# 9. SCENARIOS

### 9-1. Introduction

Community input received at the public forums were used to develop the scenarios (development alternatives) that will be tested using the Best Practice Model (BPM) which is a set of transportation models developed by the New York Metropolitan Transportation Council (NYMTC) to meet the federal requirements for long-range planning. The Best Practice Model incorporates transportation behavior and relationships that have been developed with an extensive set of data that includes a major travel survey of households in the region, land-use inventories, socioeconomic data, traffic and transit counts, and travel times. The BPM facilitates the prediction of trip generation, trip distribution, and mode choice based on land use and other factors.

#### 9-2. Alternative Futures (Development Scenarios)

Four transportation and three land use scenarios were developed with the information gathered from field surveys and public forums held in the community. These scenarios will be tested using a combination of each transportation and land use scenario as highlighted in the matrix below (Figure 9-1). Consequently, twelve combinations will be modeled and assessed.

	LAND USE	. 1	2	3
			Moderate	Full Buildout
TRANSPORTATION		Current Trend	Development	(Vacant Lots)
	Current			
_	Programmed			
1	Projects			
	Transportation			
	Management			
2	Strategies			
	Transit Focusod			
3	Improvements			
J	Improvements			
	Major Roadway			
4	Improvements			

Figure 9-1: Proposed Scenarios

#### **Transportation Scenarios**

- 1. *Current Programmed Projects* includes projects that are already programmed by NYCDOT or are in the Transportation Improvement Plan (TIP). The projects that are currently programmed include:
  - Reconstruction of Bayview Avenue (between West 31 Street and West 36 Street) and along McDonald Avenue (between Avenue X and Cortelyou Road);
  - Resurfacing Shore Parkway Service Road (between Bay Parkway and 23 Avenue); and,
  - Extension of Shore Parkway exit ramp at Bay Parkway.
- 2. *Transportation Management Strategies* includes the application of the following strategies where appropriate to improve traffic circulation:
  - Park and ride facilities;
  - Improved signage;
  - Signal and/or intersection improvements;
  - Pedestrian/bicycle facilities;
  - One-way street pair; and,
  - On-street parking changes.
- 3. *Transit Focused Improvements* includes potential changes to the transit system as expressed by community residents. They include:
  - Ferry service between Coney Island and the Rockaways and/or Manhattan;
  - Inter-Neighborhood Transit (bus service between Coney Island, Brighton Beach, and Manhattan Beach); and,
  - Additional express bus service.
- Major Roadway Improvement(s) reflects potential changes to the street network. The following item was identified by the community in Coney Island to reduce delays at the Cropsey Avenue exit from the Belt Parkway.
  - New exit ramp from Belt Parkway at Stillwell Avenue (eastbound and westbound).

#### Land Use Scenarios

- 1. *Current Trend* follows the existing development pattern in the study area. It includes the following potential changes:
  - Development based on current trends in the community;
  - Infill residential vacant lots with one- and two-family homes; and,
  - Introduction of small scale commercial/retail entities.
- Moderate Development includes some deviation from the current development pattern. It
  would include new developments such as co-ops and condos to complement the low-income
  housing being built in Coney Island. Developments under this scenario would help to
  stabilize the economic base of the community. Potential changes would include:
  - Increased commercial/retail developments;
  - Intensification and mixture of housing types; and,
  - Additional recreational/entertainment developments.
- 3. *Full Build Out (of vacant lots)* would include developments that maximize building potential under the current zoning regulations or some changes to the current regulations that would increase density. Developments under this scenario would include:
  - Build out vacant lots to the maximum allowed under current zoning;
  - Upzoning or changing zoning regulations, if necessary, to meet development objectives;
  - Increased amusement/recreational developments, such as a water park; and,
  - Development of a hotel and office space.

#### 9-3. Guiding Principles

A set of overarching principles, or guiding principles, were developed using the study's goals/objectives, community visions, and other stakeholders input to frame future outcomes in the study area. The guiding principles complement the transportation and land use alternative futures; they are as follows:

#### Transportation

- Improve the aesthetics of major gateways and corridors;
- Provide increased options for bicyclists and pedestrians;

- Enhance transportation connections and use of public transit; and,
- Develop solutions to reduce congestion and improve safety along major corridors and at intersections, where necessary.

#### Environment

• Protect natural resources – shorelines, open spaces, and parks and recreational areas.

#### **Community and Land Use**

- Provide a mix of housing types to support economic development and diversity;
- Develop vacant lots and renovate or demolish abandoned buildings; and,
- Create an attractive and revitalized amusement/recreation center in Coney Island.

#### 9-4. Strategic Outcomes

A list of strategic outcomes, results-based outcomes, corresponding to each strategic area and consistent with the guiding principles was identified by the community. The following strategic outcomes for each strategic area were developed to assess the results of the modeling process:

#### **Principle 1: Transportation**

- Improved lighting;
- Better curbside management;
- Greater parking turnover;
- Better truck route;
- Improved interface with Belt Parkway;
- Better walk/transit access to activity centers;
- Expediting buses through traffic;
- Focus on transit to Keyspan Park incentives; and,
- Enhanced Coney Island bus service.

# **Principle 2: Environment**

- Maximize the use of the beach and open/park space;
- Continuity and access in recreational areas.

# **Principle 3: Community and Land Use**

- Reduced density in Gravesend;
- Open space preservation/greenery;
- Maintaining nature of current streets;
- More of a land use mix; same level of density;
- Affordable housing for seniors;
- Amusement/recreation center in Coney Island; and,
- Improved community facilities/community space.

# 9-5. Performance Measures

Performance measures are used to evaluate the effectiveness of alternatives and to identify opportunities for improvement and guide the selection of the best scenario or combination of scenarios. The following are some of the performance measures that will be used to assess the outcomes of the modeling process:

- Share of person trips by transit;
- Bus travel speeds;
- Auto occupancy;
- Number of auto trips;
- Auto miles of travel;
- Auto travel time lost to congestion;
- Surface transit time lost to congestion;
- Number of congested route miles;
- Number of truck trips; and
- Auto travel speed.