

APPENDIX A

Survey Results re: Regulating Construction Staging Areas in Other Cities

New York City

New development is happening throughout New York City (NYC), and many development projects are located on critical streets and heavily congested areas such as midtown Manhattan. The mission of the NYC Department of Transportation's Office of Construction Mitigation and Coordination (OCMC) is to facilitate projects while minimizing the impact on vehicular, bicycle, and pedestrian flow, and on the community and businesses.

Use of the curb lane and sidewalk for construction: Typically OCMC will allow use of the curb lane and part of the sidewalk to erect a new building. These closures are confined to the frontage of the site being developed. However, OCMC will not automatically permit the use of a street and sidewalk for construction if the building fronts on a lane with restricted use (e.g. is a rush hour lane, a dedicated bus lane or bicycle lane, etc.). The contractor would need to mitigate the impacts of their construction on the street and sidewalk before a permit is issued to store material or equipment on the roadway or sidewalk. Some examples of mitigation are described below. Work restriction hours on critical streets provide guidance for other permit requests such as street excavation and building operations.

Mitigation measures: OCMC uses many tools to minimize the impacts of lane closures for construction of new developments in Manhattan and on critical streets citywide. Depending on the impact the project will have, some examples of mitigations include:

- Restricting parking on the opposite curb, restriping roadways or temporary reversal or conversion of streets to one-way or two-way traffic to accommodate the same capacity for vehicles/bikes/pedestrians and buses as prior to construction.
- Limiting use of a lane on critical streets for certain operations (such as installing tower crane or major lifts that require street closures) to off-peak weekday hours, weekends or nights (use of night hours is typically limited to building operations that do not generate excessive noise, especially in residential areas).
- Use of NYPD traffic agents to facilitate the movement of traffic and the use of pedestrian managers in high-volume pedestrian areas.
- Use of construction embargoes along detour routes to limit other construction activities' impact on a detour.

Notification: NYC makes use of extensive notification and outreach. This includes both mitigation measures at the construction site, such as fixed signage or use of electronic variable message sign boards, and public outreach efforts when a project impacts critical streets, such as community outreach or media announcements.

Number of permits issued: In 2012, NYC DOT issued 285,411 permits for construction citywide. Of those permits, 99,215 were issued in Manhattan. While almost all permits impact the roadway in some fashion, 59,738 permits were issued for building operations in Manhattan.

Right-of-Way Occupancy Fees: Developers are charged a fee of \$50.00 every 3 months for the temporary closing of a roadway and for the temporary closing of a sidewalk. The full schedule of fees is here: <http://www.nyc.gov/html/dot/downloads/pdf/hwyrules.pdf>

Vancouver

The City of Vancouver's Engineering Services division works with developers to issue building permits with terms and conditions that are acceptable to the City and that limit negative impacts on pedestrians, cyclists, and vehicles.

Development application and permitting process: Engineering Services staff are involved from the start of the development application process, before zoning bylaw reviews. They are able to identify likely construction challenges, and can suggest that developers consider these issues right from the start. The goal at this stage is for the developer not to design a building that is unbuildable.

Once a development permit has been issued, Engineering Services staff meet with the developer to understand the construction methods and equipment that will be needed, and to begin to discuss the terms and conditions of the building permit. Though permits are always granted in the end, developers are often required to modify their construction plans before they can receive a permit.

Mitigation measures: In most important locations (e.g. on major arterials), developers are limited to the use of one lane for construction staging areas. To fit all of their equipment within one lane, developers are often required to use more expensive construction methods and equipment, such as: onsite concrete placing booms, self-climbing tower booms, and stiff-leg cranes.

Full closures may be permitted for short time periods (e.g. 1-2 days), but may only be allowed on weekends. In one case, a developer used a helicopter as an alternative to closing a major intersection for four days.

The City of Vancouver's policies indicate that sidewalks and bike lanes should be kept open and accessible as priorities. Pedestrians are generally accommodated in covered walkways, and bike lanes may be moved to the opposite side of the street. At times, a lane of traffic will be diverted to maintain space for pedestrians and cyclists.

Management of truck traffic: Vancouver's truck route regulation designates certain streets as truck routes. Under the bylaw, trucks used for construction are required to take

the shortest path from a truck route to the construction site, even if this lengthens the total distance that the truck must travel. A designated "truck squad" within the Police enforces this regulation, working with staff who approve traffic management plans for construction sites.

Enforcement of building permits: Vancouver's Street Use Inspectors ensure that developers are complying with the terms of their building permits. If an inspector finds that a developer is occupying an extra lane, the infraction is documented and the developer is given a warning. If this occurs a second time, the developer is fined for both infractions, at a rate of \$1,500 per infraction. Vancouver has increased the number of inspectors from 2 to 7 as the number of developments under construction has increased.

Notification: The City of Vancouver provides significant advance notification regarding lane closures and/or street closures. In addition to on-the-ground signage, the City has created a map where lane closures, full street closures, and upcoming street and lane closures are posted. The City has one full-time staff member dedicated to maintaining and updating the map and associated information regarding lane and street closures. The map is available here: <http://vancouver.ca/streets-transportation/roadwork.aspx>

Right-of-Way Occupancy Fees: Developers are charged a daily fee of \$2.47 per 10 m² of street or air space immediately above a street.

Chicago

The Chicago Department of Transportation's (CDOT's) Public Right of Way Permit Office is responsible for issuing permit for the use or opening of the public right of way. The CDOT Office of Underground Coordination (OUC) is responsible for all requests regarding the review/approval of construction work in or adjacent to the Public Way. The OUC also works with the Permit Office to monitor and coordinate construction projects in order to minimize the disruption and maximize the infrastructure benefits for Chicago taxpayers.

Contractor licensing: All contractors that require a permit for Opening the Public Way are required to obtain a Public Way work license from CDOT prior to constructing in the Public Way. To receive work licenses, they must submit appropriate letters of credit and insurance information.

Review process: CDOT's Plan Review Committee (PRC) meets every week to review large proposed development plans that may affect the public right of way. The PRC is comprised of representatives from several units and disciplines within CDOT. The PRC review constitutes a comprehensive, one-stop site plan examination and approval process. After approval by the PRC and prior to construction, all developments will require engineering approval from CDOT's Developer Engineering Plan Review Unit for any construction activity planned within the public way. The permits issued by the Department of Buildings do not cover any work to be done in the Public Way.

Fees: For new construction, referred to as a Type II activity, the daily fees for occupying the right-of-way increase over time. The daily fees for areas outside the CBD are illustrated in the table below. The daily fees for occupying the public right-of-way inside the Central Business District (CBD) are twice those outside the CBD.

Permit Activity	1-3 days	4-540 days	541+ days
Sidewalk – partial closure	\$1.00 / linear ft	\$2.00 / linear ft	\$4.00 / linear ft
Sidewalk – full closure	\$2.00 / linear ft	\$4.00 / linear ft	\$8.00 / linear ft
Bicycle lane – full closure	\$2.00 / linear ft	\$4.00 / linear ft	\$8.00 / linear ft
Street lane with parking spaces	\$5.00 / linear ft	\$10.00 / linear ft	\$20.00 / linear ft
Street lane used by vehicles	\$10.00 / linear ft	\$20.00 / linear ft	\$40.00 / linear ft
Alley, lane >10 ft unobstructed	\$2.50 / linear ft	\$5.00 / linear ft	\$10.00 / linear ft
Alley, lane <10 ft unobstructed	\$5.00 / linear ft	\$10.00 / linear ft	\$20.00 / linear ft

Calgary

Street use permit: In the City of Calgary, a street use permit is required to use any City road right-of-way and is issued to reserve street space for construction. This encompasses the use of a street, a sidewalk, an alley, a walkway, a back lane, a boulevard, or traffic control set-up. The Streets Bylaw authorizes the Transportation Department's Traffic Engineer to issue street use permits for many different reasons, including restricting the use of a city road right-of-way for construction activities.

Hoarding permit: A hoarding permit is also required for new construction. The City of Calgary Roads has revised the hoarding policies, fees and fines to improve pedestrian mobility, provide effective hoarding solutions, and visually enhance construction sites in Calgary. The following project information is required as part of the application for a hoarding permit:

- Description of project and proposed street use.
- Justification of the need for use of the street.
- Off-street alternatives that were considered and reasons for rejection.
- Complete schedule of planned hoarding including start and end dates, hours of operation by day of week and extent of street use at all times.

Closure of a pedestrian sidewalk, roadway, or both, is only permitted where it is established that no reasonable alternative exists. Short-term closure of pedestrian facilities is permitted where operations constitute a hazard to pedestrians. Provisions are made at all times for the safe passage of pedestrians in and around construction sites.

Public realm: In an effort to add to Calgary's visual appeal, the City offers businesses incentives for the use of enhanced screening for hoarding applications. This adds visual interest and public art as well as provides opportunities for youth and artists to showcase their work. Interested developers work with a local community arts charity to come up with artistic designs for their construction hoarding boards.