Downtown Transportation Operations Study

Project 1 Downtown Transportation Operations Project Implementation Team

Summary

Recommendation

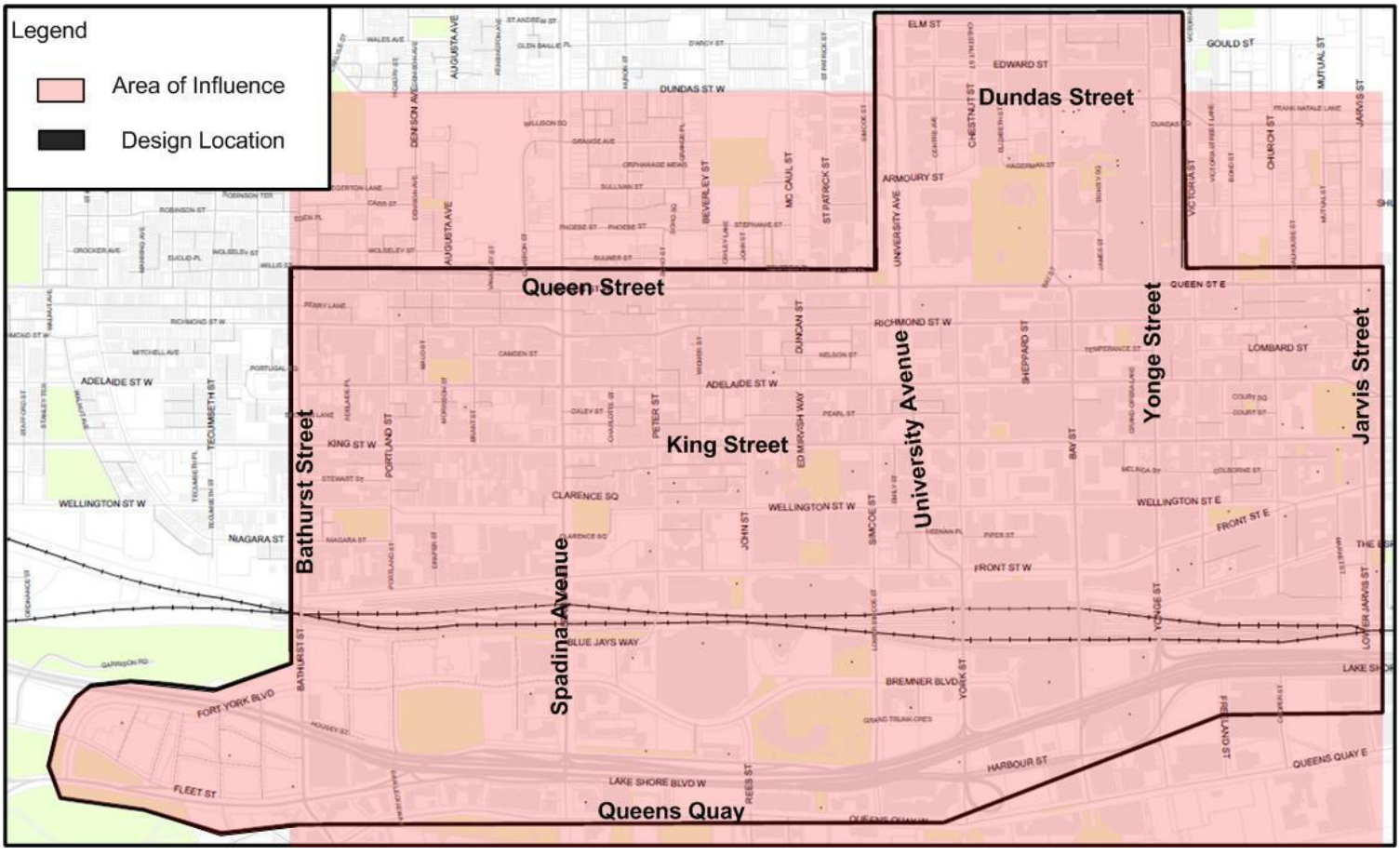
Establish a Downtown Transportation Operations Project Implementation Committee and Action Team to develop, coordinate, prioritize, and identify resources and funding for initiatives which will improve transportation operations in the downtown core.

Description

The General Manager, Transportation Services, will chair the committee and designate senior representation from Toronto Police (Traffic Services and Parking Enforcement), City Legal (Prosecutions and Court Services), Toronto Parking Authority, and TTC to serve on the Committee.

This senior level committee should meet quarterly to coordinate and prioritize the efforts of City agencies that affect transportation operations. Progress tracking and reporting, as well as programme planning for the following year, will be key committee functions.

An advisory committee of sector representatives (courier, motor-coach, taxi, etc.) and an Action Team will also be established to participate in meetings when relevant topics are being discussed and implement committee directives.



Downtown Transportation Operations Study

Project 2 Road User Behaviour Education Campaigns

Summary

Recommendation

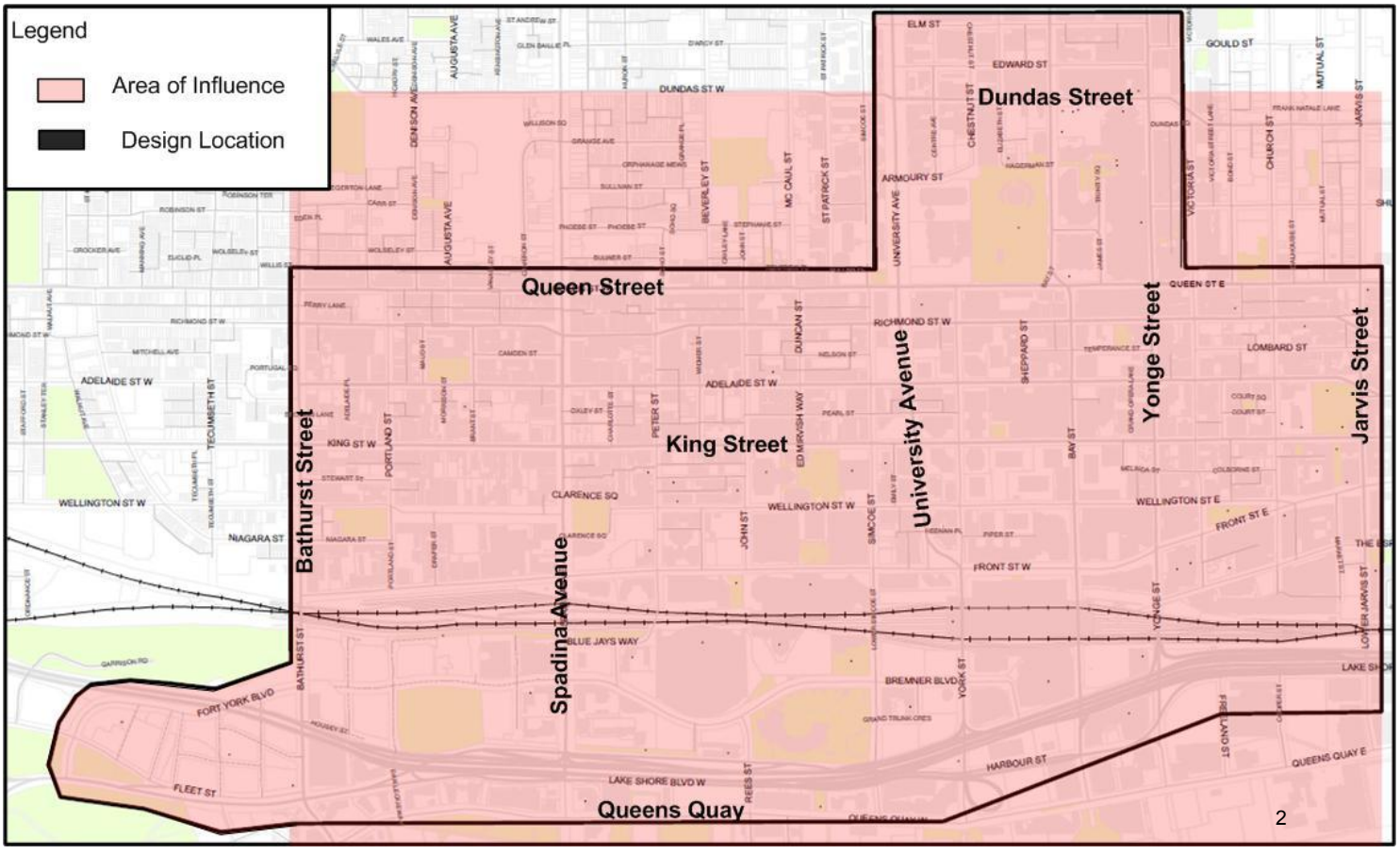
Continue to undertake road user safety campaigns, and consider implementing new road user behaviour campaigns to address road user behaviour concerns.

Description

Use existing agreements for posting public service announcements (PSAs) on street furniture and other City properties to present the road user behaviour campaigns.

Examples of potential messages include:

1. Respect the Red – Paid advertising campaign to target:
   - Vehicles unsafely running yellow/red lights; and
   - Vehicles travelling despite congestion and obstructing the intersection (i.e., intersection blockages).
2. Don't Be That Guy – Paid advertising campaign to target:
   - Failing to yield right of way;
   - Making improper lane changes;
   - Improper lane use (commuters in transit/taxi/bicycle lane);
   - Failure to use turn signals;
   - Following too closely;
   - Distracted driving; and
   - Illegal stopping/parking.



Downtown Transportation Operations Study

Project 3 Traffic Assistance Personnel (TAP) Program

Summary

Recommendation

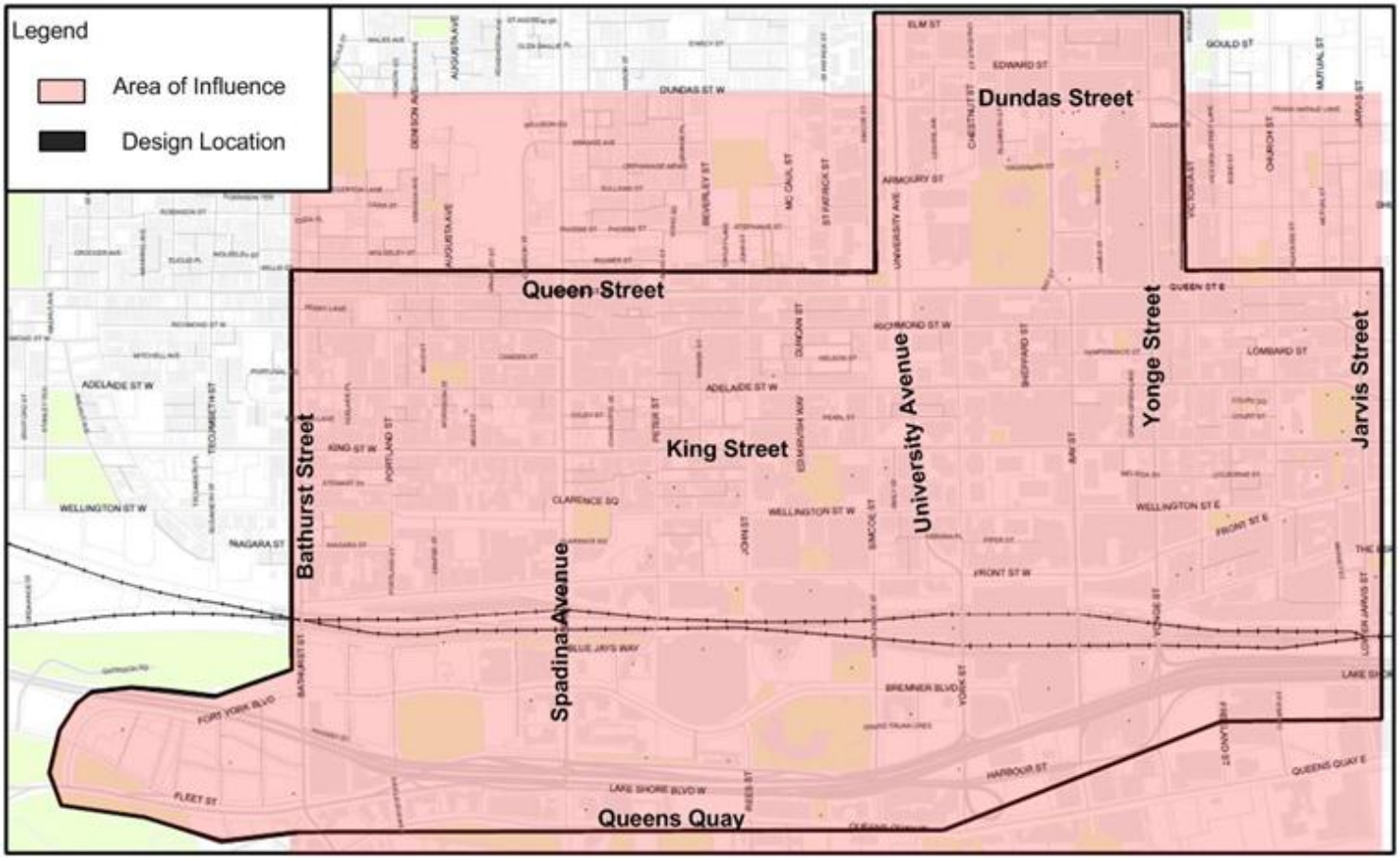
Establish a program for the deployment of Traffic Assistance Personnel (TAP) to improve intersection operations by reducing the frequency of intersection blockages.

Description

The TAPs would be deployed at identified problem intersections within the study area during the peak traffic periods to guide traffic (vehicles, pedestrians, and cyclists) and discourage intersection and crosswalk blockages. Fewer intersection and crosswalk blockages would result in improved pedestrian and cyclist safety and reduced transit and cross-street traffic delays.

TAPs would not have the authority to enforce by-laws related to intersection blockages or other traffic violations; enforcement would remain the responsibility of Toronto Police Services.

Similar programs have been successfully employed in New York City, Chicago, and Vancouver to reduce congestion impacts during rush hours and following major events.



Downtown Transportation Operations Study

Project 4 Adjusted Hours of Peak Period Parking and Turning Restrictions

Summary

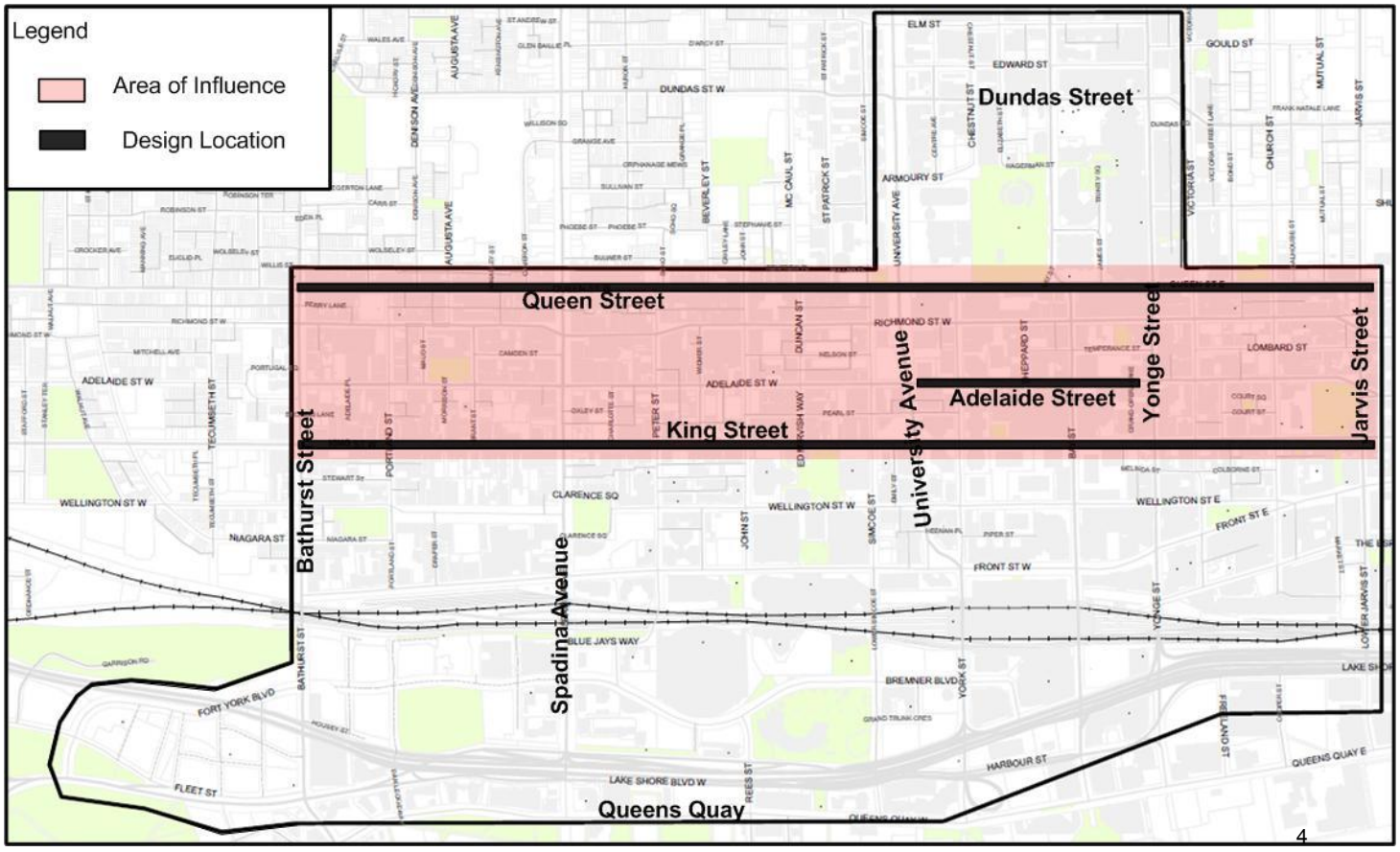
Recommendation

Adjust the time periods associated with parking (as well as standing and stopping) and turning movement restrictions on King Street and Queen Street from Bathurst Street to Jarvis Street, and Adelaide Street from University Avenue to Yonge Street to better reflect current traffic conditions.

Description

Screenline traffic volume data (entering and exiting the downtown) suggest that the peak period stopping, standing, parking and turning movement restrictions within the study area require adjustments to better reflect current demand patterns. Given the widening of peak period shoulders, expanding the peak period restrictions to be in effect from 7:00-10:00am and 3:00-7:00pm is justified. Initially, the peak period restrictions along King Street, Queen Street and a critical stretch of Adelaide Street would be expanded on a trial basis. With enforcement, these changes should result in increased throughput capacity along the design streets and reduced delays to streetcars along King Street and Queen Street.

A before/after study is recommended to assess the effectiveness of the proposed by-law changes. If the expanded peak period restrictions are proven effective, further data collection and analysis is recommended to identify additional locations that could benefit from similar by-law restriction updates.



Downtown Transportation Operations Study

Project 5 *Intensified On Street Stopping, Standing, and Parking Enforcement*

Summary

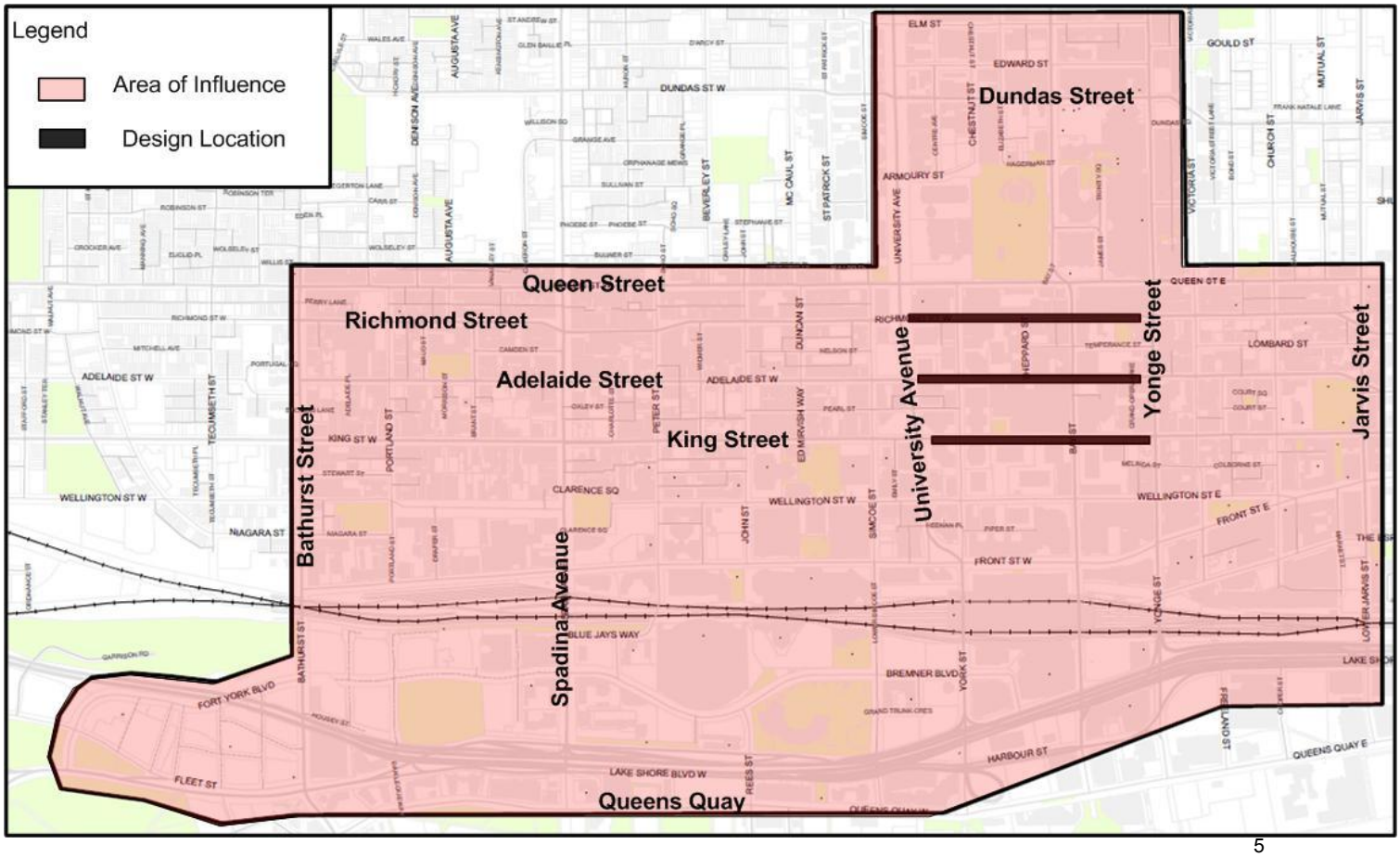
Recommendation

Develop and implement a targeted enforcement strategy for deterring traffic regulations violators.

Description

The following measures should be included in the strategy:

- Increase surveillance levels to ensure that perceived apprehension risk is high.
- Target King Street, Richmond Street and Adelaide Street, between Yonge Street and University Avenue, for the first 3 enforcement campaigns.
- Establish a small impound lot near the downtown area for the temporary storage of vehicles towed during peak periods.
- Negotiate with contracted towing operators for increased presence during the campaigns.
- Determine the effectiveness of the campaign by means of before and after studies (quality of tows versus quantity of tows).
- Work with the media to provide awareness of enforcement operations and increase its effectiveness.



Downtown Transportation Operations Study

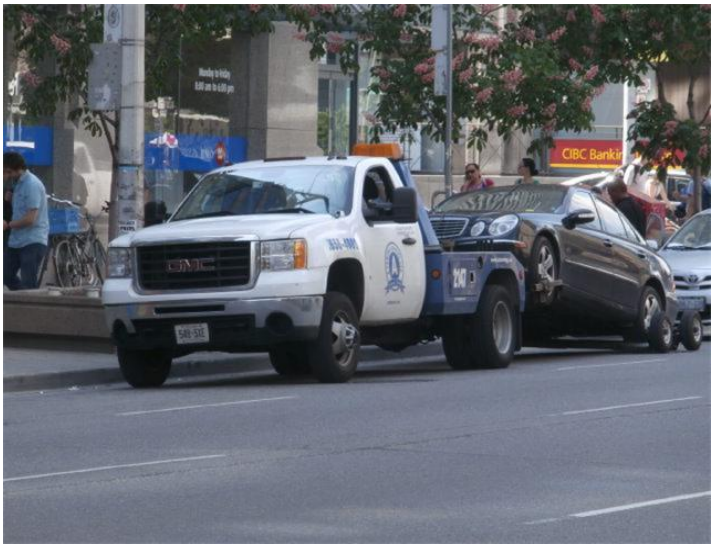
Project 6 Enhanced Parking Infractions Management

Summary

Recommendation

The following initiatives are recommended:

1. Implement a "Fixed Fine" system for parking offences (excluding accessible/disabled parking offences), as approved by City Council, after receiving approval of the Senior Regional Justice of the Ontario Court of Justice.
2. Apply "Rush Hour Offences" fine levels for stopping/standing/ parking offences as approved by City Council, as soon as possible, after receiving approval of the Senior Regional Justice of the Ontario Court of Justice.
3. Evaluate the merits of a programme that would identify and target habitual offenders (scofflaws) of the City's traffic by-laws.
4. Assess the benefits and costs of implementing an Administrative Monetary Penalties System (AMPS) for parking offences, presently prosecuted under Part II of the *Provincial Offences Act.*



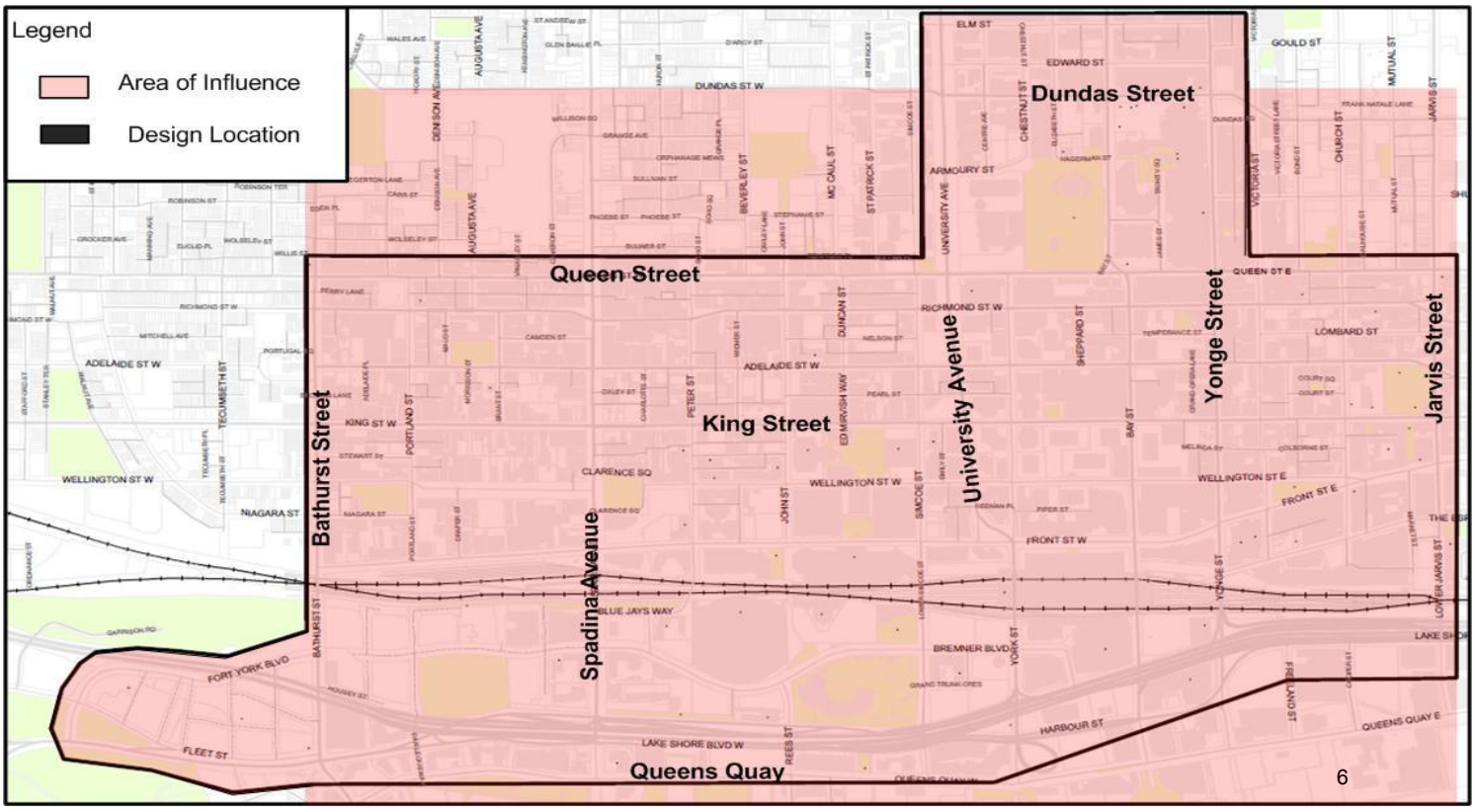
Description

The "Fixed Fine" system will help to optimize the City's courts by reducing the number of parking ticket trials. The "Fixed Fine" system does not allow for the set fine amount shown on the ticket to be reduced at trial; therefore, there is less incentive for ticket recipients to request a trial.

The "Rush Hour Offences" initiative will result in a fixed fine amount of $150.00 for offences on rush hour routes. Rush hour routes consist of any city roadways where official signs to prohibit parking, standing or stopping a vehicle during all or any portion of the general rush hour period(s) of 6:00 a.m. to 10:00 a.m. and or 3:00 p.m. to 7:00 p.m., Monday to Friday except Public Holidays are displayed. This initiative includes a public education campaign informing the public about the increased and fixed fines. The campaign could include advertisements and a grace period where issued tickets include a warning that informs offenders of the impending fine increase.

The hand-held units (WiPS), used by Parking Enforcement Officers were designed to send scofflaw information to the officer, through PTMS (Parking Tag Management System) updates.

The establishment of an AMPS could result in a more streamlined, citizen-friendly process for disputing minor parking infractions and eliminate the need for persons to appear in court.



Downtown Transportation Operations Study

Project 7 Courier Management

Summary

Recommendation

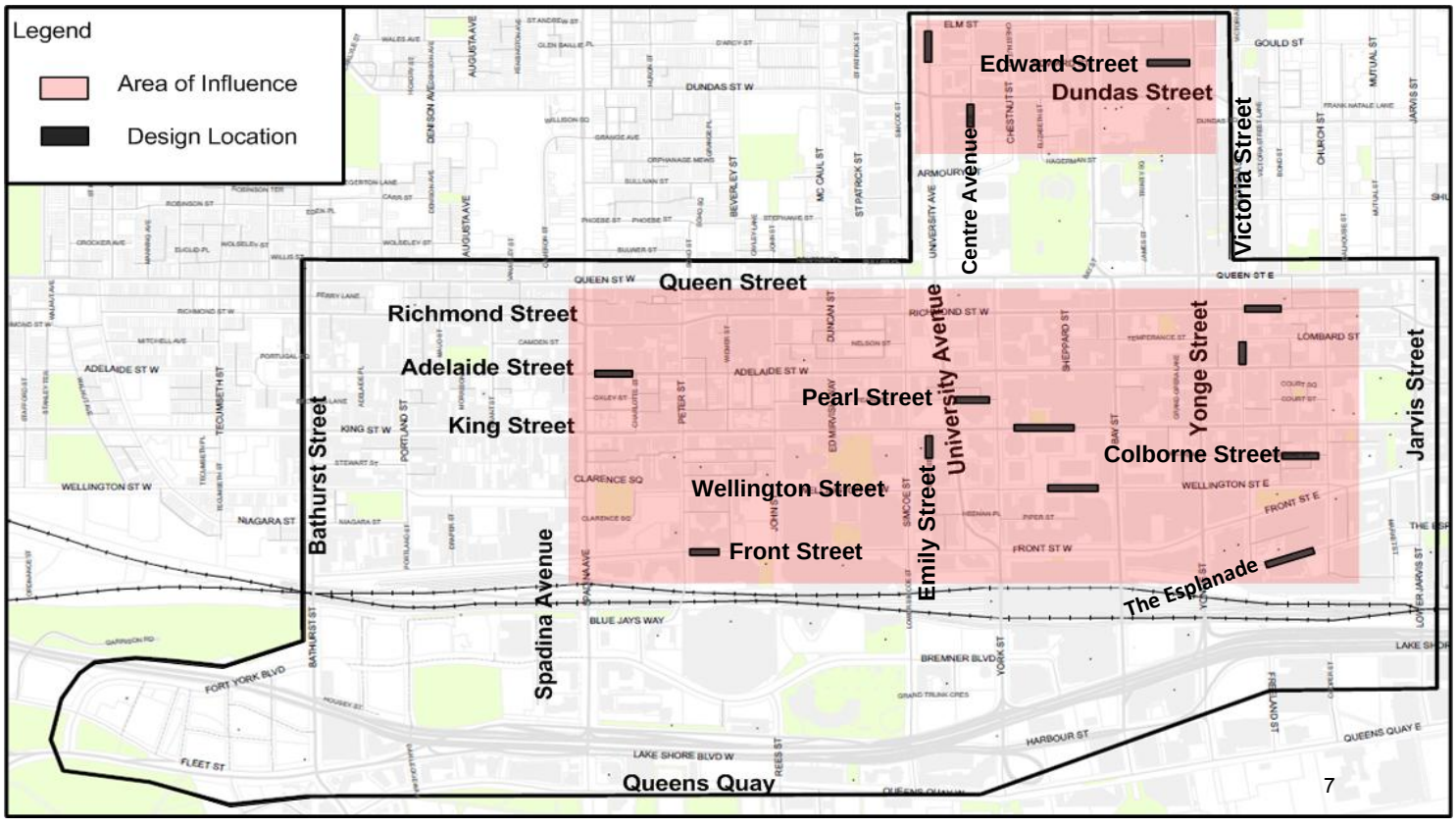
Enact Courier Delivery Zones (CDZ) in strategic areas for off-peak periods and implement them in 13 downtown locations.

Description

The overall objective is to mitigate congestion resulting from illegal lane and road occupancies, while providing a legal means for downtown courier activity. This involves the revival of a pilot project dedicating a number of locations for curbside loading during off-peak hours, and coordinating changes to enforcement bylaws with the Toronto Parking Authority.

Locations identified for CDZ implementation have been selected based on historical parking violations and a desire to limit impacts to traffic flow. The Canadian Courier and Logistics Association has reviewed and agreed with the 13 proposed locations. Existing by-laws must be amended to allow for courier curb side activities, and CDZ advisory signs must be installed.

Following implementation, a before/after study is recommended to assess the degree of success achieved by the proposed CDZs. A potential future addition to the program involves defining a CDZ within the by-laws and the implementing a permitting program for courier vehicle management.



Downtown Transportation Operations Study

Project 8 Enhanced Disruption Management

Summary

Recommendation

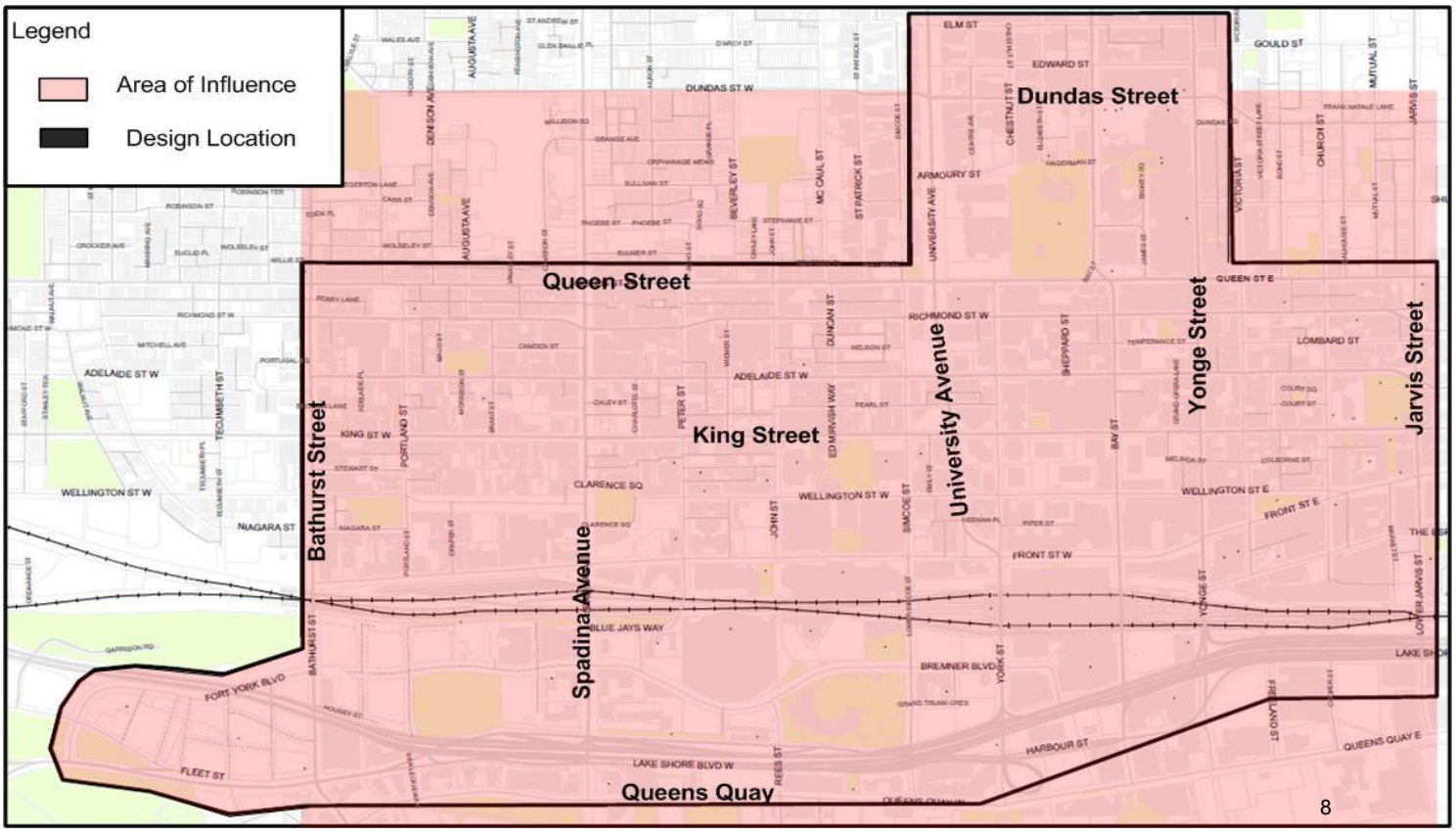
Implement the following road closure disruption management strategies:

- Develop and implement a requirement for a Disruption Mitigation Plan, and develop a "Constrained Urban Conditions" traffic management plan guide;
- Explore making it a requirement of road/lane occupancy permit applications that applicants prepare a disruption mitigation plan that includes impacts to the road network, and consideration of all modes and mitigation measures;
- Review, and potentially revise, the costs of road/lane occupancy permits to ensure that they reflect the cost of incurred disruptions (e.g., loss of parking and increases in delay); and
- Implement temporary cameras at road/lane occupancy sites to monitor impacts.

Description

The current City of Toronto application for road/lane occupancies does not require a traffic disruption mitigation plan. This project was set up to better manage permitted road/lane occupancies, and to update the requirements for permit applications to improve associated traffic operations.

The current policies related to permitted road/lane occupancies were reviewed. Common issues were identified and recommended changes to City policies that would improve traffic management associated with road/lane occupancies were explored. These changes would bring permit costs in line with the value of resulting congestion, and attempt to clarify the need for paid duty police officer presence. An economic analysis will be required to evaluate the public costs associated with road/lane occupancies.



Downtown Transportation Operations Study

Project 9 Special Events Transportation Management

Summary

Recommendation

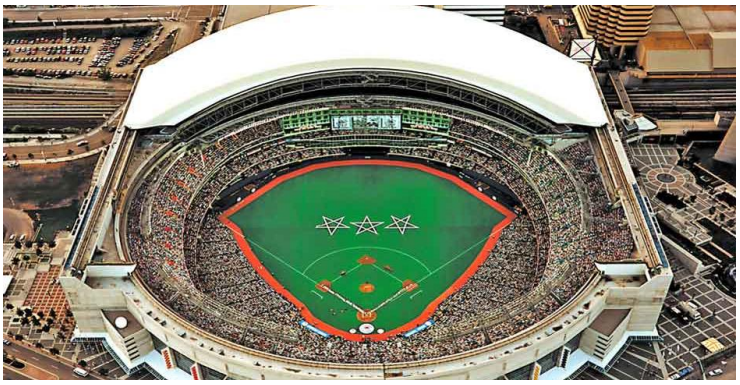
Develop a Special Events Transportation Management Plan process tailored towards maximizing the road network's ability to accommodate the traffic spikes associated with special events.

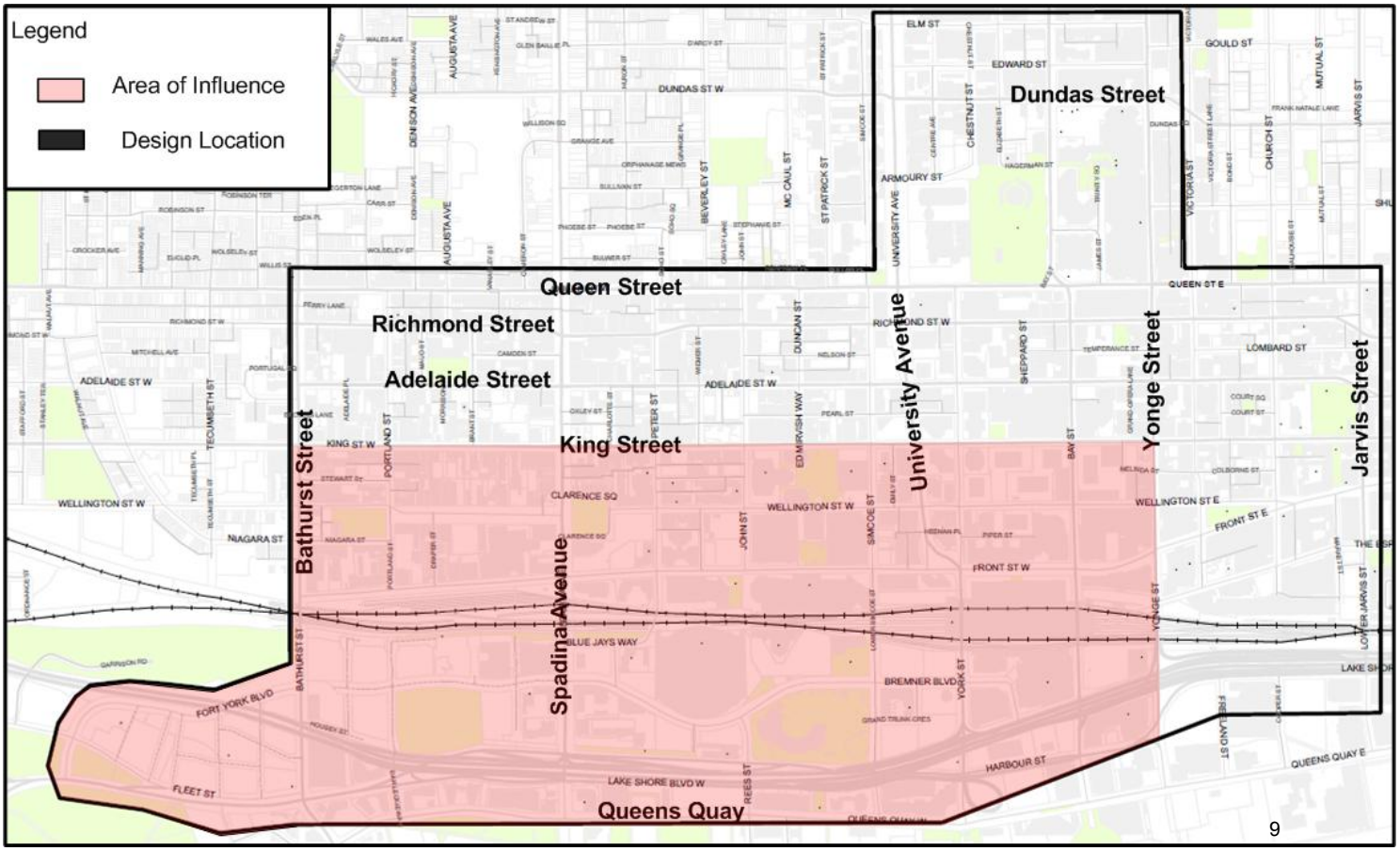
Description

The City of Toronto annually hosts a variety of recurring and non-recurring special events; therefore, a management plan targeting special event traffic is needed. The first step would involve City of Toronto representatives approaching the Air Canada Centre and Rogers Centre management to solicit their participation in the development of the plan. The second step would involve expanding the program to manage traffic associated with other events, including those at Exhibition Place and Coronation Park, as well as parades, marathons and charity walks/rides. Monitoring the effectiveness of special events transportation management would also be part of the scope of the initiative.

The following engineering and enforcement strategies should be included:

- Traffic signal timing optimization;
- Traffic signal coordination;
- Use of Traffic Assistance Personnel to improve traffic flows;
- Increased transit services; and
- Strategic road closures.





Downtown Transportation Operations Study

Project 10 Yonge & Dundas Area Traffic Operations Improvements

Summary

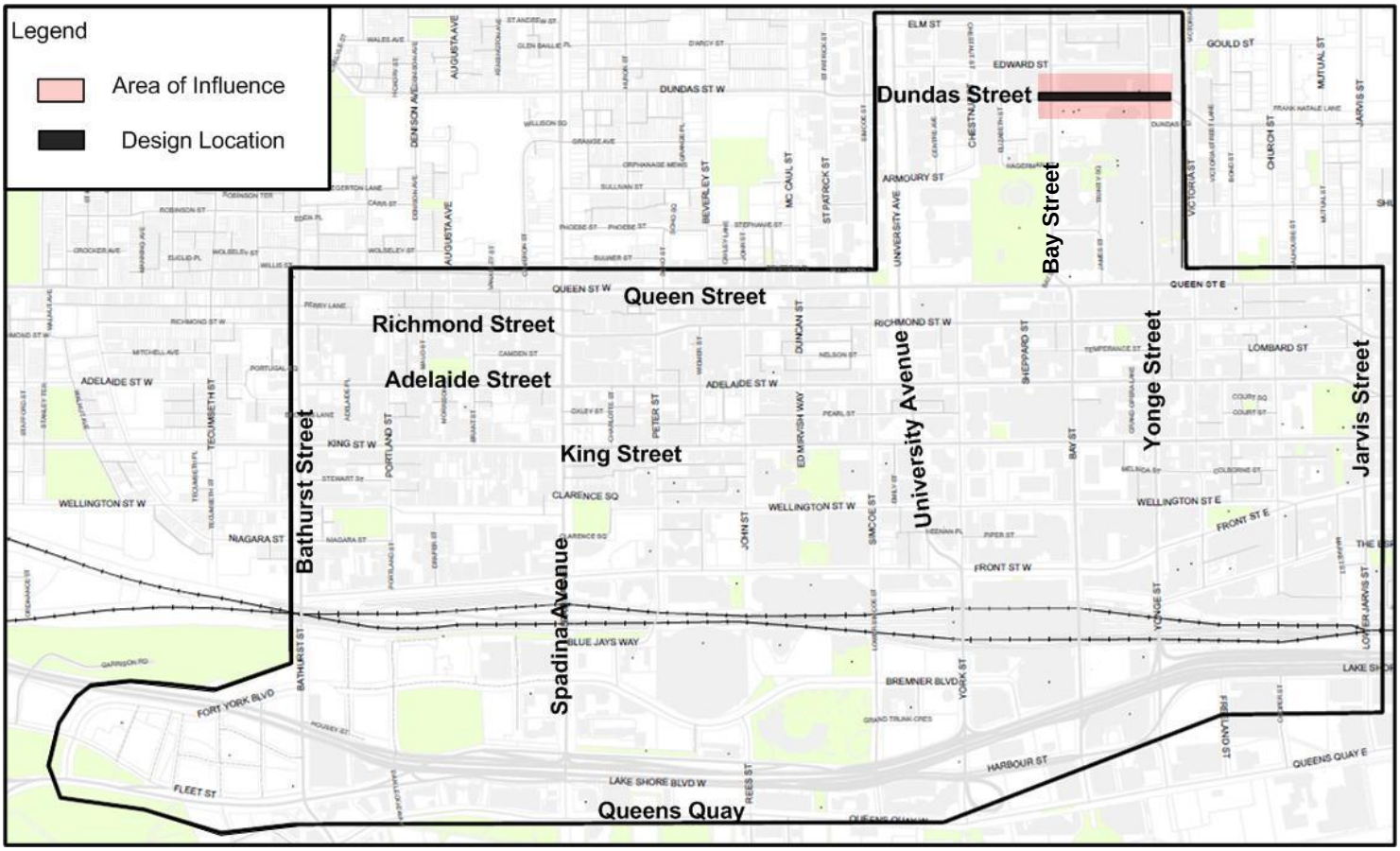
Recommendation

Implement the following measures in an effort to mitigate congestion caused by illegal curbside lane occupancies along Dundas Street:

- Designated Courier Delivery Zones (CDZ);
- Designated taxi Hail-Spots for passenger pick-up and drop-off; and
- Increased enforcement through a highly publicized blitz and installation of a traffic camera.

Description

Field observations have shown that curbside activities along Dundas Street are a significant contributor to delays to traffic passing through the Yonge and Dundas intersection. The dedicated CDZs and Hail Spots are intended to relocate courier, delivery truck and taxi activities from major arterial roads where lane blockages cause significant delays to collector roads where delays caused are less critical. Changes to parking, standing, and stopping by-laws are also being recommended to increase capacity. Increased monitoring and enforcement will be critical to the success of this initiative. As part of the project, there will be no changes to the existing pedestrian priority phasing at the Yonge and Dundas intersection.



Downtown Transportation Operations Study

Project 11 Bay Street Clearway Transit Operations Improvements

Summary

Recommendation

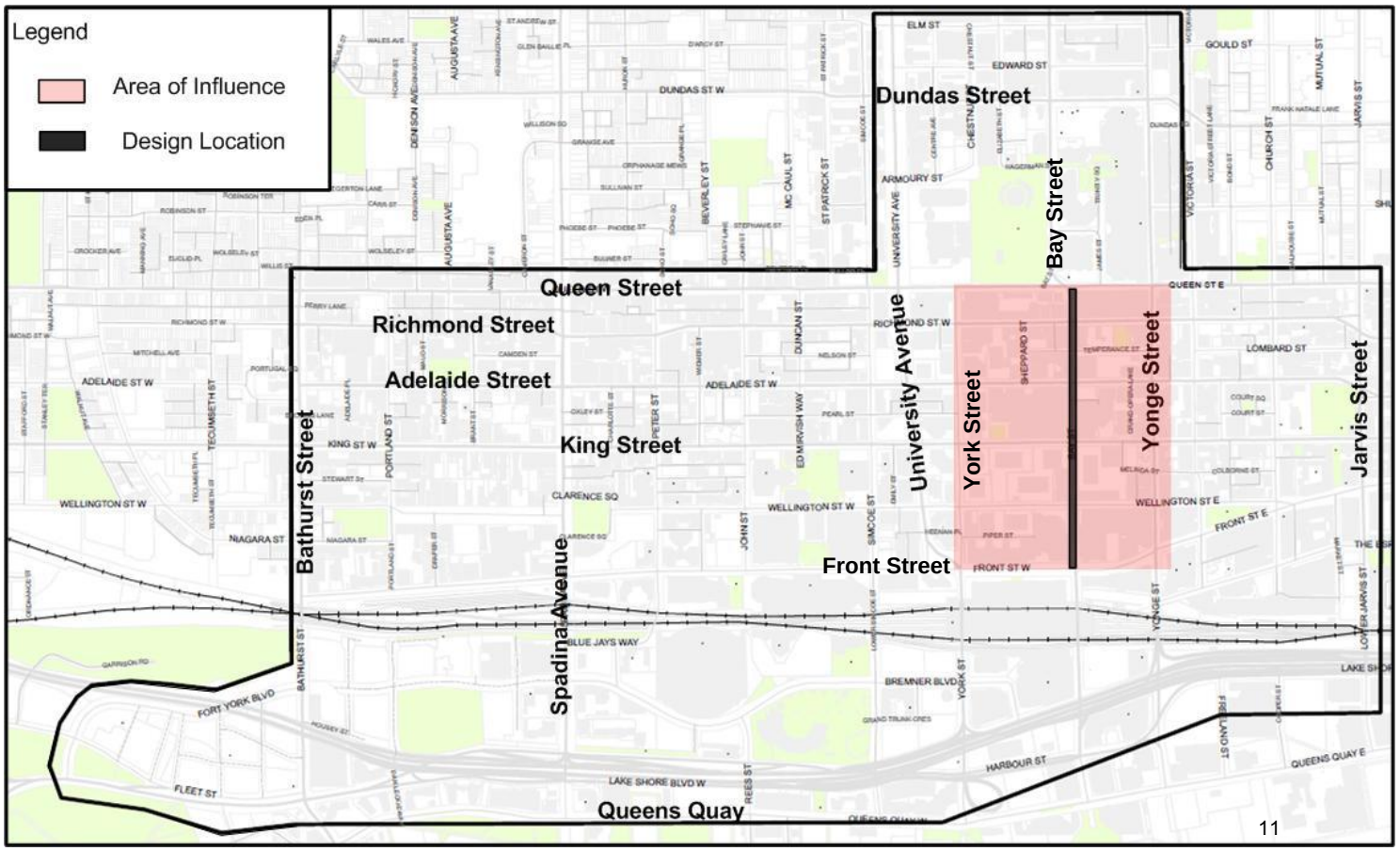
Prohibit northbound and southbound right-turns from Bay Street at King Street, northbound right-turns from Bay Street at Wellington Street and update the southbound right-turn prohibition from Bay Street at Richmond Street to reflect the Bay Street clearway designation times.

Description

The curb lanes on Bay Street are designated as transit, taxi, and bicycle lanes from 7:00 am to 7:00 pm on weekdays. This is known as the Bay Street Clearway. This designation is present for both northbound and southbound directions, from Front Street in the south, to the DTOS northern boundary of Queen Street and further north.

Transit vehicles are experiencing lengthy delays in the Bay Street Clearway. These delays are happening for a combination of reasons. One major reason is that high pedestrian volumes limit the ability of general traffic to make right turns. This then blocks the transit vehicles attempting to move through the intersection in the curb lane.

With the right-turn prohibitions, the travel time and number of lane changes required for transit vehicles through this segment should decrease. Given the ongoing Front Street reconstruction at Union station, southbound right-turns are temporarily prohibited at the Bay Street and Front Street intersection; the temporary prohibition is scheduled to be removed early 2015. A southbound right-turn prohibition from Bay Street at Wellington Street is recommended to be investigated once the temporary prohibition at Bay Street and Front Street is rescinded.



Downtown Transportation Operations Study

Project 12 *Wellington Street and Simcoe Street Redesign and Two-way Conversion*

Summary

Recommendation

Implement the following Wellington Street and Simcoe Street conversions in an effort to increase traveller mobility:

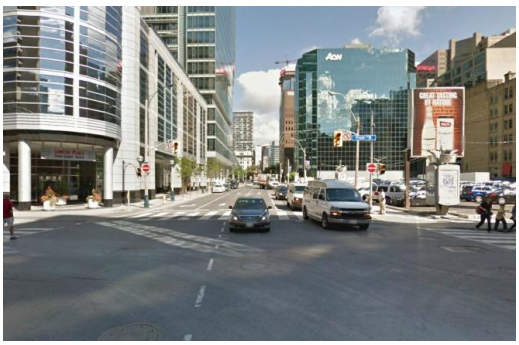
- Convert Wellington Street from one-way westbound to two-way from Yonge Street to Simcoe Street, and from John Street to Blue Jays Way;
- Redesign lane allocations along Wellington Street from Simcoe Street to John Street; and
- Convert Simcoe Street from one-way southbound to two-way from Front Street to Wellington Street.

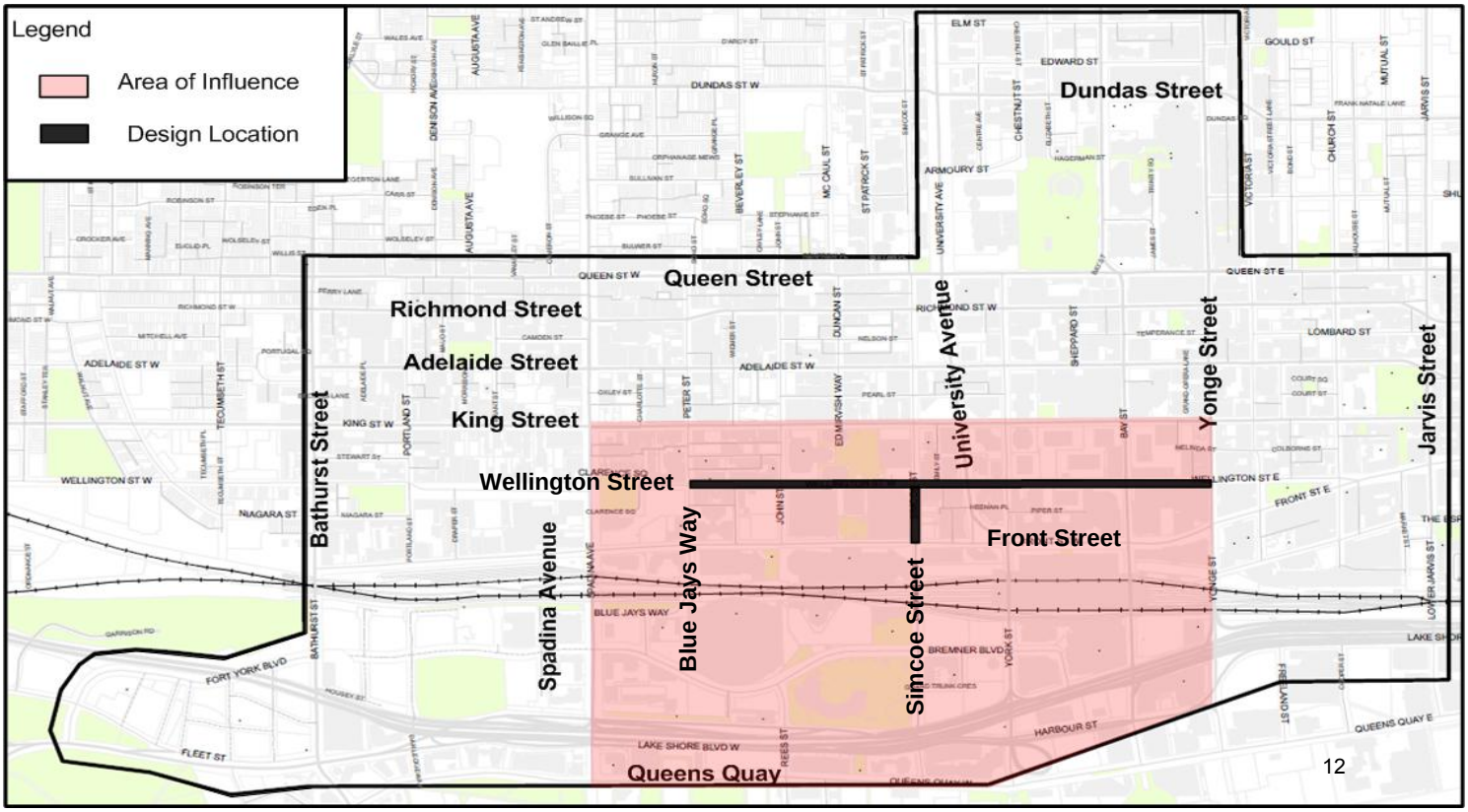
Description

With the changing role and traffic capacity of Front Street and given King Street designation as a transit corridor, alternative east-west roadways in the downtown area are essential. This project explores the impacts of converting Wellington Street and Simcoe Street to two-way roadways in an effort to provide the needed east-west corridor. Two-way traffic along Wellington Street is proposed to operate with 2 lanes serving each direction. Simcoe Street is proposed to operate with 1 lane serving each direction and a cycle lane in each direction.

Presently, there is unused capacity along Wellington Street, and a one-way to two-way conversion might make better use of the capacity in conjunction with accommodating displaced eastbound traffic due to Front Street changes. Existing curbside by-laws along Wellington Street are proposed to be maintained; however, these by-laws can be re-examined in the future once the new traffic patterns are understood.

The two-way conversion of Simcoe Street between Front Street and Wellington Street would achieve better use of available capacity, improve traffic circulation from Lower Simcoe Street and support the Wellington Street two-way conversion.





Downtown Transportation Operations Study

Project 13 Gardiner Expressway Lane Modifications

Summary

Recommendation

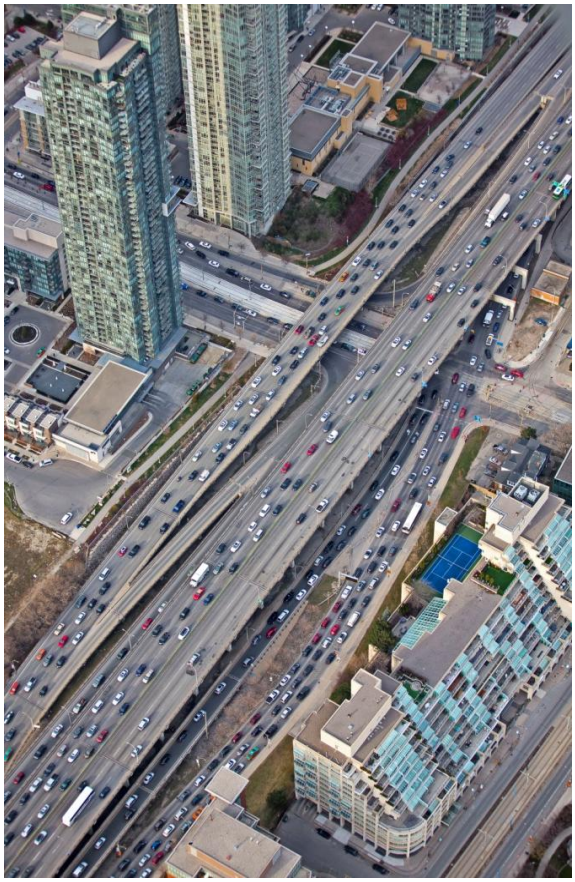
Complete a two stage study to further investigate ways of relieving congestion caused by vehicles trying to access the Gardiner Expressway. The study would examine:

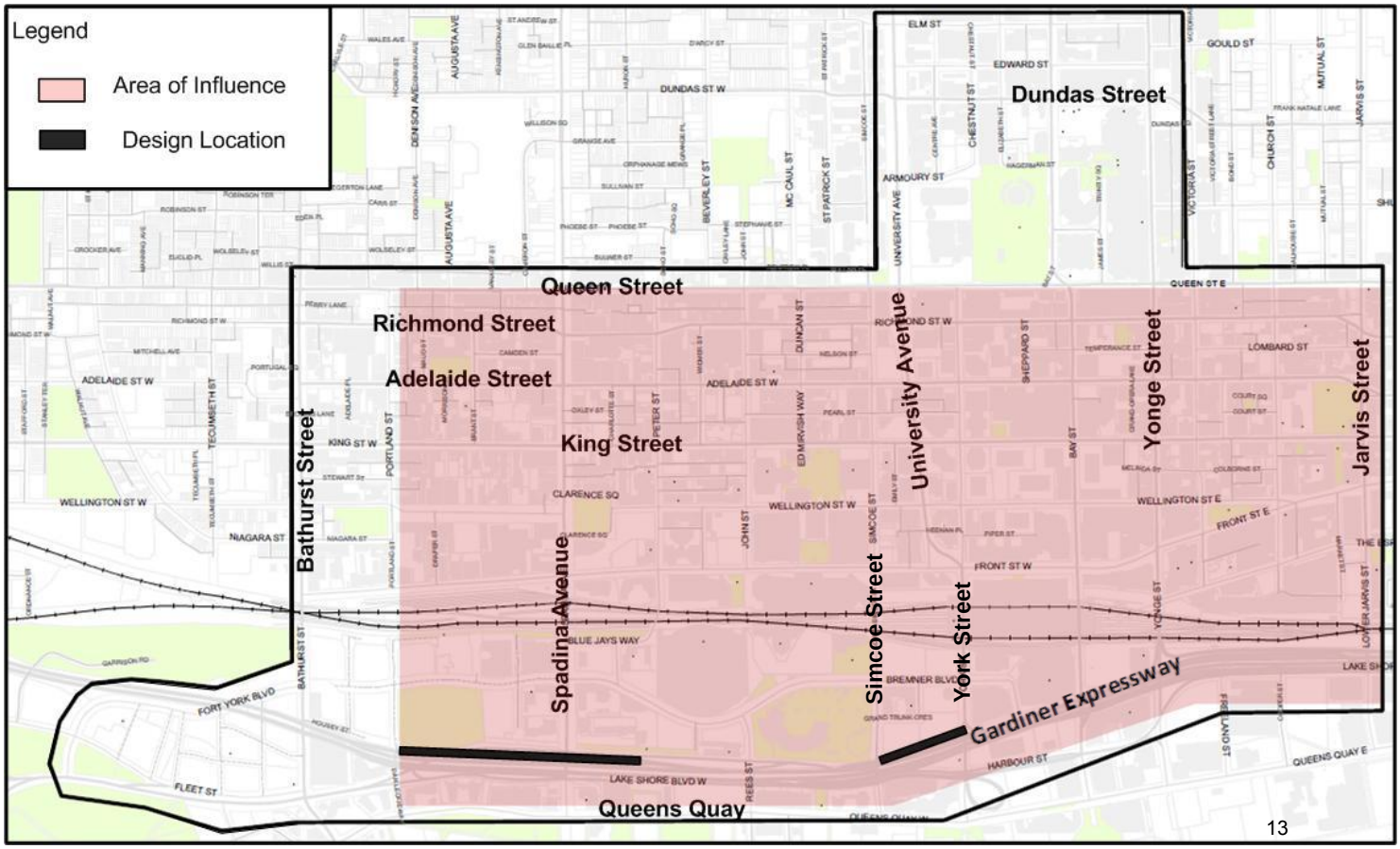
1. Prioritizing Gardiner Expressway on-ramp lane entry through lane re-configurations; and
2. Increasing Gardiner Expressway capacity through pavement markings and a potential managed lane system west of downtown Toronto.

Description

There is an opportunity to provide two entry lanes from York Street onto the Gardiner Expressway by dropping a westbound Gardiner Expressway through lane east of York Street and repainting the on-ramp lanes. Additionally, narrower lane widths across Spadina Avenue could extend the auxiliary lane onto the Gardiner Expressway, possibly even to Dunn Avenue, allowing for additional storage capacity. Both of these opportunities would be coupled with a lane drop just before each of the on-ramps, to provide free flow entry for vehicles onto the Gardiner Expressway. This philosophy recognizes that the Gardiner Expressway is not meant for long-haul travel, but more for downtown access and egress. As such, reducing the capacity across the expressway in order to facilitate an increase in capacity and number of vehicles entering the Gardiner expressway (and being removed from City arterial roads) was one of the primary goals.

These opportunities can be provided through managed lanes, which would be centrally controlled, and in effect for westbound traffic only, primarily in the PM peak period. Managed lanes provide a dynamic option to eliminate the proposed lane reduction through the centrally controlled and monitored system.





Downtown Transportation Operations Study

Project 14 Downtown Arterial Roads Traffic Cameras

Summary

Recommendation

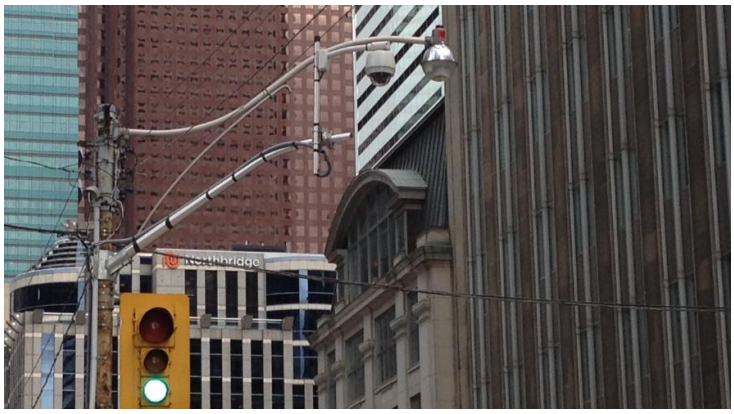
Install 15 cameras to monitor congestion hot spots and road occupancies/closures (e.g., construction, maintenance, development, and illegal stopping, standing, parking).

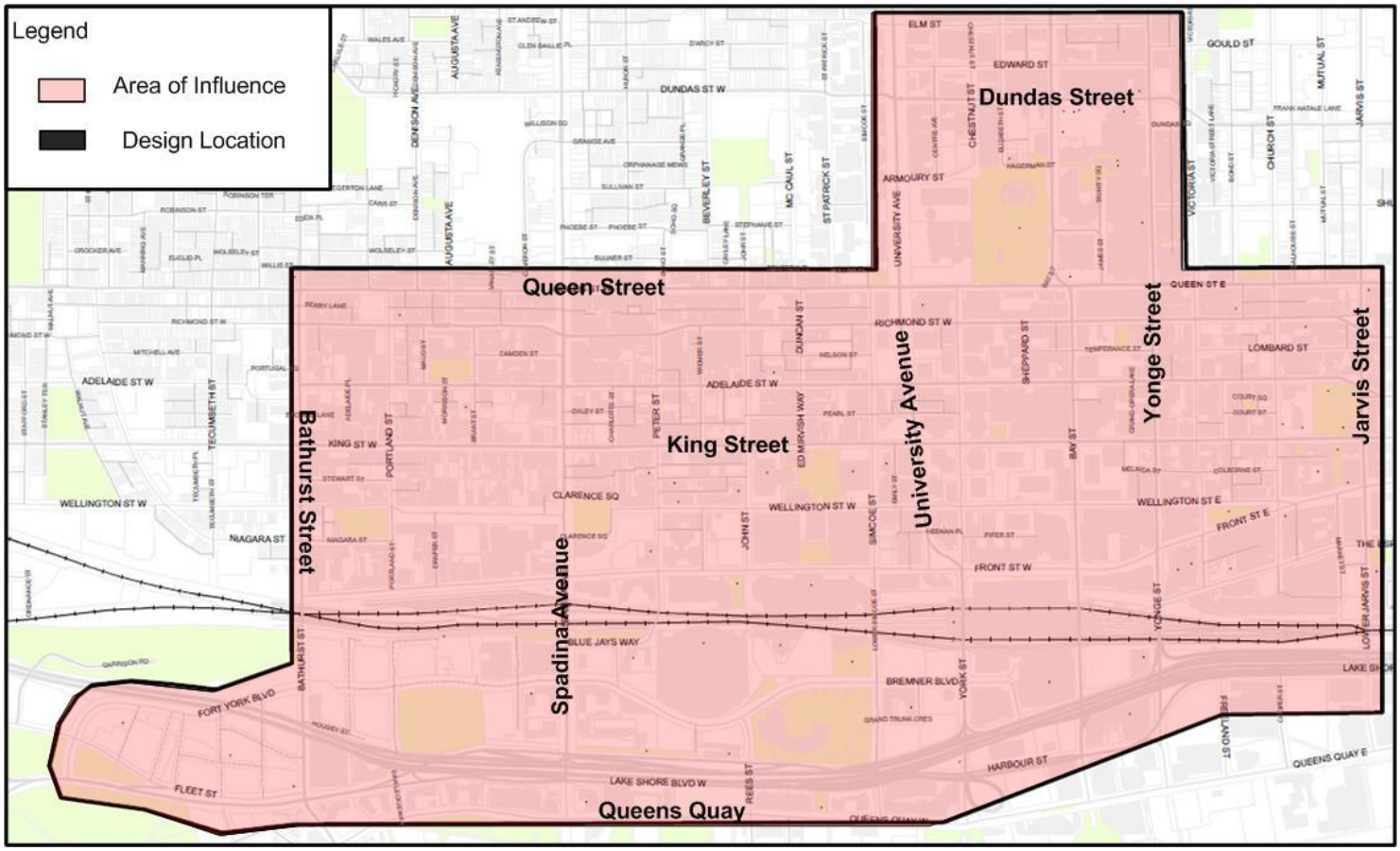
Description

The cameras will assist in:

- Identifying the true causes of recurring congestion;
- Developing possible mitigating strategies;
- Assessing the results of implemented strategies and enabling strategy fine tuning;
- Developing a library of lessons learned;
- Monitoring compliance with permit condition;
- Activating enforcement and tow truck operation quickly at the needed time;
- Assessing the effectiveness and suitability of lane occupancy permit conditions; and
- Assessing the effectiveness of special event traffic control plans.

The cameras would be made available to the public by serving as an expansion to the existing RESCU program.





Downtown Transportation Operations Study

Project 15 Transit Priority Strategy

Summary

Recommendation

Implement a revised Transit Signal Priority (TSP) strategy at a number of key locations throughout the DTOS study area given the following scenarios:

- Revise TSP strategy at locations with existing TSP; and
- Implement TSP at selected locations without existing TSP.

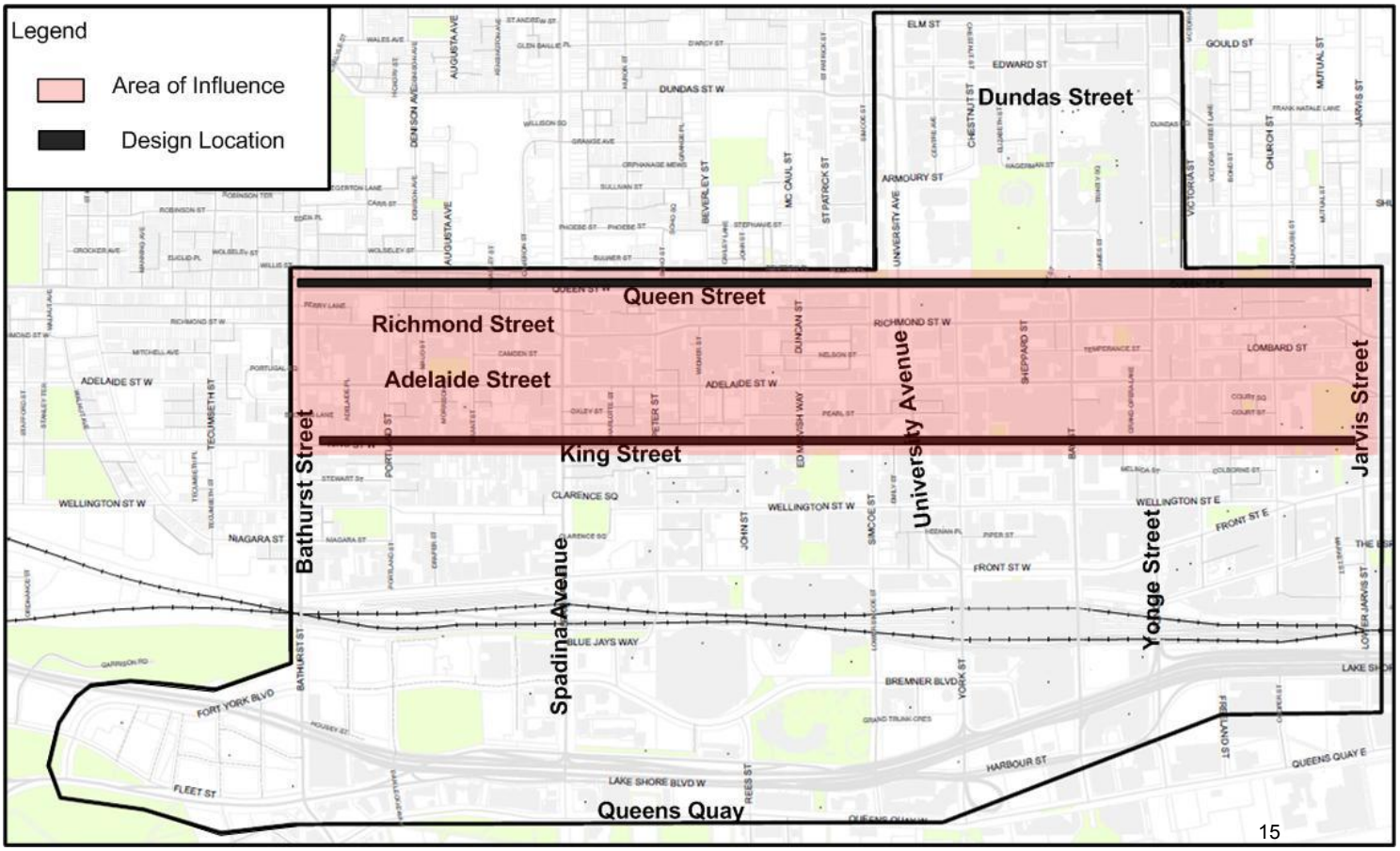
Description

Initially, efforts should be focused on locations with high boarding and alighting volumes to maximize the effect. The objective is the optimization of people flow and maximization of safety. Therefore, the transit signal priority strategy should focus on managing signal timings and providing priority to transit vehicles with the following guiding principles:

- Traffic signals should display green when the transit vehicle is ready to proceed through the intersection; and
- Traffic signals should display red during transit vehicle boarding and alighting.

This approach increases transit passenger safety and minimizes the percent time general traffic is blocked by transit boarding and alighting. Project rollout will occur through the following steps:

- Step 1 – Determine optimal TSP locations along King Street and Queen Street in coordination with the TTC;
- Step 2 – Complete preliminary and detailed study design;
- Step 3 – TSP Implementation; and
- Step 4 – Complete before/after study to evaluate the TSP success.



Downtown Transportation Operations Study

Project 16 Richmond Street Congestion Management Traffic Signal Strategy

Summary

Recommendation

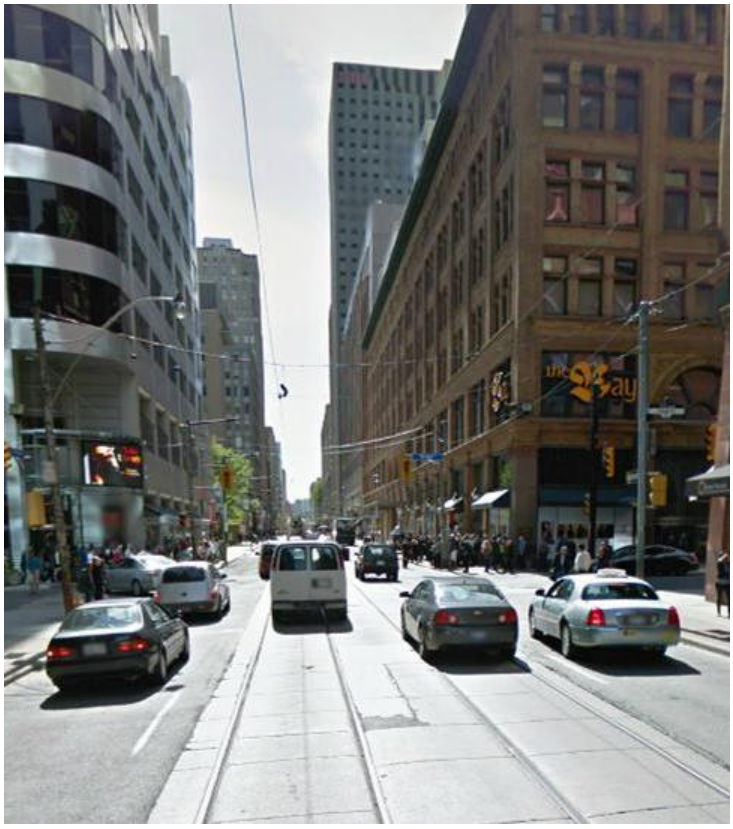
Implement a congestion management traffic signal timing strategy along Richmond Street between Jarvis Street and Bay Street.

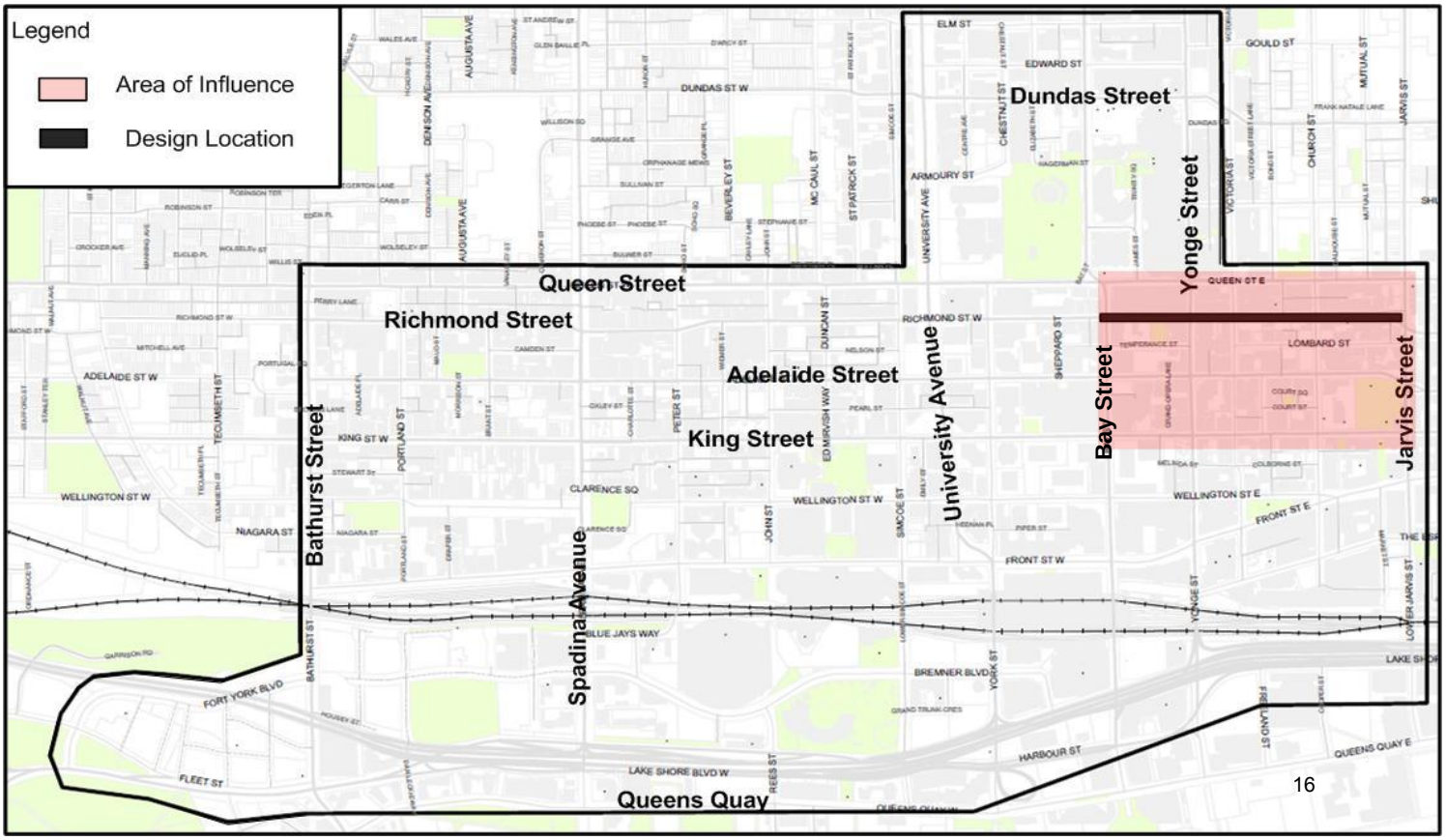
Description

Congestion detection equipment will be implemented along Richmond Street, in the vicinity of Bay Street, and along Jarvis Street. When congestion is detected on Richmond Street, upstream traffic signals will be notified and the traffic signal timing plans will be altered in a manner that reduces incoming traffic volumes along Richmond Street. The objective is to spread queues evenly along Richmond Street between Jarvis Street and Bay Street in an effort to eliminate the downstream congestion. Congestion on Jarvis Street, north and south of Richmond Street, will also be monitored to maintain an acceptable level of service.

The Richmond Street corridor was chosen as an ideal location for the pilot project for the following reasons:

- Operates as a 1-way road and as a primary westbound route into the downtown core due to its connection to the Don Valley Parkway;
- Does not serve transit;
- Richmond Street's queue management ability; and
- Richmond Street at Jarvis Street is located along the DTOS study area border.





Downtown Transportation Operations Study

Project 17 Entertainment District Area Operations Traffic Signal Strategy

Summary

Recommendation

Implement a traffic signal timing strategy within Toronto's entertainment district based on its particular time-of-day and day-of-week transportation characteristics.

Description

The entertainment district, as the first stage of this strategy, is defined by the area encompassed by King Street to the south, Spadina Avenue to the west, Queen Street to the north and Simcoe Street to the east.

Traffic signal timing plans will be developed to reflect 24/7 operating conditions to serve the area's commercial, residential, and entertainment needs.

A transportation pattern assessment will be conducted to gain an understanding of the transportation characteristics within the entertainment district. Using the results of the transportation pattern assessment, specially tailored traffic signal timings and turning movement restrictions will be developed with the objective of serving the predominant needs, based on time-of-day and day-of-week.

The area of influence could potentially be expanded as part of future revisions.