijheel station.
11. ICD
12. Existing trees to be partially retained and open to public use.

#### 5. IMPLEMENTATION STRATEGY

Some of the interventions discussed in conceptual planning and schematic design can be implemented in different phases.

- |  |                                 |
|--|---------------------------------|
| <ul style="list-style-type: none"> <li>▪ Improvement of streetscape of Station road and Toyenbee circular road to connect to Motijheel station of Line 6.</li> <li>▪ Renovation of Railway terminal.</li> <li>▪ Improvement of streetscape of Outer circular road and Atish Dipongkor road.</li> <li>▪ Development of bus stops for local buses along Outer circular and Atish Dipongkor roads.</li> <li>▪ Development of MRT station with parking facilities for both non-motorized and motorized vehicles and lay over parking for local buses.</li> <li>▪ Development of the foot over bridge connecting eastern side of the station.</li> <li>▪ Development of underground connections across ICD.</li> <li>▪ Development of plaza with non-motorized interchange point near the Hospital in Mugda.</li> <li>▪ Development of BRTC bus terminal and connect with the MRT station.</li> </ul> | <p>Short term interventions</p> |
| <ul style="list-style-type: none"> <li>▪ Widening of Culvert road to accommodate pedestrian access along with vehicular access.</li> <li>▪ Widening of three/four neighborhood roads of Kadamtala, Mugdapara and Maniknagar to serve as primary connectors.</li> <li>▪ Redevelopment of public housing in between Culvert road, Station Road, Mazar road and DIT road.</li> <li>▪ Promote mixed use development along the Station road and Atish Dipongkor road.</li> <li>▪ Design new north south connecting road between Outer circular road and Atish Dipongkor road with parking facilities for inter-district buses.</li> <li>▪ Development of commercial parking lot.</li> <li>▪ Expansion of railway terminal.</li> <li>▪ Development of corporate office for the railway with commercial and public entertainment facilities at lower levels, and parking at basement levels.</li> </ul> | <p>Long term interventions</p>  |

## ANNEX 1: HOUSEHOLD PROFILE OF KAMALAPUR

### 1. General overview of Kamalapur

Kamalapur area is part of Motijheel Thana, one of the administrative divisions of Dhaka city. Motijheel Thana occupies a land area of 4.69 km<sup>2</sup>. In 2011, Motijheel Thana registered a total residential population of 223,676 distributed in 36,059 households. The average household size is 6. Motijheel along with Dilkusha comprises the Central Business District (CBD) of Dhaka. The area houses more offices and business institutions than any other parts of the city. The largest number of corporate headquarters in Bangladesh are located in Motijheel and Dilkusha. Many service, retail, and commercial organizations and agencies have emerged in the adjoining area to support the CBD. Majority of the working population (88%) are engaged in services and the remaining are employed in the industry (12%).

### 2. Results of the socio-economic survey

A survey was conducted among 500 household living in six areas within 500m of the Kamalapur Railway Station: AGB colony, Bank colony, Ahmaadbag, North Mugdapara, Kamlapur Railway Station, and Kabi Jaasim Road private housing. This section presents the results of the survey.

#### 2.1 Length of stay in Kamalapur

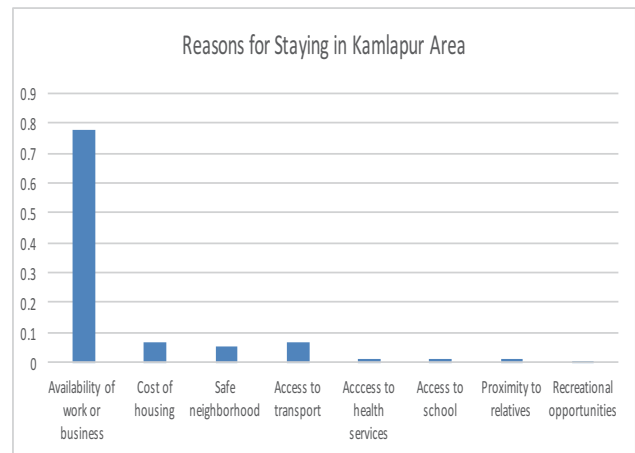
The average length of stay of all household- respondents in Kamalapur is 13 years. Household respondents in Kabi Jasim Road private housing have stayed longer than in other survey areas, averaging 32 years. In terms of distribution, 37 percent of the respondents are residing in Kamalapur for 10 years and above while 28 percent have stayed for about 6-10 years. Around 36 percent are new residents who have stayed in Kamalapur area for less than 5 years.

In terms of length of stay in current residents, household respondents have stayed in their current residence an average of 10 years. In terms of distribution, 51 percent have only stayed for less than five (5) years.

	Table 1: LENGTH OF STAY IN KAMLAPUR AREA									
	N	Average	5 years or lower		6-10 years		Above 10 years		TOTAL	
AGB colony	100	10	33	33%	39	39%	28	28%	100	100%
Bank colony	100	6	51	51%	29	29%	20	20%	100	100%
Ahmaadbag	50	10	17	34%	20	40%	13	26%	50	100%
North Mugdapara	50	13	9	18%	25	50%	16	32%	50	100%
Kamlapur Railway Station	100	6	65	65%	15	15%	20	20%	100	100%
Kabi Jaasim Road private housing	100	32	3	3%	10	10%	87	87%	100	100%
Average	500	13	178	36%	138	28%	184	37%	500	100%

## 2.2 Reason for choosing to stay in Kamalapur

The availability of work or business opportunities is the primary reason why the household-respondents chose to live in Kamalapur area.



## 2.3 Household size

Data shows that the average household size in the community is 4.4. This does not include those who are living in and around the station because they are not considered as typical households. Most of them are divorced or separated from families. The average household size in Kamalapur is the same as in Dhaka city in general, which was reported at 4.4.

On the average, at least one member of the household is working, except for households residing in AGB colony wherein, on the average, two (2) members are working.

	Average	Working
AGB colony	4.6	2
Bank colony	4.4	1
Ahmaadbag	4.2	1
North Mugdapara	4.3	1
Kamalapur Railway Station	1.7	1
Kabi Jaasim Road private housing	4.5	1
Average	3.9	1

## 2.4 Socio-demographic characteristics of the household heads

**Age.** The average age of the household head is 46 years. Around 33 percent of the household heads have ages within the range of 41 to 50 years. This is followed by household heads whose ages are within 50-60 years. Around 23 percent have ages between 31-40 while only 12 percent are 30 years old and below.

**Gender distribution and marital status.** Nine of 10 household-respondents are male-headed and married. A large number of homeless people in and around Kamalapur Railway Station are divorced or separated, accounting for 23 percent of the sample obtained in the Kamalapur Railway Station.

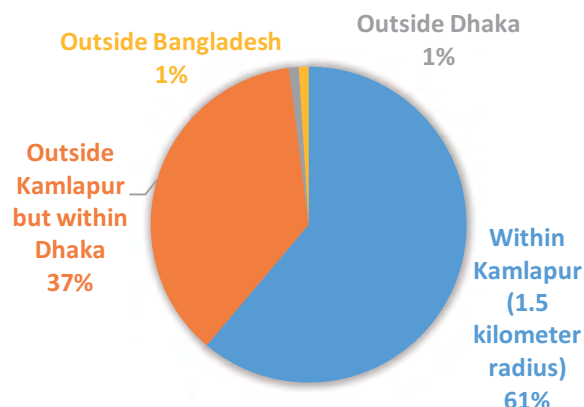
**Educational attainment.** Forty-three percent of the household heads have post-graduate degrees while 11 percent have bachelor's degrees while 8 percent reached college level. Around 21 percent have at least attended primary or high school. The remaining 19 percent do not have any formal education, majority of them are residing in and around Kamalapur Railway Station.

**Source of income or livelihood.** Around half of the household respondents (46%) are employed by government or private offices. Most of them live in AGB colony, Bank colony and North Mugdapara. Twenty-six percent are engaged in business activities. They mostly reside in Ahmaadbag, North Mugdapara, and Kabi Jaasim Road private housing. Homeless people in and around Kamalapur railway station work as laborers or transport workers while others are engaged in begging and prostitution activities.

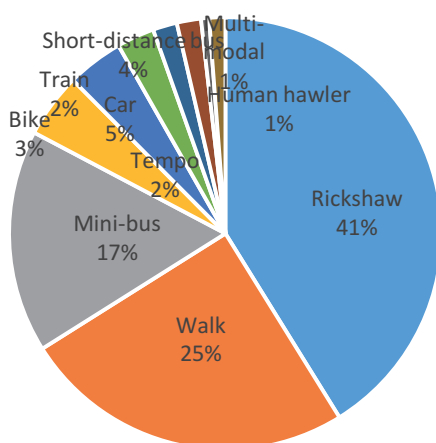
## 2.5 Travel characteristics

**Location of work, business or livelihood.** The location of work, business or livelihood of almost half (49%) of the household heads is within Kamalapur area while 37 percent are working outside Kamalapur, but within Dhaka city. Majority of the residents work within Kamalapur area (61%) and they generally travel by rickshaw, minibus or walk to work.

### LOCATION OF WORK, BUSINESS, OR LIVELIHOOD ACTIVITIES



### MODE OF TRANSPORT



**Distance and time traveled and amount spent on travel.** On the average, household heads working in Kamalapur area travel 1.5 kilometers from home to work, taking them around 16 minutes to complete the trip. For household heads who work outside Kamalapur, but within Dhaka, they travel for around 3.8 kilometers. On the average, it takes them 32 minutes to complete the trip. For household heads who travel by bus or other public transport around Kamalapur area, they spend around BDT 13/day. For those who travel outside Kamalapur area, but within Dhaka, the household heads spend BDT 34/day, on the average. This corresponds to the minimum fare of BDT 5.00 per trip.

## 2.6 Socio-demographic characteristics of spouses

The average age of spouses is 38 years old. Majority of them do not have work (74%). For working spouses, majority of them are employed in government or by private offices.

## 2.7 Household assets

Household assets provide an indication of the socio-economic status of households. Majority of the respondents have at least an electric fan, flat iron, television, mobile phone, and rice cooker. Around 37 percent of respondents have computer or laptop. Half of the respondents have washing machines. Around 11 percent have cars and 9 percent have motorcycles. Homeless people in and around Kamalapur area do not have assets except for personal belongings such as clothes.

## 2.8 Household monthly income

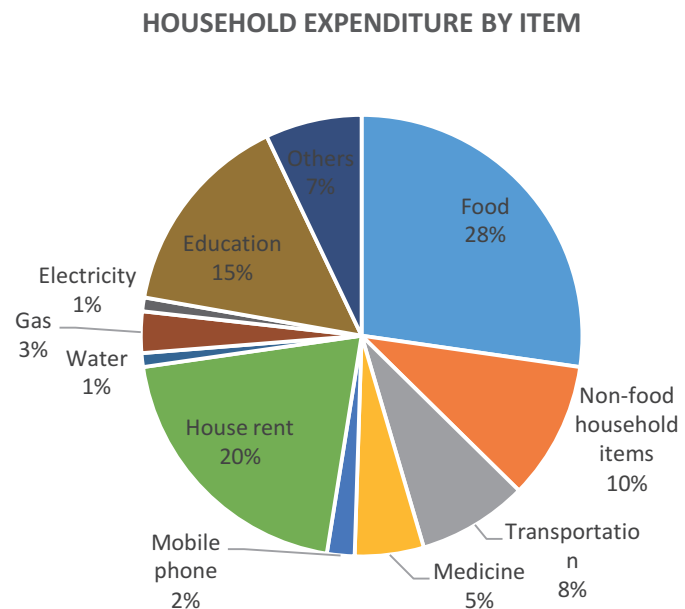
The reported average monthly income of households is around BDT 65,050. Household respondents residing in Kabi Jasim Road private housing have the highest average household monthly income of BDT 148,255. They are followed by households in AGB colony and Bank colony, at BDT 68,540 and BDT 58,377. Homeless people in and around Kamalapur railway station is BDT 7,118, which is only 11 percent of the average household income in the area. The average monthly income of households in Kamalapur area is higher than the average monthly income of households in Dhaka City<sup>1</sup> in the amount of BDT 55,086. It is twice higher than the average monthly income of households in other urban areas in Bangladesh, which is estimated at BDT 24,031.

In terms of distribution of households by level of monthly income, eight (8) percent of the households have monthly income of less than BDT 5,000 while nine (9) percent have average monthly income between BDT 15,001-10,000. Around six (6) percent have monthly income between BDT 10,001-20,000 while another 29 percent have monthly income between BDT 20,001-50,000. Around half of the respondents (48%) have monthly incomes of more than BDT 50,000.

According to the empirical study conducted by Power and Participation Research Center funded by UNDP, if a household residing in Dhaka is earning BDT 14,421, the household belongs to the bottom 40 percent of the city population in terms of income grouping. Households earning between BDT 14,421 to BDT 37,323 belong to the middle 50 percent of the city population. Following this information, around 20 percent of the household respondents belong to the bottom 40 percent of the Dhaka city population. The remaining 19 percent belong to the middle 50 percent in terms of income grouping. The remaining 61 percent belong to the upper income grouping.

## 2.9 Household monthly expenditures

The average monthly household expenditures in Kamalapur area is estimated to be at BDT 55,426.5. In terms of modal share, 18 percent of household- respondents spend around BDT 10,000 per month for consumption. Another five (5) percent of household respondents spend between BDT 5,001-10,000 per month. Households spending BDT 10,001-30,000 per month constitute 24 percent of the total sample. The remaining 53 percent of the total household respondents spend BDT more than BDT 40,000 per month.



Food and rent takes up the largest share of household expenditures at 28 percent and 20 percent, respectively. Other household expenses include non-food (groceries/dry goods) expenditures (10%), medicine (5%), and mobile communication (2%). Expenditures on electricity, water, and transport eat up around two (2) percent of household expenditures. Transport expenditures share eight (8) percent of total household expenditures.

<sup>1</sup> UNDP.2016. Politics, Governance, and Middle Income Aspirations Realities and Challenges: An Empirical Study

## 2.10 Household savings

Based on the income and expenditure data, 99 percent of the household-respondents are saving. The average savings is BDT 18,098.99 per month. Household- respondents living in Kabi Jasim Road private housing show the highest monthly savings in the amount of BDT 59,614.

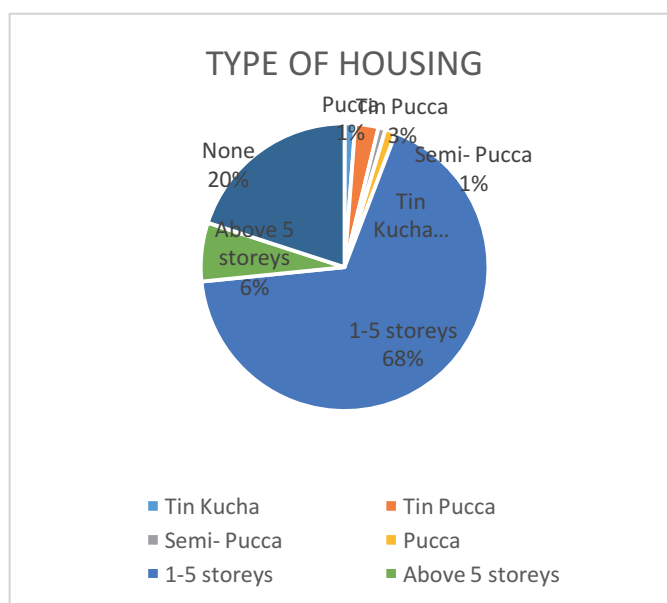
## 2.11 Access to basic infrastructure services

**Source of energy for lighting.** Electricity is the main source of energy for lighting. Around 78 percent of the household-respondents use electricity for lighting while 19 percent use gas or LPG. For cooking 79 percent use gas or LPG.

**Source of water for drinking and other activities.** At the time of the survey, 80 percent of the households have access to piped water<sup>2</sup>. Piped water is used for drinking, cooking, bathing, and other household activities. The remaining 20 percent use public or communal faucets in the area.

**Sanitation facilities.** Around 86 percent of the household respondents use flush or pour flush toilet facility with septic tanks while 10 percent use the same type of toilet, but without any depository. Around 3 per cent of the household respondents use pit latrine while one (1) percent practice open defecation. In terms of classification of toilet facility, 77 percent of the household respondents use private toilets while four (4) percent use shared toilet facilities. Household-respondents using public or communal toilet constitute 19 percent of the total sample.

**Housing characteristics.** Housing in Bangladesh is generally classified by type of materials used for construction. Classification is largely associated with durability of materials. Housing types include: (a) kucha (temporary), which is made of made of mud brick, bamboo, sun-grass, wood and occasionally corrugated iron sheets as roof; (b) pucca where walls are made partially of bricks, floors are cemented and roofs of corrugated iron sheets; (c) pucca which permanent, with life span over 25 years; and where walls of bricks and roofs of concrete. There are also multi-storey dwellings. Results of the survey show that 68 percent of the household- respondents live in 1-5 storey housing structures while 20 percent are homeless.



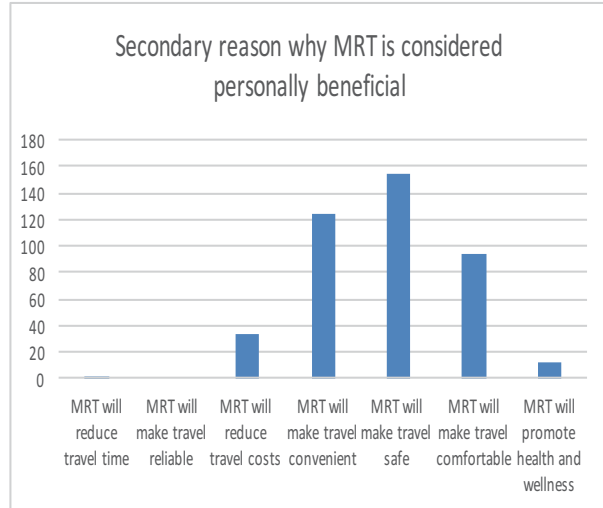
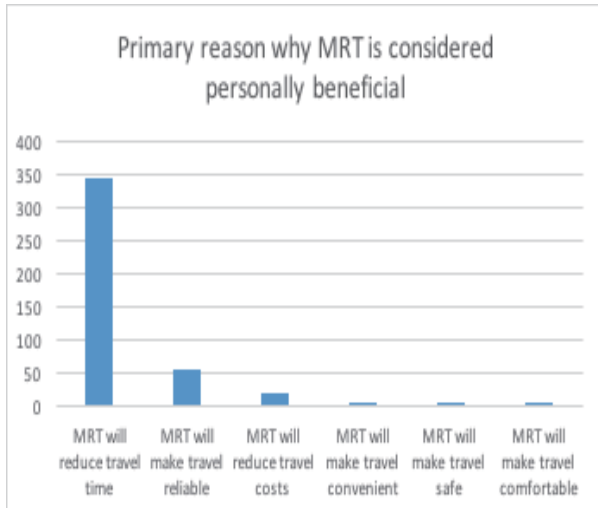
## 2.12 Perception of community issues

Around 83 and 78 percent of the household respondents consider violent crimes/ gang activity and prostitution as a major community concerns, respectively. In addition, around 62 percent express flooding and exposure to natural hazards as a concern. The same responses were generated across all three survey areas. When asked which of the community issues, the issue that the household respondents consider as first priority and needs to be acted upon, is violent crimes/ gang activity and prostitution and flooding and exposure to natural hazards.

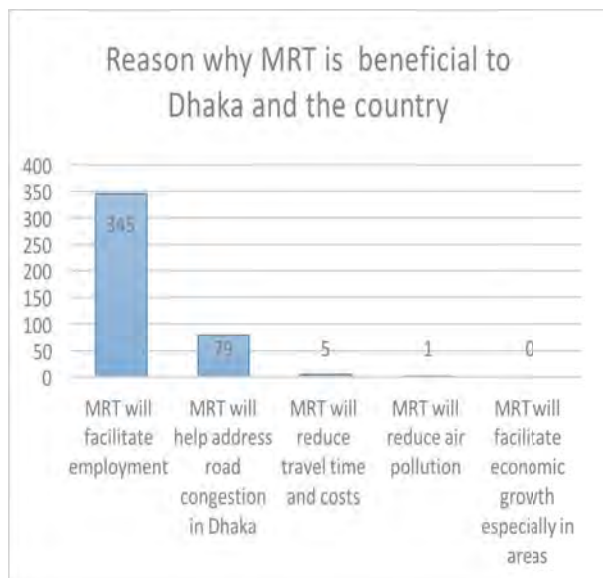
<sup>2</sup>Homeless people in and around Kamalapur

### 2.13 Level of awareness of the MRT project

Around 85 percent of the household- respondents consider the MRT project as personally beneficial. Majority of them express that the MRT will primarily reduce travel time. They also express that the MRT will make travel convenient, safe, and comfortable.



Around 86 percent of the household respondents consider the MRT project as beneficial to Dhaka and the entire country. Majority of them express that the MRT will facilitate employment (69%). It will help address road congestion in Dhaka.





## ANNEX 2: PEDESTRIAN PROFILE OF KAMALAPUR

A survey covering 300 pedestrians was conducted Kamlapur study area, particularly at the foot over bridge and near BRTC depot from December 10-18, 2017 to generate insights pedestrian travel pattern and walkability of the area.

### 1. Socio-demographic characteristics of pedestrians

**Age.** Almost half (48%) of the pedestrians come from the age bracket 21-30 years old. Around 20 percent have ages between 31-40 years. The same number of pedestrians are from the age bracket 20 years and younger.

	Table 1: AGE OF PEDESTRIAN					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
20 years old or younger	22	17%	37	22%	59	20%
21-30 years old	71	55%	74	43%	145	48%
31-40 years old	23	18%	38	22%	61	20%
41-50 years old	7	5%	11	6%	18	6%
51-60 years old	3	2%	9	5%	12	4%
Above 60 years old	2	2%	3	2%	5	2%
TOTAL	128	100%	172	100%	300	100%
AVERAGE	28		30		29	

**Sex.** Majority (89%) of the pedestrians are male. There are slightly more female pedestrians near BRTC depot than at the foot over bridge.

	Table 2: GENDER OF PEDESTRIAN					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Male	115	90%	152	88%	267	89%
Female	13	10%	20	12%	33	11%
TOTAL	128	100%	172	100%	300	100%

**Residence.** Majority of the pedestrians reside within Kamalapur area (69%). However, at the foot over bridge, majority reside in areas outside Kamalapur area, but within Dhaka city.

	Table 3: RESIDENCE OF PEDESTRIAN					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Within Kamalapur	59	46%	149	87%	208	69%
Outside Kamalapur but within Dhaka	69	54%	23	13%	92	31%
Outside Dhaka	-	-	-	-	-	-
TOTAL	128	1	172	1	300	100%

**Occupation.** The occupations of pedestrians are varied. At the foot over bridge, 27 percent are students while 25 percent are engaged in business. Near BRTC depot, 28 percent are working in

factories and 23 percent are students. Overall, students account for the majority of the pedestrians (25%) and followed by factory workers (19%).

	Table 4: OCCUPATION OF PEDESTRIAN					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Government employment	8	6%	6	3%	14	5%
Office employment	12	9%	12	7%	24	8%
Business/ commerce	32	25%	10	6%	42	14%
Factory work	9	7%	49	28%	58	19%
Transport related work	4	3%	16	9%	20	7%
Shop, store & service work	3	2%	5	3%	8	3%
Laborers & unskilled work	1	1%	3	2%	4	1%
Hawking, itinerant vending	-	-	-	-	-	-
Hotel and inn workers	2	2%	13	8%	15	5%
Small business	16	13%	11	6%	27	9%
Retired	2	2%	2	1%	4	1%
Housewife	4	3%	6	3%	10	3%
Student	35	27%	39	23%	74	25%
Unemployed	-	-	-	-	-	-
TOTAL	128	100%	172	100%	300	100%

## 2. Travel pattern

**Trip origin and destination.** Around 47 percent of the pedestrians at the foot over bridge are from within Kamalapur area and 53 percent are from areas outside Kamalapur, but within Dhaka. The destination of the majority (94%) are within Kamalapur area. Majority of pedestrians near BRTC depot come from Kamalapur area (85%). Almost half (48%) are bound to Kamalapur area and the remain 52 percent are bound to areas outside Kamalapur, but within Dhaka.

Overall, 69 percent of the pedestrians originate within Kamalapur area while 31 percent are from other parts of Dhaka. Around 68 percent walk towards Kamalapur area while 32 percent are going outside Kamalapur area.

	Table 5: TRIP ORIGIN AND DESTINATION											
	Foot over bridge				Near BRTC depot				TOTAL			
	Origin		Destination		Origin		Destination		Origin		Destination	
	N	%	N	%	N	%	N	%	N	%	N	%
Within Kamalapur	60	47%	120	94%	147	85%	83	48%	207	69%	203	68%
Outside Kamalapur, but within Dhaka	68	53%	8	6%	25	15%	89	52%	93	31%	97	32%
Outside Dhaka	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	128	100%	128	100%	172	100%	172	100%	300	100%	300	100%

**Purpose of travel.** Majority of the pedestrians walk to or from work (84%) while five (5) percent go to or from school. Eight (8) percent of pedestrians express that the walk to do errands in the area. The two survey areas exhibit the same pattern.

	Table 6: PURPOSE OF TRAVEL					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Go to work	99	77%	115	67%	214	71%
Return from work	9	7%	29	17%	38	13%
Go to school	5	4%	2	1%	7	2%
Return from school	3	2%	5	3%	8	3%
Do business trips	1	1%	5	3%	6	2%
Go shopping	-	-	-	-	-	-
Run errands	11	9%	13	8%	24	8%
Visit family and relatives	-	-	3	2%	3	1%
Visit friends	-	-	-	-	-	-
Leisure	-	-	-	-	-	-
TOTAL	128	100%	172	100%	300	100%

**Frequency of walking.** Around 71% of the pedestrians walk/travel every day.

	Table 7: FREQUENCY OF TRAVEL					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Once a week	7	5%	-	-	7	2%
Twice a week	-	-	-	-	-	-
3 times a week	1	1%	1	1%	2	1%
4 times a week	-	-	7	4%	7	2%
Weekdays (Monday to Friday)	-	-	10	6%	10	3%
Everyday	84	66%	128	74%	212	71%
Sometimes	36	28%	26	15%	62	21%
TOTAL	128	100%	172	100%	300	100%

**Frequency of passing the area.** Seventy-six percent of the pedestrians pass by the area every day.

	Table 8: FREQUENCY PASSING THE AREA					
	Foot over bridge		Near BRTC depot		TOTAL	
	N	%	N	%	N	%
Once a week	13	10%	4	2%	17	6%
Twice a week	3	2%	0	0%	3	1%
3 times a week	3	2%	1	1%	4	1%
4 times a week	3	2%	7	4%	10	3%
Weekdays (Monday to Friday)	-	-	11	6%	11	4%
Everyday	101	79%	127	74%	228	76%
Sometimes	5	4%	22	13%	27	9%
TOTAL	128	100%	172	100%	300	100%

**Estimated walking time.** On the average, walking time of pedestrians at the foot over bridge is 21 minutes while those at the BRTC depot take 25 minutes to reach their respective destinations.

	Table 9: ESTIMATED WALKING TIME		
	Foot over bridge	Near BRTC depot	TOTAL
AVERAGE	21	25	23
MODE	10	30	30
MAX	60	60	60
MIN	3	5	3

### 3. Assessment of walkability

Pedestrians interviewed at the foot over bridge are generally dissatisfied with their overall walking experience. Specifically, they are dissatisfied with the (a) quality sidewalk/ pedestrian road conditions, (b) personal safety as well as safety of women and children in sidewalks, walkways and street crossing, (c) protection from harsh weather, places to sit, things to see and do; and (d) visual appeal. They are also leaning towards dissatisfaction when it comes to ease in transferring accessing bus and/or railway.

Pedestrians are neither satisfied nor dissatisfied with (a) availability/ adequacy of sidewalks/ pedestrian roads, (b) adequacy of street lighting, (c) connectivity of walkways towards destination, and (d) availability of signage and street signs.

Foot over bridge	Table 10: ASSESSMENT OF WALKABILITY							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Availability/ adequacy of sidewalks/ pedestrian roads	2.80	3	-	46	61	21	-	-
Sidewalk/pedestrian road conditions/ quality	3.55	4	-	16	25	87	-	-
Personal safety in sidewalks, walkways and street crossing	3.79	4	1	2	20	105	-	-
Safety of roads to women and children in sidewalks, walkways and street crossing	3.82	4	-	2	21	103	2	-
Adequacy of street lighting	2.88	2	-	62	22	41	3	-
Well connected walkways going to where I want	3.12	3	-	5	104	18	1	-
Ease in transferring accessing bus and/or railway	3.16	3	-	27	58	39	3	1
Protection from harsh weather, places to sit, things to see and do	3.91	4	1	1	8	117	-	1
Visual appeal/ cleanliness of surroundings	3.98	4	-	1	5	117	5	-
Ease in crossing the streets	3.43	3	-	6	67	50	4	1
Availability of signage/ street signs	3.24	3	-	1	110	9	1	7

Pedestrians who were interviewed near the BRTC bus depot are generally satisfied with (a) availability/ adequacy of sidewalks/ pedestrian roads, (b) sidewalk/pedestrian road conditions/ quality, (c) adequacy of street lighting, (d) ease in transferring accessing bus and/or railway, and (e) personal safety in sidewalks, walkways and street crossing.

However, they are leaning towards dissatisfaction when asked about (a) connectivity of the walkways towards their destinations, and (b) protection from harsh weather, places to sit, things to see and do, visual appeal/ cleanliness of surroundings. Majority of them also express dissatisfaction in terms of ease in crossing the streets and availability of street signage.

Near BRTC bus depot	Table 11: ASSESSMENT OF WALKABILITY							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Availability/ adequacy of sidewalks/ pedestrian roads	2.39	2	-	113	50	9	-	-
Sidewalk/pedestrian road conditions/ quality	2.60	2	-	81	79	12	-	-
Personal safety in sidewalks, walkways and street crossing	2.83	3	2	55	86	29	-	-
Safety of roads to women and children in sidewalks, walkways and street crossing	2.82	3	0	63	77	31	1	-
Adequacy of street lighting	2.39	2	124	125	31	13	3	-
Well connected walkways going to where I want	3.03	3	16	16	122	25	3	-
Ease in transferring accessing bus and/or railway	2.63	2	3	84	61	21	3	-
Protection from harsh weather, places to sit, things to see and do	3.15	3	1	23	103	40	5	-
Visual appeal/ cleanliness of surroundings	3.32	3	-	9	103	58	2	-
Ease in crossing the streets	3.73	4	-	3	49	113	5	2
Availability of signage/ street signs	3.83	4	-	1	38	124	7	2

Overall, majority of the pedestrians interviewed are satisfied with (a) availability/ adequacy of sidewalks/ pedestrian roads, (b) adequacy of street lighting, and (c) ease in transferring accessing bus and/or railway.

However, they are dissatisfied with (a) personal safety and safety of women and children in sidewalks, walkways and street crossing, (b) connectivity of walkways to destinations, (c) protection from harsh weather, places to sit, things to see and do, (d) visual appeal/ cleanliness of surroundings, (e) ease in crossing the streets, and availability of street signage.

Pedestrians are generally neither satisfied nor dissatisfied with the quality of sidewalk/pedestrian road conditions.

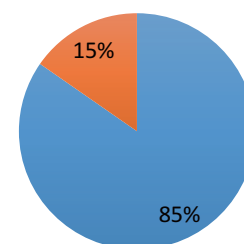
ALL	Table 12: ASSESSMENT OF WALKABILITY							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Availability/ adequacy of sidewalks/ pedestrian roads	2.57	2	-	159	110	30	-	-
Sidewalk/pedestrian road conditions/ quality	3.01	3	-	97	103	99	-	-
Personal safety in sidewalks, walkways and street crossing	3.24	4	3	56	106	134	-	-
Safety of roads to women and children in sidewalks, walkways and street crossing	3.25	4	-	65	97	134	3	-
Adequacy of street lighting	2.60	2	-	186	53	54	6	-
Well connected walkways going to where I want	3.07	3	5	21	226	43	4	-
Ease in transferring accessing bus and/or railway	2.86	3	3	111	118	60	6	1

Protection from harsh weather, places to sit, things to see and do	3.47	4	2	24	110	157	5	1
Visual appeal/ cleanliness of surroundings	3.60	4	-	9	108	175	7	-
Ease in crossing the streets	3.60	4	-	9	116	162	9	3
Availability of signage/ street signs	3.58	3	-	2	148	132	8	9

### 1.1. Awareness of MRT project

### AWARENESS OF MRT PROJECT

Around 85 percent of the household respondents are aware of the MRT project. Around 98 percent of those who have knowledge about the MRT project consider it as personally beneficial. Majority of them express that the MRT will primarily reduce travel time. They also express that the MRT will primarily reduce travel time. It will also reduce travel costs and will make travel safe.



■ Yes ■ No

ALL	REASON WHY MRT IS PERSONALLY BENEFICIAL			
	PRIMARY		SECONDARY	
	N	%	N	%
MRT will reduce travel time	268	91%	-	-
MRT will make travel reliable	12	4%	-	-
MRT will reduce travel costs	13	4%	92	31%
MRT will make travel convenient	-	-	12	4%
MRT will make travel safe	3	1%	145	49%
MRT will make travel comfortable	-	-	40	14%
MRT will make travel convenient	-	-	7	2%
MRT will promote health and wellness	-	-	-	-
TOTAL	296	100%	296	100%

Around 96 percent of the household respondents consider the MRT project as beneficial to Dhaka and the entire country. Majority of them express (78%) express that the MRT will facilitate employment. It will reduce travel time and costs, and will facilitate economic growth especially in areas near the MRT.

ALL	Table 13: REASON WHY MRT IS BENEFICIAL TO DHAKA AND COUNTRY			
	PRIMARY		SECONDARY	
	N	%	N	%
MRT will facilitate employment	230	78%	-	-
MRT will help address road decongestion/ traffic in Dhaka	25	8%	9	3%
MRT will reduce travel time and costs	38	13%	109	37%
MRT will reduce air pollution	3	1%	26	9%
MRT will facilitate economic growth especially in areas near the MRT	-	-	142	48%
No answer	-	-	10	3%
TOTAL	296	100%	296	100%

## ANNEX 3: KAMALAPUR BUS OPERATORS' PROFILE

### 1. Bus inventory

A total of 16 bus operators operating within the Kamalapur study area were surveyed within the period December 10-18, 2017. The 16 bus operators own a total of 922 buses.

**Fleet size.** Majority can be considered medium-scale operators, with 44 percent owning 10-29 buses and 19 percent owning 30-49 buses. Only two operators have a fleet of 50 or more buses.

Table 1: Bus inventory- fleet size		
Number of buses	Number of bus operators	Percent of total
Less than 10	-	-
10 to 29	7	44%
30 to 49	3	19%
50 to 69	1	6%
70 to 99	1	6%
more than 100	4	25%
TOTAL	16	100%

**Bus type or service.** The fleet of bus companies have the following types of buses:

Bus Type	Definition
<b>Large</b>	Buses for long distance travel (>97 km.) with 36-42 seats. In most cases, these buses travel across one and more districts.
<b>Medium (mini-buses)</b>	Buses that service long distance routes with seating capacity of up to 38 seats. In most cases these buses travel across one and more districts.
<b>Human haulers</b>	These are legunas, tempas, maxis, etc. which serve as the main local transport within Kamalapur and its surrounding areas. They travel less than 30 km.

In terms of bus type, the fleet of bus companies surveyed are mostly mini-buses (73%, see tables below) and non-air conditioned (82% of total) buses. Only a few operators offer air-conditioned bus services.

Table 2: Bus inventory by bus type				
Type	AC	Non AC	Total	% of total
Large buses	55	57	112	27%
Mini- buses	21	288	309	73%
Human haulers	-	-	-	-
TOTAL	76	345	421	100%
AC = Air conditioned				

**Seating and standing capacity.** Large buses can accommodate 36-42 people in one trip. Mini buses carry 38 people, but can allow for more standing capacity.

**By type of fuel used and age.** Most of the buses owned by the bus operators surveyed run on diesel (93%). The remaining seven (7) percent runs on CNG. In terms of age, all of the buses are less than 10 years old. 69 percent of these buses are less than 5 years old. A study, however, indicated that

determining the age of buses can be less straightforward as the age of imported buses are counted from the date of registration in Bangladesh and not by the year it was made.<sup>3</sup>

Table 3: Bus inventory by fuel used and age		
By type of fuel used	Count	%
Gasoline	-	-
Diesel	861	93%
LNG	-	-
CNG	61	7%
TOTAL	922	100%
By age		
< 5 years	639	69%
5-10 years	283	31%
>11 years	-	-
TOTAL	922	100%

**Bus operation and maintenance.** At the time of the survey, 83 percent of the total number of buses are operational. Of this number, about 77 percent of the large buses and 85 percent of the mini buses are in operation.

Table 4: Buses in operation and under maintenance								
	In operation			Under maintenance			Total	% in operation
Type	AC	Non AC	Total	AC	Non-AC	Total		
Large buses	71	86	157	8	39	47	204	77%
Mini- buses	42	565	607	6	105	111	718	85%
Human haulers	-	-	-	-	-	-	-	-
TOTAL	113	651	764	14	144	158	922	83%

**Driver per bus.** The bus companies allot an average of two (2) drivers per bus.

Table 5: Driver per bus			
Type	AC	Non AC	Total
Large buses	2	2	2
Mini- buses	2	2	2

**Peak and off-peak operation.** As for peak-and-off peak operation, 54 percent of the large bus fleet are deployed during peak period. This drops to 26 percent during off-peak hours. For mini-buses, there is only a small difference between peak and off-peak time. During peak time, 43 percent of the mini-buses are deployed. This drops slightly to 38 percent during off- peak time.

Table 6 Peak and off-peak operation			
Type	Peak total	Off peak total	Total
Large buses	54%	26%	80%
Mini- buses	43%	38%	81%
TOTAL	46%	23%	69%

<sup>3</sup> World Bank (2009). South Asia Political Economy Governance Issues Note No.1. *Operationalizing Political Economy: Urban Bus Operators in Dhaka*. Washington, DC.



**Routes<sup>4</sup>.** The bus companies service a total of 48 routes, almost all of which are considered long distance (greater than or equal to 100 km). The average route length is 218 kilometers. Since buses along these routes take long time to reach their destination, the average number of round trips undertaken (e.g., from origin to destination and back) is 1.

Distance	Average route lengths	No. of routes	Average no. of round trips	Number of buses assigned		
				Max	Min	Average
Long distance	218	48	1	40	1	11
Short distance	-	-	-	-	-	-

**Ticket counters.** The survey asked whether the bus companies are provided with ticket counters in Kamlapur area. 15 bus operators have one (1) ticket counter in Kamlapur. Only one operator has two (2) ticket counters.

Number of ticket counters	No. of routes
0	
1	15
2	1

**Ticket price.** The bus operators surveyed provided a range of responses on ticket prices. The average ticket prices reported by service and bus type are highly variable.<sup>5</sup> This may not only due to the differences in distance but could also reflect the poor regulation of fares as operators and conductors are known to arbitrarily impose higher than the approved fares for a given distance or service.<sup>6</sup>

**Ticketing system.** As for ticketing system, bus operators still rely heavily on manual or handwritten system (50%). However, a number have already installed computerized and started issuing tickets online (19%). Others have combined with other methods of ticketing: handwritten, computerized and online. They comprise 19 percent of the total.

System	Number	Percentage
Handwritten only	8	50%
Handwritten and computerized	2	13%
Handwritten and online	-	-
Handwritten, computerized and online	3	19%
Computerized only	-	-
Computerized and online	3	19%
Online only	-	-
TOTAL	16	100%

<sup>4</sup> The survey asked the number of passengers carried by bus per day but the bus companies did not provide any response to this question.

<sup>5</sup> Fares were not reported by routes thus it is difficult to determine if there is indeed some variation in fares on the same route. Also, bus companies are unlikely to report the actual fares imposed vis-à-vis the standard government-approved fares.

<sup>6</sup> World Bank (2009). South Asia Political Economy Governance Issues Note No.1. *Operationalizing Political Economy: Urban Bus Operators in Dhaka*. Washington, DC

## 2. Garage, parking and maintenance

**Garage facilities.** Around 69 percent of the bus companies surveyed own a garage while 25% are renting. The average size of owned garage is 20 decimals. For rented garage, the average size is 5 decimals.

Type	Count	Percentage	Average size in decimals
Own	11	69%	20
Renting	4	25%	5
Own and Rent	1	6%	5
TOTAL	16	100%	

**Parking facilities.** Approximately 69 percent of bus companies own their parking spaces. The average size of owned parking space is 27 hectares while 8.5 hectares for rented parking space.

Type	Count	Percentage	Average size in decimals
Own	11	69%	27
Renting	4	25%	8.5
Own and Rent	1	6%	50
TOTAL	16	100%	

**Routine maintenance.** All the bus operators reported that they conduct routine maintenance of buses once a month. Ninety-three percent (15 operators) outsource mechanics to do routine maintenance.

**Major repairs.** Seventy- five percent (12 bus operators) also reported that they conduct major repair at least once a month. The rest do 2-4 times in a month. All operators outsource mechanics to do major repairs.

## 3. Priorities improvements and other concerns

Bus companies were also asked to identify the three most important aspects of the bus operation that would need improvement. The results show the following:

**Priority 1:** Increase space for buses and cleanliness of the place both inside and outside

**Priority 2:** There should be a mosque inside the terminal

**Priority 3:** Gas should not be taken by closing roads

Improvement	TOP 1	TOP 2	TOP 3	TOTAL
Spaces for buses should be increased	7			7
Inside & outside should be cleaned	4	2	1	7
Increased security system/ Make security system/ should ousted drunken people from here		1		1
Should arranged permanent police inside the terminal	1			1
Should repair terminal's roof	1			1
Should build mosque inside the terminal		7	2	9
Terminal should be released from traffic jam	1	3	3	7
Terminal should be released from robbery/theft		1	3	4

Table 12: Improvements in bus operation				
Improvement	TOP 1	TOP 2	TOP 3	TOTAL
Gas should not be taken by closing roads	1		4	5
Sitting place for female passengers should be increased			1	1
Should develop administrative sector/provide solution of all administrative problems		1		1
Flyover is needed			1	1

#### 4. Awareness of the MRT project

All of the bus operators are aware of the MRT project. All of them consider the MRT as personally beneficial. They expressed that the MRT will primarily reduce travel time (63% of total responses) and will make travel reliable (31%). In addition, the MRT will reduce travel costs (44%) and will make travel convenient (25%).

All of the operators also consider the MRT as beneficial for Dhaka and the entire country. Operators believe that the MRT will facilitate employment and will help address road congestion in Dhaka. They also believe that that MRT will reduce travel time and costs.

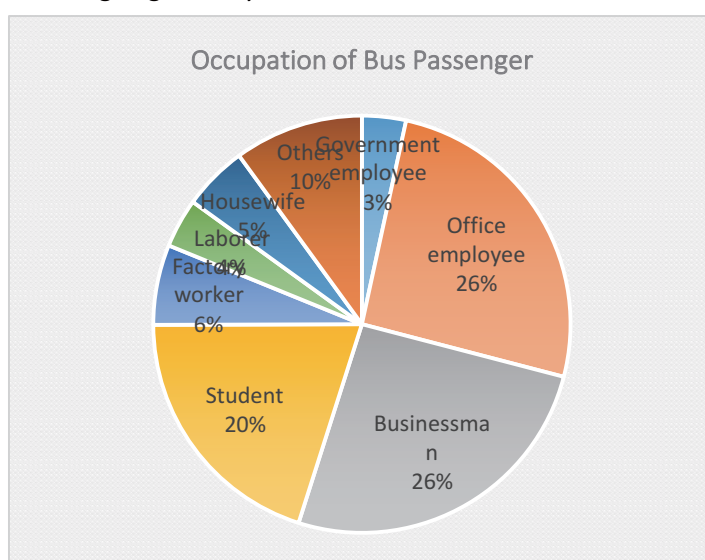
## ANNEX 4: RESULT OF THE BUS PASSENGER SURVEY

A total of 500 passengers were surveyed within December 10-18, 2017. The following are the results of the survey:

### 1. Passenger respondents profile

**Age and gender of respondents.** The respondents are predominantly male (90%) and are at the younger end of the working-age demographic. The average age is 33 years old.

**Occupation of respondents.** Majority of the passengers surveyed are working as office employees (26%) or are engaged in business (26%). Around 20 percent are students. The occupations of the rest of the in the bus passengers who were surveyed include government employment, factory work, and unskilled labor, among others. Around 5 percent of the bus passengers are housewives.



### 2. Trip characteristics

**Purpose.** Majority of the respondent's trip were to visit family/friends (46%), go to/from work (17%). The same pattern is exhibited across the three (3) survey areas.

	Table 1: PURPOSE OF TRAVEL							
	Buses along Atishdiponkor Road		Inter-district buses Inter-district buses at BRTC bus depot		Local buses along Outer Circular Road		ALL	
	N	%	N	%	N	%	N	%
Go to work	18	12%	24	12%	67	45%	109	22%
Return from work	35	23%	45	23%	6	4%	86	17%
Go to school	-	-	1	1%	11	7%	12	2%
Return from school	-	-	2	1%	2	1%	4	1%
Do business trips	1	1%	3	2%	10	7%	14	3%
Go shopping	1	1%	1	1%	4	3%	6	1%
Run errands	11	7%	1	1%	1	1%	13	3%
Visit family and relatives	76	51%	120	60%	36	24%	232	46%
Visit friends	8	5%	3	2%	12	8%	23	5%
TOTAL	150	100%	200	100%	150	100%	500	100%

**Frequency of travel.** Most of the trips made by the respondents are infrequent. Around 39 percent of the trips happen once a month and 24 percent take the trip at least once a year. This shows that majority of the respondents are considered migrant population, whose familial and social ties lies outside Dhaka.

	Table 2: FREQUENCY OF TRAVEL							
	Buses along Atish Diponkor Road		Inter-district buses at BRTC bus depot		Local buses along Outer Circular Road		ALL	
	N	%	N	%	N	%	N	%
Everyday	6	4%	4	2%	7	5%	17	3%
Every day except weekends	-	-	1	1%	29	19%	30	6%
2-3 times a week	3	2%	6	3%	32	21%	41	8%
Once a week	16	11%	13	7%	19	13%	48	10%
Once a month	68	45%	106	53%	22	15%	196	39%
Once a year	54	36%	55	28%	11	7%	120	24%
2-3 times a year	3	2%	14	7%	30	20%	47	9%
6 times a year	-	-	1	1%	0	0%	1	0%
TOTAL	150	100%	200	100%	150	100%	500	100%

**Mode of travel, travel and waiting time.** Majority of passengers riding the buses along Atish Dipankar Road from point of origin to Kamlapur area use non-air-conditioned buses. It takes them, on the average, 80 minutes to travel. While at Kamlapur, they spend almost half an hour waiting for buses. From Kamlapur to destination, 98 percent of the passengers use non- air-conditioned buses.

Table 13: MODE OF TRAVEL, ESTIMATED TRAVEL AND WAITING TIME, ATISH DIPANKAR ROAD							
Buses at Atish Diponkor	MODE OF TRAVEL FROM ORIGIN TO KAMLAPUR		EST TRAVEL TIME	EST. WAITING TIME AT KAMLAPUR	MODE OF TRAVEL FROM KAMLAPUR TO DESTINATION		EST TRAVEL TIME
	N	%			N	%	
Bus AC	2	1%	80	27	1	1%	90
Bus Non- AC	136	91%			147	98%	
Car	-	-			-	-	
Rickshaw	10	7%			-	-	
Legunas, tempos, maxis	-	-			2	1%	
CNG	2	1%			-	-	
Walking	-	-			-	-	
Others	-	-			-	-	
TOTAL	150	1%			150	100%	

Half of the passengers using inter-district buses along Atish Diponkor Road use non-air-conditioned buses from point of origin to Kamlapur area. Others use rickshaw (24%) and CNG (11%). It takes them around 73 minutes to reach Kamlapur. While at Kamlapur, they wait for another 34 minutes to transfer another bus. From Kamlapur to destination, majority use air-conditioned buses (71%) while others use non-air-conditioned buses (27%). The estimated travel time is 169 minutes.

Table 14: MODE OF TRAVEL, ESTIMATED TRAVEL AND WAITING TIME, BRTC DEPOT							
Buses at BRTC depot	MODE OF TRAVEL FROM ORIGIN TO KAMLAPUR		EST TRAVEL TIME	EST. WAITING TIME AT KAMLAPUR	MODE OF TRAVEL FROM KAMLAPUR TO DESTINATION		EST TRAVEL TIME
	N	%			N	%	
Bus AC	16	8%	73	34	141	71%	169
Bus Non- AC	100	50%			53	27%	

Car	1	1%			2	1%
Rickshaw	47	24%			2	1%
Legunas, tempos, maxis	-	-			-	0%
CNG	22	11%			1	1%
Walking	1	1%			-	0%
Others	13	7%			1	1%
TOTAL	200	100%			200	40%

Around 83 percent of the passengers using local buses along Outer Circular Road use non-air-conditioned buses from point of origin to Kamlapur area. Others use rickshaw (3%). It takes them around 100 minutes to reach Kamlapur. While at Kamlapur, they wait for another 22 minutes to transfer another bus. From Kamlapur to destination, majority still use non-air-conditioned buses (71%) while others use non-air-conditioned buses (27%). The estimated travel time is almost one (1) hour.

Local buses along Outer Circular Road	MODE OF TRAVEL FROM ORIGIN TO KAMLAPUR		EST TRAVEL TIME	EST. WAITING TIME AT KAMLAPUR	MODE OF TRAVEL		EST TRAVEL TIME FROM KAMLAPUR TO DESTINATION
	N	%			N	%	
			100	22			57
Bus AC	-	-			-	-	
Bus Non- AC	125	83%			150	100%	
Car	1	1%			-	-	
Rickshaw	4	3%			-	-	
Legunas, tempos, maxis	-	-			-	-	
CNG	1	1%			-	-	
Walking	-	-			-	-	
Others	19	13%			-	-	
TOTAL	150	100%			-	-	

Overall, majority of the bus passengers at Kamlapur area travel from their point of origin to Kamlapur by non-air-conditioned buses (72%). From Kamlapur area, they also majority also use non-air-conditioned buses going to their respective destinations.

ALL	MODE OF TRAVEL FROM ORIGIN TO KAMLAPUR		EST TRAVEL TIME	EST. WAITING TIME AT KAMLAPUR	MODE OF TRAVEL FROM KAMLAPUR TO DESTINATION		EST TRAVEL TIME
	N	%			N	%	
			83	28			112
Bus AC	18	4%			142	28%	
Bus Non- AC	361	72%			350	70%	
Car	2	0%			2	0%	
Rickshaw	61	12%			2	0%	
Legunas, tempos, maxis	-	-			2	0%	
CNG	25	5%			1	0%	
Walking	1	0%			-	-	
Others	32	6%			1	0%	
TOTAL	500	100%			500	100%	

**Origin-destination matrix.** Around half of the passengers at Atish Diponkor Road come from areas outside Dhaka and are traveling to areas outside Dhaka. 42 percent of the respondents originating from within Dhaka, but outside Kamlapur area are taking a trip going to other parts of Dhaka. The remaining 6 percent are traveling within Kamlapur and are traveling to other parts of Dhaka or areas outside Dhaka.

	Table 17: TRIP ORIGIN AND DESTINATION															
	Buses along Atish Diponkor Road				Buses at BRTC bus depot				Buses along Outer Circular Road				ALL			
	Origin		Destination		Origin		Destination		Origin		Destination		Origin		Destination	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Within Kamlapur	9	6%	-	-	6	3%	1	1%	7	5%	4	3%	22	4%	5	1%
Outside Kamlapur, but within Dhaka	63	42%	66	44%	153	77%	33	17%	91	61%	139	93%	307	61%	238	48%
Outside Dhaka	78	52%	84	56%	41	21%	166	83%	52	35%	7	5%	171	34%	257	51%
TOTAL	150	100%	150	100%	200	100%	200	100%	150	100%	150	100%	500	100%	500	100%

Approximately 83 percent the passengers riding buses at BRTC depot come from areas outside Dhaka and are traveling to areas outside Dhaka. 42 percent of the respondents originating from within Dhaka, but outside Kamlapur area are taking a trip going to other parts of Dhaka. The remaining 6 percent are traveling within Kamlapur and are traveling to other parts of Dhaka or areas outside Dhaka.

Majority of the passengers riding local buses along outer Circular Road originate from areas outside Kamlapur, but within Dhaka (61%). Other passengers originate from outside Dhaka. Majority of them are traveling to other parts of Dhaka outside of Kamlapur.

Overall, 61 percent of the bus passengers originate from different areas of Dhaka outside Kamlapur and 34 percent originate from areas outside Dhaka. Only 4 percent are from Kamlapur. Almost half of them are traveling outside Dhaka and the other half is traveling to other parts of Dhaka outside of Kamlapur.

### 3. Assessment of bus services

**Assessment of the bus operation: From Origin to Kamalapur.** Around 61 percent of the respondents are satisfied that the buses are accessible. Only around 40 percent of the respondents consider that buses are adequate for their travel needs. More respondents (44%) are neither satisfied nor dissatisfied with the adequacy of buses for their travel needs.

ALL	Table 18: ASSESSMENT OF BUS OPERATION FROM ORIGIN TO KAMLAPUR							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Accessibility of buses	2.25	2	56	304	102	37	1	0
Adequacy of buses to the routes you go	3.18	3	15	92	204	165	24	0
Punctuality/ reliability of the bus service	3.46	4	30	55	132	219	64	0
Reasonableness travel time	3.62	4	20	86	104	147	141	2

ALL	Table 18: ASSESSMENT OF BUS OPERATION FROM ORIGIN TO KAMLAPUR							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Reasonableness of waiting time	3.41	3	44	62	150	134	107	3
Personally safety while riding the bus	3.45	4	0	100	146	183	70	1
Ease in transferring from bus to bus	3.57	4	0	82	144	182	89	3
Courtesy of drivers and bus supervisors	3.59	4	0	89	136	171	101	3
The safety and reasonableness of driving	3.29	4	33	103	132	153	76	3
Cleanliness and comfort of buses	3.44	4	6	109	127	176	82	0
Extent by which the bus operating hours meet my needs	3.68	4.00	9	45	145	204	94	3
Easy in identifying the buses to ride	3.39	4.00	9	86	160	193	51	1
Availability of information on bus route	3.68	4.00	7	63	119	205	106	0
Information on bus schedule is available	3.24	4.00	65	75	130	135	93	2
The pick-up and drop off points are safe	3.46	4.00	0	124	110	179	85	2
The waiting area is adequate	3.36	4.00	19	109	124	174	71	3
The passenger is protected from heat and rain	3.60	4.00	0	64	162	183	90	1
Reasonableness of bus fare	1.87	2.00	75	416	9	0	0	0

Half of the respondents also disagree that buses are on schedule. They cite the lack of information on routes and schedules. Around 77 percent of the respondents expressed that there is no information available that would help them determine routes and schedules. This perception is reflective of the practice on the ground wherein bus operators generally do not follow a certain time schedule and do not provide information about bus schedules and fares.

Respondents (44%) are generally dissatisfied and 13 percent are completely dissatisfied with the reliability of bus services. The hours of service generally do not meet the respondents' needs. This can be due to the long turnaround time of buses considering that the majority cater to long distance routes. Around 20 percent of passengers are completely dissatisfied and another 27 percent are dissatisfied with waiting time.

Around half of the respondents feel that they are unsafe while riding a bus while 30 percent are neither satisfied nor dissatisfied with personal safety on the bus. Around 54 percent of the passengers also expressed dissatisfaction with the relative ease in transferring from bus to bus or from bus to other modes of transport. The same number of respondents are dissatisfied with the courtesy of drivers and bus supervisors. More than half of the passengers are also dissatisfied with cleanliness and comfort of buses, ease in identifying buses, availability of information, safety of pick up and drop off points, adequacy of waiting area, and protection of passengers from heat and rain. Majority of the bus passengers, however, consider that bus fares are reasonable.



**Assessment of the bus operation: From Kamalapur to Destination.** Bus passengers covered by the survey are generally dissatisfied with bus operation services in Kamalapur. More than half of them expressed dissatisfaction in 8 of 18 key areas of assessment. These include adequacy of buses, reliability of bus service, reasonableness of travel time, courtesy of drivers and bus supervisors, safety and reasonableness of driving, safety of pick up and drop off points, adequacy of waiting area, and protection of passengers from heat and rain. In other

Moreover, majority of bus passengers are neither satisfied nor dissatisfied in the relative ease of transferring from bus to bus, personal safety while riding the bus, reasonableness of waiting time, cleanliness and comfort of buses, ease in identifying buses and availability of information on bus schedule.

Bus passengers have expressed satisfaction in two key areas: accessibility of buses and reasonableness of bus fares.

ALL	Table 19: ASSESSMENT OF BUS OPERATION FROM KAMLAPUR TO DESTINATION							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Accessibility of buses	2.55	2.00	34	229	167	69	1	0
Adequacy of buses to the routes you go	3.30	4.00	0	128	145	179	47	1
Punctuality/ reliability of the bus service	3.44	4.00	22	68	156	179	74	1
Reasonableness travel time	3.45	4.00	33	79	132	143	113	0
Reasonableness of waiting time	3.25	3.00	57	77	144	130	89	3
Personally safety while riding the bus	3.22	3.00	27	75	218	124	52	4
Ease in transferring from bus to bus	3.20	3.00	17	28	322	107	24	2
Courtesy of drivers and bus supervisors	3.41	4.00	0	100	143	210	46	1
The safety and reasonableness of driving	3.64	4.00	12	62	127	195	102	2
Cleanliness and comfort of buses	3.04	3.00	70	73	161	161	33	2
Extent by which the bus operating hours meet my needs	3.60	4.00	0	94	119	182	102	3
Easy in identifying the buses to ride	3.34	3.00	0	96	183	174	47	0
Availability of information on bus route	3.49	4.00	8	97	125	184	84	2
Information on bus schedule is available	3.41	4.00	6	118	123	172	81	0
The pick-up and drop off points are safe	3.12	4.00	37	141	101	173	44	4
The waiting area is adequate	3.46	4.00	0	120	126	159	95	0
The passenger is protected from heat and rain	3.50	4.00	2	72	167	194	61	4
Reasonableness of bus fare	1.88	2.00	74	416	8	2	0	0

#### 4. Priority improvements

Respondents were asked to provide top three important aspects bus operations need to improve on for services. Majority of the respondents identified these top priority improvements:

**Priority 1:** make travel time reasonable

**Priority 2:** provide information on routes and ensure safe driving

**Priority 3:** provide adequate pick up and drop off points

The results show the need to upgrade the level of service of bus transportation services particularly in the reliability (e.g. timely departure and arrival).

#### 5. Awareness of MRT project

Only 83 percent of the bus passengers interviewed know about the MRT project. Around 95 percent consider the MRT as personally beneficial. Majority of them think that the MRT will reduce travel time (83%). Around 12 percent consider that the MRT will make travel reliable.

	Table 20: PERSONAL BENEFITS OF MRT PROJECT							
	Buses along Atish Diponkor Road		Inter-district buses at BRTC bus depot		Local buses along Outer Circular Road		ALL	
	N	%	N	%	N	%	N	%
MRT will reduce travel time	122	83%	140	75%	129	93%	391	83%
MRT will make travel reliable	20	14%	31	17%	6	4%	57	12%
MRT will reduce travel costs	4	3%	8	4%	2	1%	14	3%
MRT will make travel convenient	1	1%	6	3%	-	-	7	1%
MRT will make travel safe	-	-	2	1%	-	-	2	0%
MRT will make travel comfortable	-	-	-	-	2	1%	2	0%
MRT will make travel convenient	-	-	-	-	-	-	-	-
MRT will promote health and wellness	-	-	-	-	-	-	-	-
	147	100%	187	100%	139	100%	473	100%

All of the bus passengers expressed that the MRT project will be beneficial to Dhaka and the entire country primarily by facilitating employment (98%) of responses.

	Table 21: SOCIETAL BENEFITS OF MRT PROJECT							
	Buses along Atish Diponkor Road		Inter-district buses at BRTC bus depot		Local buses along Outer Circular Road		ALL	
	N	%	N	%	N	%	N	%
MRT will facilitate employment	120	81%	199	100%	144	96%	492	98%
MRT will help address road decongestion/ traffic in Dhaka	24	16%	-	-	-	-	-	-
MRT will reduce travel time and costs	2	1%	1	1%	6	4%	8	2%
MRT will reduce air pollution	-	-	-	-	-	-	-	-
MRT will facilitate economic growth especially in areas	-	-	-	-	-	-	-	-
Others	3	2%	-	-	-	-	-	-
TOTAL	149	100%	200	100%	150	100%	500	100%

## ANNEX 5: RAIL PASSENGER SURVEY

A survey was conducted on December 10-18, 2017 to characterize the rail passengers in Kamalapur area. A total of 500 passengers were interviewed.

### 1. Socio-demographic characteristics

**Age.** The average age of rail passengers is 32 years old. Around 70 percent of the rail passenger respondents have ages between 21-40 years old.

	Table 1: AGE OF TRAVELER	
	N	%
20 years old or younger	50	10%
21-30 years old	210	42%
31-40 years old	142	28%
41-50 years old	62	12%
51-60 years old	24	5%
61 years old and above	12	2%
TOTAL	500	100%
Average	32	

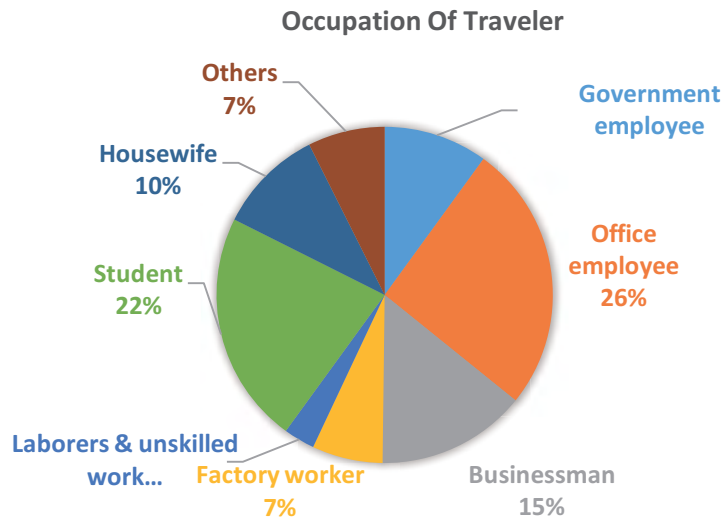
**Gender.** Majority of the passengers are male accounting for 81 percent of the total number of respondents.

	Table 2: GENDER OF TRAVELER	
	N	%
Male	404	81%
Female	96	19%
TOTAL	500	100%

**Residence.** Majority of the rail passengers are from areas outside Kamalapur, but within Dhaka city. They account for 60 percent of the total respondents. Rail passengers residing outside Dhaka city comprises 37 percent of the total number of respondents. Those residing in Kamalapur area comprise three (3) percent.

	Table 3: RESIDENCE OF TRAVELER	
	N	%
Within Kamalapur	13	3%
Outside Kamalapur but within Dhaka	301	60%
Outside Dhaka	186	37%
TOTAL	500	100%

**Occupation of traveler.** The survey shows that rail passengers have different occupations. Around 26 percent are office employees. Students comprise 23 percent while businessmen account for 14 percent of the total number of respondents. The rest of the passengers work in government and factories, among others. A tenth of the sample are housewives.

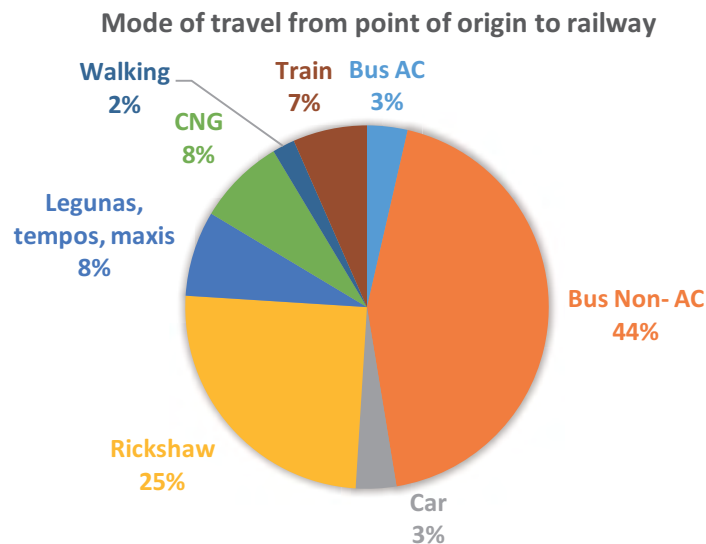


## 2. Travel pattern

**Trip origin and destination.** Majority of the rail passengers interviewed come from areas within Dhaka, but outside Kamalapur. They comprise 73 percent of the respondents. Rail passengers residing outside of Dhaka account for 23 percent. Almost all of them are traveling outside of Dhaka.

	Table 4: TRIP ORIGIN AND DESTINATION			
	Origin		Destination	
	N	%	N	%
Within Kamalapur	20	4%	-	-
Motijheel/Dilkusha	4	1%	3	1%
Outside Dhaka	113	23%	479	96%
Within Dhaka	363	73%	18	4%
TOTAL	500	100%	500	100%

Majority of the rail passengers use non- air-conditioned buses from point of origin to Kamalapur station (44%). Around 25 percent use rickshaws while 16 percent use CNG, legunas, tempos, or maxis. Only 2 percent of the rail passenger walk to the rail station.



**Frequency of travel.** Majority of the rail passengers travel once a month (59%).

	Table 5: FREQUENCY OF TRAVEL	
	N	%
Everyday	7	1%
Every day except weekends	6	1%
2-3 times a week	3	1%
Once a week	64	13%
Once a month	296	59%
1-3 times a year	83	17%
Every 2 months	25	5%
Every 3 months	16	3%
	500	100%

**Fare.** The average fare is BDT 306 per trip.

### 3. Assessment of rail services

Rail passengers interviewed are generally dissatisfied with their overall rail travel experience. Majority express that they are dissatisfied with (a) personal safety while on board, (b) length of time the journey was scheduled to take, (c) comfort of the seating area, (d) frequency of trains, (e) capacity of rail cars, (f) reliability of trains, (g) reasonableness of waiting time, and (h) cleanliness and comfort of rail cars. They express satisfaction in services in only two areas: availability of route information and schedule. Fare is considered fair.

	Table 6: ASSESSMENT OF RAIL TRAVEL							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Personal security/safety while onboard	3.1	2	0	188	99	171	36	6
Length of time the journey was scheduled to take	3.4	4	0	116	118	206	54	6
Comfort of the seating area	3.3	4	0	150	125	174	42	9
Frequency of the trains	3.4	4	0	133	98	206	55	7
Sufficient capacity of passengers in rail cars	3.7	4	0	70	109	236	71	14
Reliability/punctuality of trains (departing/arriving)	3.7	4	0	69	108	235	75	13
Reasonableness of waiting time	3.6	4	1	98	103	208	74	16
Cleanliness and comfort of rail cars	3.7	4	4	84	105	196	85	26
Extent by which the bus operating hours meet needs	3.5	4	0	131	132	142	71	24
Information on route is available	3.0	2	1	259	78	89	47	26
Information on schedule is available	2.9	2	2	311	40	70	51	26
The fare is reasonable	2.0	2	76	370	49	2	3	0

In terms of improvement in rail operation, rail passengers consider the following:

- First priority: improve comfort of seating area, improve personal safety, make travel time reasonable, and increase frequency of trains.
- Second priority: increase capacity of rail cars, improve reliability/punctuality of trains, and improve comfort of seating area.
- Third priority: Improve cleanliness and comfort of rail cars.

Table 7: POSSIBLE IMPROVEMENT IN RAIL OPERATION						
	FIRST PRIORITY		SECOND PRIORITY		THIRD PRIORITY	
	N	%	N	%	N	%
Improve personal security/safety while onboard	87	17%	14	3%	8	2%
Reduce length of time the journey was scheduled to take/ make travel time reasonable	86	17%	30	6%	14	3%
Improve comfort of seating area	111	22%	61	12%	17	3%
Increase frequency of trains	79	16%	49	10%	17	3%
Increase capacity of rail cars	68	14%	134	27%	60	12%
Improve reliability/punctuality of trains	17	3%	83	17%	49	10%
Make waiting time reasonable	7	1%	45	9%	53	11%
Improve cleanliness and comfort of rail cars	17	3%	44	9%	130	26%
Provide information on routes	6	1%	21	4%	61	12%
Provide information on schedule	18	4%	15	3%	69	14%
Make fare reasonable	4	1%	4	1%	22	4%
Others,	0	0%	0	0%	0	0%
	500	100%	500	100%	500	100%

Rail passengers have expressed satisfaction in the following areas of rail station services: (a) adequacy of information on route and schedule, (b) adequacy in connections with other modes of public transport, and (c) ease in transferring from/to other modes of transport.

However, they express dissatisfaction in the services and amenities provided by the Kamalapur railway station. In particular, they express dissatisfaction in: (a) ease in buying tickets, (b) personal security at the station, (c) safety of women and children, (d) safety of the surrounding area of the rail station, (e) adequacy of wash rooms and comfort rooms for female passengers, (f) cleanliness of the station, and (g) provision of feedback or complaints mechanism. Rail passengers are neither satisfied nor dissatisfied in the adequacy of lighting of rail station at night and adequacy of security personnel at the station.

	Table 8: ASSESSMENT OF RAIL STATION							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Ease in buying tickets	3.6	4.0	-	121	71	218	90	-
Adequacy in information about schedule	3.0	2.0	-	209	122	134	33	2

	Table 8: ASSESSMENT OF RAIL STATION							
	Average	Mode	Very Satisfied	Satisfied	Neither	Dissatisfied	Completely Dissatisfied	I do not know
Adequacy in information about platforms	3.1	2.0	-	210	93	149	43	5
Personal security/safety in the rail station	3.4	4.0	-	132	129	166	67	6
Safety of women and children	3.6	4.0	-	97	101	218	75	9
Safety of the surrounding area of the rail station	3.6	4.0	-	93	125	186	77	19
Adequacy of wash rooms	4.0	4.0	-	39	75	244	132	10
Adequacy of wash rooms for female	4.0	4.0	-	52	77	208	144	19
Cleanliness and maintenance of rail station	3.6	4.0	-	107	96	196	91	10
Adequacy of lighting at night at the rail station	3.3	2.0	-	161	144	120	54	21
Adequacy of security personnel presence at the terminal (e.g. security guard, police)	3.3	3.0	-	144	158	134	50	14
Provision of feedback or complaints about the services	3.4	2.0	-	150	117	131	75	27
Adequacy in connections with other modes of public transport	2.9	2.0	1	240	126	80	40	13
Ease in transferring from rail to other modes of transport	3.6	2.0	2	268	107	62	48	13

Rail passengers consider the following improvements:

- First priority: make buying of tickets easy.
- Second priority: provide adequate washrooms, improve security at the rail station.
- Third priority: provide adequate washrooms for both male and female.
- 

Table 10: SUGGESTED IMPROVEMENTS						
	FIRST PRIORITY		SECOND PRIORITY		THIRD PRIORITY	
	N	%	N	%	N	%
Make buying tickets easy	243	49%	31	6%	18	4%
Provide adequate information about schedule	53	11%	34	7%	11	2%
Provide adequate information about platform	46	9%	27	5%	12	2%
Improve security/safety in the rail station	55	11%	87	17%	13	3%
Improve safety of women and children in the rail station	28	6%	62	12%	22	4%
Improve safety of the surrounding area of the rail station	18	4%	64	13%	23	5%
Provide adequate wash rooms	30	6%	106	21%	90	18%
Provide adequate wash rooms for female	9	2%	44	9%	94	19%

Table 10: SUGGESTED IMPROVEMENTS						
	FIRST PRIORITY		SECOND PRIORITY		THIRD PRIORITY	
	N	%	N	%	N	%
Improve cleanliness and maintenance of rail station	5	1%	15	3%	76	15%
Provide adequate lighting at night at the rail station	1	0%	18	4%	47	9%
Provide adequate security personnel	1	0%	3	1%	21	4%
Provide mechanism for feedback or complaints about the services	10	2%	4	1%	32	6%
Improve connections with other modes of public transport	-	-	4	1%	23	5%
Improve ease of transferring from rail to other modes of transport	1	0%	1	0%	17	3%
Others	-	-	-	-	1	0%
	500	100%	500	100%	500	100%

#### 4. Awareness about MRT

Around 89 percent of the rail passengers interviewed have heard about the MRT project. 98 percent of the household respondents consider the MRT project as personally beneficial. Majority of rail passengers think that the MRT will primarily reduce travel time. Majority of the rail passengers consider the MRT project as beneficial to Dhaka and the country. They expressed that the MRT will primarily facilitate employment, address road congestion in Dhaka, and will reduce travel time and costs. Other secondary reasons include facilitating economic growth in surrounding areas as well as of Dhaka in general.



別添 D : TOD 事例

# 1 途上国都市における都市鉄道整備と TOD

## 1.1 マニラ首都圏

### 1) 概況

1.1 マニラ首都圏は 17 の自治体で構成され、マニラ首都圏庁 (MMDA: Metro Manila Development Authority) が都市圏としての調整機能と広域事業を実施している。面積は 620 km<sup>2</sup> で人口は約 1,200 万人 (2010 年) で、依然人口増と郊外化が進んでおり、実質的な都市圏は更に隣接州の自治体を含んで約 2,200 万人の巨大都市圏に成長しており、2030 年には人口約 3,000 万人にまで膨張すると予想されている (図 1.1、図 1.2 参照)。

1.2 衰えることなく続いた人口増加圧力と大きな所得格差は、膨大なインフォーマルセクターを生み、既成市街地の過密化とスプロールを同時に引き起こした。公共用地やハザードエリアには、100 万世帯を超えるスラムやスクォーターが、市域全体に分布している。マイホームを郊外に求める中間層の多くは、交通混雑により長い通勤時間を強いられている。膨張する市街地は丘陵地や開発不適地に及んでいる。こうしたなかで近年の BOP や 1,000 万人をこえる海外出稼ぎ労働者による送金を主として、好調な経済成長が続き都市開発が活発化している。都市計画が十分に機能しないなか超高層ビルが林立し人口密度が高く (220 人/ha)、都市化のインパクトは強大である。マニラ首都圏の巨大化が進み、今までに世界が経験しなかった規模で多くの問題を投げかける。

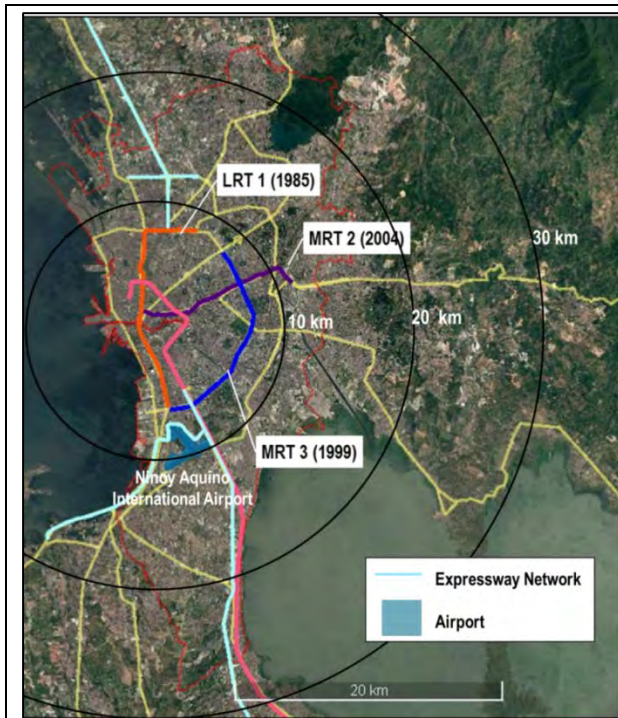
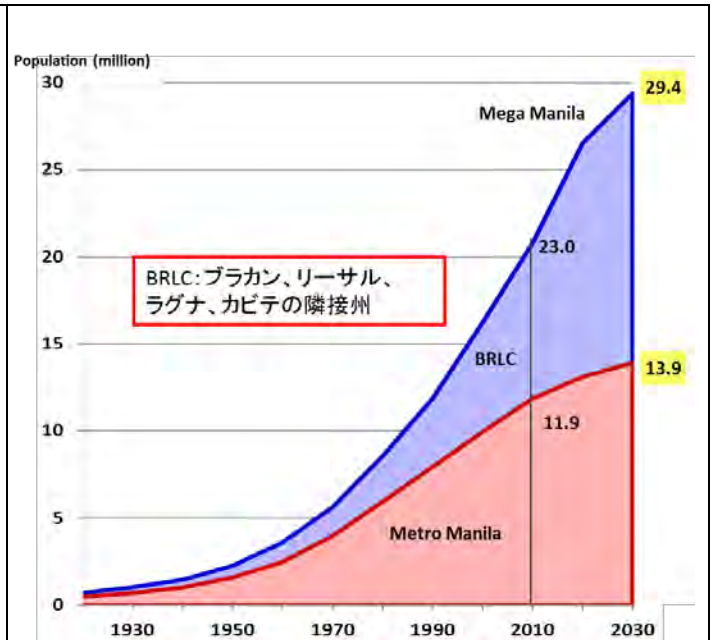


図 1.1 マニラ首都圏 (メトロマニラ) 概況図



出典: マニラ首都圏の持続的発展に向けた運輸交通ロードマップ作成支援調査

図 1.2 マニラ首都圏の人口増加

## 2) 都市交通と鉄道整備状況

1.3 マニラ首都圏の都市交通は悪化の一途をたどり混雑は朝夕のピーク時のみならず、広い時間帯に及んでいる。交通渋滞は日常化し、混雑による経済損失は1日あたり24億ペソと推定されており、通勤・通学はもとよりビジネスや私用目的のトリップに影響が及んでいる。

1.4 マニラ首都圏では1985年に都市鉄道(約15kmの高架ライトレール)が、他の東南アジア都市に比べていち早く導入され、1999年には3号線(高架のライトレール)、2003年には2号線(高架のマスラピッドトランジット)が開業した<sup>1</sup>。3路線は運賃も異なり、とりわけ3号線はBOTで実施され、建設・実施・運行面で紛争が絶えず問題が多い。利用客数は、1号線:約50万人/日、2号線:約20万人/日、3号線:約50万人/日といずれもよく利用されているが、車内混雑、プラットフォームや改札口での混雑がひどく、特に1号線と3号線の状況が深刻である。

1.5 マニラ首都圏の都市鉄道の問題は下記があげられる:(i)都市化の進展に追いつけない閉鎖的なネットワーク、(ii)需給のミスマッチ、(iii)ネットワークの結合性、(iv)運賃設定、(v)駅前広場・フィーダーサービス(vi)低い運行効率と過度なロードや技術力の不足による事故や故障の頻発、(vii)増え続ける補助金。また、マニラ首都圏の都市鉄道には、PPP事業案件が多く、こうした事業方式の違いが、ネットワークとしての整備の阻害要因となる可能性が高い。

## 3) 将来計画

1.6 マニラ首都圏の交通問題は国家的課題となり多くのプロジェクトが計画され実施に移されつつある。既存線の輸送力強化、延伸、結節機能の改善に加えて新規路線の計画が多い。中でも注目すべきは南北通勤線事業(既存のフィリピン国鉄用地を使った高架郊外鉄道)と南北地下鉄であり、膨張するマニラの空間構造を放射環状から格子状に変え、郊外の拠点開発を促す大きな可能性をもっている。何れも日本の借款が予定されている。

## 4) 駅前・沿線開発

1.7 マニラ首都圏の都市鉄道は既に高密度に開発された市街地に整備されたこともあり、鉄道建設のための用地の建設に追われ、最も重要な駅との結節施設の開発は遅れ、駅前・沿線開発への対応は進んでいない。一部には大型商業建設を中心にペDESTリアンデッキ等で駅をつなぐ試みもあるが、殆どの駅ではバスやジープニーによるアクセスは既存道路を使って行われている。

1.8 マニラ首都圏では都市鉄道が高密度に開発された市街地に建設された上、都市鉄道の質が悪いので沿線の開発は進んでいないものの、都市鉄道との関連性は薄い。

## 5) 得られる教訓

1.9 東南アジアでいち早く都市鉄道を建設したマニラ首都圏は、都市鉄道整備に関する多くの問題を抱え多くの途上国都市にとっての教訓を与えてくれる。

(i) **都市の成長や市街地の拡大に対応したネットワークの形成:**都市鉄道のネットワークプランは存在したが、鉄道整備が大幅に遅れる中で都市化が進み、プランが規模に適合しなかった。都市鉄道ネットワーク整備という長期にわたる事業には、都市開発戦略と整合した長期計画が必要である。これによって、需給のミスマッチやネットワークの連結や拡張性といった問題にも対応できる。

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<sup>1</sup> 3号線はMRTと称しているが実際にはライトレール仕様の車両が導入されている。2号線も同様にLRTと称しているが、導入車両はMRT仕様である。

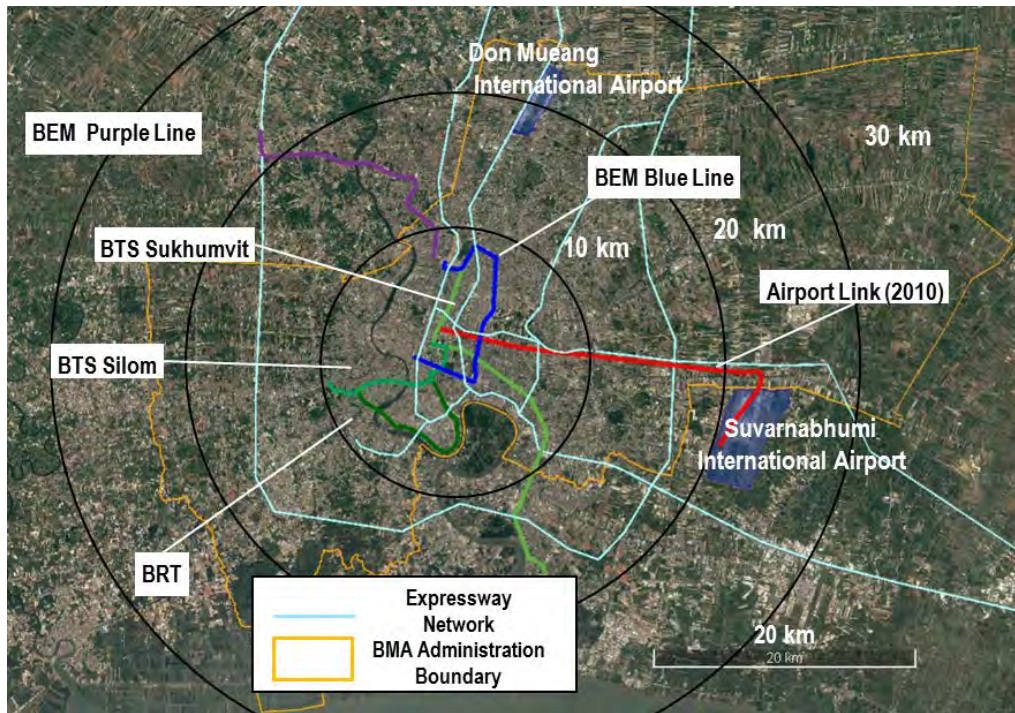
- (i) **需要予測とモードの選定:** 途上国の大都市は通常の予測年次をはるかに超える長期にわたって都市化(人口集中と郊外化)が続いており、需要予測とモードの選定や、プラットフォームや駅施設の将来の増強についても留意する必要がある。
- (ii) **交通結節点の整備:** 結節施設(歩行者の駅へのアクセス・フィーダーサービスの連結、乗換施設)の不備による弊害は鉄道利用者だけでなく道路利用者にも及ぶ。最小限の交通結節施設は鉄道事業の一環として計画され事業化されるべきである。
- (iii) **都市鉄道の運賃設定:** マニラ首都圏では都市鉄道の運賃がバス・ジープニーと同じレベルで設定しているため、道路混雑が激しくなるにつれ都市鉄道が輸送力以上に利用され車両などに過度の負担が及び、故障や事故の要因のひとつになっている。高いレベルのサービスに見合った運賃設定にすることは、都市鉄道の財政面からも重要である。
- (iv) **都市鉄道関係者の能力強化:** マニラ首都圏の鉄道整備上大きな問題は、中央政府から公社に至る行政の能力が非常に弱いことにある。このために鉄道事業が適切に計画されなかったり事業の遅延に結びついている。

## 1.2 バンコク都市圏

### 1) 概況

1.10 バンコク市域の面積は 1,569 km<sup>2</sup>、人口は約 830 万人であるが、実質的な都市圏人口は約 1,500 万人にのぼる。バンコクのプライマシーは非常に高く、第 2 都市のノンタブリは人口 27 万人である。積極的な外国投資の受け入れとグローバル化の進展で地域におけるバンコクの拠点性は高まっており、機能の集中は今後も続くことが予想されている。バンコクの空間構造上の問題のひとつに、特異な道路体系がある。道路面積率は市街地で 8.5%、郊外部で 2.5%と言われ、他の大都市と比べて絶対量が少ないうえ、幹線道路にソイと呼ばれるアクセス道路が直接ぶらさがる街路パターンをとり、ヒエラルキーも欠けており、補助幹線が不足したまま大きな街区が形成された。このために交通流は分散されることなく、限られた幹線道路に集中し、激しい交通混雑につながった。

1.11 土地利用規制は極めて緩く、用途が混合した開発が進んでいる。都市部では高度化・高層化が進み、郊外部へはスプロールが進行している。こうした市街地の非効率で急速な開発がインフラの供給を難しくしており、交通渋滞だけでなく様々な都市問題を引き起こす原因にもなっている。



出典: Google Earth より調査団作成

図 1.3 バンコク都市圏概況図

## 2) 都市交通と鉄道整備状況

1.12 都市計画は存在するものの、マニラ同様に内容は杜撰で実効性には欠けるなかで、旺盛な不動産開発はバンコクを世界有数の交通混雑都市に至らしめた。バンコクはモータリゼーションが比較的早く進行したこともあって、他の大都市に先駆けて交通問題を先鋭化させたが、その対策として都市高速道路の建設を進めた。現在は合計 8 区間、約 208km の都市高速道路が交通状況の改善に寄与している。都市高速道路の拡大計画もあり、合計 330 km の都市高速道路ネットワークが提案されている。

1.13 バンコクには在来鉄道があり、かつて都市交通目的での活用が試みられたが、効果は極めて限定的で、現在も都市交通需要の 1%未滿に過ぎない。1999 年に最初の路線が民間の BTS 社によって開業された。1992 年には首都高速輸送公社(MRTA: Mass Rapid Transit Authority)が設立され、ブルーラインの事業化が進められた。当初は高架であったが、地下鉄に変更され、2004 年に最初の区間が開業、2010 年にはエアポートリンク、2016 年にはパープルラインが開業した。この間、2010 年には BRT が開業している。タイ国鉄のバンスー駅から北部郊外へのレッドラインも工事中である。

1.14 都市交通マスタープランは一元化されておらず 2、都市鉄道の実施主体は首相府(MRTA)、内務省(EIA で法的には鉄道整備可能とバンコク首都圏庁(BMA)によるコンセッション付与)、運輸通信省(SRT によるコンセッション付与)の 3 者が実施する。都市計画の策定部局は BMA 都市計画部局であるが BMA と OCMLT で定期的な協議は行われているが、都市鉄道と連携しつつ計画を立案するという体制は整っていない。

<sup>2</sup> バンコクにおける交通プロジェクトは何れも首相傘下の OCMLT の認可を受けて正式に決定されるが、当初から計画調整機関として事業実施の予算を持たず十分な調整機能を果たせていない。

### 3) 将来計画

1.15 バンコクの都市鉄道整備の動きは急で、既存の路線に加え、多くの路線が実施・計画されており、10路線464kmに及ぶ都市鉄道が今後急速に進むと予想される。特徴は郊外への延伸を進めているところある。

### 4) 駅前・沿線開発

1.16 駅前・沿線開発の実態について整理された情報はないが、各種資料により概ね下記が特徴と言える。

- (i) 都心部においては、駅を中心に広範囲にペDESTリアンデッキが建設され、駅直近への利用客の集中を緩和している。ホテルや商業施設に直結している例もある。
- (ii) 都市鉄道沿線の中高層住宅(コンドミニアム)の1999年以降の建設動向を調査した成果によれば、沿線での開発は進んでおり、主に中間層がマーケットで郊外から流入し、市内からも移転している。その結果スプロールに対する抑制効果がみられ、通勤距離が短くなることでクルマの保有率も低下するというライフスタイルの変化があるとしている。
- (iii) 2015年12月に開発が承認されたオレンジライン(バンコク西部のタリンチャンと東部のミンブリをつなぐ39.6km、30駅の路線)で沿線の不動産開発が急増しており、都市鉄道が不動産業界を刺激していることが明らかになってきている。

### 5) 得られる教訓

1.17 バンコクの都市鉄道整備の経緯から、次のような教訓を学べる。

- (i) **ネットワークの構築:** バンコクもマニラ同様、最初の路線を民活で実施したために、その後の需要に較べ過少になっている。一方バンコクの都市鉄道はマニラ首都圏が中心市街地に集中するのに較べ隣県を含む後背への延伸が行われているのが特徴である。路線間の連結は悪い。
- (ii) **都市高速道路・都市鉄道・路面交通の役割分担:** バンコクの都市鉄道はマニラ首都圏と異なり、運賃はバスの約2倍であり、サービスレベルも高く中間層の利用を促している。これによって高速道路(主として物流と業務交通)、都市鉄道(主に通勤・通学交通)、路面交通(フィーダー交通)のおおまかな役割分担がとれる方向にあると考えられる。
- (iii) **バンコク高速道路(BECL)と地下鉄(BMCL)の合併:** 両交通インフラ会社は2015年12月に合併し、バンコク高速道路地下鉄(Bangkok Expressway and Metro: BEM)として発足した。BMCL社は毎年赤字を計上しているが、BECL社は利用交通量の着実な増加で、高配当銘柄とされている。これによってブルーライン・パープルラインに加えて、新規路線への競争力を高める意図があるとされている。
- (iv) **BTSの事業戦略:** BTS社は順調な利用客増を背景に路線の延伸・拡張を進めており、同時に不動産事業に有力ディベロパーと提携して進出している。出資比率50:50で合弁会社を設立し、地下鉄駅から500m圏内のコンドミニアムの開発を進めている。また、広告事業は子会社を通して屋内・屋外広告ビジネスを展開中で、成長が期待されている。サービス事業では、ホテル運営と電子マネー(ラピッドカードと呼ばれ、BTSその他2,000を超えるレストランで利用可能で、保有者は300万人以上と言われる)からの収益もあげている。

## 2 日本・先進国の経験と、途上国への教訓と対応策の方向性

### 2.1 日本の駅前・沿線開発事例

#### 1) 日本の都市鉄道と都市開発の一体的開発の経緯

2.1 世界の大都市の中で、鉄道が都市形成に与えた大きな影響を与え、都市内移動が公共機関を中心として人の移動は鉄道、貨物の移動は自動車という分担を果たし、高密度で、利便性の高い巨大都市を維持しているのが東京大都市圏である。このような大都市圏を形成した東京には、様々なタイプの開発事例が多く、いずれも途上国の都市にとっては、鉄道と都市開発が一体となったTODを理解する上で、有用な情報と教訓をもたらす。その特徴は下記である。

- (i) **鉄道は自動車のない時代の唯一の公共交通手段であった**:東京は、18世紀初頭には100万人を超えたと考えられており、既にアジアで最大の人口規模であった1872年(明治5年)新橋～横浜への鉄道開設により始まった。鉄道の歴史は、自動車がなかった時代の唯一の交通手段として活用され、収益の高い事業として、全国に多くの鉄道会社が設立された。明治末期までに、ほぼ全国の幹線網が完成されるに至った。
- (ii) **日本の鉄道は民間事業として発展し、過半が買収され国有化が実施されたものの、大都市には多くの民間鉄道が残されていた**:1904年に甲武鉄道が電化され利便性が向上し、沿線地域の人口増加により都市化が進んだ。小林一三が率いた阪神急行電鉄では、沿線開発や百貨店などの副業を路線敷設とセットで行うなど、現在の日本における鉄道経営のモデルを作り出した。乗客誘致のため、沿線の宅地開発を行い、遊園地などの集客設備を作った例も多かった。ターミナル駅へのデパート併設は1920年の阪急梅田駅が最初で、その後各私鉄のターミナルに次々とデパートが設置されるようになった。
- (iii) **関東大震災の帝都復興計画による長期的計画の策定**:関東大震災により壊滅的被害を受けた東京は、震災による焼失区域1100万坪(3,630ha)の区画整理や実現はしなかったが、非焼失区域を含む東京市を対象として、新興のターミナルとなりつつあった池袋、新宿、渋谷、目黒と都心部を連絡する幹線道路建設し、その下に地下鉄を通す計画<sup>3</sup>があった。
- (iv) **高度成長期における大都市の急速な人口増加と都市開発と鉄道の一体開発**:1955年から1973年の18年間は年間10%以上の経済成長を示すいわゆる高度成長期においては、大都市圏への人口集中が進み、大都市における市街地のスプロール発生など、都市インフラの整備不足による生活環境悪化など、現在の途上国の都市と同様な都市問題を発生させた。(この時代に多摩田園都市開発が始まった)これらに対応するため、1968年の新都市計画法により、十年以内に優先的かつ計画的に市街化を図るべき区域(市街化区域)を定め、スプロールの防止を図ることとした。このスプロール規制と合わせて、住宅地の計画的な誘導を図るための大規模都市開発法として新住宅市街地開発法(S38 1963)が施行され、政府による大規模ニュータウン整備に着手した(多摩ニュータウン)。

2.2 大規模ニュータウン開発と平行して、鉄道沿線の中小規模の住宅開発については、既存駅の間駅に新駅を開設により、宅地開発される事例も増加した。この際、中間駅の設置費用は原則開発者負担としており、新駅周辺の開発業者や交通利便性改善を期待する地域の自治体等の

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<sup>3</sup> 東京都市計画物語越沢明を参考

負担により設置されている。この方法を「開発事業者の負担による新駅整備（請願駅）」と称している。（越谷レイクタウン）

2.3 上記の大規模ニュータウン開発は、人口規模は 20 万人から 30 万人であり、鉄道駅の徒歩圏を超える区域の開発を含むものであった。このため、開発区域の住宅地から駅への交通機関として、フィーダーバス路線が鉄道会社や地域のバス会社等によって整備されている。

## 2) 都市鉄道との一体的開発に関する特徴

- (i) **都市機能強化策としての拠点開発：**高度成長期を経て経済成長の低迷が続く安定成長期に入り、都市力の強化が大きな課題となり、臨海部開発など新たな大規模開発が進められ、アクセス交通として鉄道などの整備が一体的に行われた（臨海副都心開発、MM21 開発）。交通利便性の高い駅及び駅周辺地区の大規模跡地などを活用し、新都市拠点整備事業として多くの駅の遊休地（鉄道操車場等）の拠点開発が進められた（鉄道操車場などの遊休地開発事例、汐留地区、スカイツリー、品川開発等）。都心再開発と新駅の設置としては、地下鉄の新線整備に合わせた都心再開発の事例は多い（虎ノ門ヒルズ）。
- (ii) **拠点交通ターミナルの再開発：**都心部の主要ターミナルは、多くの駅利用者の増加により、拠点性を高めてきた。しかし、駅前施設整備後 7～80 年経て、長距離バス路線の増加、ターミナル駅の老朽化など駅者の改築や土地の高度利用を目的とした駅の再開発が進んでいる。（渋谷駅再開発、新宿ターミナル開発、あべのハルカス再開発）
- (iii) **鉄道利用者の減少傾向の中で、新たな売上げ確保のための事業展開：**日本の鉄道の特色として、鉄道事業を中心として関連事業を広範囲に取り組んでいる鉄道会社が多い。鉄道会社の売上げの過半数が非鉄道部門での売上げが占めている会社が多く見られる。これらの取り組みは、これまで、駅が持つ地域の交通中心としての役割を生かし、多様な生活サービスを鉄道利用者に提供しようとする鉄道会社の取り組みでもあった。

## 3) 日本の都市鉄道における駅ナカ・駅前・沿線開発のタイプ

2.4 このように、日本においては、鉄道駅の利用者を対象として駅及び駅前広場隣接地の開発と大規模開発で駅が計画的に整備され、駅周辺部を含む一体的整備が進んでいる。駅と一体的整備の事例は、駅ナカの開発、駅前広場 沿線開発（既成市街地、鉄道遊休地、新開発地、郊外既存鉄道の中間駅開発）等に類型できる。これらについては多くの事例があるが、途上国の沿線開発に参考になると考えられる代表的な事例を表 6.1 に示す。



表 2.1 駅前・沿線開発事例分類

分類	事例駅	内容	
駅ナカ及び駅前開発	駅ナカ開発	石神井公園	駅舎内/高架下など
		東京駅赤煉瓦駅舎の保存・復元	容積率の移転による活用
	駅用地の高度利用	あべのハルカス	駅の老朽化と駅敷地の高度利用など
		国道 20 号と新宿駅南口バスターミナル	道路整備事業と一体となった事業
	駅前広場	新宿駅/池袋駅の駅前広場	超過収用方式や民間資金の導入
	駅前地区再開発	渋谷駅再開発及び渋谷駅周辺開発	地下鉄乗り入れによる駅の改造
既成市街地再開発	虎ノ門ヒルズ	大規模再開発と駅新設	
沿線開発	工場跡地	恵比寿ガーテンプレイス	工場の用途転換による再開発
	鉄道遊休地	スカイツリー/汐留/埼玉新都心/品川	操車場跡地の再開発
	請願駅	越谷レイクタウン	新駅設置による住宅地開発
		本庄早稲田駅	大学設置と新駅開設
	大規模都市開発	田園都市/多摩NT/北千葉	ニュータウン開発とアクセス鉄道
		ユーカリが丘/阪急沿線開発	民間による先駆的事业
		つくばEXプレス	常磐線混雑解消と研究学園都市アクセス
新業務開発	MM21/臨海副都心	大規模開発とアクセス鉄道	

出典: 調査団作成

#### 4) 駅前広場

2.5 駅前・沿線開発において最も重要なものは交通結節点である。この機能が確保されないと鉄道本来の機能が大きく損なわれる。途上国の鉄道整備でこの機能を誰が担うのかが曖昧なままに鉄道建設が進められている。日本の場合、駅前広場の整備については、戦災復興事業以来、鉄道側と都市側の分担について申し合わせがあり、これらの経緯を踏まえて、日本の TOD 事例を理解することが必要である。主な点は下記である。

- (i) 駅前広場の整備に関して、戦後復興事業において、1946 年の申し合わせで街路と鉄道用地の一体施設として整備する方針が出され、その用地、費用は、都市側と鉄道側で折半するとした。以後、現在まで負担割合は変更されているものの、この方針は変わっていない。すなわち、都市整備部局ないし道路管理者が整備することが原則と考えられてきた。
- (ii) 駅前広場の規模については、広場面積の算定式として 1953 年に駅前広場研究委員会式(28 年式)が示され、乗降人員の関数として面積を決定するものとされた。1972 年に建設省と国鉄の間で駅前広場整備に関する新たな申し合わせ事項(建国協定)が作成され都市側の負担率が 1/2 から 3/4 へと変更された。また広場面積の算定に関しては、計画要素ごとに面積を積み上げるより合理的な方法が示された。
- (iii) 鉄道側と都市側の負担金に関する制度があったことから、古い駅は、比較的駅前広場が整備されている。しかし、国鉄の民営化以降は、都市側の負担となり、都市施設として整備されている。
- (iv) 地域の拠点駅などポテンシャルのある駅前においては、駅前広場の整備と合わせて、駅前広場に面する街区の再開発事業など一体開発事例も多い。郊外部の単独駅など駅前広場の整備のみで、バス、タクシーの発着場の整備という例も多く見られる。しかし、大規模開発に関

連して鉄道を整備するなどの事業では、当初から駅前地区の整備が計画され、計画人口に合わせた駅前広場の整備など一体的開発が進められている。

2.6 このように日本の都市では鉄道駅の駅前広場整備は当然とされ、鉄道側、都市側の分担比率によって整備されてきた。この中で、駅前広場が都市計画として整備された事例は、戦前の新宿西口広場の整備事例、戦後の戦災復興事業とされた池袋の駅前広場整備などがある。

## 5) 駅ナカ開発・駅前開発

2.7 駅ナカや駅前開発は、古くから民間鉄道がターミナル駅で構内店舗やデパート、映画館など鉄道利用者の利用増進を図ると同時に非鉄道収入を確保する目的で、私鉄のターミナル駅で、多くの事例が見られる。日本の鉄道のビジネスモデルの特徴として下記がある。

- (i) 駅ナカや駅前における商業開発（オフィスや住居を含む）、さらには駅勢圏における都市開発等の非鉄道事業が経営の柱となっていることが挙げられる。JRの国鉄時代は、構内販売の店舗やそば屋など利用者サービスとして実施されていたが、駅ナカ開発が注目されたのは最近の事で、高齢化による利用者の減少対策として、新たな収入源を求めようとしたもので、2002年のJR東日本の「ステーションルネッサンス」としての上野駅ショッピングゾーンの改修の始まりが先魁である。
- (ii) 駅ナカの鉄道利用者サービスという視点から、駅ソトの商業施設と競争力を持つ魅力ある店舗の誘致を図り、魅力的なショッピングゾーンとして、現在では多くのターミナル駅に展開している。この傾向は民営鉄道で特に顕著であるが、JR本土3社についても非鉄道事業の売り上げが全体の売上の20%~30%前後、純粋な都市鉄道会社である東京メトロでも10%程度と、重要な収入源になっていることがわかる。これらは、経営上全く独立して実施されているわけではなく、相乗効果を狙って戦略的に実施されている。

2.8 一般に、各非鉄道事業には、鉄道という交通手段の存在が駅に旅客を集め、これらの非鉄道事業の需要を生んでいると言え、その相乗効果により鉄道会社の経営が成立しているといえる。

表 2.2 日本の駅前・沿線開発事例

	石神井公園駅 周辺開発計画	東京駅赤レンガ駅舎 の保存・復元事業	阿倍野ハルカス
事業目的	鉄道高架化に合わせ駅周辺のまちづくりに着手	丸の内駅舎の保存・復元	百貨店老朽化による建替事業
事業主体	西武プロパティーズ、 行政、まちづくり協議会	JR 東日本	近鉄日本鉄道
事業規模 (面積、戸数、事業 等)	5,100 m <sup>2</sup> の交通広場と高架下を利用した住民生活サービス施設	敷地面積 116.7ha の特定容積率適用	敷地面積 28,700 m <sup>2</sup> 総事業費 1,300 億円
整備財源		余剰容積率の販売による補てん	都市再生特別地区指定による財政支援、金融支援
事業期間	2012 年に第 1 期開業 現在も事業実施中	1988 年に構想をとりまとめ 2012 年に部分開業	2010 年 1 月着工 2014 年 3 月開業
用地取得	鉄道高架下利用	駅の復元の為、不要	百貨店ビルの建て替え
開発利益還元	不動産関連事業収入による内部補助	特例容積率の余剰分を周辺の開発業者へ販売し、事業費の確保を行った。	不動産関連事業収入による内部補助
コメント・教訓	・鉄道高架下を利用した開発を行うことにより土地リスクを回避することが可能である。	・駅上部の容積率の販売による事業費の確保	・百貨店建て替えに伴う不動産開発の為、土地リスクを回避できる。 ・地域まちづくり組織の参加によりエリアマネジメントの実施と計画策定
	恵比寿ガーデンプレイス	東京スカイツリー	汐留地区
事業目的	既存土地利用の変化と工場跡地の有効活用	鉄道跡地(貨物取り扱い駅)の有効活用	貨物ターミナル土地の有効活用
事業主体	サッポロビール、住宅都市整備公団	東武タワースカイツリー(東武鉄道が筆頭株主)	東京都都市整備局と民間企業による複合プロジェクト
事業規模 (面積、戸数、事業 等)	敷地面積 83,000 m <sup>2</sup> 総事業費 2,950 億円	敷地面積 36,844 m <sup>2</sup> 総事業費 650 億円	施工面積約 30.7ha 事業費 1,493 億円で着手
整備財源	特定住宅市街地総合整備促進事業による補助金	ユーロ債の発行による資金調達	
事業期間	1991 年 8 月～1994 年 9 月	2008 年 7 月～2012 年 2 月	1985 年汐留地区に関する計画委員会が設立
用地取得	工場跡地利用	鉄道跡地利用	土地区画整理
開発利益還元	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助
コメント・教訓	用途地域・容積率変更による効果的な都市開発 駅と再開発地区との連絡通路による乗客数の増加 工場跡地利用による土地の有効活用	鉄道跡地利用による開発リスクの低減	貨物ターミナル跡地を利用することによる土地リスクの軽減
	新宿駅南口バスターミナル と国道 20 号	渋谷駅再開発	虎ノ門ヒルズ
事業目的	跨線橋架け替えに合わせた国道拡張とバスターミナル整備	都市再生緊急整備地域指定による都市再生モデルの展開	環状 2 号線道路整備と再開発事業をして実施
事業主体	東京国道事務所と JR 東日本	東急電鉄、JR 東日本、東京メトロ	環状第 2 号線を東京都都市整備局、特定建築者、土地取得を都市再生機構が実施
事業規模 (面積、戸数、事業 等)	バスタ用敷地として約 1.47ha の人工地盤の建設	都市再生緊急整備地区(139ha) ①渋谷駅街区土地区画整理事業: 約 5.5ha②渋谷駅南街区: 敷地面積 7100 m <sup>2</sup> ③道玄坂一丁目駅前地区: 敷地面積 3,330 m <sup>2</sup> ④渋谷駅桜丘口地区: 敷地面積 17,000 m <sup>2</sup> ⑤渋谷宮下町	東京都市計画事業環状第二号線新橋・虎ノ門地区第二種市街地再開発事業として施行面積約 8.0ha(延長 1,350m) 用地取得は約 5.0ha

		計画：敷地面積 5,020 m <sup>2</sup> ⑥南平台： 敷地面積 4,128 m <sup>2</sup>	
整備財源		都市再生緊急整備地域指定による補助金	特定建築者制度により民間資金活用の促進
事業期間	2000年2月跨線橋開始 2016年4月バスタ新宿開業	区画整理開始平成22年～ 実施中	1998年に道路の地下化が決定 2014年6月虎ノ門ヒルズ森タワー改行
用地取得	鉄道用地上部に人工地盤建設による土地の確保	街区整備土地区画整理(交換分布)により分散する土地を集約	都市再生機構が土地取得を実施
開発利益還元	人工地盤で拡張した土地を利用した不動産開発による内部補助	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助
コメント・教訓	<ul style="list-style-type: none"> <li>・鉄道用地上部を利用した開発を行うことにより土地リスクを回避することが可能である。</li> <li>・学識経験者等で構成される委員会により多様な利権者の調整を実施した。</li> </ul>	<ul style="list-style-type: none"> <li>・区画整理による分散土地の集約</li> <li>・都市再生緊急整備地域指定による容積率緩和と民間投資の誘導。</li> </ul>	<ul style="list-style-type: none"> <li>・権利者の合意形成を都市再生機構が行い、不動産経営に豊富な知見を持つ森ビルを特定建築者として指定し、得意分野を活かした再開発事業を実施</li> </ul>

## 6) 沿線開発事例

2.9 鉄道を軸に都市化が進められた、日本においては、都市開発は、鉄道駅と不可分の関係がある。約 3,000 万人の東京都市圏が形成されたのは、大量輸送が可能な鉄道がそれを可能ならしめたともいえる。都市化の進展と共に、長期にわたりマスタープランに基づき、計画的な都市計画や鉄道ネットワークを形成してきた日本の経験は、巨大都市を形成するアジア型の大都市にとって貴重な経験として、途上国の計画に役立つと考えられる。

2.10 都市鉄道の駅は利用者が2万人から何十万人にもなると、交通拠点、商業中心として発展する事となる。途上国においても不動産会社は駅周辺のポテンシャルを理解されていると考えられ、駅周辺地域において土地の買い占めなどが進められている事例も多い。途上国における鉄道路線計画は、交通混雑解消を主目的とし、鉄道の運営を利用者数のみで考えがちで有り、鉄道の運営、経営という視点が不足している。沿線開発を考慮しないで設定される場合が多いことや鉄道計画路線や駅の計画予定地などが事前に公表される事が多いため、駅周辺地域において土地の買い占めなどが進められている事例が多い。

2.11 鉄道駅の持つポテンシャルは、日本の鉄道会社では駅構内商業施設の整備や鉄道用地の不動産開発として理解され、多くのプロジェクトが実施されている。鉄道と密接な連携によって整備された沿線開発について見ると次のタイプがある。沿線の工業跡地、鉄道遊休地、開発者負担による新駅整備、大規模開発があり、表 2.3 にまとめられる。

表 2.3 日本の沿線開発事例

	恵比寿ガーデンプレイス	東京スカイツリー	汐留地区
事業目的	既存土地利用の変化と工場跡地の有効活用	鉄道跡地(貨物取り扱い駅)の有効活用	貨物ターミナル土地の有効活用
事業主体	サッポロビール、住宅都市整備公団	東武タワースカイツリー(東武鉄道が筆頭株主)	東京都都市整備局と民間企業による複合プロジェクト
事業規模 (面積、戸数、事業等)	敷地面積 83,000 m <sup>2</sup> 総事業費 2,950 億円	敷地面積 36,844 m <sup>2</sup> 総事業費 650 億円	施工面積約 30.7ha 事業費 1,493 億円で着手
整備財源	特定住宅市街地総合整備促進事業による補助金	ユーロ債の発行による資金調達	
事業期間	1991年8月～1994年9月	2008年7月～2012年2月	1985年汐留地区に関する計画委員会が設立
用地取得	工場跡地利用	鉄道跡地利用	土地区画整理
開発利益還元	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助
コメント・教訓	・用途地域・容積率変更による効果的な都市開発 ・駅と再開発地区との連絡通路による乗客数の増加 ・工場跡地利用による土地の有効活用	・鉄道跡地利用による開発リスクの低減	・貨物ターミナル跡地を利用することによる土地リスクの軽減
	埼玉新都心	品川	越ヶ谷レイクタウン
事業目的	首都整備計画に基づいた業務核都市としての操車場の移転	国際交流拠点の核となる中核施設の建設	既存駅の間際に新駅を設置しニュータウン、工業団地等の開発を実施
事業主体	国、埼玉県、住宅・都市整備公団(現都市再生機構) MND さいたま(三菱地所、新日鉄都市開発、大栄不動産)	JR 東日本	開発事業者と自治体で分割
事業規模 (面積、戸数、事業等)	事業費約 943 億円 開発面積 47.4ha	開発面積約 16ha	開発面積約 225.6ha 駅設置費用 36 億円
整備財源	国、地方自治体、民間資金	民間資金	地元負担(固定資産税を担保として加担)
事業期間	実施中	実施中(2020年暫定開業、2024年開業予定)	1996年特定土地区画整理事業決定 2008年街開きイベント開催
用地取得	土地区画整理事業	操車場の移動による開発敷地の確保	土地区画整理事業
開発利益還元	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助	地価の価格上昇による新駅設置費用の軽減
コメント・教訓	・業務施設等の商業施設開発は鉄道利用者の増加に大きな影響をもたらしている ・操車場移動による土地リスクの軽減	・長期的な取り組みにより操車場の移転から開発用地を生み出した。	・駅開発による土地価格の上昇による固定資産税の増加
	本庄早稲田駅	みなとみらい MM21	ゆりかもめ臨海副都心開発
事業目的	本庄地方拠点都市地域の中核となる地区	通勤線の整備	交通が不便な埋め立て地へのアクセス改善
事業主体	本庄市、都市再生機構	横浜市	東京都
事業規模 (面積、戸数、事業等)	敷地面積約 64.6ha 概算事業費 145.5 億円	面積 186ha 就業人口 19 万人、居住人口 1 万人の計画	開発面積約 442ha

		(約 79.3ha の埋め立て)	
整備財源	埼玉県、本庄市	横浜市、大規模土地所有者による鉄道建設資金の一部負担 新駅周辺の土地利用者が約 500 億円を負担した。	東京都
事業期間	平成 18 年から平成 30 年予定	実施中	1987 年臨海副都心開発基本構想 1995 年ゆりかもめ開業
用地取得	土地区画整理事業	海面埋め立てにより用地の拡大を図った	埋め立てによる東京副都心開発
開発利益還元	不動産関連事業収入による内部補助	不動産関連事業収入による内部補助	土地の資産価値の向上による事業費の補てん
コメント・教訓	・新幹線新駅設置に伴った郊外地の計画的市街地事例	・鉄道資金を負担することにより土地の価格上昇を期待することが出来る。	・都心へのアクセス改善による土地の資産価値の向上につながる

2.12 鉄道駅や路線の新設と一体となった大規模開発事例としては、多くの事例が見られる。特に、大都市の人口急増に対応するための大規模住宅地開発であり、開発に伴い生じる問題に対応するため、多くの制度改正、創設が提案されてきた。1963 年に創設された、新住宅市街地開発事業は、新住宅市街地開発事業は、新住宅市街地開発法に基づき、都市計画事業として施行される全面買収方式の宅地開発事業である。鉄道と宅地開発の関連で、多摩ニュータウンの新住法による事業は、鉄道事業者の負担が多く、ニュータウン連絡鉄道に関する補助制度の契機となり、その後一体開発(内部補助)を可能にした宅地開発公団の創設が行われ、これに基づき「千葉ニュータウン」が開始された。その後、宅鉄法の成立による「つくばエクスプレス」の沿線開発が開始された。このような制度の改正により大規模ニュータウンが整備されてきたため、それぞれの事業が特色のあるものとなっている。

2.13 郊外における大規模ニュータウン開発は、通勤手段が不可欠であり、宅地開発と鉄道新線の一体開発の事例が多い。古くは、48 年前から始まる多摩田園都市開発やユウカリが丘住宅地開発に新交通システムを導入した事例、公団のニュータウン開発に鉄道を導入した事例や宅地開発と鉄道建設を同一事業体で取り組んだ事例、沿線の鉄道用地を地元の協議会などの組織を前提に土地区画整理事業で生み出そうとした事例など、時代に応じた整備手法の変化が見られる。

表 2.4 ニュータウン型沿線開発

鉄道線名 開発計画・沿線開発	事業の特徴	途上国への教訓
東急田園都市線 東急多摩田園都市開発	田園都市線都市開発は、沿線人口 60 万人の都市を約 45 年で形成した日本の沿線開発を代表する事例である。民間が鉄道と宅地開発を一体として、土地の開発権を区画整理区域として保留地の買収予定者(一括事業代行)として実施する方策により実現した事業で、鉄道計画と合わせて計画された。二子玉川、たまプラーザ等の駅を再開発しエリアマネジメントや次世代郊外まちづくり等を中心に、高齢社会への対応、シビックプライドの向上等を通じ地域の資産価値を高める取り組みが実施されている。	長期的取り組み体制が必要。 先行買収ではない事業方式が必要(権利者との共同事業など) 沿線開発による生活サービス需要の取り組みなど多様な事業展開により、非鉄道収入が 80%を超える。
小田急線、京王線、 多摩ニュータウン開発	日本最大のニュータウンで、計画人口 34 万人、公団 東京都などにより実施。通勤交通機関として小田急線、京王線などを導入した郊外 NT の代表的な事例。/公団による土地の先行買収によるニュータウン開発(新住法)を行い、未買収地区は、区画整理事業として整備、 高齢化が問題となっているが、大学、研究機関、企業、病院等地域の複合拠点	宅地開発は、公団に限定され、 鉄道事業者は沿線開発が出来ない 資産価値を維持するためには、 多様な階層によるコミュニティ形成が不可欠
北総線 千葉ニュータウン開発	宅地開発公団による鉄道と NT の一体開発プロジェクト事例。 計画人口 30 万人に対し、先行買収方式等が長期化し、住宅需要が減少し、結果、定着人口 18 万人で計画終了となった。北総線は、高額運賃の鉄道となっている。	事業を効率的に運営し、長期化はさける 収益事業として過剰投資をさける。
つくばエクスプレス つくばエクスプレス沿線 開発	つくばエクスプレス、自治体や都市再生機構が行っている沿線大規模開発である。減歩率 40%と説明し、地区により条件が異なり、超過分は、地元自治体などが負担するなど自治体の負担が大きい。 区画整理区域内の先買い用地を鉄道用地に集約換地、鉄道用地の創設換地により、確保する事業であったが、地区により事業が遅れ、鉄道としては、用地買収した地区も生じた。 都心部の地下構造の工事により巨額の建設費(8,081 億円)を要し、この整備資金の一定割合を自治体の出資金で賄うこととされた結果、首都圏新都市鉄道株の資本金額(1,850 億円)は営業規模に比して莫大となった。この事により資金調達において有利子債務負担の軽減に繋がっている。	沿線開発は、政府系の主導による開発で自治体の負担が大きい。 同時期に大規模宅地供給がされたため、宅地供給過多になった時もあった。 現在は沿線人口の増加により、鉄道の営業収支は、黒字に転換している。。
阪急電鉄 阪急沿線開発	郊外住宅の一体開発の始まりをつくった企業であり、郊外住宅開発だけではなく、都心方向の通勤客に対し、郊外に宝塚歌劇などレジャー開発にも取り組み、反対方向の利用者発掘に努めた。	日本の民間鉄道の沿線開発の先駆者で、都市鉄道の片方向利用を双方向にする開発を実施した
ユーカリが丘線 ユーカリが丘ニュータウン	不動産会社山万により開発が始められたニュータウンであり、駅前開発だけではなく、ハード面とソフト面の両面を不動産会社山万が実施している。 コミュニティの維持を考慮して、毎年一定戸数を販売し、年齢階層が偏らないように配慮している。又、各種の生活サービス施設や生活支援施設の整備に取り組んでいる。	民間主導で、都市交通システムと宅地開発をした最初の事例 インフラコスト負担が大きく鉄道経営を圧迫

## 2.2 香港とシンガポールの経験

2.14 香港とシンガポールは発展途上国の段階から先進国に成長し、他の途上国都市と同様に人口増加や交通問題に対応しつつ、都市開発を進めてきた。この過程で都市鉄道は大きな役割を果たし、公共交通のバックボーンとして市民のモビリティを支えている。香港の都市鉄道は一体的な都市開発による開発利益の都市鉄道への還元で成功し、シンガポールは世界で最も魅力のある都市の上位にランクするまでに発展したが、都市鉄道が大きな役割を果たしている。

### 1) 香港の経験

#### (i) 香港の概況

2.15 香港は中国華南地域の沿岸に位置し、香港島、九龍半島および周辺の島々からなる、面積 275 km<sup>2</sup>、人口は 730 万人の都市である。周辺は山地に囲まれており、限られた平地を有効に活用すべく極めて高密度な市街地が形成された。古くから国際的な中継貿易港であったが、現在は国際的な金融市場としてニューヨーク・ロンドン・東京などと並んで重要な位置を占めている。鉄道だけでなく、路面電車、バス、水上交通など多彩な公共交通手段が整備されており、公共交通のシェアは極めて高い。経済水準に比してクルマの保有水準は総じて低い。現在既に 10 路線 246km の都市鉄道ネットワークを持っているが、更に将来に向けて 100km 以上の延伸を計画している。また都市鉄道に加えて約 250 km の高速道路ネットワークをもっている。

2.16 香港は行政域が狭いうえに、丘陵地が多く、開発適地が限られていることから、深刻な住宅問題に悩まされてきた。かつては 2DK 程度のフラットに 3 世代家族が住んでいるのも珍しくない、と言われていた。加えて、道路建設も不十分で交通問題も深刻であった。こうした事態の改善に、香港地下鉄の建設と超高層化集合住宅をふくむニュータウン（ベッドタウン）の開発が積極的に取り組まれた。これによって都心部へのアクセスや住宅問題が改善し、外国投資が活発化し、新たな経済発展に寄与したと考えられている。香港のニュータウンは 1950 年代から始まったが、本格化したのは 1970 年代に入ってからであり、現在までに 9 つのニュータウンが開発され、香港の人口の約半数を収用していると言われている。そしてこうしたニュータウンと、都心部及び活動拠点が都市鉄道や高速道路のネットワークで結ばれている。

#### (ii) 都市鉄道制度

2.17 1970 年代初めより、経済成長、住宅開発需要、新界（香港のうち、香港島・九龍半島以外の領域）での人口成長が見通しを大きく上回り、道路整備が追い付かない中で、総合的な交通計画の必要性が認識されるようになった。1979 年「運輸政策白皮書（白書）」として公刊された。1970 年代には、まず都市利用計画の概要が策定され、それに対して交通計画が決められた。そのため、交通インフラ整備は、都市・住宅開発を後追いすることになった。しかし、1980 年代初め、資源の制約から、交通システムの容量が無制限に拡充出来るわけではないことが認識された。そして交通需要は、土地利用と交通整備の相互利用の結果であり、両者の調整が必要であると考えられ、財政的にも経済的にも Value for Money を実現する、土地利用と交通整備を統合した 1984 年「全港（香港）発展戦略」として発表した。1986 年、政府は 2001 年を目標年とする「第二次整体（総合）運輸研究」では需要後追い型の計画から資源配分に配慮した計画への変更の特徴がある。すなわち、予算制約を意識して効率的な交通インフラ整備を実現するため、費用便益計算で優先順位を設定すること。また提案された交通ネットワーク容量の範囲内に交通需要を削減することを検討すべきことが掲げられ、1990 年「第二本運輸政策白皮書（白書）」として刊行された。香港における一体開発は、政治的な背景のもとに進んだものと考えられる。



### (iii) 都市鉄道による一体開発と開発利益還元

2.18 香港は高い水準の都市鉄道ネットワークとともに、その整備手法において駅前・沿線開発の利益を鉄道事業に内部化したことでも知られている。建設当初は公共が土地を安く払い下げ、これによる開発利益を鉄道事業費の一部に充て、その後の自律的な経営へとつなげた。こうした一種の内部補助で、鉄道運営は支えられた。この方式はその後の路線でも積極的に用いられており、一体開発からの不動産開発利益は定常的に計上されている。香港 MTR による開発利益還元の特徴は下記である。

- (i) 駅や車庫の上部、そして場合によっては周辺の不動産開発と一部その後の管理が MTR の場合の開発利益還元方式となっている。実際には民間の不動産業者との合弁事業を主導して、住宅・商業施設などを開発し、その多くを分譲する一方、一部は所有し続けて賃貸管理を続けている。
- (ii) 分譲事業は早い時期にまとまった利益をもたらし、建設費の利子負担を効率的に軽減するため不可欠な要素になっている。
- (iii) 鉄道の安全運行の観点から、開発した不動産のうち、車庫の上部の施設については、所有権を MTRC に残し、賃貸により不動産管理を行っている。ショッピングセンター、住宅施設、事務所ビル等がふくまれ、MTRC は香港でも最大手の不動産管理者のひとつになっている。

### (iv) 得られる教訓

2.19 香港の駅前・沿線開発から得られる教訓は下記である。

- (i) 一体開発を梃子として都市鉄道整備を安定的な収益を生む事業として確立したが、これを可能にしたのは公有地の優先的な取得もあるが、高密度で交通アクセスが制約されがちな市街地で、高品質な鉄道サービスのポテンシャルを最大限に生かす企画力とビジネスモデルの開発に拠るところが大きいと考えられる。
- (ii) 外国の人材・技術・資本を積極的に活用し、海外進出を可能にする鉄道事業ビジネスモデルをつくりあげたこと。
- (iii) 一体開発において分譲と賃貸を使い分けて、鉄道の安全性を確保すると同時に、初期投資の負担を軽減しつつ継続的な利益を確保する仕組みをつくったこと。

## 1) シンガポールの経験

### (i) 概況

2.20 シンガポールは面積 518 km<sup>2</sup> に 570 万人の人口を有する、アジアで最も高い所得水準の都市国家である。シンガポールは建国当初より、限られた国土の有効利用という視点から計画的に都市づくりを実践してきた。都市の開発戦略を示す最初のコンセプトプランは、1971 年に作成され<sup>4</sup>、その後、1991 年、2001 年に改訂されたが、空間構造についての基本的な考え方は一貫している。シンガポールの都市鉄道の最初の路線が開業したのは 1987 年であるが、1971 年のコンセプトプランで計画的に開発された、あるいはされる予定の高密度居住のニュータウン中心部と CBD を連結するマストラ導入予定地が概ね示されていた。

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<sup>4</sup> 1958 年に植民地政府のもとで最初のマスタープランが作成されたが、1965 年にマレーシア連邦から分離独立し、新たな組織制度づけが始まった。

2.21 現在のシンガポールは、高品質の都市鉄道と都市高速道路に加え、自動車抑制策（保有規制、ロードプライシング）、新交通システム、LRT、バス等の組み合わせによって都市交通を管理し、高いモビリティを市民に提供している。更に、シンガポールでは1962年のパン・アイランド・エクスプレスウェイを始めとし、1998年までに現在の高速道路の多く（8路線 150km）が開業していた。都市鉄道との開業のタイミングを見ると、高速道路ネットワークの整備がほぼ完了した。

### (ii) シンガポールの都市鉄道整備状況

2.22 シンガポールの都市鉄道は、当時既に良く整備された道路と非常に効率の良いバスシステムがあったこともあり、国連や世銀を巻き込む10年に及ぶ調査と論争の末に、1982年に実施が決まり、1983年に着工、1987年に部分開業、1993年に第1フェーズの67kmが開業したものである。MRTの路線長は170kmであり、更に将来、約150kmの延伸や新線が計画されている。

### (iii) シンガポールの都市開発

2.23 シンガポールの都市開発は、1965年の独立当時に直面していた深刻な住宅不足、劣悪な生活環境、インフラの欠如と言った多くの都市問題を抱えていたが、その後多くの課題を克服し、世界の都市の中でも、常に上位にランクされる競争力と魅力を持つ都市として発展したが、この背景には次のような点があげられる。

- (i) 1959年に設立された国家開発省(Ministry of National Development)のもとでの優れた都市計画とこの実践
- (ii) 土地制度と国有地の拡大:シンガポールは英国流の「土地は究極的に国家に帰属する」という理念のもとに、1959年の自治権獲得以降、政府は土地利用を積極的に進め、国土の約3割を収用し、公共施設の整備、都市再開発事業、ニュータウン開発で大きな役割を果たした。また国土の20%近くを埋立てで増やし、チャンギ国際空港、ジュロン工業団地、プンゴル住宅地、都心部に隣接するマリーナ・スクウェアやマリーナ・サウスの開発を実施した。
- (iii) 土地収用制度と都市開発:土地の買収は、政府に強制的な土地収用権限を与えては、土地収用法にもとづいて行われ、任意買収は行われない。即ち土地収用を必要とする公共事業が、関係省庁の協議の後、国会で議決され、公告等の手続きを経て買収が行われる。なお、政府は土地収用の後、インフラの整備は行うが、建物の建設及び経営は主に、民間の開発業者に任せられる。
- (iv) 住宅政策:国民生活の基盤となる住宅建設は、政府による安価な住宅の供給という目標の下に進められ、大きな成果を挙げている。高層・高密度の住宅団地が建設され、狭い国土が有効利用されている。なお、住宅建設は旧市街地の開発ではなく、幹線交通ネットワーク（高速道路、都市鉄道）と連結したニュータウン開発と組み合わせて行われてきた。国民が自分の家を持つことが政治的・経済的にも社会の安定に繋がるという考え方のもと、ニュータウン開発は持ち家制度とともに推進されている<sup>5</sup>。

### (iv) 得られる教訓

2.24 シンガポールは開発を計画に沿って実現してきた、先進都市をふくめて数少ない都市のひとつである。その経験から得られる主な教訓は下記である。

- (i) **優れた都市計画とその運用:**長期を含有したコンセプトプランと具体的な開発を規制・誘導するマスタープランにより、合意形成を定期的に図り、これを実践するための組織制度を整備

<sup>5</sup> 2012年の統計で、国民の81.6%がニュータウンを中心とする公営住宅に居住し、持ち家率は90%である。

したこと。英国植民地時代に培われた都市計画の基盤があったこともこれを可能とした。この中で都市計画は、土地利用、住宅、交通、環境を一貫して総合的に含んでいた。

- (ii) **政府の強いリーダーシップ**: 資源もない小さな島国として独立した危機感に支えられたリーダーと、これを支える政府組織の開発に向けての強いリーダーシップがあった。これによって組織間の調整や協力も円滑に実施された。
- (iii) **外国の人材・技術・資本の活用**: ODA はもとより、外国投資や外国のリソースを独立当初より積極的に受け入れ、インフラ整備にも積極的に活用してきた。

別添 E：主要交通ターミナル

## 1.1 Introduction of Each Study Sites

The survey was done at (a) Gabtoli, (b) Mohakhali, and (c) Sayedabad Bus Terminals and (d) Sadarghat Launch Terminal (Landing Station). The followings are the introductory information of the terminals.

- (a) Gabtoli bus terminal covers the area of north-west, west and southern areas of the country. The terminal is under Dhaka North City Corporation (DNCC) administration. An Assistant Manager is responsible for overall administration of the terminal. The area of the terminal is 123,400 m<sup>2</sup> (12.34 hectare).
- (b) Mohakhali Bus Terminal is one of three main Inter District Bus Terminals in Dhaka, opened in 1984. The terminal primarily serves destinations in northern Bangladesh, including Mymensingh, Netrokona, Tangail, Jamalpur, Sherpur, Kishoreganj, and Bogra and also north-east areas, for instance, Sylhet areas. The area is 36,400 m<sup>2</sup> (3.64 hectare) under the administration of Dhaka North City Corporation (DNCC).
- (c) Sayedabad Bus Terminal is one of the most important intercity bus terminals in Dhaka. Usually from Sayedabad terminal, intercity coaches start for Sylhet, Moulvibazar, Comilla, Chandpur, Chittagong, Cox's Bazar, Rangamati, Bandarban, Gopalganj, Sunamganj, Kishoreganj, Feni, Noakhali, Hobiganj, Brahmanbaria, Laxmipur, and Barishal districts. Beside the non-A/C sitting services, a number of A/C luxury chair coaches move from Sayedabad bus terminal. The area of Sayedabad Terminal is 40,500m<sup>2</sup> (4.05 hectare) under the administration of Dhaka South City Corporation (DSCC).
- (d) Sadarghat Launch Terminal is one of the largest river ports in Bangladesh which is located in the southern part of Dhaka, on the river Buriganga. About 200 large and small passenger launches depart and arrive at the terminal every day. The port serves for the major cities in the southern part of Bangladesh from Dhaka. The port is under the administration of Bangladesh Inland Water Transport Authority (BIWTA).

## 1.2 Current Conditions and Information

### 1) Number of Buses and Operation Areas

The number of buses/launches by terminals is shown in the following Table 1.2.1. The details of Buses/Launches by Company are shown in Annexure – 1.

**Table 1.2.1 Number of Buses by Terminals**

Terminals	Number of Buses/ Launches	Bus Operation Areas by Division
Gabtoli Bus Terminals	3,085	Barisal, Khulna, Rajshahi and Rangpur
Mohakhali Bus Terminals	1,812	Dhaka, Mymensingh, Sylhet, Rangpur, Rajshahi
Sayedabad Bus Terminals	4,520	Dhaka, Chittagong, Sylhet, Barisal, Khulna
Sadarghat Launch Terminal	243	Dhaka, Barisal, Khulna, Chittagong

### 2) Riding Capacity, Fleet Age and Average Driving Distance per Day

- (a) Mohakhali Bus Terminal: The buses are mainly local type and plying nearby districts

and seating capacity is 52. The average life is 6.7 year which is more than average life. However, the bus services are average quality.

- (b) Sayedabad Bus Terminal: The terminal is using by Chittagong and Sylhet areas and standard buses. Therefore, the operators are changing their fleet within short period of time and which is 4.5 years.
- (c) Gabtoli Bus Terminal: The terminal is using by Barisal, Khulna, Rajshahi and Rangpur areas and standard buses and also mixed of medium quality of buses. The operators are also changing their buses frequently, because to attract the passengers. The trip distance of buses from Gabtoli is about 423km/day which is longer than other two terminals, because the terminal covers mainly long-distance destinations.
- (d) Sadarghat Launch Terminal: The Launches scheduled for Sadarghat terminal are of three types: Large, Medium and Small with passenger capacity of 1000-1500, 500-750 and 150-400 respectively. The average launch riding capacity is 773 passengers for Sadarghat terminal.

**Table 1.2.2 Riding Capacity, Fleet Age and Average Driving Distance per Day**

SL	Terminal	Measurement	Unit	Value
1	Mohakhali	Average Bus Riding Capacity	No. of Passengers	43
2		Average Fleet Age	Year	6.7
3		Average Driving Distance Per Day	Kilometre	340
4	Sayedabad	Average Bus Riding Capacity	No. of Passengers	42
5		Average Fleet Age	Year	4.5
6		Average Driving Distance Per Day	Kilometre	335
7	Gabtoli	Average Bus Riding Capacity	No. of Passengers	40
8		Average Fleet Age	Year	4.6
9		Average Driving Distance Per Day	Kilometre	423
10	Sadarghat	Average Launch Riding Capacity	No. of Passengers	773
11		Average Fleet Age	Year	7
12		Average Driving Distance Per Day	Kilometre	280

### 3) Average Number of Passengers and Number of Trips

The following Table 1.2.3 shows the average number of passengers and number of single trips. It is found that the number of bus trip of Mohakhali is more than other terminals, because length of routes is shorter. So, shorter length more trips and longer length less trips. Number of operated buses and ferries of each route, Average no. of passengers per trip, No. of single trips per day by route by company is in Annexure – 2.

**Table 1.2.3 Average Number of Passengers and Number of Trips**

SL	Terminal	Measurement	Unit	Value
1	Mohakhali	Average No. of Passenger Per Trips	No. of Passengers	25
2		Average No. of Single Trips	No. of Trips	2.22
3	Sayedabad	Average No. of Passenger Per Trips	No. of Passengers	28
4		Average No. of Single Trips	No. of Trips	1.91
5	Gabtoli	Average No. of Passenger Per Trips	No. of Passengers	31

6		Average No. of Single Trips	No. of Trips	1.70
7	Sadarghat	Average No. of Passenger Per Trips	No. of Passengers	396
8		Average No. of Single Trips	No. of Trips	1

#### 4) Bus & Launch Fare

Bangladesh Road Transport Authority (BRTA) is the only authority to fix the bus and minibus fare in the country. However private companies follow the same fare structure of BRTA. In fare structure calculation, BRTA considers distance and bridge toll, it does not consider facility and specification (Such as AC and travel time). The fare for long distance bus is Taka 1.42 per kilometer plus the bridge toll divided by seating capacity for per person. However, private operators are charging higher or lower fare rate than BRTA rate, such as, higher rate for AC, comfortable seating facility buses. Lower fare rate for comfortable seating buses ( Say 52 seat in a bus).

For river vessels the rate was fixed by BIWTA ( Bangladesh Inland Water Transport Authority ) on 2014. The fare is of third class/ deck ( For first 100 KM: 1.7 Taka per KM, After 100 KM: per KM 1.4 Taka). For second class seat the fare is double. For first class seat fare is 3 to 4 times of third class fare based on facility provided.

Bus Routes length, locations, destinations and permitted fare for 40 seated bus by bus terminal of Bangladesh Road Transport Authority (BRTA) Route Permit (May 2016) list and the Launch Route Permit (2014) list of Bangladesh Inland Water Transport Authority (BIWTA) are presented on Annexure-3.

#### 5) Bus and Launch Trip Frequency

For Mohakhali bus terminal as majority of the bus routes are towards greater Mymensingh and Tangail districts the interval between buses is around half an hour. For routes toward Sylhet, Rajshahi and Rangpur divisions the average bus interval is 2 to 3 hours.

For Sayedabad bus terminal for bus trips to Chittagong, Sylhet, Comilla, Noakhali, Mawa, Munshiganj are start in every 15 to 30 minutes. For buses toward Barisal and Khulna divisions; Cox's Bazar the interval is 1 to 2 hours. For other destinations bus companys have 1 to 2 trips daily.

For Gabtoli bus terminal as majority of the trips are long distance, the usual schedule is one trip per 2 hours per route per bus company, though the concentration of trips are more on 7 am to 10 am and 8pm to 12am. For all the bus terminals the bus service are started at 6 am in the morning up to 12am at night.

For Sadarghat launch terminal for long distance route large and medium size launches start from the terminal in the morning and evening twice. For shorter routes the interval time between launches is 30 minutes to 1 hours and operated only during day time. Launch schedule usually varies depending on weather and season.

#### 6) Terminal Fee, Average Stop Time and Average Number of Working Days and Monthly Maintenance Cost

The following Table 1.2.4 shows the terminal fee, average stop time and average number of working days and monthly maintenance cost. The maintenance cost of buses at Mohakhali Bus Terminal is BDT 9,270 only which is about 1/3<sup>rd</sup> of other terminals, because

of short distance bus services.

**Table 1.2.4 Terminal Fee, Average Stop Time and Average Number of Working Days and Monthly Maintenance Cost**

SL	Terminal	Measurement	Unit	Value
1	Mohakhali	Terminal Usage Fee (Short Period)	BDT	40
2		Average Stop Time	Hour	2.38
3		Average No. of Working days per months	Days	24
4		Average Maintenance Cost per Vehicle per month	BDT	9,270
5	Sayedabad	Terminal Usage Fee (Short Period)	BDT	40
6		Average Stop Time	Hour	5
7		Average No. of Working days per months	Days	25
8		Average Maintenance Cost per Vehicle per month	BDT	21,253
9	Gabtoli	Terminal Usage Fee (Short Period)	BDT	40
10		Average Stop Time	Hour	3.25
11		Average No. of Working days per months	Days	25
12		Average Maintenance Cost per Vehicle per month	BDT	27,056
13	Sadarghat	Terminal Usage Fee	BDT	300
14		Average Stop Time	Hour	5
15		Average No. of Working days per months	Days	20
16		Average Maintenance Cost per Vehicle per month	BDT	325,000

**7) Problems for Users and Operation by Terminal**

The following Table 6 shows the problems for users and operation by terminals. It is found that the core problems for the operation and terminal use are inadequate space, terminal maintenance and security.

**Table 1.2.5 Problems for Users and Operation by Terminal**

Problems for the User/Operation	Terminal Name			
	Mohakhali	Sayedabad	Gabtoli	Sadarghat
Inadequate Space	89.1%	88.2%	83.5%	78.6%
Terminal Maintenance	82.6%	90.2%	75.3%	92.9%
Security	82.6%	80.4%	84.7%	85.7%
Unnecessary Subscription Fee	0.0%	11.8%	5.9%	7.1%
Inadequate Maintenance Workshop	0.0%	8.8%	4.7%	0.0%

Note: Percentage is more than 100 because multiple response



## Annexure 1: Number of Fleet

### 1) Mohakhali

SL No.	Name of the Bus Company	Total Number of Buses of the company
1	Boyshakhi	18
2	Sonar Bangla	60
3	S.I Enterprise	50
4	Rifat	6
5	Orin Travels	13
6	Crown	6
7	Ovi Enterprise	22
8	Madargong Special	12
9	Hazi Paribahan	22
10	ENA	280
11	Tuhin Elite	24
12	Manik Express	33
13	Desh Travels	85
14	National Travesl	40
15	Rajib	40
16	A C Supre	30
17	Hazrat Shah Jalal	45
18	Alam Asia	100
19	Green Line	30
20	Konak Chapa	1
21	Islam	60
22	Imam	62
23	Shyamoli Bangla	60
24	Arafa	1
25	Monna Poribahan	26
26	Ananna Poribahan	46
27	Uttara Arabian Transport	50
28	Nirala super	46
29	J. K Special	3
30	Jalshiri	50
31	Titash Travels	25
32	Badshah	30
33	Anono Classic	35
34	P.P.L Super	20
35	Uzan Vati	30
36	Binimoy	95
37	Shah Fateh Ali Poribohan	60
38	Akota Travels	70
39	S R Travels	13
40	Jakir Travels	4
41	Pingky	4
42	Hazi Sorker Poribohan	4
43	Ccono Exclusive	26
44	Dhaka Jamalpur, Mohanagar	8
45	Doles Shari	64
46	Siam	3
Total		1812

### 2) Sayedabad

SL No.	Name of the Bus Company	Total Number of Buses of the company
1	Star Line	200
2	Diganto Express	26
3	Econo	70
4	Dula Poribahan	22
5	Sundurban Classic	6
6	Sonali poribahan	11
7	Monohordi Pori	29
8	Abhilash	30
9	N.P.Poribahan	6
10	Akota Express	2
11	Asa Poribahan	2
12	M.R.Transport	4
13	Ruposi Bangla	16
14	New oversil	2
15	Al-Arafat pori	4
16	Meghna Express	7
17	Baloful Transport	15
18	Parjotok	22
19	Hamim	26

SL No.	Name of the Bus Company	Total Number of Buses of the company
20	Meghna Travels	40
21	Grameen Service	12
22	Rupali Bangla	6
23	Sugandha	16
24	Megna Travels	10
25	Azmeri Poribohan	3
26	Bapari Poribohan	6
27	Sarbik Poribohan	3
28	Kuwakata Express	4
29	Falguni Poribohan	10
30	Somudro Soikot pori	4
31	Bolessor Poribohan	6
32	Mohona	2
33	New Antora Classic	7
34	Royel Monohardi	48
35	Ahmed Poribohan	5
36	Limon Poribohan	5
37	J.B Travels	12
38	Al-Shamim Express	2
39	Bilash Poribohan	2
40	Sakin Poribohan	2
41	New Sammi	2
42	Borisal Express	4
43	Shakur Poribohan	4
44	Shyamoli	300
45	Hanif Enterprise	800
46	Shyamoli( SP)	400
47	Mamun Enterprise	80
48	Al-Mobaraka	40
49	Ekushe Express	65
50	Sheba Green Line	110
51	Shadhin Bangla	3
52	Tongi para	55
53	Dhaka Express	24
54	K.k Sheba	21
55	Shohagh	100
56	Soudia	100
57	Modern	10
58	Agroduct	6
59	Nilacol	5
60	Tisha Exclusive	90
61	Padma	30
62	Janani Service	18
63	Anando Poribohan	6
64	Kmaa Poribohan	2
65	Lacky Express	4
66	Himachol Express	50
67	S.Alom	56
68	Dream Line	30
69	Year-71	20
70	Eagle Poribohan	180
71	Ilish	2
72	Unique Service	195
73	Jatayat	40
74	Ena	120
75	Shanti Poribohan	80
76	Rafin-Safin	10
77	Ullash poribohan	20
78	New Eagle	6
79	Tisha Exclusive	5
80	New Line	4
81	Ekushe Express	70
82	C.D.M	25
83	Mousumi Poribohan	5
84	Jonaki Service	35
85	Bishmillah	2
86	Borisal Express	19
87	Shopna Santa	10
88	Panchagarh Travels	8
89	Romar	20
90	Elish Poribohan	60
91	C.D.M Travels	300

SL No.	Name of the Bus Company	Total Number of Buses of the company
92	Pabna Express	10
93	Chapay Travels	4
94	Saddam Enterprise	12
95	Western Travels	4
96	M.R Poribohan	4
97	Shana Travels	4
98	United Poribohan	6
99	R.P .Aligans	10
100	Ahsan Enterprise	30
101	Shanti Poribohan	80
Total		4520

### 3) Gabtoli

SL No.	Name of the Bus Company	Total Number of Buses of the company
1	Egale Poribohan	180
2	Sakura Poribohan	67
3	Suborno Poribohan	10
4	Rajbari Poribohan	5
5	Bangla Travel	6
6	K. Line	17
7	Green Bangla Pori	4
8	H.R.Travel	10
9	Kings Poribohan	6
10	Surjo Mukhi	20
11	A.K Travel	62
12	M.M.Poribohan	4
13	Darsona Delux	10
14	Ishordi Express	7
15	J.R Poribohan	55
16	Sarbik Poribohan	45
17	Sonar Tory	17
18	J.Line	12
19	Golden Line	100
20	Sumon Delux	11
21	South Line	27
22	Comfot Line	20
23	Royel Express	30
24	Rabeya Poribohan	10
25	Rajdhuni Express	10
26	Shouhardo Poribohan	13
27	King Fiser Travel	13
28	Sangram Poribohan	16
29	AlamEnterprise	12
30	Tuhin Elite	29
31	Grameen Travel	29
32	Rahobar Enterprise	8
33	Mamun Enterprise	80
34	Rupa	18
35	Meherpur Delux	3
36	Zaker Enterprise	15
37	Sundurban Express	10
38	R.K Exclusive	7
39	Kaliganj Express	18
40	R.M.Travel	4
41	Shoukhin Poribohan	20
42	Sonali poribohan	14
43	S.P.Golden Line	15
44	Fatema Special	7
45	Soheli Poribohan	4
46	Citra Poribohan	2
47	Duruti Poribohan	14
48	Kohinur Poribohan	5
49	Satkhira Express	15
50	Alpha Line	5
51	Rajoni gondha	80
52	Diganto Poribohan	80
53	Sumon Delux	9
54	National Travesl	50
55	Sony Super	8
56	Salma Enterprise	8
57	S.B.Super Delux	14
58	Nabil Poribohan	90

SL No.	Name of the Bus Company	Total Number of Buses of the company
59	Hanif Enterprise	750
60	M.M.Poribohan	8
61	F.k.Super Delux	8
62	Purbasha Poribohan	30
63	Shyamoli Poribohan	400
64	Rasel Enterprise	55
65	Khalek Enterprise	17
66	Sathi Enterprise	4
67	Century Travel	8
68	Bikash Poribohan	23
69	MR.Enterprise	15
70	Sheba Green Line	44
71	Uttara Poribohan	8
72	C.D Delux	12
73	S.B.Super Delux	30
74	Shuvo Bashundhora	20
75	Apu Classic	2
76	Surovi Poribohan	15
77	Anando Poribohan	20
78	Sky Line	4
79	Asad Poribohan	8
80	Himel Poribohan	4
81	Haq Special	6
82	R.B.Travel	12
83	Rojina	30
84	Shohagh Poribohan	80
85	Mim Poribohan	12
Total		3085

#### 4) Sadarghat

Launch Company Name	Launch Size	No of Launch	
Feari Shipping Line	Large & Medium	3	
Faruk Shipping Line		4	
Surovi Navigation		3	
Begum Transport		4	
Prova Shipping Line		4	
M K Shipping Line		4	
Fardin Shipping Line		1	
Shattar Shipping Line		1	
Gazi River Transport		1	
Farhan Navigation & Habiba Navigation		6	
Tuhin Rabbi Shipping		3	
Sharuk Enterprise		2	
JomJom Water Transport		1	
Khan Water Way		3	
A Rahman Shipping Line		1	
M.V Deshantor		1	
Prince Water Way		1	
Mahabuddin Ahmed		3	
Rana Water Transport		13	
Bondhon Water Way		3	
Shuvoraj Shipping Line		1	
Padma Water Way		4	
Jahid Shipping Line		3	
Nijam Shipping Line		1	
Doler Shipping Line		2	
E Ali Shipping Line		3	
Salma Shipping Line		1	
Salma Water Way		6	
Agorpur Navigation & Farhan Navigation		6	
BITWC		5	
Dhaka-Chandpur Route (Company with Single Launch)		29	
Short Routes Launches		Small	120
Total			243

#### Annexure 2: Route

## 1) Mohakhali

SL. No.	Company Name	Route	No. of vehicle / fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
1	BAYSHAKHI	Dhaka - Bakshiganj	18	350	40	2
2	SONAR BANGLA	Dhaka (Mohakhali) - Sherpur, Via-Tangail, Jamalpur.	40	188	40	2
3	SI ENTERPRISE	Dhaka (Mohakhali) - Sirajganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu.	14	128	25	2
4	RIFAT	Dhaka - Rowmari	6	283	30	2
5	ORIN TRAVELS	Dhaka (Mohakhali) -Gaibandha , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Palashbari.	6	257	20	2
6	CROWN	Dhaka (Mohakhali) - Jamalpur, Via- Tangail, Madhupur.	6	173	25	2
7	OVI ENTERPRISE	Dhaka (Mohakhali) - Sirajganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu.	14	128	20	2
8	MADARGANG SPECIAL	Dhaka (Mohakhali) - Jamalpur, Via- Tangail, Madhupur.	12	173	30	2
9	HAZI PARIBAHAN	Dhaka (Mohakhali) - Nalitabari , Via- Bhaluka, Mymensingh.	16	192	30	2
10	ENA	Dhaka (Mohakhali) - Mymensingh, Via-Bhaluka,Trisal.	80	116	35	3
11	ENA	Dhaka (Mohakhali) - Sunamganj , Via- Bhairab,B-Baria, Madhabpur , Shylhet.	12	307	22	2
12	ENA	Dhaka (Mohakhali) - Biani Bazar , Via- Tongi, Bhairab,B-Baria, Moulavibazar	12	286	22	2
13	ENA	Dhaka (Mohakhali) -Rangpur , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra.	12	384	20	1
14	ENA	Dhaka (Mohakhali) -Srimongal	8	238	20	2
15	ENA	Dhaka (Mohakhali)- Habiganj	8	166	25	2
16	ENA	Dhaka (Mohakhali) - Sylhet , Via- Tongi, Bhairab,B-Baria, Madhabpur, Sayestaganj, Sherpur.	40	257	25	2
17	ENA	Dhaka (Mohakhali) -Chittagong	12	242	24	2
18	ENA	Dhaka (Mohakhali)- Cox's Bazar	12	396	20	1
19	ENA	Dhaka (Mohakhali)- Feni	20	149	30	2
20	TUHIN ELITE	Dhaka (Mohakhali) - Chapai Nawabganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu ,Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	3	297	20	1
21	MANIK EXPRESS	Dhaka (Mohakhali) - Lalmonirhat , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Haragacha.	1	340	20	2
22	DESH TRAVELS	Dhaka (Mohakhali) - Chapai Nawabganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu ,Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	6	297	20	2
23	DESH TRAVELS	Dhaka (Mohakhali) - Rajshahi , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,baraigram,( Natun Rasta), Natore.	6	252	20	2
24	DESH TRAVELS	Mohakhali-Kanshat	2	350	20	2
25	NATIONAL TRAVELS	Dhaka (Mohakhali) - Chapai Nawabganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu ,Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	6	297	20	2
26	NATIONAL TRAVELS	Dhaka (Mohakhali) - Rajshahi , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,baraigram,( Natun Rasta), Natore.	6	252	20	2
27	NATIONAL TRAVELS	Mohakhali-Kanshat	2	350	20	2
28	RAJIB	Dhaka (Mohakhali) - Jamalpur, Via-Bhaluka,Mymensingh, Madhupur.	30	202	25	2
29	A C SUPRE	Dhaka (Mohakhali) - Sherpur, Via-Bhaluka,Mymensingh, Madhupur, Jamalpr.	5	227	25	2
30	HAZRAT SHAH JALAL	Dhaka (Mohakhali) - Netrakona, Via-Bhaluka,Mymensingh.	22	155	27	2
31	RAJIB	Dhaka (Mohakhali) - Dharmapasha , Via- Bhaluka, Mymensingh, Netrakona.	3	195	20	4
32	ALAM ASIA	Dhaka (Mohakhali) - Fulbaria,	70	136	20	2

SL. No.	Company Name	Route	No. of vehicle / fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
		Via-Bhaluka,Mymensingh.				
33	GREEN LINE	Dhaka (Mohakhali) - Netrakona, Via-Bhaluka,Mymensingh.	20	155	20	2
34	KONAK CHAPA	Dhaka (Mohakhali) - Dharmapasha , Via-Bhaluka, Mymensingh, Netrakona.	1	183	20	2
35	ISLAM	Dhaka (Mohakhali) - Muktagachha, Via-Bhaluka,Mymensingh.	40	132	20	2
36	IMAM	Dhaka (Mohakhali) - Haluaghat, Via-Bhaluka,Mymensingh.	42	166	25	2
37	SHYAMOLI BANGLA	Dhaka (Mohakhali) - Haluaghat, Via-Bhaluka,Mymensingh.	45	166	23	2
38	ARAFA	Dhaka (Mohakhali) - Dharmapasha , Via-Bhaluka, Mymensingh, Netrakona.	1	181	20	2
39	MONNA PARIBAHAN	Dhaka (Mohakhali) - Nandail	20	167	35	2
40	ANANNA PARIBAHAN	Dhaka (Mohakhali) - Kishoreganj , Via-Kapasias.	40	130	20	3
41	UTTARA ARABIAN TRANSPORT	Dhaka (Mohakhali) - Brahmanbaria, Via-Tongi, Kaliganj,Narsingdi, Bhairab.	35	224	40	2
42	NIRALA SUPER	Dhaka (Mohakhali) - Tangail. Via- Ashulia, Kaliakoir.	30	90	30	2
43	J. K SPECIAL	Dhaka (Mohakhali) -Rangpur , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra.	3	297	40	2
44	JALSHIRI	Dhaka (Mohakhali) - Hossainpur ( Kishoreganj Upazila) , Via- Kapasia.	25	137	20	2
45	JALSHIRI	Dhaka (Mohakhali) - Katiadi , Via- Kapasia.	23	106	40	3
46	TITASH TRAVELS	Dhaka (Mohakhali) - Brahmanbaria, Via-Tongi, Kaliganj,Narsingdi, Bhairab.	16	112	25	2
47	BADSHAH	Dhaka (Mohakhali) - Bhairab, Via-Kaliganj,Ghurashal, Narsingdi.	45	91	40	4
48	ANONO CLASSIC	Dhaka (Mohakhali) - Kishoreganj	28	130	25	3
49	P.P.L SUPER	Dhaka (Mohakhali) - Narsingdi , Via- Tongi, Kaliganj, Ghurashal.	16	55.8	35	4
50	UZAN VATI	Dhaka (Mohakhali) - Kishoreganj	22	130	40	2
51	BINIMOY	Dhaka (Mohakhali) - Kendua Bazar, Via-Tangail, Madhupur.	40	142	20	2
52	SHAH FATEH ALI	Dhaka (Mohakhali) - Naogaon , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,bogra.	40	242	30	2
53	AKOTA TRAVELS	Dhaka (Mohakhali) - Rajshahi , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,baragram,( Natun Rasta), Natore.	16	252	20	2
54	AKOTA TRAVELS	Dhaka (Mohakhali) - Naogaon , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,bogra.	16	242	20	2
55	AKOTA TRAVELS	Dhaka (Mohakhali) - Bogra , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka.	16	192	20	2
56	SR TRAVELS	Dhaka (Mohakhali) - Lalmonirhat , Via-Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Haragacha.	8	380	20	1
57	JAKIR TRAVELS	Dhaka (Mohakhali) - Panchagharh , Via-Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra,Ghoraghat,Dinajpur,Thakurgaon .	2	425	20	1
58	PINGKY	Dhaka (Mohakhali) - Kurigram , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Rangpur, Mithapukur, Haragacha.	3	341	20	2
59	HAZI SARKAR PARIBAHAN	Dhaka (Mohakhali) -Rangpur , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra.	2	297	20	2
60	ECONO EXCLUSIVE	Dhaka (Mohakhali) - Brahmanbaria, Via-Tongi, Kaliganj,Narsingdi, Bhairab.	25	112	27	2
61	MOHANAGAR DHAKA-JAMALPUR	Dhaka (Mohakhali) - Jamalpur, Via-Bhaluka,Mymensingh, Madhupur.	5	202	20	2
62	DOLESWARI	Dhaka (Mohakhali) - Tangail. Via- Ashulia, Kaliakoir.	45	90	30	2
63	SIAM	Dhaka-Rawmari	3	283	25	2
Total			1183	13615.8		131

## 2) Sayedabad

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
1	STAR LINE	Dhaka (Saidabad)- Feni, Via- Comilla.	75	149	32	2
2	STAR LINE	Dhaka (Saidabad)- Parshuram , Via- Comilla, Feni.	4	173	30	2
3	STAR LINE	Dhaka (Saidabad)- Chhagalnaiya, Via- Comilla, Feni.	17	162	30	2
4	STAR LINE	Dhaka (Saidabad)- Sonagazi , Via- Comilla, Feni.	7	168	35	2
5	STAR LINE	Dhaka (Saidabad)- Cox`s Bazar, Via- Comilla, Feni, Chittagong.	2	396	36	1
6	STAR LINE	Dhaka (Saidabad)- Chittagong, Via- Comilla, Feni.	6	242	36	2
7	DIGANTO EXPRESS	Dhaka (Saidabad)- Habiganj, Via- Narsingdi, Bhairab, Madhabpur.	26	166	25	2
8	ECONO	Dhaka (Saidabad)- Chittagong, Via- Comilla, Feni.	1	242	30	2
9	ECONO	Dhaka (Saidabad)- Cox`s Bazar, Via- Comilla, Feni, Chittagong.	1	396	30	1
10	ECONO	Dhaka (Saidabad)- Khagrachhari, Via- Comilla, Feni, Chittagong, Ramgarh.	2	276	25	2
11	ECONO	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmohani, Lakshmipur.	45	194	32	2
12	DOLA PARIBAHAN	Dhaka (Saidabad)- Pirojpur , Via- Mawa, Bhanga, Gopalganj, Bagerhat.	15	223	35	2
13	SUNDURBAN CLASSIC	Dhaka (Saidabad)- Khulna, Via- Mawa, Bhanga, Gopalganj.	3	194	15	1
14	SONALI PARIBAHAN	Dhaka (Saidabad)- Madaripur, Via- Mawa, Bhanga.	11	99	20	2
15	MONOHORDI PORI	Dhaka (Saidabad)- Manahardi, Via- Narsingdi.	26	84	15	2
16	ABHILASH	Saydabad-Bishonondi	20	50	25	3
17	N.P.PARIBAHAN	Dhaka (Saidabad)- Chhatak , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	6	275	25	2
18	AKOTA EXPRESS	Dhaka (Saidabad)- Sunamganj , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	2	307	20	1
19	ASA PORIBAHON	Dhaka (Saidabad)- Sunamganj , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	2	307	30	1
20	M.R. TRANSPORT	Dhaka (Saidabad)- Companiganj, Via- Comilla, Moynamoti Cantonment.	2	257	20	2
21	RUPOSI BANGLA	Dhaka (Saidabad)- Biani Bazar , Via- Narsingdi, Bhairab, Madhabpur, Moulavibazar, Rajnagar.	4	286	20	1
22	RUPOSI BANGLA	Dhaka (Saidabad)- Sunamganj , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	1	307	22	1
23	RUPOSI BANGLA	Saydabad-Diroy	2	350	20	1
24	NEW OVERSIL	Dhaka (Saidabad)- Chhatak , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	2	275	35	1
25	JJ TRAVELS	Dhaka (Saidabad)- Sunamganj , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	1	307	30	1
26	JJ TRAVELS	Saydabad-Diroy	2	355	30	1
27	AL-ARAFAT PORI	Saydabad-Mongla	3	250	25	1
28	MEGHNA EXPRESS	Saydabad-Rayenda	3	280	30	1
29	BALOFUL TRANSPORT	Dhaka (Saidabad)- Khulna, Via- Mawa, Bhanga, Gopalganj.	6	194	35	1
30	BALOFUL TRANSPORT	Saydabad-Pathorgata	1	420	30	1
31	BALOFUL TRANSPORT	Saydabad-Motbaria	2	400	30	1
32	PARJOTOK	Dhaka (Saidabad)- Khulna, Via- Mawa, Bhanga, Gopalganj.	4	194	30	1
33	PARJOTOK	Dhaka (Saidabad)- Pirojpur , Via- Mawa, Bhanga, Gopalganj, Bagerhat.	4	223	30	1
34	PARJOTOK	Dhaka (Saidabad)- Satkhira, Via- Mawa, Bhanga, Gopalganj, Khulna.	2	250	30	1
35	PARJOTOK	Saydabad-Mongla	6	220	35	1
36	PARJOTOK	Saydabad-Rayenda	2	250	30	1
37	PARJOTOK	Saydabad-Rampal	2	200	30	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
38	HAMIM	Dhaka (Saidabad)- Pirojpur , Via-Mawa,Bhanga, Gopalganj,Bagerhat.	4	223	30	1
39	HAMIM	Saydabad-Borguna	2	340	30	1
40	HAMIM	Saydabad-Lohagora	1	300	25	1
41	HAMIM	Saydabad-Bagharhat	4	230	35	1
42	MEGHNA TRAVELS	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	6	194	30	1
43	MEGHNA TRAVELS	Dhaka (Saidabad)- Patuakhali, Via-Mawa,Bhanga , Barisal.	12	192	25	1
44	MEGHNA TRAVELS	Dhaka (Saidabad)- Pirojpur , Via-Mawa,Bhanga, Gopalganj,Bagerhat.	2	223	30	1
45	MEGHNA TRAVELS	Saydabad-Borguna	4	350	30	1
46	GRAMEEN SERVICE	Dhaka (Saidabad)- Pirojpur , Via-Mawa,Bhanga, Gopalganj,Bagerhat.	4	223	30	1
47	GRAMEEN SERVICE	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	4	194	32	1
48	GRAMEEN SERVICE	Dhaka (Saidabad)- Patuakhali, Via-Mawa,Bhanga , Barisal.	3	192	30	1
49	RUPALI BANGLA	Dhaka (Saidabad)- Biani Bazar , Via-Narsingdi,Bhairab,Madhhabpur, Moulavibazar,Rajnagar.	6	286	30	1
50	SUGANDHA	Dhaka (Saidabad)- Barisal , Via-Mawa ,Bhanga, Madaripur.	8	156	45	2
51	MEGNA TRAVELS	Dhaka (Saidabad)- Barisal , Via-Mawa ,Bhanga, Madaripur.	8	156	45	2
52	AZMERI PORIBOHAN	Dhaka (Saidabad)- Patuakhali, Via-Mawa,Bhanga , Barisal.	1	192	22	2
53	BAPARI PORIBOHAN	Saydabad-Kuwakata	1	320	35	2
54	BAPARI PORIBOHAN	Dhaka (Saidabad)- Barisal , Via-Mawa ,Bhanga, Madaripur.	2	156	35	2
55	SARBIK PORIBOHAN	Dhaka (Saidabad)- Barisal , Via-Mawa ,Bhanga, Madaripur.	3	99	15	2
56	KUWAKATA EXPRESS	Saydabad-Kuwakata	2	450	26	1
57	FALGUNI PORIBOHAN	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	4	194	30	2
58	SOMUDRO SOIKOT PORI	Saydabad-Kuwakata	2	395	20	1
59	BOLESSOR PORIBOHAN	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	3	194	27	2
60	MOHONA	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	1	194	25	2
61	NEW ANTORA CLASSIC	Dhaka (Saidabad)- Barisal , Via-Mawa ,Bhanga, Madaripur.	3	156	40	2
62	ROYEL MONOHARDI	Dhaka (Saidabad)- Manahardi, Via-Narsingdi.	46	84	15	4
63	AHMED PORIBOHAN	Dhaka (Saidabad)- Jaflong , Via-Narsingdi,Bhairab,B- Baria, Moulavibazar,Sylhet .	2	319.5	30	2
64	LIMON PORIBOHAN	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	2	307	30	2
65	J.B TRAVELS	Dhaka (Saidabad)- Chhatak , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	6	275	40	2
66	AL-SHAMIM EXPRESS	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	1	307	25	2
67	BILASH PORIBOHAN	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	1	307	25	2
68	SAKIN PORIBOHAN	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	1	307	25	2
69	NEW SAMMI	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	1	307	24	2
70	BORISAL EXPRESS	Saydabad-Pathorkata	2	350	35	2
71	SHAKUR PORIBOHAN	Saydabad-Kuwakata	2	325	35	2
72	SHYAMOLI	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	25	396	25	1
73	SHYAMOLI	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	40	242	25	1
74	SHYAMOLI	Dhaka (Saidabad)- Kaptai , Via-Comilla,Feni, Cahittagong	3	286	25	1



SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
75	SHYAMOLI	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	4	318	25	1
76	SHYAMOLI	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	2	276	25	1
77	SHYAMOLI	Dhaka (Saidabad)- Rangamati, Via-Comilla,Feni,Chittagong.	2	307	25	1
78	SHYAMOLI	Dhaka (Saidabad)- Teknaf, Via-Comilla,Feni,Cox's Bazar.	2	462	25	1
79	SHYAMOLI	Saydabad-Fotikchori	2	280	25	1
80	SHYAMOLI	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	13	257	25	1
81	SHYAMOLI	Dhaka (Saidabad)- Chhatak , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	2	275	25	1
82	SHYAMOLI	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	5	307	25	1
83	SHYAMOLI	Dhaka (Saidabad)- Biani Bazar , Via-Narsingdi,Bhairab,Madhhabpur, Moulavibazar,Rajnagar.	5	286	25	1
84	SHYAMOLI	Saydabad-Diroy	1	200	30	1
85	HANIF ENTERPRISE	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	100	242	30	1
86	HANIF ENTERPRISE	Dhaka (Saidabad)- Cox's Bazar, Via-Comilla,Feni,Chittagong.	12	396	30	1
87	HANIF ENTERPRISE	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	2	276	30	1
88	HANIF ENTERPRISE	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	2	318	30	1
89	HANIF ENTERPRISE	Dhaka (Saidabad)- Rangamati, Via-Comilla,Feni,Chittagong.	2	307	30	1
90	HANIF ENTERPRISE	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	35	257	30	2
91	HANIF ENTERPRISE	Dhaka (Saidabad)- Teknaf, Via-Comilla,Feni,Cox's Bazar.	2	462	25	1
92	HANIF ENTERPRISE	Saydabad-Rawjan	1	280	30	2
93	HANIF ENTERPRISE	Saydabad-Najirhat	2	280	30	2
94	HANIF ENTERPRISE	Saydabad-Dohazari	1	280	30	2
95	HANIF ENTERPRISE	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	2	307	30	1
96	SHYAMOLI( SP)	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	18	257	28	2
97	SHYAMOLI( SP)	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	6	307	28	2
98	SHYAMOLI( SP)	Dhaka (Saidabad)- Chhatak , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	2	275	25	2
99	SHYAMOLI( SP)	Dhaka (Saidabad)- Biani Bazar , Via-Narsingdi,Bhairab,Madhhabpur, Moulavibazar,Rajnagar.	4	286	30	2
100	SHYAMOLI( SP)	Dhaka (Saidabad)- Moulavibazar, Via-Narsingdi,Bhairab,Madhhabpur.	4	203	30	2
101	SHYAMOLI( SP)	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	35	242	30	2
102	SHYAMOLI( SP)	Dhaka (Saidabad)- Cox's Bazar, Via-Comilla,Feni,Chittagong.	15	296	30	2
103	SHYAMOLI( SP)	Dhaka (Saidabad)- Teknaf, Via-Comilla,Feni,Cox's Bazar.	4	462	30	1
104	SHYAMOLI( SP)	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	4	318	30	2
105	SHYAMOLI( SP)	Saydabad-Fotikchori	2	280	30	2
106	SHYAMOLI( SP)	Dhaka (Saidabad)- Kaptai , Via-Comilla,Feni, Cahittagong	4	286	25	2
107	SHYAMOLI( SP)	Dhaka (Saidabad)- Rangamati, Via-Comilla,Feni,Chittagong.	4	307	30	2
108	SHYAMOLI( SP)	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	2	276	25	2
109	MAMUN ENTERPRISE	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	7	307	25	1
110	MAMUN ENTERPRISE	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	7	257	25	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
111	MAMUN ENTERPRISE	Saydabad-Diroy	1	200	25	1
112	MAMUN ENTERPRISE	Saydabad-Moheshpur	1	250	30	1
113	MAMUN ENTERPRISE	Dhaka (Saidabad)- Sunamganj , Via-Narsingdi,Bhairab, Moulavibazar, Sylhet.	8	307	30	1
114	MAMUN ENTERPRISE	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	2	194	30	1
115	MAMUN ENTERPRISE	Dhaka (Saidabad)- Kustia	2	400	30	1
116	MAMUN ENTERPRISE	Dhaka (Saidabad)- Jessore	2	280	25	2
117	MAMUN ENTERPRISE	Dhaka (Saidabad)- Satkhira, Via-Mawa,Bhanga ,Gopalganj,Khulna.	2	250	25	1
118	MAMUN ENTERPRISE	Dhaka (Saidabad)- Bogra	1	200	25	2
119	MAMUN ENTERPRISE	Dhaka (Saidabad)- Sirajganj	1	120	25	2
120	MAMUN ENTERPRISE	Dhaka (Saidabad)- Chowgacha	1	230	25	2
121	AL-MOBARAKA	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	20	257	25	2
122	AL-MOBARAKA	Saydabad-Mohespur	1	250	25	2
123	EKUSHE EXPRESS	Dhaka (Saidabad)- Sonapur , Via- Comilla, Laksham,Chowmohani, Majjdi	45	195	35	2
124	EKUSHE EXPRESS	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	10	396	35	1
125	SHEBA GREEN LINE	Dhaka (Saidabad)- Pirojpur , Via-Mawa,Bhanga, Gopalganj,Bagerhat.	12	223	30	2
126	SHEBA GREEN LINE	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	8	194	30	2
127	SHADHIN BANGLA	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	2	242	35	1
128	TONGI PARA	Dhaka (Saidabad)- Pirojpur , Via-Mawa,Bhanga, Gopalganj,Bagerhat.	30	223	30	1
129	TONGI PARA	Saydabad-Nazirpur	3	230	30	1
130	TONGI PARA	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	10	194	35	1
131	DHAKA EXPRESS	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmohani, Lakshmipur.	18	194	30	2
132	K.K SHEBA	Dhaka (Saidabad)- Kankirhat, Via-Comilla, Feni.	6	176	30	2
133	K.K SHEBA	Dhaka (Saidabad)- Basurhat , Via-Comilla, Feni, Majjdi.	7	216	30	2
134	K.K SHEBA	Saydabad-Jamidurhat	4	230	30	2
135	SHOHAGH	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	5	176	16	2
136	SHOHAGH	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	2	396	20	1
137	SHOHAGH	Dhaka (Saidabad)- B- Baria , Via-Narsingdi, Bhairab.	16	103	18	2
138	SOUDIA	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	20	176	25	2
139	SOUDIA	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	20	396	25	1
140	SOUDIA	Dhaka (Saidabad)- Teknaf, Via-Comilla,Feni,Cox`s Bazar.	4	480	25	1
141	SOUDIA	Saydabad-Fotikchori	4	280	25	2
142	SOUDIA	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	2	318	25	2
143	SOUDIA	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	2	276	25	2
144	SOUDIA	Dhaka (Saidabad)- Kaptai , Via-Comilla,Feni, Cahittagong	2	284	25	2
145	MODERN	Dhaka (Saidabad)- Habiganj, Via-Narsingdi,Bhairab, Madhabpur.	9	166	20	2
146	AGRODUT	Dhaka (Saidabad)- Habiganj, Via-Narsingdi,Bhairab, Madhabpur.	6	166	20	2
147	NILACOL	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmohani, Lakshmipur.	5	194	40	2
148	TISHA EXCLUSIVE	Dhaka (Saidabad)- Hajiganj , Via- Comilla.	50	138	30	2

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149	PADMA	Dhaka (Saidabad)- Chandpur , Via-Comilla, Hajiganj.	30	157	30	2
150	JANANI SERVICE	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmohani, Lakshmpur.	30	194	25	2
151	ANANDO PORIBOHAN	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	3	396	25	1
152	KMAA PORIBOHAN	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	2	257	20	2
153	LACKY EXPRESS	Dhaka (Saidabad)- Habiganj, Via-Narsingdi,Bhairab,Madhampur.	1	166	30	2
154	LACKY EXPRESS	Saydabad-Baniachang	1	240	35	2
155	LACKY EXPRESS	Saydabad-Lokhain	1	200	30	2
156	HIMACHOL EXPRESS	Dhaka (Saidabad)- Lakshmpur , Via-Comilla, Laksham,Chowmohani .	2	177	35	2
157	HIMACHOL EXPRESS	Dhaka (Saidabad)- Sonapur , Via- Comilla, Laksham,Chowmohani, Majidi	40	195	35	2
158	S. ALAM	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	30	242	30	2
159	S. ALAM	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	5	396	30	1
160	S. ALAM	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	2	316	30	2
161	S. ALAM	Dhaka (Saidabad)- Rangamati, Via-Comilla,Feni,Chittagong.	2	307	30	2
162	S. ALAM	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	4	276	30	2
163	S. ALAM	Saydabad-Nazirpur	2	220	30	2
164	S. ALAM	Dhaka (Saidabad)- Kaptai , Via-Comilla,Feni, Cahittagong	2	286	30	2
165	S. ALAM	Saydabad-Kolkata (India)	1	420	30	1
166	DREAM LINE	Dhaka (Saidabad)- Basurhat , Via-Comilla, Feni, Majidi.	25	216	30	2
167	YEAR-71	Dhaka (Saidabad)- Teknaf, Via-Comilla,Feni,Cox`s Bazar.	10	462	30	1
168	EAGLE PORIBOHAN	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	10	242	20	2
169	EAGLE PORIBOHAN	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	8	396	20	1
170	EAGLE PORIBOHAN	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	1	318	30	2
171	EAGLE PORIBOHAN	Dhaka (Saidabad)- Kaptai , Via-Comilla,Feni, Cahittagong	1	286	25	2
172	EAGLE PORIBOHAN	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	2	276	25	2
173	ILISH	Dhaka-Borguna	2	255	35	1
174	UNIQUE SERVICE	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	40	242	20	2
175	UNIQUE SERVICE	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	6	396	30	1
176	UNIQUE SERVICE	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	30	257	20	2
177	UNIQUE SERVICE	Dhaka (Saidabad)- Rangamati, Via-Comilla,Feni,Chittagong.	2	307	25	2
178	UNIQUE SERVICE	Dhaka (Saidabad)- Bandarban, Via-Comilla,Feni,Chittagong	2	318	25	2
179	JATAYAT	Dhaka (Saidabad)- Kishoreganj, Via-Narsingdi, Bhairab.	38	140	15	2
180	ENA	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	24	242	20	2
181	ENA	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	24	396	20	1
182	ENA	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	24	257	20	2
183	ENA	Dhaka (Saidabad)- Sonagazi , Via-Comilla, Feni.	24	168	20	2
184	SHANTI PORIBOHAN	Dhaka (Saidabad)- Khagrachhari, Via-Comilla,Feni,Chittagong, Ramgarh.	16	276	20	2
185	SHANTI PORIBOHAN	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	10	242	36	2
186	SHANTI PORIBOHAN	Dhaka (Saidabad)- Cox`s Bazar, Via-Comilla,Feni,Chittagong.	15	396	36	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
187	RAFIN-SAFIN	Saydabad-Taltola	1	395	25	1
188	RAFIN-SAFIN	Saydabad-Pathorkata	2	300	25	2
189	RAFIN-SAFIN	Saydabad-Rainda	2	320	25	2
190	ULLASH PORIBOHAN	Dhaka (Saidabad)- Comilla, Via-Daudkandi.	4	102	30	2
191	ULLASH PORIBOHAN	Saydabad-Kurigram	4	350	30	1
192	ULLASH PORIBOHAN	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	1	194	35	1
193	NEW EAGLE	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	3	242	22	2
194	TISHA EXCLUSIVE	Dhaka (Saidabad)- Comilla, Via-Daudkandi.	5	102	30	2
195	NEW LINE	Dhaka (Saidabad)- Sylhet , Via-Narsingdi,Bhairab, Moulavibazar.	2	257	20	2
196	EKUSHE EXPRESS	Dhaka (Saidabad)- Noakhali( Majidi) , Via-Comilla, Feni.	65	188	30	2
197	C.D.M	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	18	242	35	2
198	MOUSUMI PORIBOHAN	Dhaka (Saidabad)- Lakshmipur , Via-Comilla, Laksham,Chowmohani .	2	177	30	2
199	JONAKI SERVICE	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmohani, Lakshmipur.	30	194	40	2
200	BISHMILLAH	Dhaka (Saidabad)- Habiganj, Via-Narsingdi,Bhairab,Madhhabpur.	2	166	25	2
201	BORISAL EXPRESS	Saydabad-Pirgacha	7	550	30	1
202	BORISAL EXPRESS	Saydabad-Pathorkata	2	350	30	2
203	SHOPNA SANTA	Saydabad-Panchagarh	1	450	25	1
204	SHOPNA SANTA	Saydabad-Dimla	1	400	25	1
205	SHOPNA SANTA	Saydabad-Bawlaganjo	1	400	25	1
206	SHOPNA SANTA	Saydabad-Laldighi	1	400	25	1
207	PANCHAGARHTRAVELS	Saydabad-Panchagarh	4	450	25	1
208	ROMAR	Saydabad-Fulbari	1	300	25	2
209	ROMAR	Saydabad-Panchagarh	1	450	25	1
210	ROMAR	Saydabad-Jaldhaka	1	400	40	1
211	ROMAR	Saydabad-Chilmari	1	385	40	1
212	ROMAR	Saydabad-Bhurungamari	1	450	40	1
213	ELISH PORIBOHAN	Saydabad-Borguna	2	350	35	2
214	ELISH PORIBOHAN	Saydabad-Mawa	54	50	50	4
215	C.D.M TRAVELS	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	110	242	35	2
216	C.D.M TRAVELS	Dhaka (Saidabad)- Cox's Bazar, Via-Comilla,Feni,Chittagong.	120	396	35	1
217	PABNA EXPRESS	Saydabad-Pabna	10	250	18	2
218	CHAPAY TRAVELS	Saydabad-Nawabganj	2	325	18	1
219	SADDAM ENTERPRISE	Saydabad-Kurigram	4	355	20	1
220	SADDAM ENTERPRISE	Saydabad-Lalmonirhat	2	340	18	2
221	WESTERN TRAVELS	Saydabad-Nawabganj	2	400	20	1
222	M.R PORIBOHAN	Dhaka (Saidabad)- Chittagong, Via-Comilla,Feni.	2	242	18	2
223	SHANA TRAVELS	Saydabad-Lal Monirhat	2	409	20	1
224	UNITED PORIBOHAN	Saydabad-Chilmari	1	385	35	1
225	UNITED PORIBOHAN	Saydabad-Gangachhara	1	340	20	2
226	UNITED PORIBOHAN	Saydabad-Bhurungamari	1	400	22	1
227	R.P .ALIGANS	Saydabad-Nawabganj	2	315	20	1
228	AHSAN ENTERPRISE	Saydabad-Baliadangi	5	450	20	1
229	AHSAN ENTERPRISE	Saydabad-Panchagarh	5	450	20	1
230	AHSAN ENTERPRISE	Saydabad-Kurigram	3	361	20	1
231	SHANTI PORIBOHAN	Saydabad-Panchagarh	1	450	20	1
232	SHANTI	Saydabad-Nilphamari	1	377	20	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (km)	Average No. Of Passengers	Number of daily Single Trips
	PORIBOHAN					
Total			2168	64108.5		361

### 3) Gabtoli

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
1	EGALE PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	16	272	30	1
2	EGALE PORIBOHAN	Gobtoli-Paikgacha	2	272	30	1
3	EGALE PORIBOHAN	Dhaka( Gabtoli )- Narail, Via- Patoria, Faridpur, Magura, Arrpara, Jessore.	4	236	30	1
4	EGALE PORIBOHAN	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	8	320	30	1
5	EGALE PORIBOHAN	Dhaka( Gabtoli )- Benapole, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	8	250	30	1
6	EGALE PORIBOHAN	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	20	242	30	1
7	EGALE PORIBOHAN	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	2	304	30	1
8	EGALE PORIBOHAN	Dhaka-Vandhuri	5	201	30	1
9	EGALE PORIBOHAN	Dhaka-Kuakata	2	339	25	1
10	EGALE PORIBOHAN	Dhaka-Chittagong	22	248	25	1
12	SAKURA PORIBOHAN	Dhaka-Sorupkathi	2	246	30	2
13	SAKURA PORIBOHAN	Dhaka( Gabtoli )- Jhalokathi, Via- Paturia, Faridpur, Madaripur, Barisal.	2	258	30	2
14	SAKURA PORIBOHAN	Dhaka-Mothbaria	2	295	30	2
15	SAKURA PORIBOHAN	Dhaka( Gabtoli )- Pirojpur, Via- Paturia, Faridpur, Barisal, Jhalokati .	2	284	30	2
16	SAKURA PORIBOHAN	Dhaka-Pathorghata	2	178	30	2
17	SAKURA PORIBOHAN	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	4	304	30	2
18	SAKURA PORIBOHAN	Dhaka-Kuakata	3	339	30	2
19	SAKURA PORIBOHAN	Dhaka-Vakutia	2	184	30	2
20	SAKURA PORIBOHAN	Dhaka-Potuakhali	2	278	30	2
21	SAKURA PORIBOHAN	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	5	242	30	2
22	SAKURA PORIBOHAN	Dhaka-Taholi	2	239	30	2
23	SUBORNO PORIBOHAN	Dhaka( Gabtoli )- Gopalganj, Via- Paturia, Faridpur, Muksudpur. .	2	204	35	2
24	SUBORNO PORIBOHAN	Dhaka-Kotali para	1	186	35	2
25	SUBORNO PORIBOHAN	Dhaka-Vanga	1	230	35	2
26	SUBORNO PORIBOHAN	Dhaka-Narua	1	118	35	2
27	SUBORNO PORIBOHAN	Dhaka-Kumarkhali	2	158	35	2
28	SUBORNO PORIBOHAN	Dhaka( Gabtoli )- Faridpur, Via- Paturia.	1	209	35	2
29	RAJBARI PORIBOHAN	Dhaka-Pangsha	4	122	35	2
30	BANGLA TRAVEL	Dhaka( Gabtoli )- Narail, Via- Patoria, Faridpur, Magura, Arrpara, Jessore.	3	236	35	1
31	K. LINE	Dhaka-Shamnagor	2	370	30	1
32	K. LINE	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	9	320	30	1
33	GREEN BANGLA PORI	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	3	320	40	2
34	GREEN BANGLA PORI	Dhaka-Shamnagor	2	272	40	2
35	H.R.TRAVEL	Dhaka( Gabtoli )- Satkhira, Via- Paturia,	5	320	30	2

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
		Faridpur, Magura,Arrpara,Jessore, Khulna.				
36	H.R.TRAVEL	Dhaka-Paigacha	2	272	30	2
37	KINGS PORIBOHAN	Dhaka( Gabtoli ) -Pabna , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu .	6	223	30	2
38	SURJO MUKHI	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	5	242	35	2
39	SURJO MUKHI	Dhaka( Gabtoli )- Faridpur, Via- Paturia.	1	109	40	2
40	SURJO MUKHI	Dhaka( Gabtoli )- Alfadanga, Via- Paturia, Faridpur	10	158	40	2
41	A.K TRAVEL	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	12	272	30	2
42	A.K TRAVEL	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	12	320	28	2
43	A.K TRAVEL	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	2	250	28	2
44	A.K TRAVEL	Dhaka( Gabtoli )- Narail, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	2	236	30	2
45	A.K TRAVEL	Dhaka-Paigacha	2	272	30	2
46	M.M.PORIBOHAN	Dhaka( Gabtoli )- Magura, Via- Paturia, Faridpur.	2	156	30	2
47	M.M.PORIBOHAN	Dhaka-Kumarkhali	2	145	28	2
48	DARSONA DELUX	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura,Jhenaidah.	8	206	30	2
49	ISHORDI EXPRESS	Dhaka( Gabtoli )- Ishwardi, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Pabna.	6	217	30	2
50	J.R PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura,Jhenaidah.	8	206	35	2
51	J.R PORIBOHAN	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura,Jhenaidah, Chuadanga.	14	249	30	2
52	J.R PORIBOHAN	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura,Jhenaidah.	11	230	30	2
53	SARBIK PORIBOHAN	Dhaka-Madaripur	30	177	35	2
54	SARBIK PORIBOHAN	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	8	242	35	2
55	SONAR TORY	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	2	304	27	2
56	SONAR TORY	Dhaka-Mathbaria	2	295	25	2
57	SONAR TORY	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	2	242	25	2
58	SONAR TORY	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura,Jhenaidah.	5	206	30	2
59	J.LINE	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura,Jhenaidah.	4	206	25	2
60	J.LINE	Dhaka-Chowgacha	6	215	25	2
61	GOLDEN LINE	Dhaka-Faridpur	60	109	35	2
62	GOLDEN LINE	Dhaka( Gabtoli ) - Gopalganj, Via- Paturia, Faridpur, Muksudpur. .	16	204	40	2
63	GOLDEN LINE	Dhaka-Kuakata	2	350	30	2
64	GOLDEN LINE	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	2	304	30	2
65	GOLDEN LINE	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	4	242	30	2
66	GOLDEN LINE	Dhaka( Gabtoli ) - Pirojpur, Via- Paturia, Faridpur, Barisal, Jhalokati .	2	284	30	2
67	SUMON DELUX	Dhaka-Chowgacha	3	215	30	2
68	SUMON DELUX	Dhaka( Gabtoli )- Chuadanga, Via- Paturia, Faridpur, Magura, Jhinaidah.	5	216	30	2
69	SUMON DELUX	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura, Jhenaidah.	3	230	30	2
70	SOUTH LINE	Dhaka-Modhukhali	2	122	30	2
71	SOUTH LINE	Dhaka-Nagurkanda	2	135	30	2
72	SOUTH LINE	Dhaka-Moinda	2	107	30	2
73	SOUTH LINE	Dhaka-Vatiapara	2	217	30	2
74	SOUTH LINE	Dhaka( Gabtoli )- Faridpur, Via- Paturia.	17	110	30	2
75	COMFOT LINE	Dhaka( Gabtoli ) - Pirojpur, Via- Paturia, Faridpur, Barisal, Jhalokati .	4	284	35	2
76	COMFOT LINE	Dhaka-Katalipara	2	186	35	2
77	COMFOT LINE	Dhaka-Kalia	2	232	35	2
78	COMFOT LINE	Dhaka-Najirpur	11	295	35	2
79	ROYEL EXPRESS	Dhaka-Chowgacha	2	215	30	2

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
80	ROYEL EXPRESS	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura,Jhenaidah.	10	206	30	2
81	ROYEL EXPRESS	Dhaka( Gabtoli )- Chuadanga, Via- Paturia, Faridpur,Magura,Jhenaidah.	16	216	30	2
82	ROYEL EXPRESS	Dhaka-Chittagong, Via- Comilla,Feni.	2	262	25	2
83	RABEYA PORIBOHAN	Dhaka-Kumarkhali	10	158	30	2
84	RAJDHUNI EXPRESS	Dhaka-Najirpur	10	260	35	2
85	SHOUHARDO PORIBOHAN	Dhaka-Miregebazar	3	139	35	2
86	SHOUHARDO PORIBOHAN	Dhaka-Naduriaghat	3	149	35	2
87	SHOUHARDO PORIBOHAN	Dhaka-Shengrum	4	167	30	2
88	SHOUHARDO PORIBOHAN	Dhaka-Khulumbari	1	170	30	2
89	SHOUHARDO PORIBOHAN	Dhaka-Narua bazar	1	118	30	2
90	KING FISER TRAVEL	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	4	320	35	2
91	KING FISER TRAVEL	Dhaka-Paikgacha	4	272	35	2
92	SANGRAM PORIBOHAN	Dhaka-Samnagar	5	380	32	1
93	ALAMENTERPRISE	Dhaka( Gabtoli )-Ranisankail, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	3	430	45	1
94	ALAMENTERPRISE	Dhaka( Gabtoli )- Panchagarh, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	3	424	45	1
95	TUHIN ELITE	Dhaka( Gabtoli )-Nawabganj , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	15	293	20	2
96	TUHIN ELITE	Dhaka( Gabtoli )-Nawabganj , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	2	330	20	2
97	TUHIN ELITE	Dhaka( Gabtoli )-Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore.	5	247	20	2
98	TUHIN ELITE	Dhaka-Rohanpur	2	324	20	2
99	GRAMEEN TRAVEL	Dhaka-Kansat	4	330	25	2
100	GRAMEEN TRAVEL	Dhaka-Rohanpur	2	324	25	2
101	GRAMEEN TRAVEL	Dhaka( Gabtoli )-Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore.	1	247	25	2
102	GRAMEEN TRAVEL	Dhaka( Gabtoli )-Nawabganj , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	20	293	25	2
103	RAHOBAR ENTERPRISE	Dhaka( Gabtoli )-Ranisankail, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	6	450	30	1
104	MAMUN ENTERPRISE	Dhaka-Shamnagar	5	380	30	1
105	MAMUN ENTERPRISE	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	1	320	30	1
106	MAMUN ENTERPRISE	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	1	272	30	1
107	MAMUN ENTERPRISE	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	1	250	30	1
108	MAMUN ENTERPRISE	Dhaka-Jibonnagar	2	250	30	1
109	MAMUN ENTERPRISE	Dhaka-Meheshpur	2	230	30	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
110	MAMUN ENTERPRISE	Dhaka-Chowgacha	1	240	30	1
111	RUPA	Dhaka( Gabtoli )- Dinajpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Ghoraghat.	4	330	40	1
112	RUPA	Dhaka-Ranisankail	4	450	40	1
113	RUPA	Dhaka( Gabtoli )- Gaibandha , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Palashbari.	6	268	40	2
114	RUPA	Dhaka-Rohanpur	4	335	40	1
115	MEHERPUR DELUX	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga.	3	249	32	2
116	ZAKER ENTERPRISE	Dhaka( Gabtoli )- Alfadanga, Via- Paturia, Faridpur	5	158	35	2
117	ZAKER ENTERPRISE	Dhaka-Kotali para	2	220	35	2
118	ZAKER ENTERPRISE	Dhaka-Vatia para	1	180	35	2
119	ZAKER ENTERPRISE	Dhaka( Gabtoli )- Faridpur, Via- Paturia.	2	110	35	2
120	ZAKER ENTERPRISE	Dhaka( Gabtoli )- Gopalganj, Via- Paturia, Faridpur, Muksudpur. .	1	204	35	2
121	ZAKER ENTERPRISE	Dhaka-Lahoria	3	250	35	2
122	SUNDURBAN EXPRESS	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	10	320	30	2
123	R.K EXCLUSIVE	Dhaka-Shilokupa	3	210	20	2
124	R.K EXCLUSIVE	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga.	4	249	20	2
125	KALIGANJ EXPRESS	Dhaka-Chowgacha	3	240	30	1
126	KALIGANJ EXPRESS	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	2	206	30	1
127	KALIGANJ EXPRESS	Dhaka(Gabtoli)-Kaliganj	2	192	30	1
128	R.M.TRAVEL	Dhaka-Shamnagor	2	380	30	1
129	SHOUKHIN PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	7	272	30	2
130	SHOUKHIN PORIBOHAN	Dhaka-Paikgacha	2	290	30	2
131	SHOUKHIN PORIBOHAN	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	2	250	30	2
132	SHOUKHIN PORIBOHAN	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	2	320	30	1
133	SONALI PORIBAHAN	Dhaka-Chowgacha	5	230	30	2
134	SONALI PORIBAHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	3	206	30	2
135	SONALI PORIBAHAN	Dhaka-Shamanta	5	250	30	2
136	S.P.GOLDEN LINE	Dhaka-Shamnagor	4	380	30	1
137	S.P.GOLDEN LINE	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	7	320	30	2
138	FATEMA SPECIAL	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura, Jhenaidah.	6	230	30	2
139	SOHELI PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	1	206	45	1
140	SOHELI PORIBOHAN	Dhaka-Chowgacha	1	230	45	1
141	CITRA PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	1	206	30	1
142	DURUTI PORIBOHAN	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	3	320	35	1
143	DURUTI PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	4	292	35	1
144	KOHINUR PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	1	206	25	2
145	KOHINUR PORIBOHAN	Dhaka-Chowgacha	1	220	25	2
146	SATKHIRA EXPRESS	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	10	320	25	2
147	ALPHA LINE	Dhaka (Mohakhali) - Sarishabari,	5	240	30	2



SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
		Via-Tangail.				
148	RAJONI GONDHA	Dhaka( Gabtoli ) -Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore.	6	247	30	1
149	DIGANTO PORIBOHAN	Dhaka( Gabtoli )- Bagerhat, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	4	310	35	1
150	DIGANTO PORIBOHAN	Dhaka( Gabtoli )- Mongla , Via- Paturia, Faridpur,Magura,Arrapara,Jessore,Khulna .	2	300	40	1
151	DIGANTO PORIBOHAN	Dhaka( Gabtoli ) - Pirojpur, Via- Paturia, Faridpur,Barisal,Jhalokati .	2	284	35	1
152	DIGANTO PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	2	272	35	1
153	DIGANTO PORIBOHAN	Dhaka-Kotalipara	9	230	40	1
154	DIGANTO PORIBOHAN	Dhaka-Kalia	3	250	40	1
155	SUMON DELUX	Dhaka-Chowgacha	4	230	30	2
156	SUMON DELUX	Dhaka-Alfadanga	2	240	30	2
157	SUMON DELUX	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura,Jhenaidah.	2	230	30	2
158	NATIONAL TRAVESL	Dhaka( Gabtoli )-Nawabganj , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	3	293	30	1
159	NATIONAL TRAVESL	Dhaka( Gabtoli ) -Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore.	20	247	35	2
160	SONY SUPER	Dhaka( Gabtoli )- Ishwardi, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Pabna.	7	217	35	2
161	SALMA ENTERPRISE	Dhaka( Gabtoli )- Dinajpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	2	330	35	2
162	SALMA ENTERPRISE	Dhaka( Gabtoli )- Hili, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Joypurhat.	2	268	35	2
163	SALMA ENTERPRISE	Dhaka-Dhamurhat	2	265	35	2
164	S.B.SUPER DELUX	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura,Jhenaidah.	2	230	25	2
165	S.B.SUPER DELUX	Dhaka-Shoulkupa	11	250	30	2
166	NABIL PORIBOHAN	Dhaka( Gabtoli )- Rangpur , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	16	308	30	2
167	NABIL PORIBOHAN	Dhaka( Gabtoli )- Dinajpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	15	330	30	2
168	NABIL PORIBOHAN	Dhaka-Shetabganj	2	360	30	1
169	NABIL PORIBOHAN	Dhaka-Ranisankail	1	390	30	1
170	NABIL PORIBOHAN	Dhaka( Gabtoli )- Panchagarh, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	6	424	30	1
171	NABIL PORIBOHAN	Dhaka( Gabtoli )- Thakurgaon, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur.	7	387	30	1
172	NABIL PORIBOHAN	Dhaka( Gabtoli )- Chilmari, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Kurigram.	4	367	30	1
173	NABIL PORIBOHAN	Dhaka-Bhurungamari	3	395	35	1
174	NABIL PORIBOHAN	Dhaka( Gabtoli )- Kurigram, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Haragachha.	1	353	30	1
175	NABIL PORIBOHAN	Dhaka-Fulbari	1	340	25	2
176	NABIL PORIBOHAN	Dhaka-Burimari	2	434	32	1
177	NABIL PORIBOHAN	Dhaka-Vowlagong	2	230	35	2
178	NABIL PORIBOHAN	Dhaka-Chilahati	3	400	30	1
179	NABIL PORIBOHAN	Dhaka( Gabtoli )-Debiganj, Via- Nabinagar,	4	377	32	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
		Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur, Saidpur.				
180	NABIL PORIBOHAN	Dhaka-Dimla	2	371	30	1
181	NABIL PORIBOHAN	Dhaka-Kisorganj-Joldhaka	2	350	30	2
182	NABIL PORIBOHAN	Dhaka( Gabtoli )-Domar, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur, Saidpur.	2	350	30	2
183	HANIF ENTERPRISE	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	5	320	25	2
184	HANIF ENTERPRISE	Dhaka( Gabtoli )- Bagerhat, Via- Paturia, Faridpur, Magura, Arrpara, Jessore, Khulna.	5	310	25	2
185	HANIF ENTERPRISE	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	35	272	25	2
186	HANIF ENTERPRISE	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	6	250	25	2
187	HANIF ENTERPRISE	Dhaka-Paikgacha	4	300	30	2
188	HANIF ENTERPRISE	Dhaka( Gabtoli )- Narail, Via- Patoria, Faridpur, Magura, Arrpara, Jessore.	4	236	30	2
189	HANIF ENTERPRISE	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	18	242	30	2
190	HANIF ENTERPRISE	Dhaka( Gabtoli ) - Jhalokathi, Via- Paturia, Faridpur, Madaripur, Barisal.	4	258	30	2
191	HANIF ENTERPRISE	Dhaka-Vandhuri	3	300	30	2
192	HANIF ENTERPRISE	Dhaka-Kuakata	2	350	25	1
193	HANIF ENTERPRISE	Dhaka-Matbaria	2	320	30	2
194	HANIF ENTERPRISE	Dhaka-Amua	2	310	30	2
195	M.M.PORIBOHAN	Dhaka-Kumarkhali	5	180	30	2
196	M.M.PORIBOHAN	Dhaka-Shoulkupa	2	200	30	2
197	F.K.SUPER DELUX	Dhaka-Shoulkupa	6	200	30	2
198	PURBASHA PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	10	206	30	2
199	PURBASHA PORIBOHAN	Dhaka-Alfadanga	18	240	30	2
200	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli )- Panchagarh, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Ghoraghat, Dinajpur, Thakurgaon.	5	424	20	1
201	SHYAMOLI PORIBOHAN	Dhaka-Dinajpur	7	330	20	1
202	SHYAMOLI PORIBOHAN	Dhaka-Joypurhat	6	247	20	1
203	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli )- Gaibandha , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Palashbari.	5	268	20	1
204	SHYAMOLI PORIBOHAN	Dhaka-Kustia	9	151	25	2
205	SHYAMOLI PORIBOHAN	Dhaka-Naogaon	10	243	20	2
206	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli ) -Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Baraigram( Natun Rasta), Natore.	2	247	25	2
207	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli ) -Pabna , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu .	5	223	20	2
208	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli )- Rangpur , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	5	308	20	2
209	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli )- Kurigram, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Haragachha.	1	353	25	1
210	SHYAMOLI PORIBOHAN	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga.	4	249	25	1
211	RASEL ENTERPRISE	Dhaka-Chingra bazar	1	250	35	1
212	RASEL ENTERPRISE	Dhaka-Shamnagar	1	400	35	1
213	RASEL ENTERPRISE	Dhaka-Nangolbad	1	190	40	2
214	RASEL ENTERPRISE	Dhaka-Danga para	1	210	40	2
215	KHALEK	Dhaka( Gabtoli )- Kurigram, Via-	2	353	30	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
	ENTERPRISE	Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Haragachha.				
216	KHALEK ENTERPRISE	Dhaka-Burimari	2	434	30	1
217	KHALEK ENTERPRISE	Dhaka( Gabtoli )- Thakurgaon, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Ghoraghat, Dinajpur.	1	387	30	1
218	KHALEK ENTERPRISE	Dhaka( Gabtoli )- Rangpur , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	1	308	30	1
219	KHALEK ENTERPRISE	Dhaka( Gabtoli )- Saidpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur.	1	338	30	1
220	SATHI ENTERPRISE	Dhaka-Volahat	2	350	27	1
221	CENTURY TRAVEL	Dhaka-Chowgacha	4	230	30	2
222	BIKASH PORIBOHAN	Dhaka( Gabtoli ) - Gopalganj, Via- Paturia, Faridpur, Muksudpur. .	5	204	35	1
223	BIKASH PORIBOHAN	Dhaka-Madaripur	3	177	35	1
224	BIKASH PORIBOHAN	Dhaka-Danga para	1	180	35	1
225	BIKASH PORIBOHAN	Dhaka-Lahuria	4	290	30	1
226	BIKASH PORIBOHAN	Dhaka( Gabtoli )- Alfadanga, Via- Paturia, Faridpur	4	158	30	2
227	MR. ENTERPRISE	Dhaka-Shamnagor	5	380	30	1
228	SHEBA GREEN LINE	Dhaka-Nazirpur	10	260	30	2
229	UTTARA PORIBOHAN	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	4	206	30	1
230	C.D DELUX	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga.	7	249	30	2
231	C.D DELUX	Dhaka-Alfadanga	5	240	30	2
232	S.B.SUPER DELUX	Dhaka-Shoukupa	15	270	30	2
233	S.B.SUPER DELUX	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga.	6	249	30	2
234	SHUVO BASHUNDHORA	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	4	272	30	1
235	SHUVO BASHUNDHORA	Dhaka-Shamnagor	2	380	30	1
236	SHUVO BASHUNDHORA	Dhaka-Jessore	8	212	30	2
237	APU CLASSIC	Dhaka-Ranir Bandar	1	332	18	1
238	SUROVI PORIBOHAN	Dhaka-Pathorghata	2	340	30	1
239	SUROVI PORIBOHAN	Dhaka-Kuakata	2	350	30	1
240	SUROVI PORIBOHAN	Dhaka-Tetulia	1	320	30	1
241	SUROVI PORIBOHAN	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	2	304	30	1
242	SUROVI PORIBOHAN	Dhaka-Bhandaria	1	290	25	1
243	ANANDO PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura, Arrpara, Jessore.	6	272	35	2
244	ANANDO PORIBOHAN	Dhaka-Paikgacha	4	300	35	2
245	ANANDO PORIBOHAN	Dhaka-Alfadanga	2	250	40	2
246	SKY LINE	Dhaka-Shoukupa	4	250	30	2
247	ASAD PORIBAHON	Dhaka( Gabtoli )- Dinajpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Ghoraghat.	4	330	30	2
248	ASAD PORIBAHON	Dhaka( Gabtoli )- Hili, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Joypurhat.	4	268	30	2
249	HIMEL PORIBOHAN	Dhaka( Gabtoli )- Thakurgaon, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Ghoraghat, Dinajpur.	1	387	40	1
250	HIMEL PORIBOHAN	Dhaka( Gabtoli )- Kurigram, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur,	1	353	40	1

SL. No.	Company Name	Route	No. of vehicle/ fleet for the route	Route Length (KM)	Average No. Of Passengers	Number of daily Single Trips
		Haragachha.				
251	HAQ SPECIAL	Dhaka( Gabtoli )- Kurigram, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Haragachha.	4	353	30	1
252	R.B.TRAVEL	Dhaka-Nougamanda	3	230	35	2
253	R.B.TRAVEL	Dhaka-Fulbari	2	340	35	2
254	R.B.TRAVEL	Dhaka-Bhurungamari	5	395	35	1
255	R.B.TRAVEL	Dhaka( Gabtoli )- Dinajpur, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	2	330	35	2
256	ROJINA	Dhaka( Gabtoli )- Panchagarh, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	2	424	30	1
257	ROJINA	Dhaka( Gabtoli )-Debiganj, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Rangpur,Saidpur.	2	377	30	1
258	ROJINA	Dhaka-Burimari	2	434	30	1
259	ROJINA	Dhaka( Gabtoli )- Dinajpur, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	4	330	30	1
260	ROJINA	Dhaka-Lakmoroth	2	420	25	1
261	ROJINA	Dhaka( Gabtoli )-Ranisankail, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	4	390	25	1
262	ROJINA	Dhaka-Kumarkhali	6	170	30	2
263	SHOHAGH PORIBOHAN	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	12	272	30	1
264	SHOHAGH PORIBOHAN	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	13	250	30	1
265	SHOHAGH PORIBOHAN	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	6	350	30	1
266	SHOHAGH PORIBOHAN	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	1	320	30	1
267	MIM PORIBOHAN	Dhaka( Gabtoli )- Dinajpur, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	4	330	35	1
268	MIM PORIBOHAN	Dhaka( Gabtoli )-Ranisankail, Via-Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	2	390	35	1
269	MIM PORIBOHAN	Dhaka( Gabtoli )-Dimla, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Rangpur,Saidpur.	2	371	35	1
270	MIM PORIBOHAN	Dhaka-Debiganj	2	377	35	1
271	MIM PORIBOHAN	Dhaka( Gabtoli )- Saidpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Rangpur.	2	338	35	2

#### 4) Sadarghat

Launch Company Name	Launch Name	Route
Fearli Shipping Line	TASRIF-2	Dhaka-Barisal
	TASRIF-3	Dhaka-Barisal
	TASRIF-4	Dhaka-Barisal
Faruk Shipping Line	M.V KALAM KHAN-1	Dhaka-Barisal
	M.V SATTAR KHAN-1	Dhaka-Patuakhali
	M.V MOSIRON KHAN-1	Dhaka-Kalaia
	M.V NAZMA KHAN	Dhaka-Barguna
Surovi Navigation	M.V SUROVI-7	Dhaka-Barisal
	M.V SUROVI-8	Dhaka-Barisal
	M.V SUROVI-9	Dhaka-Barisal
Begum Transport	M.V A R JAN-1	Dhaka-Boga-Patuakhali
	M.V DIPRAJ-2	Dhaka-Boga-Patuakhali
	M.V DIPRAJ-4	Dhaka-Madaripur
	M.V ONNO TOMA-1	Dhaka-Madaripur
Prova Shipping Line	M.V MANIK-3	Dhaka-Dulachor Via Mohanpur
	M.V MANIK-8	Dhaka-Dulachor
	M.V MANIK-5	Dhaka-Muladi Via Shoula
	M.V MANIK-9	Dhaka-Ghosherhat Via Nazirpur
M K Shipping Line	M.V MOUSHUMI	Dhaka-Betagi-Bamna-Fuljhuri-Kakchira-Barguna
	M.V PUBALI-1	Dhaka-Betagi-Bamna-Fuljhuri-Kakchira-Barguna
	M.V SUNDORBAN-2	Dhaka-Betagi-Bamna-Fuljhuri-Kakchira-Barguna
	M.V SUNDORBAN-5	Dhaka-Betagi-Bamna-Fuljhuri-Kakchira-Barguna
Fardin Shipping Line	M.V RAJDUT-7	Dhaka-Hularhat-Bhandaria
Shattar Shipping Line	MV ASHA JAOA-2	Dhaka-Boga-Patuakhali-Galachipa
Gazi River Transport	MV GAZI SALAHUDDIN	Dhaka-Borhanuddin-Vaia-Dhulia
Farhan Navigation & Habiba Navigation	MV TIPU-2	Dhaka-Daulatkha
	MV FARHAN-1	Dhaka-Daulatkha
	MV FARHAN-3,4	Dhaka-Hatia
	MV PANAMA	Dhaka-Masterhat
	M.V Tipu-5	Dhaka-Hajirhat
	MV FARHAN-5,6	Dhaka-Betua (Chorfasion)
Tuhin Rabbi Shipping	M.V OBHIJAN-5	Dhaka-Soula-Muladi
	M.V OBHIJAN-3	Dhaka-Soula-Muladi
	M.V OBHIJAN-7	Dhaka-Hulerhat-Vandaria
Sharuk Enterprise	M.V SHARUK	Dhaka-Ghosherhat
	M.V LALI	Dhaka-Letra
JomJom Water Transport	M.V BALIA	Dhaka-Vhola-Dhaka
Khan Water Way	M.V GLORI OB SREENAGAR-7	Dhaka-Vhola
	M.V GLORI OB SREENAGAR-3	Dhaka-Lalmohan Via Nagirpur
	M.V GLORI OB SREENAGAR-2	Dhaka-Rangabali/Via Kalaia
A Rahman Shipping Line	M.V OGRDUT PLUSE	Dhaka-Hularhat-Vhandaria
M.V Deshantor	M.V DESHANTOR	Dhaka-Borishal-Dhaka
Prince Water Way	M.V RIPOL	Dhaka-Chadpur
Mahabuddin Ahmed	M.V SONERTORI	Dhaka-Chadpur
	M.V SONERTORI-1	Dhaka-Chadpur
	M.V SONERTORI-2	Dhaka-Chadpur
Rana Water Transport	M.V KIRTONKHOLA-1	Dhaka-Barishal
	M.V AULAD-7	Dhaka-Barishal
	M.V PRINCE AULAD-4	Dhaka-Bhasanchor Via Hijla-Shoula
	M.V SOMRAT-2	Dhaka-Bhasanchor Via Hijla-Shoula
	M.V PRINCE AULAD-2	Dhaka-Muladi
	M.V LAMIA (DIBA)	Dhaka-Muladi
	M.V MOHARAJ-7	Dhaka-Hularhat
	M.V PRINCE AULAD	Dhaka-Demuda
	M.V KAJOL	Dhaka-Demuda
	M.V JUBORAJ-4,2	Dhaka-Barguna
	M.V NUSRAT-1	Dhaka-Barguna
	M.V KING SAMRAT-1	Dhaka-Barguna
	M.V JUBORAJ-1	Dhaka-Paisarhat
Bondhon Water Way	M.V RAJHONGSO-7,8	Dhaka-Bhasanchor
	M.V BONDHON-5	Dhaka-Kalaia
	M.V BONDHON-7	Dhaka-Borhanuddin
Shuvoraj Shipping Line	M.V KAJOL-7	Dhaka-Boga-Patuakhali
Padma Water Way	M.V PUBALI-7	Dhaka-Boga-Patuakhali-Galachipa
	M.V PUBALI-1	Dhaka-Barishal-Rayenda-Tuskhali
	M.V PUBALI-2	Dhaka-Chadpur-Poisarhat
	M.V PUBALI-4	Dhaka-Balabazar-Dulachor
Jahid Shipping Line	M.V JAMAL-5	Dhaka-Boga-Patuakhali
	M.V JAMAL-4	Dhaka-Gongapur-Borhanuddin
	M.V JAMAL-3	Dhaka-Chadpur-Ichhuli

Launch Company Name	Launch Name	Route
Nijam Shipping Line	Advancher-1	Dhaka-Barishal-Dhaka
Doler Shipping Line	M.V BAGERHAT-2	Dhaka-Boga-Patuakhali-Golachipa
	M.V MODERNSUN	Dhaka-Boga-Patuakhali-Golachipa
E Ali Shipping Line	M.V PRINCE OB HOSEN-1	Dhaka-Amtoli
	M.V ACHOL-2	Dhaka-Local Barisal
	M.V JOLTARANGO-1	Dhaka-Local Barisal
Salma Shipping Line	M.V KIRTONKHOLA-2	Dhaka-Barisal
Salma Water Way	M.V PARABOT-2	Dhaka-Barisal
	M.V PARABOT-9	Dhaka-Barisal
	M.V PARABOT-10	Dhaka-Barisal
	M.V PARABOT-11	Dhaka-Barisal
	M.V PARABOT-12	Dhaka-Barisal
	M.V PARABOT-14	Dhaka-Madaripur
Agorpur Navigation & Farhan Navigation	M.V TIPU-7	Dhaka-Barisal
	M.V FARHAN-8	Dhaka-Barisal
	M.V FARHAN-7	Dhaka-Jhalokhati
	M.V TIPU	Dhaka-Hulerhat-Bhandaria
	M.V TIPU-6	Dhaka-Hulerhat-Bhandaria
	M.V TIPU-12	Dhaka-Hulerhat-Bhandaria
	M.V FARHAN	Dhaka-Hulerhat-Bhandaria
BIWTC	M.V MODHUMOTI	Dhaka-Barisal-Morrelganj
	M.V BANGALI	Dhaka-Barisal-Morrelganj
	PS MASUD	Dhaka-Barisal-Morrelganj
	PS OSTRICH	Dhaka-Barisal-Morrelganj
	PS TURN/LAPCHA	Dhaka-Barisal-Morrelganj
Individual Operators	M.V NEW AL BORAK	Dhaka-Chandpur
	M.V SONERTORI	Dhaka-Chandpur
	M.V SOMPA RANI	Dhaka-Chandpur
	M.V EAGAL	Dhaka-Chandpur
	M.V ROF ROF	Dhaka-Chandpur
	M.V BOGDADIA-8	Dhaka-Chandpur
	M.V BOGDADIA-9	Dhaka-Chandpur
	M.V RASEL 3	Dhaka-Chandpur
	M.V ROF ROF 2	Dhaka-Chandpur
	M.V JAM JAM	Dhaka-Chandpur
	M.V MEGH RANI	Dhaka-Chandpur
	M.V SONERTORI-1	Dhaka-Chandpur
	M.V SONERTORI-2	Dhaka-Chandpur
	M.V BOGDADIA-7	Dhaka-Chandpur
	M.V EMAM HASAN-5	Dhaka-Chandpur
	M.V MITALI-4	Dhaka-Chandpur
	M.V EMAM HASAN-2	Dhaka-Chandpur
	M.V JAM JAM-1	Dhaka-Chandpur
	M.V TAQWOA	Dhaka-Chandpur
	M.V MOUR-7	Dhaka-Chandpur
	M.V ZHANDA	Dhaka-Chandpur
	M.V MITALI-2	Dhaka-Chandpur
	M.V SORNODIP	Dhaka-Chandpur
	M.V BOGDADIA-5	Dhaka-Chandpur
	M.V EAGAL-2	Dhaka-Chandpur
	M.V KALAIA	Dhaka-Chandpur
	M.V RANGABALI	Dhaka-Chandpur
	M.V JALTARANGA	Dhaka-Chandpur
	M.V SHOMPA	Dhaka-Chandpur

### Annexure 3: BRTA Route Permit List with Fare by Terminal

#### 1) Mohakhali

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total <sup>1</sup> Fare	Total Applicable Fare	No. of Permitted Bus
1	1	Dhaka (Mohakhali) - Tangail. Via- Ashulia, Kaliakoir.	90	162.95	162.95	163	110
2	2	Dhaka (Mohakhali) - Gopalpur, Via- Ashulia, Kaliakoir, Tangail, Ghatail.	129	233.56	233.56	234	260
3	3	Dhaka (Mohakhali) - Bhuapur, Via- Ashulia, Kaliakoir, Tangail.	114	206.39	206.39	206	57
4	4	Dhaka (Mohakhali) - Delduar, Via- Ashulia, Kaliakoir.	78	141.22	141.22	141	11
5	5	Dhaka (Mohakhali) - Jamalpur, Via- Tangail, Madhupur.	173	313.22	313.22	316	138
6	6	Dhaka (Mohakhali) - Shakhipur, Via-Shagardighi.	152	275.19	276.69	277	7
7	7	Dhaka (Mohakhali) - Sarishabari, Via-Tangail.	166	300.54	300.54	301	9
8	8	Dhaka (Mohakhali) - Nandina, Via-Tangail, Jamalpur.	183	331.32	331.32	331	10
9	9	Dhaka (Mohakhali) - Muktagachha, Via-Bhaluka, Mymensingh.	132	238.99	239.74	240	6
10	10	Dhaka (Mohakhali) - Phulbaria, Via-Bhaluka, Mymensingh.	136	246.23	246.98	247	70
11	11	Dhaka (Mohakhali) - Gouripur, Via-Bhaluka, Mymensingh.	140	253.47	255.47	255	14
12	12	Dhaka (Mohakhali) - Haluaghat, Via-Bhaluka, Mymensingh.	166	300.54	302.54	303	73
13	13	Dhaka (Mohakhali) - Kendua, Via-Bhaluka, Mymensingh.	186	336	338.75	339	12
14	14	Dhaka (Mohakhali) - Gagargaon, Via-Bhaluka.	96	173.81	174.56	175	0
15	15	Dhaka (Mohakhali) - Mymensingh, Via-Bhaluka, Trisal.	116	210.02	210.77	211	215
16	16	Dhaka (Mohakhali) - Netrakona, Via-Bhaluka, Mymensingh.	155	280.63	282.63	283	70
17	17	Dhaka (Mohakhali) - Sherpur, Via-Bhaluka, Mymensingh, Madhupur, Jamalpr.	227	410.98	412.98	413	5
18	104	Dhaka (Mohakhali) - Nalitabari, Via-Tangail, Jamalpur, Sherpur	220	398.31	399.81	400	0
19	140	Dhaka (Mohakhali) - Tarakandi, Via- Ashulia, Kaliakoir, Tangail, Madhupur.	181.5	328.61	328.61	329	9
20	155	Dhaka (Mohakhali) - Nagarpur, Via- Ashulia, Kaliakoir, Delduar.	99	179.24	179.24	179	9
21	158	Dhaka (Mohakhali) - Shagardighi, Via- Ashulia, Kaliakoir.	123	222.69	224.19	224	17
22	193	Dhaka (Mohakhali) - Kishorganj, Via-Bhaluka, Mymensingh, Phulbaria.	150	271.58	273.58	274	2
23	218	Dhaka (Mohakhali) - Najirpur, Via-Bhaluka, Mymensingh, purbadhala.	168	304.16	306.16	306	16
24	219	Dhaka (Mohakhali) - Sherpur, Via-Tangail, Jamalpur.	188	340.37	341.66	342	64
25	220	Dhaka (Mohakhali) - Jamalpur, Via-Bhaluka, Mymensingh, Madhupur.	202	365.72	367.72	368	69
26	221	Dhaka (Mohakhali) - Kendua Bazar, Via-Tangail, Madhupur.	142	257.09	257.09	257	4
27	222	Dhaka (Mohakhali) - Tarakandha, Via-Bhaluka, Mymensingh.	134.6	243.69	244.88	244	0
28	223	Dhaka (Mohakhali) - Sherpur, Via-Bhaluka, Mymensingh, phulpur, Nakla.	183	331.32	333.32	333	269
29	224	Dhaka (Mohakhali) - Brahmanbaria, Via- Tongi, Kaliganj, Narsingdi, Bhairab.	112	202.78	212.66	213	146
30	300	Dhaka (Mohakhali) - Bogra, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu, Nalka.	192	347.62	367.62	368	66
31	301	Dhaka (Mohakhali) - Sirajganj, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu.	128	231.74	251.74	252	52
32	302	Dhaka (Mohakhali) - Naogaon, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu, Nalka, bogra.	242	438.14	458.14	458	77
33	303	Dhaka (Mohakhali) - Rajshahi, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu, Nalka, baragram, ( Natun Rasta), Natore.	152	456.25	476.25	476	19
34	304	Dhaka (Mohakhali) - Thakurgaon, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu, Nalka, Bogra, Ghoraghat, Dinajpur.	389.7	705.55	725.55	726	8
35	305	Dhaka (Mohakhali) - Chapai Nawabganj, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu, Nalka, Baraigram ( Natun Rasta), Natore, Rajshahi.	297	537.72	558.97	559	126

<sup>1</sup> Total Fare=Bus Fare+ (Toll/average numbers of passenger)

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total <sup>1</sup> Fare	Total Applicable Fare	No. of Permitted Bus
36	306	Dhaka (Mohakhali) - ,Dinajpur, Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,ghoraghat,	330	597.47	617.47	417	45
37	307	Dhaka (Mohakhali) - Panchagharh , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra,Ghoraghat,Dinajpur,Thakurgaon.	425	769.46	789.46	789	26
38	308	Dhaka (Mohakhali) - Kurigram , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Rangpur, Mithapukur, Haragacha.	341	617.38	637.38	637	81
39	309	Dhaka (Mohakhali) -Rangpur , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra.	297	537.72	557.72	558	82
40	310	Dhaka (Mohakhali) -Gaibandha , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Palashbari.	257	465.29	485.29	485	46
41	311	Dhaka (Mohakhali) -Pabna , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka.	235	425.47	445.47	445	12
42	312	Dhaka (Mohakhali) -Hili , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, joypurhat.	234.03	423.71	443.71	444	2
43	313	Dhaka (Mohakhali) - Lalmonirhat , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Haragacha.	340	615.57	635.57	636	20
44	314	Dhaka (Mohakhali) - Nilphamari , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Rangpur, Saidpur.	357	646.35	666.35	666	34
45	315	Dhaka (Mohakhali) - Debiganj , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Rangpur, Saidpur, Nilphamari.	384	695.23	715.23	715	9
46	316	Dhaka (Mohakhali) - Chilmari , Via- Ashulia, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra, Kurigram.	374	677.13	697.13	697	1
47	318	Dhaka (Mohakhali) - Kishoreganj , Via- Bhaluka, Mymensingh, Ishwarganj,Nandail.	179	324.08	324.83	325	32
48	330	Dhaka (Mohakhali) - Bhairab, Via- Kaliganj,Ghurashal, Narsingdi.	91	164.76	167.14	167	29
49	331	Dhaka (Mohakhali) - Dharmapasha , Via- Bhaluka, Mymensingh, Netrakona.	195	353.05	355.05	355	7
50	336	Dhaka (Mohakhali) - Pakundia , Via- Kapasia.	106	191.91	194.16	194	22
51	337	Dhaka (Mohakhali) - Kishoreganj , Via- Kapasia.	130	235.37	237.62	238	92
52	338	Dhaka (Mohakhali) - Hossainpur ( Kishoreganj Upazila) , Via- Kapasia.	137	248.04	250.33	250	22
53	339	Dhaka (Mohakhali) - Katiadi , Via- Kapasia.	106	191.91	194.16	194	16
54	348	Dhaka (Mohakhali) - Joypurhat , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Bogra.	247	447.19	467.19	467	3
55	349	Dhaka (Mohakhali) - Nalitabari , Via- Bhaluka, Mymensingh.	192	347.62	348.37	348	17
56	354	Dhaka (Mohakhali) - Mymensingh , Via- Ashulia, Kaliakoir, Tangail.	186	334.75	336.75	337	1
57	365	Dhaka (Mohakhali) - Narsingdi , Via- Tongi, Kaliganj, Ghurashal.	55.8	101.03	103.41	103	25
58	368	Dhaka (Mohakhali) - Sylhet , Via- Tongi, Bhairab,B-Baria, Madhabpur, Sayestaganj, Sherpur.	245.5	444.48	454.11	454	52
59	374	Dhaka (Mohakhali) - Sunamganj , Via- Bhairab,B-Baria, Madhabpur , Shylhet.	295.5	535.03	544.63	545	4
60	371	Dhaka (Mohakhali) - Biani Bazar , Via- Tongi, Bhairab,B-Baria, Moulavibazar	285	515.99	525.62	526	10
61	379	Dhaka( Mohakhali)- Rangpur , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.					13
62	380	Dhaka (Mohakhali)- Cox's Bazar, Via- Kuril, Rampura Bridge, Saidabad, Comilla,Feni,Chittagong.					21



## 2) Sayedabad

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total Fare	Total Applicable Fare	No. of Permitted Bus
1	18	Dhaka (Saidabad)- Comilla, Via- Daudkandi.	102	184.67	194.67	195	238
2	19	Dhaka (Saidabad)- Laksham, Via- Comilla.	115	208.21	218.21	218	31
3	20	Dhaka (Saidabad)- Homna, Via- Gowripur.	65	117.68	127.68	128	119
4	21	Dhaka (Saidabad)- Nabinagar, Via- Daudkandi, Chandina, Debiduar.	89	161.31	171.13	171	59
5	22	Dhaka (Saidabad)- Kishoreganj, Via-Narsingdi, Bhairab.	140	253.47	253.47	253	169
6	23	Dhaka (Saidabad)- B- Baria , Via-Narsingdi, Bhairab.	103	186.48	191.48	191	136
7	24	Dhaka (Saidabad)- Kutikasba , Via-Narsingdi, Bhairab, B- Baria.	141	255.28	260.28	260	10
8	25	Dhaka (Saidabad)- Kuti Chowmahani , Via-Narsingdi, Bhairab, B-Baria.	135	244.41	249.41	249	4
9	26	Dhaka (Saidabad)- Burichang , Via- Comilla.	102	184.67	194.67	195	7
10	27	Dhaka (Saidabad)- Hajiganj , Via- Comilla.	138	249.84	259.84	260	27
11	28	Dhaka (Saidabad)- Faridganj , Via- Comilla, Chandpur.	174	315.02	325.02	325	40
12	29	Dhaka (Saidabad)- Kachua , Via- Gowripur.	77	139.4	149.4	149	62
13	30	Dhaka (Saidabad)- Raipur , Via- Comilla, Laksham, Chowmahani, Lakshmipur.	194	351.23	361.23	361	149
14	31	Dhaka (Saidabad)- Chatkhil , Via- Comilla, Laksham.	154	278.81	288.81	289	17
15	32	Dhaka (Saidabad)- Majidi , Via- Comilla, Feni.	189	342.18	352.18	352	17
16	33	Dhaka (Saidabad)- Ramgati , Via- Comilla, Laksham, Chowmahani, Lakshmipur.	218	394.68	404.68	405	40
17	34	Dhaka (Saidabad)- Sonagazi , Via- Comilla, Feni.	168	304.16	314.16	314	21
18	35	Dhaka (Saidabad)- Barisal , Via- Mawa ,Bhanga, Madaripur.	156	282.43	326.23	326	86
19	36	Dhaka (Saidabad)- Chandpur , Via- Comilla, Hajiganj.	157	284.24	298.49	298	80
20	357	Dhaka (Saidabad)- Chandpur , Via- Gowripur, Matlab	97	175.61	189.86	190	15
21	37	Dhaka (Saidabad)- Ramganj , Via- Comilla, Laksham, Chatkhil	168	304.16	318.41	318	63
22	38	Dhaka (Saidabad)- Ramgarh , Via- Comilla, Feni.	207	374.77	384.77	385	0
23	39	Dhaka (Saidabad)- Feni, Via- Comilla.	149	269.76	279.76	280	24
24	40	Dhaka (Saidabad)- Moulivibazar, Via- Narsingdi, Bhairab, Madhabpur.	203	367.53	372.53	373	20
25	41	Dhaka (Saidabad)- Habiganj, Via- Narsingdi, Bhairab, Madhabpur.	166	300.54	305.54	306	55
26	42	Dhaka (Saidabad)- Barlekha, Via- Narsingdi, Bhairab, Madhabpur, Moulavibazar, Kulaura.	265	479.78	484.78	485	3
27	43	Dhaka (Saidabad)- Kulaura , Via- Narsingdi, Bhairab, Madhabpur, Moulavibazar, Rajnagar.	240	434.52	439.52	440	0
28	44	Dhaka (Saidabad)- Jagannathpur , Via- Narsingdi, Bhairab, Madhabpur, Moulavibazar, Sylhet.	306	554.01	560.51	561	0
29	45	Dhaka (Saidabad)- Beani Bazar , Via- Narsingdi, Bhairab, Madhabpur, Moulavibazar, Rajnagar.	286	517.8	522.8	523	24
30	46	Dhaka (Saidabad)- Chhatak , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	275	497.88	505.85	506	19
31	47	Dhaka (Saidabad)- Sunamganj , Via- Narsingdi, Bhairab, Moulavibazar, Sylhet.	307	555.82	564.54	565	241
32	48	Dhaka (Saidabad)- Chittagong, Via- Comilla, Feni.	242	438.14	888.14	448	192
33	49	Dhaka (Saidabad)- Cox's Bazar, Via- Comilla, Feni, Chittagong.	396	716.95	730.07	730	457
34	50	Dhaka (Saidabad)- Teknaf, Via- Comilla, Feni, Cox's Bazar.	462	836.45	849.57	850	200
35	51	Dhaka (Saidabad)- Rangamati, Via- Comilla, Feni, Chittagong.	307	555.82	565.82	566	77
36	52	Dhaka (Saidabad)- Bandarban, Via- Comilla, Feni, Chittagong.	318	575.73	585.73	586	40
37	53	Dhaka (Saidabad)- Khagrachhari, Via- Comilla, Feni, Chittagong, Ramgarh.	276	499.69	509.67	510	65
38	54	Dhaka (Saidabad)- Companiganj, Via- Comilla, Moynamoti Cantonment.	167	302.35	312.35	312	55
39	55	Dhaka (Saidabad)- Sunapur , Via- Comilla, Laksham, Chowmahani, Majidi	195	353.04	363.04	363	150
40	56	Dhaka (Saidabad)- Lakshmipur , Via- Comilla, Laksham, Chowmahani .	177	320.45	330.45	330	67
41	57	Dhaka (Saidabad)- Sylhet , Via- Narsingdi, Bhairab, Moulavibazar.	257	465.29	472.51	473	138

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total Fare	Total Applicable Fare	No. of Permitted Bus
42	58	Dhaka (Saidabad)- Kankirhat, Via- Comilla, Feni.	176	318.64	328.64	329	11
43	351	Dhaka (Saidabad)- Kankirhat, Via- Comilla, Laksham.	176	318.64	328.64	329	0
44	59	Dhaka (Saidabad)- Noakhali(Majjdi) , Via- Comilla, Feni.	188	340.37	350.37	350	7
45	60	Dhaka (Saidabad)- Basurhat, Via- Comilla, Feni, Majjdi.	216	391.06	401.06	401	47
46	61	Dhaka (Saidabad)- Parshuram, Via- Comilla, Feni.	173	313.21	323.21	323	22
47	68	Dhaka (Saidabad)- Gopalganj , Via- Mawa, Bhanga,Rajoir.	188	340.37	384.17	384	0
48	95	Dhaka (Saidabad)- Barura , Via- Comilla	113	204.58	214.58	215	7
49	96	Dhaka (Saidabad)- Khulna, Via-Mawa,Bhanga, Gopalganj.	194	351.23	400.48	400	122
50	133	Dhaka (Saidabad)- Zakiganj , Via- Narsingdi,Bhairab, Moulavibazar,Sylhet .	350	633.67	639.39	639	1
51	147	Dhaka (Saidabad)- Shariatpur, Via-Mawa, Janjira.	73	132.16	172.66	173	15
52	149	Dhaka (Saidabad)- Jaflong , Via- Narsingdi,Bhairab,B- Baria, Moulavibazar,Sylhet .	319.5	578.45	585.67	586	2
53	156	Dhaka (Saidabad)- Nawabpur , Via- Daudkani.	73	132.16	142.16	142	3
54	157	Dhaka (Saidabad)- Pirojpur , Via- Mawa,Bhanga,Barisal .	206	372.96	423.88	424	59
55	352	Dhaka (Saidabad)- Pirojpur , Via- Mawa,Bhanga, Gopalganj,Bagerhat.	223.41	404.48	456.65	457	20
56	159	Dhaka (Saidabad)- Begumganj, Via- Laksham, feni.	180	325.89	335.89	336	20
57	166	Dhaka (Saidabad)- Chhagalnaiya, Via- Comilla,Feni.	162	293.76	303.76	304	2
58	174	Dhaka (Saidabad)- Nangalkot, Via- Comilla,Laksham.	138	249.84	259.84	260	2
59	175	Dhaka (Saidabad)- Chitawshi, Via- Comilla.	137	248.03	258.03	258	11
60	176	Dhaka (Saidabad)- Dighinala , Via- Comilla,Feni,Ramgarh,Khagrachhari.	277	501.5	511.5	512	33
61	177	Dhaka (Saidabad)- Tabaolchhari , Via- Comilla,Feni,Ramgarh.	291	526.85	536.85	537	25
62	178	Dhaka (Saidabad)- Chauddagam, Via- Comilla.	126.5	229.02	239.02	239	25
63	179	Dhaka (Saidabad)- Matlab, Via- Daudkandi, Gowripur.	80	144.84	154.84	155	0
64	184	Dhaka (Saidabad)- Bhairab, Via- Narsingdi.	81	146.65	146.65	147	57
65	195	Dhaka (Saidabad)- Panchhari , Via- Comilla,Feni,Ramgarh,Khagrachhari.	281	508.75	518.75	519	0
66	198	Dhaka (Saidabad)- Patuakhali, Via-Mawa,Bhanga , Barisal.	192	347.61	397.98	398	24
67	199	Dhaka (Saidabad)- Madaripur, Via-Mawa,Bhanga.	99	179.23	223.03	223	28
68	200	Dhaka (Saidabad)- Shaharasti, Via-Comilla.	127	229.93	23.39	240	9
69	203	Dhaka (Saidabad)- Companiganj, Via-Comilla, Feni, Daganbhuiyan.	167	302.35	312.35	312	11
70	204	Dhaka (Saidabad)- Fenchuganj , Via- Narsingdi,Bhairab,Madhappur,Srimangal, Moulavibazar .	234	423.65	430.87	432	1
71	205	Dhaka (Saidabad)- Kaptai , Via- Comilla,Feni, Cahittagong.	286	517.8	527.8	528	15
72	206	Dhaka (Saidabad)- Barhmanpara , Via- Comilla,Burichang.	113	204.58	214.58	215	7
73	207	Dhaka (Saidabad)- Satkhira, Via-Mawa,Bhanga ,Gopalganj,Khulna.	250	452.62	501.42	501	0
74	208	Dhaka (Saidabad)- Ramganj , Via- Comilla, Hajiganj.	154	278.81	293.06	293	71
75	329	Dhaka (Saidabad)- Narsingdi.	60	108.63	108.63	109	91
76	333	Dhaka (Saidabad)- Faridpur, Via-Mawa,Bhanga .	102	184.67	108.63	228	11
77	334	Dhaka (Saidabad)- Hossenpur(Chanpur upazila), Via-Nawabpur,Madhayabazar,Rahimanagar.	96	173.8	228.47	184	52
78	335	Dhaka (Saidabad)- Muradnagar, Via-Iliatganj	86	155.7	165.7	166	14
79	340	Dhaka (Saidabad)- Chamrabandar , Via- Narsingdi,bhairab.	160	289.68	289.68	290	20
80	341	Dhaka (Saidabad)- Munshiganj, Via-Mukterpur.	27	48.88	53.88	54	26
81	342	Dhaka (Saidabad)- Char Fession(Bhola), Via-Mawa,Bhanga,Madaripur,Barisal,Bhola.	257	465.29	518.84	519	0
82	343	Dhaka (Saidabad)- Hossenpur(Chanpur upazila),Via -Gowripr,Rahimapur.	89.5	162.03	172.03	172	26
83	344	Dhaka (Saidabad)- Char Fession(Bhola), Via- Comilla,Laksham,Chatkhil, Lakshmipur,Bhola.	278	503.31	572.43	572	5
84	345	Dhaka (Saidabad)- Shariatpur, Via- Bhuriganga 2nt Shetu, Mawa.	73	132.16	174.01	174	7
85	346	Dhaka (Saidabad)- Manahardi, Via- Narsingdi.	84	152.08	152.08	152	41
86	347	Dhaka (Saidabad)- Dighirpara, Via- Mukterpur,Munshiganj.	41.5	75.13	80.13	80	42

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total Fare	Total Applicable Fare	No. of Permitted Bus
87	350	Dhaka (Saidabad)- Mawa, Via- Mukterpur,Tongibari.	0	0	0	0	0

### 3) Gabtoli

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total Fare	Total Applicable Fare	No. of Permitted Bus
1	62	Dhaka( Gabtoli )- Faridpur, Via- Paturia.	109	198.61	262.71	263	48
2	63	Dhaka( Gabtoli )- Alfadanga, Via- Paturia, Faridpur.	158	286.05	350.15	350	4
3	64	Dhaka( Gabtoli )-Muksudpur, Via- Paturia, Faridpur.	203	367.53	431.63	432	0
4	65	Dhaka( Gabtoli )- Barisal, Via- Paturia, Faridpur, Madaripur.	242	438.14	509.13	509	103
5	66	Dhaka( Gabtoli )- Patuakhali, Via- Paturia, Faridpur, Madaripur, Barisal.	278	503.31	587.06	587	50
6	67	Dhaka( Gabtoli )- Madaripur, Via- Paturia, Faridpur.	177	320.45	384.55	358	8
7	69	Dhaka( Gabtoli )- Rajbari, Via- Paturia, Goalanda.	108	195.53	259.63	260	34
8	70	Dhaka( Gabtoli )- Jessore, Via- Paturia, Faridpur, Jhenaidah	232	420.03	484.13	484	5
9	70k	Dhaka( Gabtoli )- Jessore, Via- Paturia, Faridpur, a Magura,Arrpara	212	383.82	447.92	448	5
	71	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	272	492.45	559.65	560	165
	71k	Dhaka( Gabtoli )- Khulna, Via- Paturia, Faridpur, a Magura,Jhenaidah,Jessore.	292	528.67	595.87	596	6
10	72	Dhaka( Gabtoli )- Bagerhat, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	310	561.26	628.46	628	17
11	73	Dhaka( Gabtoli )- Kaliganj, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna,Satkhira.	347	628.24	695.44	695	11
12	74	Dhaka( Gabtoli )- Satkhira, Via- Paturia, Faridpur, Magura,Arrpara,Jessore, Khulna.	320	589.36	656.56	657	117
13	75	Dhaka( Gabtoli )-Benapole, Via- Paturia, Faridpur, Magura,Arrpara,Jessore.	250	452.63	519.83	520	12
14	76	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Faridpur, Magura,Jhenaidah.	230	416.42	483.62	484	11
15	77	Dhaka( Gabtoli )- Meherpur, Via- Paturia, Faridpur, Magura,Jhenaidah, Chuadanga.	249	450.81	518.01	518	88
16	78	Dhaka( Gabtoli )- Meherpur, Via- Kazirhat, Pabna,Pakshi Shetu, Bheramara , Mirpur.	315	570.31	637.51	638	21
17	79	Dhaka( Gabtoli )- Kushtia, Via- Paturia, Goalanda,Rajbari.	151	273.39	340.49	340	12
18	80	Dhaka( Gabtoli )- Praghpur, Via- Paturia, Goalanda,Rajbari.	217	392.88	459.98	460	12
19	81	Dhaka( Gabtoli )-Pabna , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu .	223	403.74	434.76	435	117
20	82	Dhaka( Gabtoli )-Rajshahi , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore.	247	447.19	478.21	478	84
21	83	Dhaka( Gabtoli )-Nawabganj , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka,Baraigram( Natun Rasta), Natore, Rajshahi.	293	530.48	561.5	562	179
22	84	Dhaka( Gabtoli )-Bogra , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka.	191	345.81	376.83	377	14
23	85	Dhaka( Gabtoli )- Naogaon , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	243	439.95	470.97	471	83
24	86	Dhaka( Gabtoli )- Joypurhat , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	247	447.19	478.21	478	5
25	87	Dhaka( Gabtoli )- Gaibandha , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Palashbari.	268	485.21	516.23	516	36
26	88	Dhaka( Gabtoli )- Rangpur , Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra.	308	557.63	588.65	589	120
27	89	Dhaka( Gabtoli )- Lalmonirhat, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Haragachha.	350	633.68	664.7	565	31
28	90	Dhaka( Gabtoli )- Kurigram, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Haragachha.	353	639.11	670.13	470	91
29	91	Dhaka( Gabtoli )- Dinajpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat.	330	557.47	589.69	590	131
30	92	Dhaka( Gabtoli )- Thakurgaon, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur.	387	700.66	731.68	732	64
31	93	Dhaka( Gabtoli )- Panchagarh, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra,Ghoraghat, Dinajpur, Thakurgaon.	424	767.65	798.67	799	93

SL	No	Route Description	Distance Provided By RHD (KM)	Bus Fare (Tk. 1.42 per KM)	Total Fare	Total Applicable Fare	No. of Permitted Bus
32	94	Dhaka( Gabtoli ) - Mujibnagar, Via- Paturia, Faridpur, Magura, Jhenaidah, Chuadanga, Meherpur.	259	468.92	536.12	536	14
33	97	Dhaka( Gabtoli ) -Natore, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Baraigram(Natun Rasta),	203	367.53	400.62	401	2
34	98	Dhaka( Gabtoli )- Chuadanga, Via- Paturia, Faridpur, Magura, Jhenaidah.	216	391.07	458.27	458	21
35	99	Dhaka( Gabtoli )-Nilphamari, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur, Saidpur.	358	648.16	679.18	679	65
36	100	Dhaka( Gabtoli )- Patgram, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Lalmonirhat.	410	742.31	773.33	773	6
37	101	Dhaka( Gabtoli )- Mongla , Via- Paturia, Faridpur, Magura, Arrapara, Jessore, Khulna.	300	543.15	610.35	610	2
38	102	Dhaka( Gabtoli )- Chilmari, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Kurigram.	367	664.45	695.47	695	0
39	103	Dhaka( Gabtoli )- Saidpur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur.	338	611.95	642.97	643	5
40	105	Dhaka( Gabtoli )- Ulipur, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Kurigram.	352	637.3	668.32	668	0
41	106	Dhaka( Gabtoli )- Hili, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Joypurhat.	268	485.21	516.23	516	15
42	138	Dhaka( Gabtoli )- Shibganj, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Baraigram, Natore, Rajshahi, Chapay Nawabganj.	314	568.5	599.52	600	7
43	160	Dhaka( Gabtoli )- Ishwardi, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Pabna.	249	450.82	481.84	482	51
44	131	Dhaka( Gabtoli )- Sirajganj, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu .	123	222.69	253.71	254	1
45	185	Dhaka( Gabtoli )- Narail, Via- Paturia, Faridpur, Magura, Arrapara, Jessore.	236	427.28	494.48	294	3
46	187	Dhaka( Gabtoli )- Debiganj, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Rangpur, Saidpur, Nilphamari.	377	682.56	713.58	714	11
47	209	Dhaka( Gabtoli )- Jessore, Via- Paturia, Faridpur, Magura, Arrapara.	212	383.83	451.03	451	3
48	210	Dhaka( Gabtoli )- Kaliganj, Via- Paturia, Faridpur, Magura, Jhenaidah.	192	347.62	414.82	415	1
49	211	Dhaka( Gabtoli ) - Jhalokati, Via- Paturia, Faridpur, Madaripur, Barisal.	258	467.11	538.1	538	42
50	212	Dhaka( Gabtoli ) - Pirojpur, Via- Paturia, Faridpur, Barisal, Jhalokati .	284	514.18	591.21	591	42
51	213	Dhaka( Gabtoli )- Pabna, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Baraigram, ( Natun Rasta) Dasurai.	218	394.69	425.71	426	0
52	214	Dhaka( Gabtoli ) - Lakshmipasha, Via- Paturia, Faridpur, Magura, Jessore, Narail.	238	430.9	498.1	498	3
53	215	Dhaka( Gabtoli ) - Bhurungamari, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Bogra, Mithapukur, Lalmonirhat.	434	785.76	821.95	822	41
54	216	Dhaka( Gabtoli ) - Gopalganj, Via- Paturia, Faridpur, Mukshudpur. .	204	369.34	415.84	416	41
55	217	Dhaka( Gabtoli )- Barguna, Via- Paturia, Faridpur, Madaripur, Barisal, Patuakhali.	304	550.39	642.75	683	75
56	299	Dhaka( Gabtoli )- Rajshahi, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Shahazadpur, Pabna, Natore.	336	608.33	641.41	641	41
57	317	Dhaka( Gabtoli )- Chapay Nawabganj, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Shahazadpur, Pabna, Natore, Rajshahi.	383	693.42	726.5	727	0
58	326	Dhaka( Gabtoli )- Magura, Via- Paturia, Faridpur.	155.4	281.35	348.55	349	0
59	329	Dhaka( Gabtoli ) - Jhenaidah, Via- Paturia, Faridpur, Magura.	192	347.62	414.82	415	0
60	332	Dhaka( Gabtoli ) - Khulna, Via- Nabinagar, Kaliakoir, Tangail, Jamuna shetu , Nalka, Baraigram, (Natunrasta), Pakshi shetu, Kushtia, Jhenaidah, Jessore.	394	713.34	752.46	752	62
61	355	Dhaka( Gabtoli ) - Darsana, Via- Paturia, Faridpur, Magura, Jhenaidah.	206	372.96	440.16	440	14

#### 4) Sadarghat

SL	Route	Total Distance (Kilometre)	Fare (BDT.)
1	Dhaka-Barisal (Direct)	161	255
2	Dhaka-Amtoli	239	365
3	Dhaka-Potuakhali	252	383
4	Dhaka-Jhalakathi	199	309
5	Dhaka-Lalkharabad-Bhola	194	302
6	Dhaka-Muladi Bazar	137	222
7	Dhaka-Barisal (Direct)	174	274
8	Dhaka-Charmontaz	249	379
9	Dhaka-Burhanuddin(Kheya Ghat)	193	300
10	Dhaka-Dumudday	118	195
11	Dhaka-Chandpur	68	116
12	Dhaka-Eidgaon Ferry Ghat	74	126
13	Dhaka-Daulatkha	179	281
14	Dhaka-Hatiya(Tamaruddin Bazar)	233	356
15	Dhaka-Betua Charfassion	246	374
16	Dhaka-Madaripur	174	274
17	Dhaka-Patarhat	166	262
18	Dhaka-Surjamoni	131	213
19	Dhaka-Ramchandrapur	78	133
20	Dhaka-Charjalalpur	92	156
21	Dhaka-Haturia	110	184
22	Dhaka-Dohari	43	73
23	Dhaka-Letra	207	320
24	Dhaka-Angaria	103	174
25	Dhaka-Galachipa	274	414
26	Dhaka-Matlob	76	129
27	Dhaka-Haimchar- Charbourabi	102	173
28	Dhaka-Torki	155	247
29	Dhaka-Ischuli	73	124
30	Dhaka-Lalmohan	201	311
31	Dhaka-Bhandaria	209	323
32	Dhaka-Barguna	278	419
33	Dhaka-Kalaiya	183	286
34	Dhaka-Muladi	170	268
35	Dhaka-Balabazar	105	177
36	Dhaka-Barisal	170	268
37	Dhaka-Patabunia	172	271
38	Dhaka-Paisarhat	168	265
39	Dhaka-Rangabali	282	425
40	Dhaka-Barisal-Merrelganj	350	550

別添 F：関連法規

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**Dhaka Mohanagar Building Construction Act 2008**

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Table -3 (a)

General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building:

[Type: A (A1-A5): Residential house and Hotel]

Size of the Plot		Building type: (A1-A4) <sup>[1]</sup> (Residential House)			Building type: (A5) <sup>[2]</sup> (Residential Hotel)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	6.0	3.15	67.5	6.0	2.50	67.5
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	6.0	3.35	65.0	6.0	2.75	65.0
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	6.0	3.50	62.5	6.0	3.00	62.5
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	6.0	3.50	62.5	6.0	3.25	62.5
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	6.0	3.75	60.0	6.0	3.50	60.0
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	6.0	3.75	60.0	6.0	3.75	60.0
Above 469 m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	6.0	4.00	60.0	6.0	4.50	57.5
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	6.0	4.00	60.0	9.0	5.50	67.5
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	6.0	4.25	57.5	9.0	6.00	55.0
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	9.0	4.50	57.5	9.0	6.50	55.0
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	9.0	4.75	55.0	9.0	7.00	52.5
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	9.0	5.00	52.5	9.0	7.50	52.5
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	9.0	5.25	52.5	9.0	8.00	50.0
Size of the Plot		Building type: (A1-A4) <sup>[1]</sup> (Residential House)			Building type: (A5) <sup>[2]</sup> (Residential Hotel)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)	Road width (m)	FAR	MGC (%)
Above 1206 m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	9.0	5.25	50.0	9.0	8.50	50.0
Above 1340 m <sup>2</sup>	Above 20 katha	12.0	5.50	50.0	12.0	9.50	50.0 <sup>[2]</sup>
Any size	Any size	18.0	6.00	50.0	18.0	NR	50.0 <sup>[2]</sup>
Any size	Any size	24.0	6.50	50.0	24.0	NR	50.0 <sup>[2]</sup>

[1] Following land use are allowed in an unplanned residential area (providing traffic, parking and other demands: (a) dormitory and hostel (b) child home, orphanage and old home (c) hotel or lodge with max. 20 room (d) restaurant-up to 100m<sup>2</sup> (e) religious place up to 200m<sup>2</sup> (f) ground floor of residential building can be used as office, studio or chamber of max. 100 m<sup>2</sup> and occupant up to 15 nos. and (g) saloon, beauty parlor, pharmacy, grocery, tailoring shop of up to 25 m<sup>2</sup> only for corner plot

[2] For building type A5 (residential hotel), plot above 20 katha or any measurement of plot beside road width 18m or above, podium of max. 12m (including parapet) height can be built from upper surface of road (without max. mandatory setback for ground floor). \*NR (Non restricted) - No obligation of FAR.

**Table-3 (b)**  
**General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building:**  
**[Type: B (B1-B2): Educational Institution]**

Size of the Plot		Building type: (B1) (School, College and University)			Building type: (B2) (Elementary School and Kindergarten)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	**	**	**	**	**	**
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	**	**	**	**	**	**
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	**	**	**	**	**	**
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	**	**	**	**	**	**
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	6.0	2.50	60.0	6.0	2.00	50.0 <sup>[3]</sup>
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	6.0	2.50	60.0	6.0	2.00	50.0 <sup>[3]</sup>
Above 469m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	6.0	2.50	60.0	6.0	2.00	50.0 <sup>[3]</sup>
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	6.0	2.75	60.0	6.0	2.25	50.0 <sup>[3]</sup>
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	6.0	2.75	60.0	6.0	2.25	50.0 <sup>[3]</sup>
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	9.0	3.00	57.0	9.0	2.50	50.0 <sup>[3]</sup>
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	9.0	3.00	55.0	9.0	2.50	50.0 <sup>[3]</sup>
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	9.0	3.25	53.0	9.0	2.75	50.0 <sup>[3]</sup>
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	9.0	3.25	50.0	9.0	2.75	50.0 <sup>[3]</sup>
Above 1206m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	9.0	3.50	50.0	9.0	3.00	50.0 <sup>[4]</sup>
Above 1340m <sup>2</sup>	Above 20 katha	12.0	4.00	50.0	12.0	3.50	50.0 <sup>[4]</sup>
Any size	Any size	18.0	4.50	50.0	18.0	4.00	50.0 <sup>[4]</sup>
Any size	Any size	24.0	5.50	50.0	24.0	4.50	50.0

[3] In B2 type buildings, open space of ground floor will be considered FAR free. Max. 20% of this open space can be used as room for supporting function of open space and again this portion (20%) will be considered as FAR free.  
 [4] In B2 type buildings, open space of ground floor will be considered as FAR free. Max. 40% of this open space can be used as room for supporting function of open space and again this portion (40%) will be considered as FAR free.  
 \*\* Up to 335 m<sup>2</sup> or 5 katha land B-1 and B-2 type land use is not permitted



**Table-3(c)**  
**General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building:**  
**[Type: C (C1-C4) and D(D1-D2): Institution and Healthcare]**

Size of the Plot		Building type: C (C1-C4)(Institutional)			Building type: D(D1-D2)(Healthcare)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	**	**	**	**	**	**
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	**	**	**	**	**	**
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	**	**	**	**	**	**
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	**	**	**	**	**	**
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	6.0	3.25	60.0	6.0	3.25	60.0
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	6.0	3.25	60.0	6.0	3.25	60.0
Above 469m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	6.0	3.25	60.0	6.0	3.25	60.0
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	6.0	3.50	57.5	9.0	3.50	57.5
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	6.0	3.50	57.5	9.0	3.50	57.5
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	9.0	3.75	55.0	9.0	3.75	55.0
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	9.0	4.00	55.0	9.0	4.00	55.0
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	9.0	4.25	52.5	9.0	4.25	52.5
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	9.0	4.50	50.0	9.0	4.50	50.0
Above 1206 m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	9.0	4.75	50.0	9.0	4.75	50.0
Above 1340m <sup>2</sup>	Above 20 katha	12.0	5.00	50.0 <sup>[5]</sup>	12.0	5.00	50.0 <sup>[5]</sup>
Any size	Any size	18.0	NR**	50.0 <sup>[5]</sup>	18.0	NR**	50.0 <sup>[5]</sup>
Any size	Any size	24.0	NR**	50.0 <sup>[5]</sup>	24.0	NR**	50.0 <sup>[5]</sup>

[5] In C and D type buildings, for land above 20 katha/land of any size of road width 18m or above maintaining required setback, Podium of maximum 12m height (including parapet height) can be built from the top of road surface.  
\* NR (Non restricted)- No rigidity of FAR.  
\*\* Up to 335 m<sup>2</sup> or 5 katha land C and D type land use is not permitted

**Table-3(d)**  
**General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building:**  
**[Type: E(E1-E6) : Public Gathering and Religious Building]**

Size of the Plot		Building type: E (E1-E6) (Public Gathering Building)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	6.0	2.00	65.0
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	6.0	2.00	65.0
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	6.0	2.25	60.0
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	6.0	2.25	60.0
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	9.0	2.50	57.5
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	9.0	2.50	57.5
Above 469 m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	9.0	2.75	55.0
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	9.0	2.75	55.0
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	9.0	3.00	52.5
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	12.0	3.25	50.0
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	12.0	3.50	50.0
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	12.0	3.75	50.0
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	12.0	4.00	50.0
Above 1206 m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	12.0	4.25	50.0
Above 1340m <sup>2</sup>	Above 20 katha	12.0	5.50	50.0
Any size	Any size	18.0	6.50	50.0
Any size	Any size	24.0	7.00	50.0 <sup>[6]</sup>

[6] Beside road width 24m or above (land of any size) maintaining required setback, Podium of maximum 12m height (including parapet height) can be built from the top of road surface.

**Chart-3(e)**  
**General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building:**  
**[Type: F (F1-F5): Commercial Building]**

Size of the Plot		Building type: F1(Office)			Building type: (F2-F5)(Shop, market etc.)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	6.0	2.50	67.5	6.0	2.25	65.0
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	6.0	3.00	65.0	6.0	2.50	62.5
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	6.0	3.00	65.0	6.0	2.50	62.5
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	6.0	3.50	62.5	6.0	3.00	60.0
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	6.0	3.50	62.5	6.0	3.00	60.0
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	6.0	3.75	60.0	9.0	3.25	57.5
Above 469 m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	9.0	4.50	57.5	9.0	3.25	57.5
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	9.0	5.50	57.5	9.0	3.25	55.0
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	9.0	6.00	55.0	9.0	3.50	52.5
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	9.0	6.50	55.0	12.0	3.75	52.5
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	9.0	7.00	52.5	12.0	4.00	52.5
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	9.0	7.50	52.5	12.0	4.25	50.0
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	9.0	8.00	50.0	12.0	4.50	50.0
Above 1206 m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	9.0	8.50	50.0	12.0	4.75	50.0
Above 1340m <sup>2</sup>	Above 20 katha	12.0	9.50	50.0 <sup>[7]</sup>	12.0	5.50	50.0
Any size	Any size	18.0	NR**	50.0 <sup>[7]</sup>	18.0	6.50	50.0
Any size	Any size	24.0	NR**	50.0 <sup>[7]</sup>	24.0	NR**	50.0 <sup>[7]</sup>

[7] Maintaining required setback, Podium of maximum 12m height (including parapet height) can be built from the top of road surface.

\* NR (Non restricted)- No rigidity of FAR.

Table-3(f)

General width of road, floor area ratio (FAR) and max. ground coverage (MGC) for building: [Type: G(G1-G2), H(H1-H2), J(J1-J2), K(K1-K2) : Industry, Warehouse/Storage, Building with Hazardous Usage and others]

Size of the Plot		Building type: E (E1-E6) (Industry, Warehouse/Storage, Building with Hazardous Usage and others)		
Square meter (m <sup>2</sup> )	Katha	Road width (m)	FAR	MGC (%)
134 m <sup>2</sup> or less	2 katha or less	6.0	2.00	65.0
Above 134 m <sup>2</sup> to up to 201 m <sup>2</sup>	Above 2 katha to up to 3 katha	6.0	2.00	65.0
Above 201 m <sup>2</sup> to up to 268 m <sup>2</sup>	Above 3 katha to up to 4 katha	6.0	2.25	65.0
Above 268 m <sup>2</sup> to up to 335 m <sup>2</sup>	Above 4 katha to up to 5 katha	6.0	2.25	65.0
Above 335 m <sup>2</sup> to up to 402 m <sup>2</sup>	Above 5 katha to up to 6 katha	6.0	2.50	65.0
Above 402 m <sup>2</sup> to up to 469 m <sup>2</sup>	Above 6 katha to up to 7 katha	6.0	2.50	65.0
Above 469 m <sup>2</sup> to up to 536 m <sup>2</sup>	Above 7 katha to up to 8 katha	9.0	2.75	65.0
Above 536 m <sup>2</sup> to up to 603 m <sup>2</sup>	Above 8 katha to up to 9 katha	9.0	2.75	65.0
Above 603 m <sup>2</sup> to up to 670 m <sup>2</sup>	Above 9 katha to up to 10 katha	9.0	2.75	65.0
Above 670 m <sup>2</sup> to up to 804 m <sup>2</sup>	Above 10 katha to up to 12 katha	9.0	3.00	62.5
Above 804 m <sup>2</sup> to up to 938 m <sup>2</sup>	Above 12 katha to up to 14 katha	9.0	3.25	62.5
Above 938 m <sup>2</sup> to up to 1072 m <sup>2</sup>	Above 14 katha to up to 16 katha	9.0	3.50	60.0
Above 1072 m <sup>2</sup> to up to 1206 m <sup>2</sup>	Above 16 katha to up to 18 katha	9.0	3.75	60.0
Above 1206 m <sup>2</sup> to up to 1340 m <sup>2</sup>	Above 18 katha to up to 20 katha	9.0	4.00	60.0
Above 1340m <sup>2</sup>	Above 20 katha	12.0	4.25	60.0
Any size	Any size	18.0	4.50	60.0
Any size	Any size	24.0	5.00	60.0

第5章 56条抜粋  
 駐車場:必要スペース

Type of Car	Parking Width (meter)	Parking Length (meter)	Internal turning radius for car (meter)	Outer side turning radius (meter)
Normal Car (for each)	2.4	4.6	..	..
Bus and Truck (for each)	3.6	10.0	8.7	12.8
Multi-excel Truck/ Long Trailer (for each)	3.6	18.0	6.9	3.8
Two wheeled Bike (for each)	1.0	2.0	..	..

Parking	One way traffic One side bay	One way traffic Two Side bay	Two way traffic
0 <sup>0</sup>	3.5 m	4.0 m	4.25 m
45 <sup>0</sup>	4.5 m	4.0 m	4.25 m
90 <sup>0</sup>	4.25 m	4.25 m	4.25 m

56 টা সারণী 4: সড়ক স্থান প্রয়োজনীয় সংখ্যা

Occupancy		Minimum parking requirements
<b>Residential (occupancy type- 'A')</b>		
Single family/ row house- semidetached residence up to 200 m <sup>2</sup> gross area		1 car parking
Single family/ row house- semidetached residence above 200 m <sup>2</sup> gross area		2 car parking
Flat above 200m <sup>2</sup> gross area in Multi-family residence		1 car parking for each unit
Flat above 140 m <sup>2</sup> to 200m <sup>2</sup> gross area		2 car parking for each 3 unit
Flat above 90 m <sup>2</sup> to 140m <sup>2</sup> gross area		1 car parking for each 2 unit
Flat above 60 m <sup>2</sup> to 90m <sup>2</sup> gross area		1 car parking for each 4 unit
Flat up to 60 m <sup>2</sup> gross area		1 car parking for each 8 unit
Flat up to 90 m <sup>2</sup> gross area		1 motor cycle parking for each 5 unit
Hotel (Star class)		1 car parking for each 5 guest room
Hotel (other class)		1 car parking for each 200m <sup>2</sup> gross area
Others		1 car parking for each 300m <sup>2</sup> gross area
<b>Educational institution (Occupancy type- 'B')</b>		
Kindergarten, Primary school, High school, College, Tertiary educational institution, Training center, University and other educational institution		1 car parking for each 200m <sup>2</sup> gross area. Within school campus dropping bay (open to all) is mandatory in ground floor having unobstructed 4.25m width and 25m length, parallel with road. For plot frontage length below 25m, unobstructed dropping bay will run along the site front length and 4.25m width.
<b>Institutional (Occupancy type- 'C')</b>		
Health care (Occupancy type- 'D')		
Hospital, clinic		1 car parking for each 5 beds
Medial Laboratory		1 car parking for each 100m <sup>2</sup> gross area
Others (medical outpatient, group practice etc.)		1 car parking for each 200m <sup>2</sup> gross area
<b>Public gathering (Occupancy type- 'E')</b>		
Cinema		1 car parking for each 40seat
Theatre, Auditorium		1 car parking for each 20 seats
Marriage/ party center		1 car parking for each 100m <sup>2</sup> gross area
Religious structure	Up to 300 m <sup>2</sup>	1 car parking minimum
	Above 300 m <sup>2</sup>	1 car parking for each 100m <sup>2</sup> gross area
Others		1 car parking for each 200m <sup>2</sup> gross area
<b>Commercial (Occupancy type- 'F')</b>		
Shop, Departmental Store		1 car parking for each 200m <sup>2</sup> gross area
Restaurant		1 car parking for each 100m <sup>2</sup> gross area
<b>Occupancy</b>		<b>Minimum parking requirements</b>
Office		1 car parking for each 200m <sup>2</sup> gross area
Others		1 car parking for each 200m <sup>2</sup> gross area
<b>Industrial (Occupancy type- 'G')</b>		
<b>Storage building (Occupancy type- 'H')</b>		
		For all structure 1 truck parking and 1 car parking is mandatory excluding loading unloading bay. For official or administrative portion 1 car parking for each 200m <sup>2</sup> gross area will be ensured.
Note		
<ul style="list-style-type: none"> <li>• Parking in a mixed-use building will be based on occupancy type of each floor. The sum of each floor parking requirements will be the parking requirements of the whole building.</li> <li>• For different type of flat, the total parking will be the sum of each type of flat.</li> <li>• For fraction in parking requirements, 1 parking will be considered.</li> <li>• The parking for lower income group can be lowered by the permission of the town development authority.</li> <li>• For flat below 90m<sup>2</sup> area parking can be ensured by combining motor cycle and car.</li> <li>• For any type of building at least 1 car parking is mandatory.</li> </ul>		

## Private Residential Land Development Rules 2004

民間デベロッパーが開発を実施するにあたり必要な要素の抜粋は以下の通りである。

- a) レイアウトプランに描かれた計画は 10 年以内に完成されなければならない。
- b) 変更等は RAJUK の許可なく行うことは出来ない。
- c) 川や池、湖といった洪水レベルよりも低く開発をすることは禁じられる。
- d) 土地プロットや所有者などの詳細は毎年 1 月 31 日までに報告することが求められている。
- e) ダッカ市、及びダッカ WASA (Water And Sewage Authority)の管轄外の場合には、下水処理場等はデベロッパーがコストを負担する。
- f) 開発を申請するためには、ダッカ市内で最低 5 エーカー、市外で 10 エーカーの敷地が必要である。
- g) 総敷地面積の 10%以下であれば政府に敷地を要求することが可能である。
- h) 人口密度は 350 人/エーカーを超えてはならない。
- i) デベロッパーは総面積の 70%以上の土地を販売することは出来ず、最低でも 30%を公共施設、公園等、インフラ関連施設に割り当てなければならない。
- j) 主要道路は最低 80 フィート以上等の道路幅の最低基準が決められている。
- k) 人口規模によって、教育、医療、商業の面積配分が決定されている。
- l) デベロッパーは開発許可を得るために RAJUK、環境局、WASA、シティーコーポレーション等の様々な機関の許可を必要とする。

বাংলাদেশ国ダッカ都市交通整備事業 (TOD) 準備調査  
 ドラフトファイナルレポート

人口規模による各施設必要面積 (acre)

Community Service	Size of the population									
	2500	5000	10000	15000	20000	25000	50000	100000	150000	Service per 1000 population
Education (acres)										
Nursery	0.20	0.40	0.80	1.20	1.60	2.00	4.00	8.00	12.00	0.08
Primary School	0.30	0.60	1.00	1.20	1.60	2.00	4.00	8.00	12.00	0.08
Secondary School			1.20	1.50	2.00	1.50	5.00	10.00	15.00	0.10
College				1.20	1.60	2.00	4.00	8.00	12.00	0.08
Health (acres)										
Small Clinic				0.60	0.80	1.00	2.00			0.04
Hospital								4.00	6.00	0.04
Utility and Community Services (acres)										
Utility Community and Religious Service	0.10	0.20	0.50	0.60	0.80	1.00	2.00	4.00	6.00	0.04
Recreation (acres)										
Playground/Play fields	0.50	1.00	1.00	1.20	1.60	2.00	4.00	8.00	12.00	0.08
Parks	0.50	1.00	1.50	1.80	2.40	3.00	6.00	12.00	18.00	0.12
Commercial (acres)										
Commercial/ Shop/ Market / Kacha Bazar	0.20	0.30	0.50	0.60	0.80	1.00	2.00	4.00	6.00	0.04
Roads (acres)										
Residential Roads	0.90	1.70	3.50	5.00	6.80	8.50	17.00	34.00	51.00	0.34
Total Area for Community Facilities	2.70	5.20	10.00	14.90	20.00	25.00	50.00	100.00	150.00	1.00
Net Residential Area	4.44	9.08	18.50	27.95	37.14	46.43	92.85	185.71	278.57	
Gross Residential Area	7.14	14.28	28.57	42.85	57.14	71.43	142.85	285.71	428.57	
Persons per Acre	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	