8. PUBLIC TRANSPORTATION

8.1 Introduction

Public transportation plays a vital role in the transportation system of an area and it also helps to minimize traffic congestion and other traffic-related externalities. Three types of public transit are examined in this report, the area is already served by two forms - bus and train, and the community has expressed interest in a third - ferry.

According to the 2000 Census, the portion of the study area residents who use mass transit (19% or 32,816) is slightly larger than those who use private automobile (12% or 21,612) for their journey-to-work trips. New York City Transit is the primary provider of public transit service in the study area. It provides local and express bus service and train service in the study area. There are nine local bus lines (B1, B3, B4, B6, B36, B64, B68, B74, and B82) and two express bus lines (X28 and X29) that serve the study area. The local buses provide daily service to points within the study area and Brooklyn, while the express buses provide service between the study area and Manhattan. There are six subway lines (B, F, N, D, Q and M) that serve the study area. The B, F, N, D, and Q trains provide service throughout the study area, while the M train serves only one station (Bay Parkway/86th Street) in the study area.

The reconstruction of the Coney Island/Stillwell Avenue station and adjacent stations will impact public transportation service in the study area for the duration of the project which is expected to last approximately 18-24 months (September 2002 to May 2004). For part of the reconstruction period, only the W train (which replaced the D train) stopped at the Coney Island/Stillwell Avenue station, while the N, F and Q line routes are truncated. The N train terminates service at 86th Street, the F line terminates at Avenue X, and the Q line terminates at Brighton Beach Avenue. Consequently, subway service is temporarily not available at Ocean Parkway and West 8th Street (Q line), Neptune Avenue and West 8th Street (F line), and Coney Island/Stillwell Avenue (N, F, and Q line). Shuttle bus service has been provided to complete the route stops for the subway stations that are closed. The completion of the Manhattan Bridge reconstruction has

resulted in the restoration of D train service to Coney Island which replaces service previously provided by the W train in the study area.

8.2 Surface Transit

A. Bus

The analysis of bus services in the study area examines how well the area is served spatially as well as the frequency of the service. Figure 8-1 shows the local and express buses and the corridors on which they travel in the study area, while Table 8-1 provides headway information for each route. Tables 8-2 to 8-5 show the existing conditions for AM, midday, PM, and Saturday midday peak hour service. Additionally, Table 8-6 provides the annual ridership data for the local bus routes. The analysis of bus service is derived from ridership and operating data for each bus line that was provided by the New York City Transit (NYCT). Detailed information, including passenger volume per peak hour, capacity, and headways for each bus line operating in the study area is presented below:

B1

The B1 bus provides service between Bay Ridge and Manhattan Beach. In the study area it provides service along 86th Street, Avenue X, Ocean Parkway and Brighton Beach Avenue. According to 2001 data it carried approximately 962, 659, and 530 passengers during the morning, midday, and evening peak hours which represented about 52%, 44%, and 59% of its service capacity. Average use during the Saturday peak hour was approximately 41% of capacity. In 2001, the B1 line transported an average of 20,359 passengers on a weekday and 11,514 passengers on weekends. Ridership increased by 13% and 15% between 1999 and 2001 for weekdays and Saturdays, respectively. The maximum load points were Brighton Beach Avenue/Brighton 1 during the AM peak hour, and 86th Street/Stillwell Avenue during the midday and PM peak hours.

Headway varies according to demand for service. During the AM peak hour, the headway is three minutes for southbound and nine minutes for northbound buses. During the PM peak hour, the headway is nine minutes for southbound and ten minutes for northbound buses.

Figure 8-1: Bus Routes in the Study Area

Table 8-1: Local Bus Routes Serving the Study Area (Coney Island/Gravesend/Brighton Beach)

| | | | | Headway in Minute | | | nutes |
|--------------|---|-----------|---|-------------------|-----|-----|-----------|
| Bus Route | Main Corridors Travelled in the Study Area | Direction | Origin/Destination | AM | MD | PM | SAT MD |
| | Brighton Beach Avenue, Ocean Parkway, Avenue X, | NB | From: Oriental Blvd/Mackenzie St | 9 | 5 | 10 | 8 |
| B1 | 86th Street | SB | To: Shore Rd/Mackay Pl | 3 | 9 | 9 | 9 |
| | | EB | From: 25th Ave/Harway Ave | 10 | 8 | 7 | N/A |
| В3 | Avenue U, 86th Street, 25th Avenue | WB | To: E.74th St/Avenue X | 5 | 9 | 7 | N/A |
| | | EB | From: Voorhies Ave/Knapp St | 12 | 15 | 15 | 20 |
| B4 | Ocean Parkway, 86th Street, Stillwell Avenue | WB | To: Narrows Ave/77th St | 15 | 15 | 15 | 20 |
| | | EB | From: Harway Ave/Bay 37th St | 7 | N/A | N/A | 6 |
| B6 | Shore Parkway, Cropsey Avenue, Bay Parkway | WB | To: Livonia Ave/Ashford St | 3 | N/A | N/A | 6 |
| | Avenue Z, Ocean Parkway, Neptune Avenue, Surf | EB | From: Nostrand Ave/Gravesend Neck Rd | 3 | 9 | 8 | 10 |
| B36 | Avenue | WB | To: 37th St/Surf Ave | 4 | 9 | 8 | 10 |
| | | EB | From: Stillwell Ave/Mermaid Ave | 15 | 12 | 12 | 10 |
| B64 | Stillwell Avenue, Harway Avenue, Bath Avenue | WB | To: Forth Ave/86th St | 12 | 12 | 12 | 10 |
| | | EB | From: West 5 Street/Surf Ave. | 7 | 6 | 7 | 40 |
| B68 | Neptune Avenue, Brighton Beach Avenue, Coney Island Avenue | WB | To: Bartel Pritchard Square/Prospect Park West | 6 | 6 | 10 | 40 |
| B74 | Mermaid Avenue, Stillwell Avenue | Loop | Stillwell Terminal | 9 | 12 | 8 | 20 |
| | | EB | From: Seaview Ave/Pennsylvania Ave | 5 | 8 | 6 | N/A |
| B82 | Kings Highway, Bay Parkway, Cropsey Avenue | WB | To: Canal Ave/Cropsey Ave | 6 | 8 | 6 | N/A |

Table 8-2: Existing Conditions - Bus Service AM Peak Hour (8 - 9 AM) Weekdays

| Bus Route | Direction | Maximum Load Point Location | Buses Per Hour | Hourly Passenger Volume | Bus Capacity Per Hour | Average Ridership Bus | Available Capacity | Hourly Passenger Volume |
|--------------|-----------|---|----------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------|-------------------------------|
| | NB | | 7 | 227 | 490 | 33 | 263 | |
| В1 | SB | Brighton Beach Ave & Brighton 1 St | 18 | 735 | 1260 | 41 | 525 | 962 |
| | EB | Avenue U & Ocean Ave. | 6 | 232 | 420 | 39 | 188 | |
| В3 | WB | Avenue U & Ocean Ave. | 12 | 571 | 840 | 48 | 269 | 803 |
| | EB | Bay Ridge Pkwy & 18th Avenue Bay Ridge Pkwy & 18th | 5 | 130 | 350 | 26 | 220 | 278 |
| B4 | WB | Avenue | 4 | 148 | 280 | 37 | 132 | |
| | EB | Bay Pkwy & 60th Street | 9 | 497 | 630 | 55 | 133 | |
| В6 | WB | Glenwood Rd. & Nostrand Ave | 21 | 1024 | 1470 | 49 | 446 | 1521 |
| | EB | | 18 | 733 | 1260 | 41 | 527 | |
| B36 | WB | Sheephead Bay Rd. & E 16 St. | 17 | 597 | 1190 | 35 | 593 | 1330 |
| | EB | | 4 | 142 | 280 | 36 | 138 | |
| B64 | WB | 86th Street & 14th Avenue | 5 | 186 | 350 | 37 | 164 | 328 |
| | NB | Coney Island Ave & Kings Hwy and Coney Island Ave & Ave J Coney Island Ave & Ave U and Coney Island Ave & Ave | 11 | 415 | 770 | 38 | 355 | 842 |
| B68 | SB | J | 11 | 427 | 770 | 39 | 343 | |
| B74 | Loop | Stillwell Terminal (Arrive) | 8 | 310 | 560 | 39 | 250 | 310 |
| B82 | EB WB | Coney Island Ave & Kings Hwy | 12 10 | 525 569 | 840 700 | 44 57 | 315 131 | 1094 |
| TOTAL | | | | 7,468 | 12,460 | | | 7,468 |

Notes: 1. Derived from NYCT Ridercheck Survey

2. Maximum load point is defined as the peak passenger accumulation point on a bus route.

- 3. The hourly volume is calculated by adding the highest accumulation on each bus during the peak hour.
- 4. Available capacity is calculated by multiplying the existing bus frequency by the bus capacity and subtracting the hourly volume.
- $5. \ Maximum \ capacity \ of \ buses \ is \ 70 \ passengers \ per \ bus.$

Table 8-3: Existing Conditions - Bus Service Midday Peak Hour (1 - 2 PM) Weekdays

| Bus Route | Direction | Maximum Load Point Location | Buses Per Hour | Hourly Passenger Volume | Bus Capacity Per Hour | Average Ridership Bus | Available Capacity | Hourly Passenger Volume |
|--------------|-----------|--|----------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------|-------------------------------|
| | NB | Oriental Bl. & Mackenzie St. 86th Street & Stillwell | 13 | 494 | 910 | 38 | 416 | 659 |
| B1 | SB | Avenue | 7 | 165 | 490 | 24 | 325 | |
| | EB | Avenue U & Ocean Ave. | 8 | 268 | 560 | 34 | 292 | 485 |
| В3 | WB | Avenue U & Ocean Ave. | 7 | 217 | 490 | 31 | 273 | 403 |
| B4 | EB | Bay Ridge Pkwy & 18th Ave. Bay Ridge & Fort Hamilton | 4 | 104 | 280 | 26 | 176 | 197 |
| | WB | Pkwy | 4 | 93 | 280 | 23 | 187 | |
| | EB | Glenwood Road & Nostrand Ave. Glenwood Road & Nostrand | 11 | 326 | 770 | 30 | 444 | 678 |
| B6 | WB | Ave. | 10 | 352 | 700 | 35 | 348 | |
| | EB | Surf & Stillwell Avenues | 7 | 182 | 490 | 26 | 308 | |
| B36 | WB | Surf & Stillwell Avenues | 7 | 222 | 490 | 32 | 268 | 404 |
| | EB | Fourth Avenue & 86th Street | 5 | 157 | 350 | 31 | 193 | |
| B64 | WB | 86th Street & 14th Avenue | 5 | 137 | 350 | 27 | 213 | 294 |
| | NB | Coney Island Ave & Ave U | 9 | 286 | 630 | 32 | 344 | |
| B68 | SB | Coney Island Ave & Ave J | 10 | 338 | 700 | 34 | 362 | 624 |
| B74 | Loop | Stillwell Terminal (Leave) | 5 | 131 | 350 | 26 | 219 | 469 |
| | EB | Coney Island Ave & Kings Hwy Coney Island Ave & Kings | 8 | 247 | 560 | 31 | 313 | 492 |
| B82 | WB | Hwy | 8 | 245 | 560 | 31 | 315 | |
| TOTAL | | | | 3,964 | 8,960 | | | 4,302 |

Notes: 1. Derived from NYCT Ridercheck Survey

- 2. Maximum load point is defined as the peak passenger accumulation point on a bus route.
- 3. The hourly volume is calculated by adding the highest accumulation on each bus during the peak hour.
- 4. Available capacity is calculated by multiplying the existing bus frequency by the bus capacity and subtracting the hourly volume.
- 5. Maximum capacity of buses is 70 passengers per bus.

Table 8-4: Existing Conditions - Bus Service PM Peak Hour (5 - 6 PM) Weekdays

| Bus Route | Direction | Maximum Load Point Location | Buses Per Hour | Hourly Passenger Volume | Bus Capacity Per Hour | Average Ridership Bus | Available Capacity | Hourly Passenger Volume |
|--------------|-----------|---|----------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------|-------------------------------|
| | ND | 86th Street & Stillwell | | 260 | 420 | 4.5 | 1.50 | |
| ъ. | NB | Avenue | 6 | 268 | 420 | 45 | 152 | 532 |
| B1 | SB | | 7 | 264 | 490 | 38 | 226 | |
| | EB | Avenue U & Ocean Ave. | 9 | 235 | 630 | 26 | 395 | 402 |
| В3 | WB | Avenue U & Ocean Ave. | 9 | 258 | 630 | 29 | 372 | 493 |
| | ЕВ | Bay Ridge Pkwy & 18th Avenue Bay Ridge Pkwy & 18th | 4 | 107 | 280 | 27 | 173 | 209 |
| B4 | WB | Avenue | 4 | 102 | 280 | 26 | 178 | |
| | EB | Glenwood Road & Nostrand Ave and Ave H & Utica Ave Glenwood Road & Nostrand | 17 | 688 | 1190 | 40 | 502 | 1005 |
| В6 | WB | Ave and Rockaway Parkway Station | 13 | 399 | 910 | 31 | 511 | 1087 |
| | EB | Sheephead Bay Rd. & E 15 St. | 8 | 408 | 560 | 51 | 152 | 661 |
| B36 | WB | Surf & Stillwell Avenues | 8 | 253 | 560 | 32 | 307 | |
| | EB | 86th Street & 14th Avenue | 5 | 205 | 350 | 41 | 145 | |
| B64 | WB | 86th Street & 14th Avenue | 5 | 175 | 350 | 35 | 175 | 380 |
| | NB | Coney Island Ave & Ave J and Coney Island Ave & Kings Hwy Coney Island Ave & Ave J and Coney Island Ave & | 10 | 385 | 700 | 39 | 315 | 744 |
| B68 | SB | Kings Hwy | 9 | 359 | 630 | 40 | 271 | |
| B74 | Loop | Stillwell Terminal (Leave) | 9 | 275 | 630 | 31 | 355 | 275 |
| | EB | Coney Island Ave & Kings Hwy Coney Island Ave & Kings | 10 | 472 | 700 | 47 | 228 | 708 |
| B82 | WB | Hwy | 10 | 236 | 700 | 24 | 464 | |
| TOTAL | | | | 5,089 | 10,010 | | | 5,089 |

Notes: 1. Derived from NYCT Ridercheck Survey

- 2. Maximum load point is defined as the peak passenger accumulation point on a bus route.
- 3. The hourly volume is calculated by adding the highest accumulation on each bus during the peak hour.
- 4. Available capacity is calculated by multiplying the existing bus frequency by the bus capacity and subtracting the hourly volume.
- 5. Maximum capacity of buses is 70 passengers per bus.

Table 8-5: Existing Conditions - Bus Service Saturday Peak Hour (1 - 2 PM)

| Bus Route | Direction | Maximum Load Point Location | Buses Per Hour | Hourly Passenger Volume | Bus Capacity Per Hour | Average Ridership Bus | Available | Hourly Passenger Volume |
|--------------|-----------|-----------------------------|----------------------|-------------------------------|-----------------------------|-----------------------------|-----------|-------------------------------|
| Route | Direction | 86th Street & Stillwell | Hour | voiume | Per Hour | Bus | Capacity | voiume |
| | NB | Avenue | 8 | 213 | 560 | 27 | 347 | |
| | ND | 86th Street & Stillwell | O | 213 | 300 | 27 | 347 | 430 |
| B1 | SB | Avenue | 7 | 217 | 490 | 31 | 273 | .50 |
| | ~ | Avenue U & Nostrand | , | | | | | |
| | EB | Avenue | 9 | 406 | 630 | 45 | 224 | |
| | | Avenue U & Nostrand | | | | | | 635 |
| В3 | WB | Avenue | 10 | 229 | 700 | 23 | 471 | |
| | | Bay Ridge Pkwy & 18th | | | | | | |
| | EB | Avenue | 3 | 91 | 210 | 30 | 119 | |
| | | Bay Ridge Pkwy & 18th | | | | | | 174 |
| B4 | WB | Avenue | 3 | 83 | 210 | 28 | 127 | |
| | ED | Glenwood Rd. & Nostrand | 10 | 255 | 7 00 | 20 | 122 | |
| | EB | Ave | 10 | 277 | 700 | 28 | 423 | 673 |
| B6 | WB | Avenue H & Utica Avenue | 10 | 396 | 700 | 40 | 304 | |
| | | Surf Avenue & Stillwell | _ | | | | | |
| | EB | Avenue | 6 | 181 | 420 | 30 | 239 | 221 |
| D26 | 1110 | Sheephead Bay Rd. & E 16 | | 150 | 420 | 2.5 | 250 | 331 |
| B36 | WB | St. | 6 | 150 | 420 | 25 | 270 | |
| | EB | 4th Avenue & 86th Street | 6 | 157 | 420 | 26 | 263 | |
| B64 | WB | 86th Street & 14th Avenue | 6 | 152 | 420 | 25 | 268 | 309 |
| | | Coney Island Avenue & | | | | | | |
| | NB | King Hwy | 8 | 167 | 560 | 21 | 393 | |
| | | Coney Island Avenue & | | | | | | 377 |
| B68 | SB | King Hwy | 8 | 210 | 560 | 26 | 350 | |
| B74 | Loop | Stillwell Terminal (Leave) | 3 | 55 | 210 | 18 | 155 | 55 |
| | EB | Kings Hwy & Ocean Avenue | 6 | 193 | 420 | 32 | 227 | |
| | | Kings Hwy & West 7th | | | | | | 380 |
| B82 | WB | Street | 6 | 187 | 420 | 31 | 233 | 360 |
| TOTAL | | | | 3,364 | 8,050 | | | 3,364 |

Notes:

- 1. Derived from NYCT Ridercheck Survey
- 2. Maximum load point is defined as the peak passenger accumulation point on a bus route.
- 3. The hourly volume is calculated by adding the highest accumulation on each bus during the peak hour.
- 4. Available capacity is calculated by multiplying the existing bus frequency by the bus capacity and subtracting the hourly volume.
- 5. Maximum capacity of buses is 70 passengers per bus.

Table 8-6: Average Bus Ridership

| | 1999 | | 20 | 00 | 2001 | | |
|--------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--|
| Bus Route | Average Weekday | Average Saturday | Average Weekday | Average Saturday | Average Weekday | Average Saturday | |
| B 1 | 18,018 | 9,993 | 18,983 | 10,130 | 20,359 | 11,514 | |
| В 3 | 13,599 | 10,202 | 14,407 | 10,445 | 14,989 | 11,529 | |
| B 4 | 6,401 | 4,087 | 6,478 | 4,058 | 6,578 | 4,451 | |
| В 6 | 33,538 | 20,312 | 35,960 | 21,905 | 38,381 | 25,493 | |
| B 36 | 15,019 | 7,394 | 15,767 | 7,437 | 16,498 | 8,293 | |
| B 64 | 5,606 | 4,118 | 5,770 | 4,243 | 6,312 | 4,939 | |
| B 68 | 16,931 | 10,259 | 16,560 | 9,795 | 18,083 | 11,527 | |
| B 74 | 3,650 | 1,030 | 3,929 | 1,637 | 4,013 | 1,787 | |
| B 82 | 26,059 | 14,692 | 26,883 | 15,048 | 27,880 | 15,505 | |
| X 28 | 3,376 | n/a | 3,865 | n/a | 4,117 | n/a | |
| X 29 | 517 | n/a | 595 | n/a | 664 | n/a | |

Source: NYCT

B3

The B3 bus provides service between Bath Beach and Bergen Beach. In the study area it provides service along Avenue U, Stillwell Avenue, and 25th Avenue before approaching its last stop at 25th Avenue/Harway Avenue. According to 2001 data it carried approximately 485, 493, and 803 passengers during the morning, midday and evening peak hours which represented about 62%, 46%, and 39% of its service capacity in both directions. In 2001, the B3 bus transported an average of 14,989 passengers on weekdays and 11,529 passengers on weekends. Between 1999 and 2001 there was a 10% and 13% increase in weekday and Saturday ridership volume. The maximum load point for all peak periods was Avenue U/Ocean Avenue, which is located outside the study area.

Headway for this bus line differs by peak hour and direction according to demand. During the AM peak hour its headway is five minutes for eastbound and ten minutes for westbound buses, but in the PM peak hour it shifts to seven minutes in both directions.

B4

The B4 bus provides service between Bay Ridge and Sheepshead Bay. In the study area it provides service along Stillwell Avenue, 86 Street, Shell Road, Avenue Z, Ocean Parkway, and Neptune Avenue. According to 2001 data it carried approximately 197, 278, and 209 passengers during the morning, midday and evening peak hours which represented about 45%, 35%, and 37% of it service capacity in both directions. During the Saturday peak hour, it operated at approximately 42% of its capacity. In 2001 this bus carried an average of 6,578 passengers on weekdays and 4,451 passengers on weekends. Between 1999 and 2001 weekday and Saturday ridership volume increased 3% and 9%, respectively. The maximum load points for this bus line were Brighton Beach Avenue/Brighton 1(morning peak hour) and 86th Street/Stillwell Avenue (midday and evening peak hours).

A significant difference does not exist between the headways for AM and PM peak hours. During the morning peak hour the headway is twelve for eastbound and fifteen minutes for westbound buses; the headway is 15 minutes in both directions during the PM peak hour.

B6

The B6 bus line provides service between Bath Beach and East New York. In the study area it provides service along Bay Parkway, Shore Parkway, and 26th Avenue. According to 2001 data it transported approximately 1,521, 678, and 1,087 passengers, which represented about 73%, 46%, and 52% of its service capacity in both directions, during the AM, midday and PM peak hours. During the Saturday peak hour, the bus operated at approximately 48% of its capacity. In 2001 this bus line carried an average of 38,381 passengers on a weekday and 25,493 passengers on weekend. Between 1999 and 2001 weekday and Saturday ridership increased 14% and 26%, respectively. The maximum load point for this bus line is outside the study area. The headway for this bus line in the morning is three minutes and seven minutes for westbound and eastbound buses, respectively; on Saturdays the headway shifts to six minutes.

B36

The B36 bus provides service between Coney Island and Sheepshead Bay (Avenue U). It provides service along Ocean Parkway, Neptune Avenue, West 5th Street, Surf Avenue, West 37th Street, and West 33rd Street. According to 2001 data it transported approximately 1,330, 404, and 661 passengers, which represented about 54%, 41%, and 59% of its service capacity in both directions, during the AM, midday, and PM peak hours. During the Saturday peak hour, the bus operated at approximately 40% of its capacity. In 2001 this bus carried an average of 16,498 passengers on weekdays and 8,293 passengers on weekends. Between 1999 and 2001 there was a 10% and 12% increase in the weekday and Saturday ridership volume. The maximum load point is outside the study area during the AM peak hour, and during the midday and evening peak hours it is at Surf/Stillwell Avenues.

During the AM peak hour the headway is three minutes for eastbound buses and four minutes for westbound buses; and during the PM hour the headway is eight minutes in both directions.

B64

The B64 bus provides service between Bay Ridge and Coney Island. In the study area it provides service along the Bath Avenue, 25th Avenue, Harway Avenue, Stillwell Avenue,

Mermaid Avenue, Surf Avenue, Bay View Avenue, and 37th Street. In 2001 it transported approximately 328, 294, and 380 passengers, which represented about 52%, 42%, and 55% of capacity in both directions, during the AM, midday, and PM peak hours. During the Saturday peak hour, the bus operated at approximately 37% of its capacity. In 2001 this bus carried an average of 6,312 passengers on a weekday and 4,939 passengers on weekends. Between 1999 and 2001 weekday and Saturday ridership increased 13% and 20%, respectively. The maximum load point for this bus line lies outside the study area. Headway for this bus line is 15 and 12 minutes for the AM and PM peak hours, respectively.

B68

The B68 bus provides service between Coney Island and Park Slope. In the study area it provides service along Coney Island Avenue, Brighton Beach Avenue, and Surf Avenue. According to 2001 data it transported approximately 842, 624, and 744 passengers, which represented about 55%, 47%, and 56% of its capacity in both directions during the AM, midday, and PM peak hours. During the Saturday peak hour, the bus operated at approximately 37% of its capacity. In 2001 this bus line carried an average of 18,083 passengers on a weekday and 11,527 passengers on weekend. Between 1999 and 2001 weekday and Saturday ridership increased by 7% and 12%, respectively. The headway is the same for both AM and PM peak hours – eight minutes and seven minutes in each direction.

B74

The B74 bus provides service between Sea Gate and Coney Island. It provides service along Mermaid Avenue, Neptune Avenue, Bay View Avenue, and 33rd Street. According to 2001 data it carried approximately 310, 131, and 275 passengers, which represented about 55%, 37%, and 44% of its capacity in both directions, during the AM, midday, and PM peak hours. In 2001, this bus line transported an average of 4,013 passengers each weekday, and 1,787 passengers on weekends. Between 1999 and 2001 weekday and Saturday ridership increased 10% and 73%, respectively. The maximum load point location for this bus line is the Stillwell Avenue Terminal for all periods. The headways for the peak hours are nine minutes in the morning and seven minutes in the evening.

B82

The B82 bus provides service between Gravesend and Starrett City. In the study area it runs along Cropsey Avenue, Bay Parkway, and Kings Highway. According to 2001 data it transported approximately 1,094, 492, and 708 passengers, which represented about 72%, 44%, and 50% of the total capacity in both directions, during the AM, midday, and PM peak hours. In 2001, this bus line transported an average of 27,880 passengers on weekdays and 15,505 passengers on weekends. Between 1999 and 2001 weekday and Saturday ridership increased 7% and 6%, respectively. The maximum load point for this bus line is Coney Island Avenue/Kings Highway for all weekday peak hours. The headway is five minutes for eastbound buses and six minutes for westbound buses during the AM peak; the PM peak headway is six minutes in both directions.

X28

The X28 bus provides service between Sea Gate or Bensonhurst and Manhattan. The service originates at various locations within the study area with stops along Surf Avenue and Cropsey Avenue. In 2001, the X28 transported approximately 4,117 passengers daily. Between 1999 and 2001 there was a 22% increase in the weekday ridership volume.

X29

The X29 bus provides service between Coney Island and Manhattan. In the study area the service originates at Stillwell/Surf Avenues and runs along Surf Avenue, West 5th Street, Neptune Avenue, and Coney Island Avenue. In 2001 an average of 664 passengers were transported daily. Between 1999 and 2001 there was a 28% increase in the weekday ridership volume.

B. Jitney Cabs/Taxis

The presence of jitneys ("dollar cabs") in the study area is very visible in Coney Island where they provide feeder service to the Stillwell Avenue station. Jitneys serve residents primarily in the western portion of Coney Island, where there are several New York City Housing Authority buildings and a low-income population. The jitneys provide service primarily along the B74 bus route which runs along Mermaid Avenue and Surf Avenue. The popularity of the jitneys in this

area, west of Stillwell Avenue, may be linked to the sporadic bus service offered by New York City Transit which residents complained about at the visioning sessions held by NYCDOT and NYMTC.

8.3 Subway Service

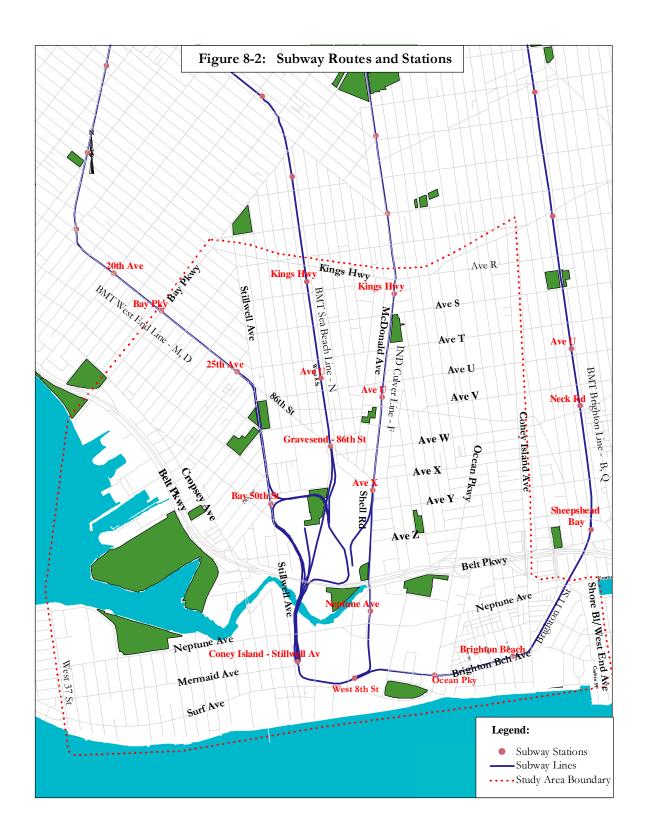
Six subway lines (B, F, N, D, Q and M) operate within the study area. The five subway lines make a total of 13 stops in the study area. The B train provides express service in the study area and replaces service previously provided by the Q diamond. The Q train provides local service in the study area. Figure 8-2 shows the subway routes and stops in the study area. Under normal conditions, the local train terminates at the Coney Island/Stillwell Avenue station while the express train terminates at Brighton Beach; however, while the repairs are being made to the Coney Island/Stillwell Avenue Station, both lines terminate at the Brighton Beach station. The Coney Island/Stillwell Avenue station is the main terminal for three trains (F, Q, and D) operating in the study area; it is also a major transfer point for commuters using the B36, B64, and B74 buses.

B Train

Following the completion of renovations on the Manhattan Bridge in February 2004, the B train resumed service to the study area providing service from Bedford Park Boulevard, the Bronx and Brighton Beach. The B train provides local service in Manhattan and express service in Brooklyn.

D Train

The D train provides service between 205th Street (Norwood) in the Bronx and Coney Island. It makes four stops in the study area – Bay Parkway, 25th Avenue, Bay 50th Street, and terminates at Coney Island/Stillwell Avenue. Transfers to surface transit can be made at Bay Parkway (B6 and B82 bus lines), 25th Avenue (B3 and B4 bus lines), Bay 50th Street (B64), and Coney Island/Stillwell Avenue (B74). The headway for this train is ten minutes during the peak and off peak hours (weekdays), and it decreases to eight minutes on weekends.



According to 2001 data, on an average weekday this train transports approximately 6,337 passengers traveling from the 25th Avenue and Bay 50th Street stations. From the other two stations – Bay Parkway and Coney Island/Stillwell Avenue – where the D train provides service along with the F, Q, and M ridership in 2001 averaged 16,742 commuters on weekdays. Between 1999 and 2001, the number of commuters entering the system at 25th Avenue, the maximum load point on the D train in the study area, increased 5%. As shown in Table 8-7, approximately 1,982 and 160 commuters entered the system at this station during the AM and PM peak hours.

F Train

The F train operates between Jamaica Estates, Queens and Coney Island. Within the study area, it runs along McDonald Avenue making a total of six stops in the study area – Kings Highway, Avenue U, Avenue X, Neptune Avenue, West 8th Street, and Coney Island/Stillwell Avenue where the line terminates. Transfers to surface transportation can be made at Kings Highway (B82), Avenue U (B3), Avenue X (B1, B4, and shuttle bus to Coney Island while Coney Island/Stillwell Avenue station reconstruction is in progress). It provides only local service and the headway for this train varies from 4 to 6 minutes during the peak hours and 6 to 8 minutes during the off peak hours (weekdays).

According to 2001 data, on an average weekday this trains transported approximately 9,860 passengers traveling from Avenue U, Avenue X, Kings Highway, and Neptune Avenue. The F train also provides service from Coney Island/Stillwell Avenue and West 8th Street where the Q and D trains also operate. In 2001, approximately 13,000 commuters accessed the system from these stations. Between 1999 and 2001, Kings Highway was the maximum load point for commuters using this line in the study area; ridership at this station increased 14% in the same period. As shown in Table 8-7 during the AM and PM peak hours approximately 1,648 and 213 commuters accessed the system at the Kings Highway station.

Table 8-7: Average Subway Ridership

| | 199 | 99 | 200 | 00 | 20 | 01 |
|--|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|
| Station (Train) | Average Weekday | Average Saturday | Average Weekday | Average Saturday | Average Weekday | Average Saturday |
| 25 Ave. (W) | 3,697 | 1,486 | 3,931 | 1,589 | 3,898 | 1,587 |
| 86 St. (N) | 1,241 | 635 | 1,453 | 862 | 1,599 | 1,014 |
| Ave. U (F) | 2,103 | 1,036 | 2,225 | 1,115 | 2,371 | 1,161 |
| Ave. U (N) | 1,612 | 691 | 1,971 | 1,104 | 2,190 | 1,355 |
| Ave. X (F) | 2,853 | 1,278 | 2,985 | 1,331 | 3,102 | 1,384 |
| Bay 50 St. (W) | 2,325 | 1,033 | 2,366 | 972 | 2,439 | 961 |
| Bay Pkwy. (M,W) | 5,748 | 3,077 | 6,020 | 3,086 | 5,986 | 2,787 |
| Kings Highway (F) | 3,266 | 1,813 | 3,421 | 1,838 | 3,731 | 2,215 |
| Kings Highway (N) | 2,510 | 1,123 | 2,878 | 1,594 | 3,030 | 1,789 |
| Neptune Ave. (F) | 1,638 | 629 | 1,713 | 691 | 1,852 | 745 |
| Ocean Pkwy. (Q) | 2,555 | 1,641 | 2,728 | 1,722 | 2,844 | 1,755 |
| Stillwell AveConey Island (F,Q,W) | 9,499 | 8,646 | 10,056 | 8,951 | 10,756 | 9,809 |
| West 8 StNew York Aquarium (F,Q) | 2,270 | 1,838 | 2,207 | 1,765 | 2,200 | 2,025 |

Source: NYCT

While the Stillwell Avenue station is undergoing reconstruction, F train service will terminate at Avenue X. Shuttle bus service will be provided between Avenue X and Stillwell Avenue. Additionally, the B68 bus line has been extended until Stillwell Avenue serving West 8th Street and Neptune Avenue along its new route.

M Train

The M train provides service between Middle Village, Queens and Gravesend. It makes only one stop (Bay Parkway/86th Street) in the study area. Commuters can transfer to the B1, B6, and B82 bus lines at this location.

According to 2001 data, on an average weekday there were 5,986 passengers traveling from the Bay Parkway station. As Bay Parkway serves commuters for the M and D trains, it is not clear what portion of the commuters uses the M train. As shown in Table 8-7, between 1999 and 2001, ridership at this station increased 4%.

N Train

The **N** train provides service between Astoria (Ditmars Boulevard) and Gravesend (86th Street). This train makes three stops in the study area at Kings Highway, Avenue U and 86th Street. At Kings Highway passengers can make connection to the B82 bus. It provides only local service. Headway along this line varies from eight to ten minutes on weekdays.

According to 2001 data, shown in Table 8-7, this train transported approximately 6,819 passengers traveling from 86th Street, Avenue U, and Kings Highway on weekdays. New York City Transit 2001 data also indicate that the Kings Highway station was the maximum load point for this line in the study area, and that ridership from this station increase 21% between 1999 and 2001. For the duration of the Stillwell Avenue reconstruction period, the N train service will continue to terminate service at the 86th Street Station as it has since November 2001.

Q Train

The Q train provides service between 57th Street, Manhattan and Coney Island. It makes four stops in the study area – Brighton Beach, Ocean Parkway, West 8th Street, and Coney

Island/Stillwell Avenue. In general, the Q train provides express service in Manhattan and local service in Brooklyn. Due to the reconstruction of the Coney Island/Stillwell Avenue station, service is currently terminated at Brighton Beach. Transfers to surface transit at the Brighton Beach station include the B1, B36 and B68 bus lines. Headway for this train varies from six to eight minutes during the peak hours and ten minutes during the off peak hours (weekdays).

According to 2001 data, on an average weekday the Q train transported approximately 2,844 passengers traveling from the Ocean Parkway station. Between 1999 and 2001, the Ocean Parkway station remained the highest loading point for the Q in the study area; ridership at this station increased 11% for the same period. As shown in Table 8-7, approximately 1,095 and 259 commuters entered the system at this station during the AM and PM peak hours.

Due to the Coney Island/Stillwell Avenue rehabilitation project, the Q train will terminate service at the Brighton Beach station; service to other stops will be provided by the B68 bus line.

8.4 Stillwell Avenue Terminal Rehabilitation Project

To cater to the growing need of commuters using the Stillwell Avenue station, New York City Transit (NYCT) has committed to a major rehabilitation of the station. The first phase of the \$220 million project begun in Fall 2001, and the second phase begun in September 2002 and will continue until May 2004. During the reconstruction period, bus and subway service will be affected.

As previously noted service at the following stations has been affected:

- Coney Island/Stillwell Avenue termination of F, Q, and N train service
- Neptune Avenue/Shell Road termination of F train service
- West 8th Street termination of F and Q train service
- Ocean Parkway termination of Q train service

Service on the following bus lines has also been affected:

• **B3** – in the study area this bus travels all along Avenue U, Stillwell Avenue and 25th Avenue, before approaching its last stop at 25th Avenue/Harway Avenue. Along its route, it also

provides feeder services to the Q train at Avenue U Station and D train at 23rd Avenue Station. These extensions are done due to the extension project of the Stillwell Avenue Terminal.

- **B36** the existing westbound B36 bus stop located at the intersection of Stillwell and Surf Avenue will be relocated from the near side of Stillwell Avenue to the far side on the same avenue.
- **B68** due to the temporary closure of the Stillwell Avenue station that will affect train routes in this area, B68 will be replacing the Q train route and will travel until Stillwell Avenue. It will also provide service to the Neptune Avenue station (F train), Ocean Parkway station (Q train), West 8th Street station (F and Q trains), and Stillwell Avenue station (F and Q trains). The new schedule for this route is as follows:

Southbound: regular route from Windsor Terrace to Brighton Beach Avenue/Ocean Parkway; then via West Brighton Avenue, West 5th Street, Neptune Avenue, and Stillwell Avenue.

Northbound: from Stillwell Avenue, near side of Surf Avenue, then via: Stillwell Avenue, Surf Avenue, West Brighton Avenue, onto Brighton Beach Avenue, then on to its regular route to Windsor Terrace.

8.5 Public Transportation Issues Raised by the Community

At the public meetings held in the study area, community groups provided input about weaknesses in the public transit service and changes they would like to see.

Bus Transit

Community groups raised the following issues:

- The need for bus service on Neptune Avenue from West 5th Street to West 36th Street.
- The need for direct bus service between Kingsborough Community College and Coney Island; i.e., feeder service from nearby subway stations.
- The B3 bus service on Avenue U, Nostrand Avenue to Kings Plaza experiences congestion and overcrowding, and it is slow. The B36 one-stop-ride service to Kings Plaza should be reinstated to alleviate the B3 problems and improve quality of service
- The need for additional service on the B74 line after school hours, especially in the evenings.

- Increase the frequency of bus service as a method to reduce Dollar Van competition.
- A bus hub is needed in Coney Island to serve Keyspan Stadium. The B64, B68, and B82 bus routes should be extended to this hub.
- A transfer is needed from subway to bus service from 86th Street in Gravesend connecting to the West 8th Street subway station on Coney Island.
- Initiate weekend operation for existing express bus services.

Rapid Transit

- Stillwell Station should be accessible to ADA standards. No wheelchair access exits there.
- All-day Metrocards (FunCards) should be available at the booths.
- Express Q-train service should be extended to Stillwell Avenue.
- Brooklyn/Queens (inter-borough) train service should be expanded.
- Additional express service is needed on all subway lines Q, F, N, and R.
- NYCT right-of-ways should be better maintained; for example, landscaping areas around subway structures would beautify the areas and help avert dumping.
- Better coordination for special-event transit scheduling is required.
- Provision of a less maintenance-intensive and cleaner subway system.
- More reliable and on-time subway service is needed.

Ferry Service

 The provision of ferry service to Manhattan and the Rockaways is desired and should be examined.