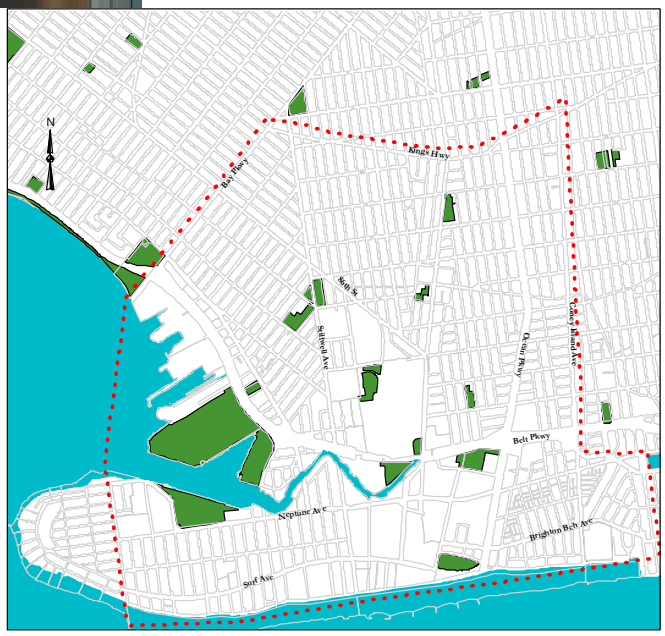
Coney Island/Gravesend Sustainable Development Transportation Study



Technical Memorandum No. 1 - Existing Conditions

Michael R. Bloomberg, Mayor
The City of New York

New York City
Department of Transportation
Iris Weinshall, Commissioner

May 2004

EXECUTIVE SUMMARY

The Coney Island/Gravesend Sustainable Development Transportation Study seeks to address the development and transportation needs of three communities (Coney Island, Gravesend, and Brighton Beach) in southern Brooklyn. The study area is bounded by Kings Highway on the north, Coney Island Avenue (northeast) and West End Avenue (southeast), the Riegelmann Boardwalk, and West 37th Street (southwest) and Bay Parkway (northwest). The purpose of the study is to assess the land use development potential and trends of the area and to evaluate their effects on the traffic network and transportation system. Of the three communities in the study area, Coney Island has the greatest growth potential because it has a concentration of prime vacant parcels and buildings that exceed those found in either Gravesend or Brighton Beach. Additionally, there have been some discussions about revitalizing Coney Island as a destination location for recreation and entertainment.

Technical Memorandum No. 1 assesses the existing conditions in the study area which will form the basis for future analysis and alternative development scenarios. It examines demographics, land use and zoning, traffic conditions including goods movement, pedestrians and bicycles, accidents and safety, parking supply and demand, and public transportation. The data collected for each subject area was supplemented with information gathered from community residents at several public forums held in the community.

S-1. Demographics

The population and characteristics of the study area is diverse including people of various racial, ethnic, and socioeconomic backgrounds as well as different types of residential buildings. Low density houses are concentrated in Gravesend while Coney Island and Brighton Beach have a higher concentration of high density dwelling units.

The demographics analysis for the study area examined population trends from 1980 to 2000. The analysis showed that between 1980 and 1990 the study area's population declined while the population in New York City and Brooklyn increased. However, between 1990 and 2000

population growth in the study area (7.3%) was similar to that of Brooklyn (7.2%) and New York City (9.4%). The median income for the study area, which grew steadily between 1980 and 2000, was $29,303 in 2000; it was slightly lower than the median income for Brooklyn and New York City which was $33,056 and $38,293, respectively. Although the median income for the study area as a whole increased, there was an increase in the number of people living below the poverty level. This trend was more apparent in some census tracts than others. The majority of the study area residents (54%) used transit to complete their journey to work trips which was similar to New York City (52%) and Brooklyn (57%).

S-2. Land Use and Zoning

The majority of the study area is zoned and used for residential use. Commercial/retail uses are concentrated along 13 of the 14 major corridors in the study area. Most of the commercial/retail activities are small-scale independent enterprises; however, there are some major chain and big box stores such as McDonald's, Radio Shack, Toys R Us, Rite Aid, P.C. Richards, Pathmark, Kohl's, and Home Depot. Industrial use in the study area is dispersed but concentrated along some parts of Cropsey Avenue, Neptune Avenue, McDonald Avenue/Shell Road, and Stillwell Avenue. Some of New York City's major entertainment and recreation attractions – the New York Aquarium, the Coney Island Amusement Park, Keyspan Park, and the Boardwalk – are located in the study area.

Recent major developments such as Keyspan Park, Home Depot, and Oceana as well as small-scale in-fill developments indicate that some parts of the study area are being revitalized. Nevertheless, the potential for future development is still enormous with approximately 1.6 million square feet of vacant parcels in Coney Island alone.

S-3. Traffic and Transportation

The traffic and transportation analysis focused on the 14 major corridors in the study area – Coney Island Avenue, Ocean Parkway, Stillwell Avenue, McDonald Avenue/Shell Road, Kings Highway, Bay Parkway, Cropsey Avenue, 86th Street, Neptune Avenue, Mermaid Avenue, Surf Avenue, Brighton Beach Avenue, Avenue X, and Avenue U. The existing conditions of 53 intersections along these corridors were assessed for the AM (8:00-9:00), midday (1:00-2:00

PM), PM (5:00-6:00) weekday peak hours, and the Saturday peak hour (12:00 – 1:00 PM). The capacity and level of service (LOS) at these intersections were analyzed using the 2000 Highway Capacity Software.

Complex and high volume intersections such as McDonald Avenue/86th Street/Avenue X, Coney Island Avenue/Brighton Beach Avenue, Coney Island Avenue/Neptune Avenue, Ocean Parkway/Neptune Avenue, McDonald Avenue/Kings Highway, and Coney Island Avenue/Guider Avenue experienced unacceptable level of service (LOS E or F) for one or more of the peak hours.

S-4. Pedestrians and Bicycles

The analysis of pedestrian and bicycle transportation focused on activities along the major corridors and intersections. Two sets of pedestrian counts were conducted for weekdays and summer activities. Counts were conducted at a total of 32 intersections. The intersections with the most pedestrian activity are located along corridors with significant commercial activities or transportation transfer points. The corridors and intersections are Brighton Beach Avenue (between Ocean Parkway and Coney Island Avenue), 86th Street (between Bay Parkway and Stillwell Avenue), Coney Island Avenue/Brighton Beach Avenue, McDonald Avenue/Kings Highway, Surf Avenue/Stillwell Avenue, 86th Street/Bay Parkway, and McDonald Avenue/86th Street/Avenue X.

There are no on-street bicycle facilities in the study area. However, the Greenway paths on Ocean Parkway and the Coney Island Boardwalk (open to cyclists between 5-10 AM daily) are well utilized by residents. The Department of City Planning is currently conducting a study that examines options to close the gaps between the various segments of the Greenway in the study area.

S-5. Accidents/Safety Analysis

The accident and safety analysis examined 27 intersections in the study area that had an average of 20 or more accidents each year between 1996 and 2000. Analysis of the accidents by corridors showed that each year Coney Island Avenue had the highest number of accidents. The

data also showed that the Neptune Avenue/Ocean Parkway intersection was the most critical location with an average of 49 accidents per year for the five years analyzed. The second most critical intersection was Coney Island Avenue/Avenue Z with an average of 39 accidents per year. The data showed that there was one location with an average between 41 to 50 accidents per year, four locations with between 31 to 40 accidents, and 21 locations that averaged between 20 to 30 accidents per year.

S-6. Parking Analysis

The parking analysis focused on on-street parking supply and demand on the major corridors during the AM, midday, and PM peak hours. It also inventoried off-street parking facilities in the study area. The survey showed that parking supply met demand in most places except at those locations where there are a lot of commercial/retail activities, such as along Brighton Beach Avenue, 86th Street, and parts of Kings Highway.

S-7. Public Transportation

The transit needs of the study area are met with service provided by subways, buses (both local and express), and jitneys. More than half of the study area's population use mass transit to complete their journey to work trips.

There are nine local bus lines (B1, B3, B4, B6, B36, B64, B68, B74, and B82) and two express buses (X28 and X29) that provide service in the study area. The local buses connect the three communities with various neighborhoods and destinations in Brooklyn, while the express buses provide service between the study area, Manhattan, the Bronx, and Queens. The B, D, F, M, N, and Q trains provide service at 13 stops in the study area. Due to the reconstruction of the Stillwell Avenue station service is temporarily suspended at three stations (Neptune Avenue, Ocean Parkway, and West 8th Street). In addition to the subways and buses, jitneys fill some transportation needs for residents in Coney Island where service is provided between the Stillwell Avenue station and residences in the western tip of the peninsula.

Although the study area is generally well served, residents expressed the need for better service on the B74 route as well as service to Kings Borough Community College and Manhattan Beach. Residents also expressed the desire to have ferry service to Manhattan and the Rockaways.

S-8. Alternative Futures (Development Scenarios)

With the assistance of community groups and other stakeholders, a set of four transportation scenarios and three land use scenarios were identified for testing with the Best Practice Model. The New York Best Practice Model is a regional transportation modeling software developed by the New York Metropolitan Transportation Council to assess travel and transportation patterns in the region. The transportation and land use scenarios are shown in the matrix below. A combination of each transportation and land use scenario will be tested with the model and the results used to assess future transportation needs in the study area.

Alternative Transportation and Land Use Scenarios

TRANSPORTATION \ LAND USE →	1 Current Trend	2 Moderate Development	3 Full Buildout (Vacant Lots)
1 Current Programmed Projects			
2 Transportation Management Strategies			
3 Transit Focused Improvements			
4 Major Roadway Improvements			