The Causes and Character of Vehicle-Pedestrian Conflict at Montreal's Proposed Downtown Stadium Site

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## **Executive Summary**

The proposed site for Montreal's downtown baseball stadium is located on the eastern edge of a quiet residential neighbourhood whose inhabitants have expressed concern over the noise, vandalism and parking difficulties that may be generated by the venue's operation. The current study, however, does not focus on these nuisance impacts. Rather, it addresses possible public safety hazards, in the form of vehicle-pedestrian conflicts, which the proposed stadium might impose on the abutting community.

The neighbourhood, which falls between an attractive pedestrian corridor on Notre-Dame and a 4-lane arterial roadway on St. Jacques, is composed of medium rise condominiums, walk-up apartments, and semi-detached townhouses. It also features a variety of parks, paths, and other possible pedestrian-friendly destinations including:

- Specialty Retail District on Notre Dame
- Pool/Community Sports Centre on Notre-Dame at Des Seigneurs
- Church on Richmond, featuring a backyard park/playground and walking path extending south to Notre-Dame
- Restaurants/Bistros with 2<sup>nd</sup> storey apartments on Notre-Dame between Guy & Versailles
- Walking Path/Sitting Park, cutting through Victor Hugo crescent

Key transportation corridors that provide CBD access to many municipalities in the Montreal region also surround the 12.1 acre site. These important transportation links include:

- Ville-Marie Expressway an extension of Highway 20
- Highway 10 services commuters from South Shore municipalities using the Victoria bridge.
- Highway 15 (Decarie Expressway) accessible from Highway 20/Ville-MarieExpressway

Finally, the proposed stadium site lies two blocks south of the Molson Centre, a 21000-seat hockey arena whose operation schedule is expected to overlap with that of the new stadium at least five times annually. Local residents expect the proximity of these two venues to intensify impacts on their quality of life on nights when both facilities are hosting events.

Based on origin/destination studies regarding current baseball and hockey events hosted in the city, it is expected that spectators will arrive from all parts of the Montreal region, and that downtown residents will account for only 19% of all event attendees. As a result, the vast majority of out-going vehicular traffic will attempt to access the key transportation corridors listed above. This has significant implications for the expected character of vehicle-pedestrian conflict in the area.

2/3 of all pedestrian departures from the stadium will be drawn towards public transit facilities of one form or another. As such, the flow of pedestrian traffic is expected to move north towards commuter train stations, subway/metro stations, bus stops, and parking facilities. This

suggests that the streets and sidewalks north of St. Jacques will receive the heaviest volumes of pedestrian traffic.

A similar proportion of Molson Centre attendees are expected to move towards the same facilities. As such, the streets north of St. Jacques will be heavily congested with thousands of pedestrians attempting to access a relatively small number of parking and transit facilities. The Crescent/St. Antoine and De La Montagne/St. Antoine intersections will be especially congested because a key highway access point in this area is bounded by transit and parking facilities between the two yenues.

Under these conditions, aggressive pedestrians and motorists will interact in close proximity. Pedestrians will stream onto busy roadways, attempting to gain more personal space. Motorists will jockey for position and manoeuvre in unpredictable bursts, attempting to pass more quickly through the busy street network. Without direct intervention and traffic-control, dangerous vehicle-pedestrian conflicts will certainly be generated.

These conflicts, however, will likely be drawn north of the stadium site due to the concentration of parking facilities between St. Jacques and Rene Levesque, transit facilities north of St. Jacques, as well as the downtown core. As a result, the residential neighbourhood abutting the proposed stadium site, and the pedestrian corridor running along Notre Dame, will not attract significantly volumes of vehicles or pedestrians. Though some spillover traffic will create noisy street-level conditions, perhaps inappropriate for a residential community at 11:30 pm, public safety hazards will not be drawn onto neighbourhood streets.

In response to the significant potential for vehicle-pedestrian conflict north of St. Jacques, traffic-control measures should be implemented. Though certain measures are inappropriate in this case, because of the undue confusion and disruption they will cause, two particular measures ought to be introduced after stadium events:

- Police Control-traffic direction by officers rather than automated light phases
- "Barn Dance" Phases-extended pedestrian-only phases at key intersections