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# **EXECUTIVE SUMMARY**

The Manhattan Cruise Terminal (MCT) experiences a combination of pedestrian/cyclist congestion, truck idling, and vehicle build up entering and exiting the terminal. While MCT has generally maintained a traffic enforcement agent (TEA) presence at the cruise terminal to manage pedestrian and vehicular traffic, and ramp structures at the terminal help bring vehicles off the road to a degree, the outdated structure of the terminal continues to exacerbate challenges for the surrounding neighborhood along the West Side Highway.

Responding to a need to accommodate the evolving cruise industry, the public realm, multi-modal forms of transportation, and opportunities for increased activity at the Cruise NYC facilities, NYCEDC is developing a conceptual Master Plan to modernize MCT.

The goal of this traffic report is to present a menu of traffic mitigation options for further study with interagency partners. NYCEDC will work with New York City Department of Transportation (NYC DOT), New York State Department of Transportation (NYS DOT), New York City Police Department (NYPD), Ports America, and Hudson River Greenway Trust to identify the most effective strategies to meet the needs of MCT operations and local roadway users in accordance with the Master Plan.

Through a combination of field observations, traffic data collection, and feedback from the local community, two primary focal areas were identified as options for short- and medium-term mitigation strategies:

#### **Short-Term Strategies**

- Improve pedestrian flow and reduce conflicts by placing pedestrian traffic managers (TMs) and/or NYPD traffic enforcement agents (TEAs) along the Hudson River Greenway and pedestrian crossings on 12th Avenue.
- Improve vehicle flows in and out of the terminal by enhancing signage and wayfinding for pedestrians, taxis and for-hire vehicles (FHVs), and privately owned vehicles (POVs).
- Improve internal roadway operations by striping the south service road to increase capacity at the entrance and optimizing pick-up/drop-off on levels 2 and 3.

Strategies for Further Interagency Coordination (primarily NYC DOT, NYPD, NYS DOT)

- Improve pedestrian/vehicular traffic flows and safety via signal modifications:
  - Modernize the Hudson River Greenway signal crossings, including bike signals, to facilitate pedestrian entry/exit from MCT
  - Lead pedestrian interval (LPI) signal phasing to increase pedestrian visibility and reduce pedestrian/vehicle conflicts while crossing 12th Avenue
  - o Extend signal times along 12th Avenue to facilitate traffic flows
  - Add signal heads to increase visibility and reduce confusion for vehicles exiting MCT
- Improve traffic flow by diverting northbound traffic entering the terminal to alleviate backups in the leftturn bay which spills into thru-lanes on 12th Avenue

**Table 1 List of Traffic Improvement and Congestion Mitigation Interventions** 

Challenge	Potential Intervention	Phase
Bikes rarely yield to pedestrians crossing Greenway	Deploy traffic managers at key Greenway crossings	Short-term
	Study feasibility of bike-oriented signals at key Greenway crossings	Coordinate with other agencies on potential
Insufficient time for pedestrians to cross 12 <sup>th</sup> Avenue and Greenway, causing clusters on medians, sidewalks, and crosswalks	Deploy traffic managers and NYPD TEAs at key intersections	Short-term
	Install pedestrian wayfinding signs within terminal and at MCT exit and entrance	Shortterm
	Extend signal timing to cross 12 <sup>th</sup> Avenue during peak periods	Coordinate with other agencies on potential
	Study feasibility of Leading Pedestrian Interval Phasing (LPI)	Coordinate with other agencies on potential
Congestion at the protected left-turn signal at W. 55th Street, causing spillback from the left-turn bay into the adjacent through lane	Close the left-turn bay and divert northbound traffic to make a right on West 56 <sup>th</sup> Street, right again on 11th Avenue, and right onto 55 <sup>th</sup> Street	Coordinate with other agencies on potential
Taxis and FHVs on northbound 12 <sup>th</sup> Avenue use one drop-off more than the other	Improved taxi and FHV signage to evenly distribute passengers between the two drop-off zones	Short-term
Traffic congestion within MCT on all three floors	Deploy Traffic Managers at drop-off zones efficiently	Short-term
	Pavement markings to double the in-bound land capacity at West 54th Street and direct traffic based on vehicle type and destination	Coordinate with other agencies on potential
	Remove barricades on second floor	Short-term
	Remove curbside parking on one side of third floor road, and add pavement markings	Short-term
Insufficient and inconsistent vehicle signage within MCT creates confusion and congestion	Signs with uniform names and appearance, placed to guide vehicles toward the appropriate entrances for each vehicle type	Coordinate with other agencies on potential
	Signal head to increase visibility for exiting vehicles	Coordinate with other agencies on potential
Lack of industry and public sector coordination on traffic management	Stakeholder coordination	Short-term
Lack of understanding of passenger travel pattern	Data tracking and impact analysis	Short-term
Lack of convenient and alternate mode of travel to MCT	Increased airport transfers and shuttle buses	Coordinate with other agencies on potential

This report details the cruise terminal traffic mitigation strategies and is hereby submitted as the Community Traffic Mitigation Plan for the Manhattan Cruise Terminal (MCT) in accordance with Local Law 54, which requires the creation of a Community Traffic Mitigation Plan defined as "a plan, developed in consultation with the Department of Transportation and the Police Department, that outlines proposed measures to reduce private or for-hire vehicle usage and encourage use of public transportation in a neighborhood where a cruise terminal is located in order to address traffic congestion and other disruptions resulting from the loading or unloading of cruise ships or similar vessels at a cruise terminal." In the development of the Community Traffic Mitigation Plan, input is solicited from "members of the public who reside in neighborhoods surrounding a cruise terminal" via a public comment period and is "accompanied by an assessment by the Police Department and the Department of Transportation of which, if any, of the proposed measures such departments plan to undertake."

This memorandum and its appendices are a summary of these efforts and is hereby submitted as the Community Traffic Mitigation Plan for the Manhattan Cruise Terminal (MCT).

# INTRODUCTION

## **HISTORY**

The Manhattan Cruise Terminal (located in Midtown West between West 47<sup>th</sup> Street and West 54<sup>th</sup> Street along 12th Avenue) was originally known as the New York Passenger Ship Terminal, which opened in the 1930s and was rebuilt in 1974. In 2004 the City of New York purchased the 18-acre site from the Port Authority of New York and New Jersey (PANYNJ) and redeveloped it as the Manhattan Cruise Terminal (MCT). The MCT is a multi-level facility which consists of three piers: Piers 88, 90, and 92. Currently Pier 88 and Pier 90 are operational, while Pier 92 is vacant. Vehicular access to the facility consists of a single entrance at West 55<sup>th</sup> Street and two exits: one for passenger vehicles at West 46<sup>th</sup> Street, and one for buses, vans, and trucks at West 48<sup>th</sup> Street. Pedestrian access points are located opposite the two piers currently in service at West 48<sup>th</sup> Street (Pier 88) and West 50<sup>th</sup> Street (Pier 90). Additionally, pedestrian access points are also separated from 12<sup>th</sup> Avenue by the Hudson River Greenway, a bidirectional, multiuse path along the waterfront.

The MCT serves as one of the three cruise ports for the greater New York City region, the other two being the Brooklyn Cruise Terminal (BCT) in Red Hook, Brooklyn, and the Cape Liberty Cruise Port located in Bayonne, New Jersey. There are multiple cruise companies that operate out of the MCT as shown in Table 1.

**Table 1: Projected Cruise Calls for 2025** 

Cruise Line	Ship	Capacity (Passengers)	No. Of Ship Calls	Cruise Season	
Carnival	Venezia	4,100	24	May - November	
Crystal	Serenity	1,100	3	September - October	
Hapag-Lloyd	Europa / Europa 2 / Inspiration	420 / 510 / 230	5	May- December	
	NCL Aqua	3,600	10	Year-round	
Norwegian	NCL Breakway NCL Getaway	4,000	31		
	NCL Epic	4,100	1		
	NCL Escape	4,300	13		
	NCL Pearl / NCL Star	2,400	3		
	NCL Prima	3,100	7		
Oceania -	MS Insignia	670	4	July - November	
	Oceania Allura	1,200	4		
Seabourn	Sojourn	450	3	September - November	
Silversea	Dawn / Shadow	600 / 400	4	May - October	
Viking	Mars / Neptune / Sky	930	6	April Contombor	
	Polaris	380	1	April – September	
Virgin	Brillant Lady	2,700	4	September	

# **OVERVIEW OF TRAFFIC ISSUES**

- 1. Greenway Conflict: To enter and exit the cruise terminal as a pedestrian, cruise passengers must cross the Hudson River Greenway (greenway). Cyclists on the greenway frequently move through the greenway swiftly, oftentimes disregarding stop signals. The juxtaposition of pedestrian cruise flow and greenway traffic poses a safety hazard along the greenway between West 46<sup>th</sup> Street and West 50<sup>th</sup> Street. There is also conflict between greenway users and vehicles entering and exiting the terminal.
- **2. Pedestrian Congestion**: The high volume of pedestrians on ship call days, exacerbated by the limited number of access points to MCT, creates pedestrian congestion in medians, crosswalks, and sidewalks at multiple locations:
  - Crosswalks on 12th Avenue at West 46<sup>th</sup> Street, West 48<sup>th</sup> Street, and West 50<sup>th</sup> Street
  - 12th Avenue eastside sidewalk near the taxi stand, between West 47th Street and West 48th Street





Figure 1: Pedestrian clusters on 12th Ave

3. Circulation within Cruise Terminal: Within the terminal, traffic congestion is concentrated along the ground level (due to the large number of pedestrian-vehicular interactions) and the second level (largely due to pick-up / drop-off and other frontage activities creating friction with the thru traffic.



Figure 2: Queues on Level 2 due to closure of curbside

**4. Vehicular Congestion on Local Roads**: Inadequate wayfinding, inefficient taxi operations, and high curbside dwell time create vehicular congestion at the MCT entrance across from West 55<sup>th</sup> Street. Traffic bound for the MCT that was traveling along northbound 12th Avenue needs to execute a protected left-turn movement before entering the facility. At peak periods, spill back from the left-turn bay frequently entered the adjacent through lane.



Figure 3: Spillback out of the left-turn bay into adjacent traffic on 12th Avenue

## CRUISE TRAFFIC MANAGEMENT STAKEHOLDERS

Effective coordination between industry and public sector stakeholders is required to successfully manage the interactions between vehicles, pedestrians, and bicyclists at MCT, along the Hudson River Greenway, and the surrounding streets impacted in the Midtown West neighborhood. The following are the key City agencies including NYCEDC and private sector stakeholders that coordinate on an ongoing basis to assure minimal traffic impact to the community.

- NYCEDC serves as the lease administrator of the MCT on behalf of the City.
- Ports America serves as the operator of MCT. Ports America provides terminal management and stevedoring services for the facility. They are also responsible for traffic management within the facility, including frontage operations and pedestrian assistance. As well as coordination with cruise companies to ensure traffic disruptions are reduced to a minimum during cruise days.
- Multiple cruise companies currently have operations at MCT. The largest of these are Norwegian Cruise Lines
  and Carnival Corporation. Most of the cruise companies are operating private shuttle and transfer services from
  key origins of the city and surrounding areas including nearby airports, hotels, and train stations, providing a
  convenient alternative to personal vehicles to and from MCT.
- The New York City Department of Transportation (NYC DOT) oversees the operation of the roadways surrounding the MCT, including determination of parking regulations and traffic flow including signal timings.
- New York State Department of Transportation (NYS DOT) has jurisdiction over 12<sup>th</sup> Avenue and co-manages it with NYC DOT.
- The New York Police Department (NYPD) is responsible for traffic management on the public roadways outside the MCT, as well as assisting with internal traffic flow when needed.
- Hudson River Park Trust operates and maintains the public park area as well as the greenway adjacent to MCT.

# **METHODOLOGY**

## FIELD OBSERVATIONS AND DATA ANALYSIS

The following tasks were performed, further described in subsequent sections:

#### • Field Observations

Field observations were conducted on multiple days in August 2024, including one in which the Carnival Venezia was in port. Staff were positioned within the MCT and around the Midtown West neighborhood to observe vehicular and pedestrian operations, documenting traffic congestion, pedestrian interactions vehicles and bicyclists, curbside operations, and frontage operations within the facility. These observations were also used to develop a comprehensive traffic data collection plan.

#### • Traffic Data Collection

- In October 2024, traffic data including turning movement counts (TMCs) were conducted at six intersections collecting vehicular data as well as pedestrian and bicyclist crossing data. Cameras were also installed to conduct pedestrian and bicyclist counts at three locations along the Hudson River Greenway.
- Manual counts were conducted along a two-block area that is designated for taxi stand operations.
   These counts were to determine vehicle occupancy and dwell time.
- A guide sign inventory was performed along the frontage roadways and neighborhood cross streets to determine existing sign placement and identify locations where signing enhancement may be warranted.

#### Qualitative traffic data analysis

 Using the traffic data collected, proposed short-term and long-term improvements were developed to be utilized as part of a combined traffic mitigation strategy for both the facility and the surrounding neighborhood.

# **DETERMINATION OF STRATEGIES**

NYCEDC and partner stakeholders are prepared to implement all mitigation strategies as needed. NYCEDC is also identifying the adequate level of traffic mitigation strategies necessary for each ship call day based on various conditions as part of our traffic management workstream. Several factors are considered to forecast the severity of traffic impacts on the neighborhood:

- Anticipated Number of Cruise Passengers: The number of passengers at MCT on a given day directly impacts the volume of vehicles arriving at MCT. Based on future estimates of passenger volumes, NYCEDC will coordinate with NYPD to ensure adequate number of TEAs are deployed to manage traffic flow. For example, when ships are berthed only on Pier 88, TMs and TEAs will be deployed focusing on intersections of West 48<sup>th</sup> Street. If ships are berthed on both Pier 88 and Pier 90, TMs and TEAs will be deployed to West 52<sup>nd</sup> Street as well.
- **Special Events in and Around the Neighborhood**: Special events can potentially cause traffic impacts by diverting traffic flows throughout the neighborhood and surroundings, creating an unusual traffic pattern.

With close coordination with NYPD and other sister agencies, NYCEDC is continuing to monitor overlaps between special events and ship call days to ensure minimal impact.

- Day of the Week: There are occasions that ship calls may fall on weekdays when cruise traffic overlaps with neighborhood commuter traffic. During those occurrences, NYCEDC will coordinate with NYPD and other stakeholders to ensure cruise traffic causes minimal impact by implementing traffic diversions.
- Coordinating External Impacts and Constructions: NYCEDC and Ports America are actively monitoring construction and redevelopment projects surrounding MCT and its potential impact to traffic flow, for example at Pier 94. NYCEDC will stay coordinated with NYS DOT's current efforts to study pedestrian and bike safety along Route 9A.



# SHORT-TERM STRATEGIES

## PEDESTRIAN TRAFFIC MANAGERS

Due to the large number of pedestrian conflicts observed, pedestrian traffic managers (TMs) and NYPD TEAs will be deployed at key locations to facilitate the safe movement of pedestrians, bicyclists, and vehicles. The primary locations where the TMs and TEAs are to be deployed are the crossings of 12th Avenue and the Hudson River Greenway at West 46<sup>th</sup>, West 48<sup>th</sup>, and West 50<sup>th</sup> Streets, and NYPD TEAs at West 52<sup>nd</sup> and 55<sup>th</sup> Streets to facilitate vehicle turns. Additionally, TMs will be deployed along the east side of 12th Avenue and within the MCT. To address the safety issue of pedestrian and cyclist conflict on the greenway, an interim strategy will be for TEAs to manually override the greenway crossing signals as needed, while NYCEDC works with NYPD and NYC DOT on longer-term signal alignment and/or extension.

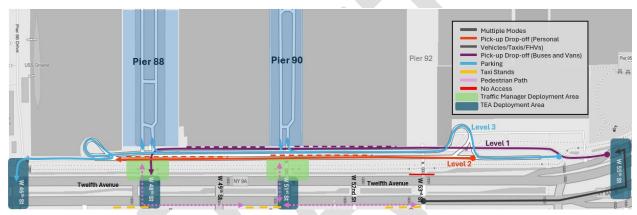


Figure 4: Traffic flow to and within MCT by vehicle type and targeted areas for traffic manager deployment

## SIGNAGE AND WAYFINDING

#### Taxi and For-Hire Vehicle Signs

There are two taxi zones along northbound 12th Avenue: one between West 47<sup>th</sup> and West 48<sup>th</sup> Streets and one between West 49<sup>th</sup> and West 50<sup>th</sup> Streets. The block between West 47<sup>th</sup> Street and West 48<sup>th</sup> Street is often congested with pedestrians and lacks positive management of taxis. Between West 48<sup>th</sup> Street and West 50<sup>th</sup> Street, the curb frontage is comparatively under-utilized and is mostly used by for-hire vehicles (FHVs) for pick-up and drop-off. Improved signage on 12th Avenue and within the terminal will better distribute passengers between the two taxi zones and more optimally utilize curb frontage.

#### Pedestrian Wayfinding Signs

For those headed to the terminal, wayfinding signing is recommended along both West 48<sup>th</sup> Street and West 50<sup>th</sup> Street between 11th and 12th Avenues, as well as at key intersections between the MCT and major transit connections. Additionally, wayfinding signage will be installed within the MCT to direct passengers to public transit options as well as to nearby popular destinations. The use of self-service interactive electronic kiosks will be studied to determine the viability to enhance static wayfinding options. These signage improvements will assist in alleviating passenger confusion and the resulting congestion that occurs from it.

#### Vehicular Guide Signs

Existing guide signing is insufficient and inconsistent, with multiple different names and designations for the MCT used throughout the area. Guide signs will be updated with a uniform name and appearance to assist drivers in accessing the terminal. Guide signs will also direct vehicles towards the appropriate entrances (West 55<sup>th</sup> Street for passenger vehicles, West 59<sup>th</sup> Street for buses and trucks).





Figure 5: Inconsistent signage between W 55th St bus/truck/limo entrance and signage along that same roadway further south

# INTERNAL ROADWAY UPDATES

#### Pavement Markings for South Service Road

The south service road for the MCT is striped as one single lane prior to the entrance to the facility at West 54th Street. NYCEDC will study whether there is enough space within the existing right-of-way to restripe this segment as two lanes to increase capacity and direct vehicles to the appropriate lane. These lanes would then be signed in advance to match signage at the entrance to the facility: the left lane for private vehicles and taxis/FHVs destined for the upper two levels; the right lane for buses, trucks, and limousines destined for the ground level.

#### Increased Capacity at MCT Second Level

The second level of the terminal consists of two travel lanes and a parking lane. Currently the parking lane is frequently blocked off with temporary barricades, which results in vehicles using the nearside through lane for curbside operations. NYCEDC will study the effectiveness of whether removing these barricades to allow for curbside operations from the parking lane will reduce congestion bottlenecks and improve traffic flow. Additionally, staff will be positioned along the second level to help enforce keeping the through lanes from being blocked.

#### Increased Capacity at MCT Third Level

The third level of the terminal currently allows curbside parking along both sides of the roadway, resulting in only a single through lane. When there is a delay of a vehicle entering the parking areas above Pier 88 or Pier 90, the thrulane is often blocked. NYCEDC will study the effectiveness of eliminating curbside on one side of the third level, converting to right turn lanes for vehicles entering the parking lots. Additionally, pavement markings throughout the third level will be updated for this new configuration as well as to refresh the parking lots.

# STRATEGIES FOR INTERAGENCY COORDINATION

NYCEDC will work with NYC DOT, NYC PD, NYS DOT, and Hudson River Greenway Trust to evaluate the potential and effectiveness of the following measures.

## TRAFFIC SIGNAL MODIFICATIONS

#### Hudson River Greenway Signals

Bicycle lane signals have been deployed at multiple locations throughout the city at locations where bicycle traffic needs to be stopped to safely allow conflicting traffic to pass. However, there is only one bike signal in the MCT vicinity (at W 46<sup>th</sup>). Key crossings will be studied to determine if more bike signals are warranted. Crossings to be evaluated are anticipated to be West 48<sup>th</sup> Street, West 50<sup>th</sup> Street, West 52<sup>nd</sup> Street, and West 54<sup>th</sup> Street.

#### Leading Pedestrian Interval Phasing

Leading pedestrian interval (LPI) signal phasing allows pedestrians the opportunity to begin crossing an intersection without vehicular conflicts. These signal timing adjustments have been installed at many intersections in the city. Key crossings of 12th Avenue will be studied to determine if LPI phasing could be instituted without causing significant adverse impacts to vehicular traffic movements. Key intersections to be studied along 12th Avenue are West 46th Street, West 48th Street, West 50th Street, and West 52nd Street.

#### Extend Signal Times

Existing signal timing along 12th Avenue does not consider the peak periods of MCT-related activity. Existing cycle lengths could be extended during peak periods as well as individual phase lengths modified to more safely and efficiently process both vehicles and pedestrians. Intersections along 12th Avenue between West 46<sup>th</sup> Street and West 55<sup>th</sup> Street will be evaluated.

#### Signal Heads for Exiting Vehicles

Exiting from MCT at the West 48th street (Pier 88) gate currently lacks visibility of traffic signal due to lane configuration. NYCEDC will study the feasibility of installing additional signal heads at the intersection for improved visibility of traffic signals for vehicles exiting the terminal.

### TRAFFIC DIVERSION

Vehicular traffic entering the MCT from northbound 12th Avenue must make a left-turn at West 55<sup>th</sup> Street (in what is an elongated U-turn). During peak periods signal phasing cannot sufficiently accommodate demand, leading to queues extending beyond the left-turn bay into one of the thru lanes on 12th Avenue. Potential solutions during peak demand would be to close the left-turn bay and direct MCT-related traffic to execute a right-turn onto either West 56<sup>th</sup> Street or West 57<sup>th</sup> Street, then turning onto southbound 11<sup>th</sup> Avenue and then westbound on West 55<sup>th</sup> Street. Vehicles from this approach would be able to enter the Terminal directly by crossing 12<sup>th</sup> Avenue. These diversions will be analyzed to determine their viability. If either option is selected to be enacted, signage for the terminal will be updated.

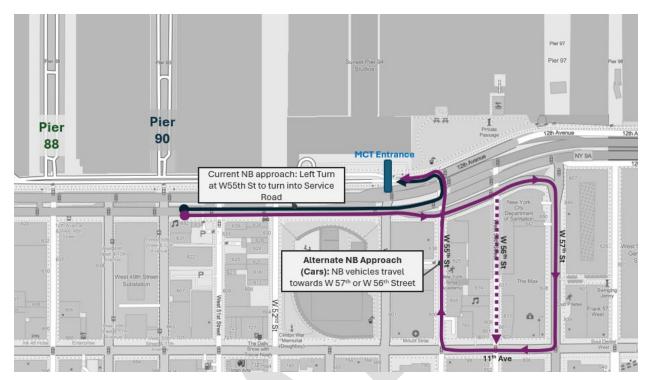


Figure 6: Northbound traffic would be diverted to make a right on West 57th Street, right again on 11th Avenue, and right onto West 55th Street to enter MCT

# **NEXT STEPS**

NYCEDC has initiated a comprehensive Master Plan<sup>1</sup> to modernize the Manhattan Cruise Terminal (MCT) (Piers 88, 90, and 92) for years to come. This work has involved significant planning of the piers, cruise terminal, traffic and public realm impacts to develop a plan for significant infrastructure changes in the long term.

NYCEDC will work with Ports America on the effectiveness of the short-term solutions and consult interagency partners to diligence the potential for the longer-term interventions.



<sup>1</sup> The Manhattan Cruise Terminal Master Plan will accumulate in a separate document to be released in 2025. That document will detail long term strategies to address traffic impacts, among other community benefits and operational upgrades, which goes beyond the scope of this traffic plan.

# **GLOSSARY**

- Community Traffic Mitigation Plan: As defined by Local Law 54 or 2024, "plan, developed in consultation with the department of transportation and the police department, that outlines proposed measures to reduce private or for-hire vehicle usage and encourage use of public transportation in a neighborhood where a cruise terminal is located in order to address traffic congestion and other disruptions resulting from the loading or unloading of cruise ships or similar vessels at a cruise terminal."
- Cruise Terminal: Manhattan Cruise Terminal located at 711 12th Avenue, New York, NY and Brooklyn Cruise Terminal located at 210 Clinton Wharf, Brooklyn, NY 11231.
- For-Hire Vehicles (FHVs): Vehicles providing pre-arranged transportation for a fee, including app-based services such as Lyft and Uber.
- Internal Roadway (within this plan's context): Private roadway within Manhattan Cruise Terminal.
- Local Law (LL): Municipal regulation or statute passed by the City Council that affects the day-to-day lives of people living in, working in, or visiting New York City.
- Operator: Terminal Operator—for both MCT and BCT, it is Ports America
- Pavement markings: Painted lines, arrows, and symbols to enhance safety by delineating lanes to guide drivers.
- Port of Call: Where a ship calls one of our cruise terminals without debarking or embarking passengers.
- Queue: Line in which vehicles stack up while waiting at intersections or entrances.
- Ship call: The act of a cruise ship berthing at and departing from a cruise terminal.
- Shuttle Bus: A bus service designed to transport people between set destinations.
- Traffic Enforcement Agents (TEA): Agents within a division of NYPD who enforce traffic laws and have the ability to override traffic signal indications.
- Traffic Managers (TM): Also called "flaggers," privately hired staff that ensure safe passage for pedestrians at busy intersections.
- Turning Movement Counts (TMC): Type of traffic data collection method recording the number of vehicles making maneuvers at a specific intersection or set of intersections.