15. Construction Effects

15.1 INTRODUCTION

This chapter describes the potential construction effects related to implementing the CBD Tolling Alternative.

15.2 AFFECTED ENVIRONMENT

The locations where construction of tolling infrastructure and tolling system equipment would occur are predominantly transportation rights-of-way, including roads, bridges, tunnel entrances and exits, and sidewalks. Limited work would also be required at sites along roadways in and along the edges of Central Park and on the structure of the High Line.

15.3 ENVIRONMENTAL CONSEQUENCES

15.3.1 No Action Alternative

The No Action Alternative would not implement a vehicular tolling program and would not involve any construction activities. Therefore, the No Action Alternative would have no construction-related effects.

15.3.2 CBD Tolling Alternative

Construction activities for the CBD Tolling Alternative would involve reusing or replacing existing traffic and tolling infrastructure to install tolling system equipment along transportation rights-of-way within and near the Manhattan CBD. The overall duration of construction for the CBD Tolling Alternative is expected to be less than one year. At each location, the total construction duration would generally be approximately one to two weeks, although inclement weather or other unforeseen conditions could extend the duration of construction at individual locations. Concurrent construction at multiple sites would likely occur to allow efficient construction management.

Construction activities would be typical of those required for the installation of streetlight poles and tolling infrastructure throughout the city. At most locations, the CBD Tolling Alternative would require the replacement of existing poles or installation of new poles. Construction activities would include excavating and constructing the foundation(s), placing the new support poles or structures, attaching the tolling system equipment, and restoring the roadway, sidewalk, or ground surface. Depending on the type of pole or mounting structure and its configuration, excavation areas would range from 11 square feet to approximately 80 square feet, and the depth of excavation would range from 2 feet to approximately 12 feet below grade. The volume of excavated material at any location would be up to approximately 15 cubic yards. At locations where tolling infrastructure and tolling system equipment are installed, additional

trenching, approximately 2 feet below grade, could be required for utility and communications connections. At those locations where new connections are needed, trenches would be dug from each pole to the nearest utility access point and conduits would be laid in the trenches. Once the new connections are installed, trenches would be covered and returned to their original condition.

Although not anticipated, if excavation below the water table is necessary, it would be done in accordance with New York City Department of Environmental Protection (NYCDEP) and New York State Department of Environmental Conservation (NYSDEC) requirements.

Construction activities would include the use of mini excavators, skid steer loaders, small foundation drilling equipment, pavement saws, bucket trucks, boom trucks, truck-mounted equipment for placing new infrastructure, concrete deliveries, dump trucks for the removal and delivery of soil and materials, and flatbed trucks to deliver equipment and materials. Hand-held equipment would be used to excavate and construct the foundations and to repair the roadway and/or sidewalk surface at the conclusion of construction. Approximately four to six construction workers and two to three trucks would be present for the entirety of the workday at each construction site, and additional individuals would be present throughout the workday to deliver materials or supervise and inspect work.

Temporary lane closures would be needed to accommodate construction work at most locations. Most construction work would occur during the weekday, during daytime hours, unless the localized short-term lane closures required would result in substantial disruptions to traffic. For operations that require access across a larger portion of the roadway, and/or where daytime lane closures are not practical because of traffic concerns, construction would occur at night (10 p.m. to 5 a.m.). The contractor would coordinate construction work with the NYCDOT Office of Construction Management Coordination for work on city streets and the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges and in accordance with a Maintenance and Protection of Traffic Plan. The Project Sponsors would coordinate with the Port Authority of New York and New Jersey for work near the Lincoln and Holland Tunnels, as necessary. Coordination with NYSDOT and NYC Parks would occur for any work within or near their facilities.

Construction activities for the CBD Tolling Alternative would result in the following temporary effects on the built and natural environment:

- Regional Traffic: There would be approximately one to two weeks of traffic disruption at any individual location over the less than one year duration of construction. Any temporary changes in traffic operations would not have the potential to change regional travel patterns.
- Highways, Local Traffic, and Parking: The duration of lane closures at any individual location would be approximately one to two weeks. Individual lane closures could last from several hours up to several days. No streets would be fully closed to traffic, except when staging or lifting operations may require a short-period closure (up to several hours) for the safety of construction workers and the traveling public. TBTA, acting on behalf of the Project Sponsors, and the contractor would coordinate on the scheduling of construction activities to minimize neighborhood disruptions to the extent practicable. As specified in the contract, the contractor would support communication strategies by TBTA that seek

to inform the affected public about roadway closures, commuter alternatives, and any potential effects on traffic during construction.

- **Transit:** Construction would occur on streets and sidewalks with bus routes and bus stops, within a block of the Roosevelt Island Tramway station at Second Avenue and East 60th Street, and near some subway station entrances. If a bus stop must be temporarily relocated to install tolling infrastructure and tolling system equipment, TBTA would coordinate with NYCDOT and New York City Transit (NYCT) to temporarily relocate the stop to a nearby location. TBTA would ensure that construction of the CBD Tolling Alternative would not affect access to the Roosevelt Island Tramway station or subway station entrances.
- **Pedestrians and Bicycles:** Individual sidewalk and bicycle lane closures could last from several hours up to multiple days during the approximately one- to two-week construction period. Sidewalks would only be closed for pedestrians potentially to accommodate staging or lifting operations for a short period (up to several hours) for the safety of construction workers and the traveling public. TBTA would implement temporary pedestrian and bicycle detours if necessary for public safety, to protected sections of the adjacent travel lane or to the opposite side of the street. To the extent practical, TBTA and the contractor would avoid restricting access to bicycle docking stations. Construction activities within and adjacent to transportation rights-of-way would be subject to approval by the applicable transportation agency.
- **Social and Economic Conditions:** Construction of the CBD Tolling Alternative would result in limited and temporary disturbances and inconveniences, of short duration, to residents, workers, visitors, and businesses in areas where construction work is taking place, and would not result in any lasting adverse effects to social and economic conditions. TBTA will ensure that the contractor maintains access to businesses and residences along affected roadways during construction.
- **Parks and Recreational Resources:** Construction would take place adjacent to some New York City parks, but would not affect access to those parks. It would also occur within Central Park where park roadways approach Central Park South (59th Street) and along the sidewalks abutting the park on Fifth Avenue and Central Park West. In Central Park, trenches would be dug for utility connections, and the surface would be restored to its original condition. The CBD Tolling Alternative would attach tolling equipment to the underside of the High Line. Park users would be able to use these parks throughout construction, and construction would not result in any lasting impairment of the enjoyment of these publicly accessible open spaces. Construction may be required within 50 feet of NYC Parks-regulated trees, which include street trees and trees in city parks. TBTA will avoid effects to regulated trees to the extent feasible. If construction activities could affect a regulated tree, the work would comply with the measures set on the following pages.
- **Historic and Cultural Resources:** Construction would occur in streets and sidewalks adjacent to historic properties (see **Appendix 8, Historic and Cultural Resources: Section 106 Finding Documentation,** for a list of historic properties that would be close to construction sites. There would be no adverse effects on historic properties. As described in **Chapter 8, "Historic and Cultural Resources,"** the proposed areas for excavation have already been heavily disturbed, and it is unlikely that any archaeological resources

would be encountered. See the preceding bullet for construction activities within and adjacent to Central Park and the High Line, which are listed or eligible for listing on the State and National Registers of Historic Places.

- Visual Resources: Construction vehicles and equipment would install tolling infrastructure and tolling system equipment, and signage, cones, and Jersey barriers would direct vehicle and pedestrian traffic around construction zones. While the equipment and detours could temporarily impair views for some viewer groups, construction would be of short duration and would not have any lasting adverse effects on visual resources.
- Air Quality: Use of diesel-fuel-powered construction equipment and generators would produce pollutant emissions. Excavation to install new tolling infrastructure and tolling system equipment would also expose soils beneath streets and sidewalks, which could result in airborne dust. The brief duration and limited nature of construction at each construction site would limit emissions. TBTA will ensure the contractor employs measures to limit and avoid adverse effects on air quality.
- Noise: Jackhammers, pavement breakers, backhoes, compressors, generators, trucks, and other equipment would generate noise. The use of this equipment would last from a few minutes on one day up to a few hours on multiple days during the approximately one- to two-week construction period at each location. Jackhammers and pavement breakers generate the highest noise levels of the anticipated construction equipment, with a sound level of 85 to 89 decibels at 50 feet from the source. The changes in noise associated with certain construction equipment would be perceptible to people near the construction zones. TBTA will ensure that the contractor complies with the New York City Noise Code and other measures to minimize the effects of construction noise.[1]
- Natural Resources: As described in Chapter 13, "Natural Resources," there are limited natural features where new tolling infrastructure and tolling system equipment would be installed. The endangered coastal plain blue-eyed grass and New York State's threatened red pigweed and little ladies' tresses may be present in areas where construction would occur, and their presence will be confirmed prior to construction. Peregrine falcons nest on bridges within New York City, but construction activities associated with the CBD Tolling Alternative are unlikely to affect them. Use of sediment control measures and tree protection measures will limit potential adverse effects on natural resources. Overall, the potential to disturb natural resources during construction would be minimal.
- Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials: Construction of the CBD Tolling Alternative would result in soil disturbance and the potential alteration or removal of existing structures (e.g., streetlight poles) that may contain asbestos or lead-based paint. TBTA will ensure that the contractor manages hazardous wastes and contaminated materials according to established practices, described in Chapter 14, "Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials."

[1] Local Laws of the City of New York, Local Law 113 of 2005. https://www1.nyc.gov/assets/dep/downloads/pdf/air/noise/noise-code-full-version.pdf.

TBTA, acting on behalf of the Project Sponsors, will ensure that the contractor complies with measures to avoid and minimize construction effects set forth below and in **Chapter 14, "Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials."**

- Develop a Maintenance and Protection of Traffic Plan for all work in public streets and sidewalks; coordinate with NYCDOT's Office of Construction Management Coordination for any proposed detours and coordinate with NYCDOT's Bike Unit and Pedestrian Unit for any bicycle lane detours, effects on bicycle docking stations, and/or pedestrian detours; and coordinate with NYCT for any potential temporary changes in bus stops.
- Avoid interference with existing utilities to the extent practicable. Where the Project's construction could conflict with existing utilities, coordinate with the utility owner and protect in place or relocate existing utilities per utility owner requirements.
- Comply with the Diesel Emissions Reduction Act of 2006, including best available retrofit technology or ultra-low sulfur diesel fuel for construction vehicles.
- Comply with the New York City Noise Code and apply best practices such as using manufacturer's noise reduction devices on construction equipment, operating construction devices at lower engine speeds, wrapping loud equipment in noise-insulating material, using quieter backup alarms, and training construction workers in quieter work methods; prepare and implement a Construction Noise Mitigation Plan, which would include a Construction Noise Monitoring Plan, noise control measures used to reduce or eliminate noise effects, and mitigation techniques to be used during construction.
- Acquire tree work permits whenever construction would occur within 50 feet of a NYC Parks-regulated tree, including street trees and trees in city parks; should trees be damaged during construction, plant new trees or provide restitution in the form of a monetary payment to the NYC Parks Tree Fund; follow NYC Parks specifications for new trees.
- Schedule construction activities that could require tree removal outside the primary bird breeding season of early May through July, to the extent practicable; should construction activities require tree removal during April or August (i.e., the beginning and end of the bird breeding season), the Project Sponsors would coordination with FHWA with respect to surveys of active nests.
- Undertake a survey to determine if coastal plain blue-eyed grass, little ladies' tresses, and red pigweed are present at construction locations within the Manhattan CBD. If species are found, then develop a protection plan in consultation with NYC Parks and NYSDEC.
- If applicable, obtain coverage under the New York State Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001 or current version, if applicable). In accordance with the general permit, develop and implement a Stormwater Pollution Prevention Plan.
- Provide erosion and sediment control measures to protect catch basins, drainage channels, and waterways; prevent debris or other materials from entering drainage systems, per site-specific soil erosion and sediment control countermeasures.

- Implement communications strategies to inform the public about lane closures, commuter alternatives, and any potential temporary impacts on traffic during construction; develop a communications plan with strategies for outreach during construction.

15.4 CONCLUSION

Construction associated with the CBD Tolling Alternative would be typical of street construction that occurs regularly within the Manhattan CBD. Construction would result in temporary disruptions to traffic and pedestrian patterns and temporary noise disruption at nearby land uses such as residences and businesses. The Project Sponsors will require the contractor to develop and comply with plans and procedures to minimize construction effects. With these measures and because of the brief timeframe, low intensity, and limited scope of construction of the CBD Tolling Alternative, adverse construction effects would not occur.

Table 15-1 summarizes the construction effects of the CBD Tolling Alternative and commitments to minimize or mitigate the effects.

Table 15-1. Summary of Construction Effects of the CBD Tolling Alternative

SUMMARY OF EFFECTS	EFFECT FOR ALL TOLLING SCENARIOS	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
Potential disruption related to construction for installation of tolling infrastructure	Temporary disruptions to traffic and pedestrian patterns, and noise from construction activities, with a duration of less than one year overall, and approximately two weeks at any given location. These effects will be managed through construction commitments.	No	Refer to **Section 15.3.2** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.