

Sidewalk Closures Update

Technical Report

Traffic Engineering

Roads

The City of Calgary

October 2014

EXECUTIVE SUMMARY

This report presents an update to the practices and procedures followed by the City of Calgary for sidewalk closures during construction. This report also summarizes how the City of Calgary enhances pedestrian safety and mobility with the application of best practices in construction projects. This issue was discussed and evaluated in 2013 by the Transportation Department and was reported to the Council via the S.P.C. on Transportation and Transit. An update to that report is completed, at the request of council, to present the current practices within the City of Calgary that enhance pedestrian safety and mobility during sidewalk closures in construction zones, encourage decorative hoarding and minimize disruptions to businesses.

Many construction projects are usually underway in the downtown core and surrounding neighbourhood within the City of Calgary. The City of Calgary focuses on pedestrian safety and mobility by minimizing sidewalk closures and duration of closures due to construction projects. In order to maintain the pedestrian safety and mobility adjacent to construction sites, Roads – Traffic Engineering allows accommodation of pedestrians under a hoarding structure on the sidewalk or in the curb lane of traffic where feasible.

There may be some instances where safe accommodation of pedestrians on the sidewalks may not be possible due to imminent risk to the pedestrians from the adjacent construction activities. In these cases, alternatives to sidewalk closures are explored. If it is not possible to accommodate the pedestrians on the sidewalk safely and an immediate risk to pedestrians exists on the sidewalk despite the use of hoarding structures, Roads – Traffic Engineering may allow sidewalk closure and detour of pedestrians. During sidewalk closures and pedestrian detours, efforts are made to maintain pedestrian accesses, either through the use of a protected walkway, and/or with clear and concise signage as standardized in The City of Calgary Temporary Traffic Control Manual 2011.

With the continual efforts from the City of Calgary for the safe accommodation of pedestrians during construction, the proportion of sidewalk closures due to construction has significantly decreased over the time in the Calgary downtown, relative to the volume of construction projects underway.

In order to maintain safe accommodation of pedestrians in construction zones as well as to promote the desired economic investment (construction projects) within the City of Calgary, Roads, Planning Development and Assessment (PDA) and the Calgary Construction Association (CAA) will continue collaboration. Roadway Operations and Detours will continue to attend monthly construction site safety meetings with PDA and CCA, coordinate with PDA earlier in the building and hoarding permit application process if possible, and continue to follow 'On-Site Construction Safety – Best Practices'.

Table of Contents

EXECUTIVE SUMMARY	2
1.0 BACKGROUND.....	4
2.0 CURRENT PRACTICE AND PROCEDURE FOR SIDEWALK CLOSURES	4
2.1 Permit Process for Sidewalk Closures.....	7
2.2 Closures and Detours within the City of Calgary	12
2.3 Sidewalk Closures – Moving Forward	15
3.0 CONCLUSIONS.....	17
APPENDIX A – TT2013-0361.....	18

1.0 BACKGROUND

This report presents an update of the practices and procedures followed by the City of Calgary (the City) for sidewalk closures during construction. This report also summarizes how the City enhances pedestrian safety and mobility with the application of best practices in construction projects. This issue was discussed and evaluated in 2013 by the Transportation Department and reported to the Council via the S.P.C. on Transportation and Transit; a summary of item TT2013-0361 is included in **Appendix A**. An update to that report has been completed, at the request of council, to review and present the current practices within the City that enhance pedestrian safety and mobility during sidewalk closures adjacent to construction sites. An expanded discussion on how the City's current practices maintain pedestrian safety and mobility in construction zones is included in this report.

2.0 CURRENT PRACTICE AND PROCEDURE FOR SIDEWALK CLOSURES

Many construction projects are usually underway in the downtown core and surrounding neighbourhood within the City of Calgary. In order to maintain the pedestrian safety and mobility, the City allows accommodation of pedestrians under a hoarding structure on the sidewalk or in the curb lane of traffic where feasible. However, there may be some instances where safe accommodation of pedestrians on the sidewalks may not be possible due to imminent risk to the pedestrians from the adjacent construction and to accommodate construction activities. These construction projects may require closure of sidewalks to protect the pedestrians from construction related accidents. In these cases, the City may allow sidewalk closure (one side of the street, not both sides) and detour of pedestrians. In conjunction with the sidewalk closure, closure of a cycle track adjacent to the sidewalk may be necessary depending on the extent of the construction or any imminent risk to the cyclists.

The cumulative impacts of closures arising from multiple construction sites can create an inconvenient environment for pedestrians. In order to better serve the safety and mobility of pedestrians as well as to accommodate the desired economic investment (construction project), the City intends to coordinate construction hoarding activities earlier in the engagement process in site safety planning.

The City allows different types of hoarding structures to protect pedestrians on sidewalks adjacent to construction sites (where pedestrians can be accommodated safely on sidewalks within construction zone). SeaCans (C-Cans) are one type of holding structures used on sidewalks. SeaCans are transport containers modified for pedestrian protection on sidewalks within active construction zones. An example of SeaCan application on sidewalk is presented in

Photo 1 that shows pedestrian accommodation on sidewalks along 10 Street at 8 Avenue SW during construction.

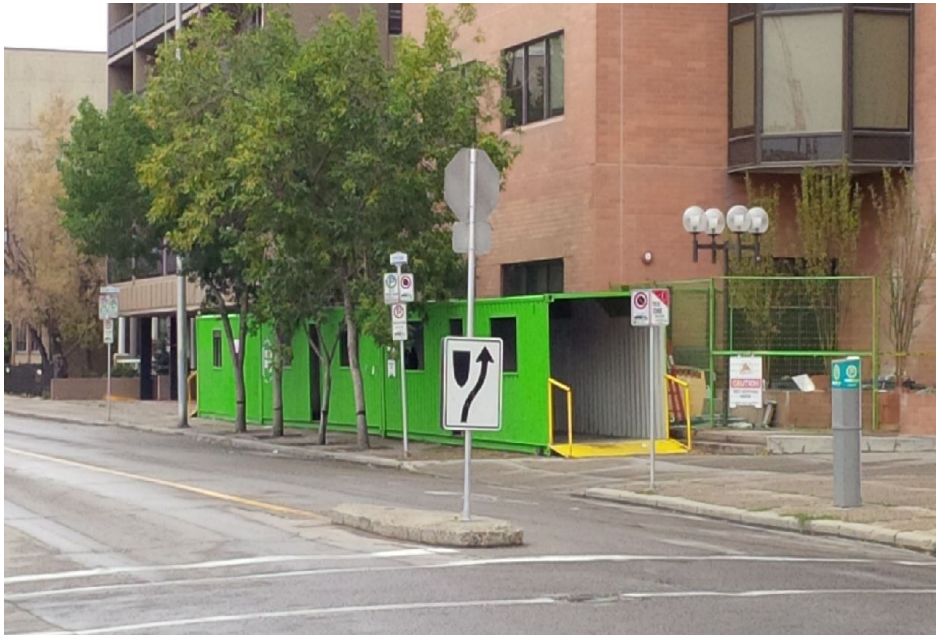


Photo 1 Application of SeaCan on Sidewalk along 10 Street at 8 Avenue

Another example of overhead protection for pedestrians is at the Eau Claire Tower on 3 Avenue SW. Pedestrian access is safely maintained and the sidewalk is operational with the application of the protective frame (**Photo 2**).



Photo 2 Protective Frame on Sidewalk adjacent to Eau Claire Tower on 3 Avenue SW

The City endeavours to minimize sidewalk closures and duration of closures due to construction projects. The existing City bylaw, Bylaw Number 20M88, reads as follows with respect to sidewalk closures and detour:

CONSTRUCTION AND MAINTENANCE OPERATIONS – PERMITS

(1) Where a person wishes to park, leave, stand, store or station any vehicle, material, or object used in connection with a building construction or maintenance operation on a portion of a Street that person shall:

- (a) obtain a permit in writing from the Traffic Engineer,
- (b) in addition to any other charges required, pay a daily charge as specified in Schedule "A".

(2) A person who obtains a permit from the Traffic Engineer pursuant to this section shall comply with all of the provisions and conditions of the permit.

(3) A person who obtains a permit from the Traffic Engineer pursuant to this section shall:

- (a) erect and maintain any fenced enclosure around the portion of Street pursuant to the permit
- (b) ensure that:
 - (i) warning signs are posted for the approaching public, and
 - (ii) pedestrian movements can be maintained past the work area.

(4) A person who obtains a permit from the Traffic Engineer pursuant to this section shall ensure that temporary traffic controls are:

- (a) properly in place prior to commencement of the operations, and
- (b) removed from the Street upon completion of the operation.

(5) A person who obtains a permit from the Traffic Engineer pursuant to this Section shall ensure no motor vehicles of any type are parked or allowed to be parked in that area permitted for the storage of items.

(6) A person who obtains a permit from the Traffic Engineer pursuant to this Section shall ensure access is maintained to all fire hydrants and water valves.

HOARDING PERMIT EXCERPT

APPROVAL: In order obtain a Hoarding Permit, Traffic Engineering may request additional application requirements be completed. A permit will not be granted if all requested items are not submitted. For approval, every effort should be made to minimize the size and overall duration of the hoarding. Traffic Engineering reserves the right to refuse or modify any Hoarding Permit Application or requested extension of a Hoarding Permit upon expiration.

2.1 Permit Process for Sidewalk Closures

The permit process for the use of the City right-of-way begins with a request sent in by the applicant via 311, ePermits, or by direct contact with the Roadway Operations and Detours (RO&D) technician through email, phone, or in person. A description of the requested closure has to be provided in the request. Applications for the use of the City right-of-way or sidewalk closures may be submitted to long-term closure for new construction. All requests require justifications for the use of City right-of-way. For any requests for sidewalk closure(s), the applicant must provide significant justification. All other alternatives to sidewalk closure(s) are investigated by Roadway Operations and Detours –

- Is it possible to install overhead hoarding structure?
- Is it possible to safely accommodate and protect pedestrians within a hoarding structure on the sidewalk?
- What is the scope and method of construction? Is it possible to modify the construction method to keep the sidewalk open?
- Can the sidewalk closure be avoided by using alternate City right-of-way?
- Is the sidewalk closure absolutely necessary to ensure pedestrian safety?
- If the sidewalk closure is unavoidable for safety/practical reasons, is it possible to stage or phase out the construction to minimize the time of the closure before an alternative set-up can be introduced?

PEDESTRIAN SAFETY IS PARAMOUNT

Pedestrian safety is a priority within the City of Calgary. During permit request to Roadway Operations and Detours, the safety of pedestrians is thoroughly investigated in case of a proposed use of the City right-of-way for construction. Sidewalk closures may be required to accommodate construction activities due to constrained right-of-way in downtown Calgary. The City may allow closure of a sidewalk and pedestrian detour to accommodate construction activities and to protect pedestrians from the adjacent construction site. Every possible effort is made to maintain pedestrian access, either through the use of a protected walkway, or with clear and concise signage as standardized in The City of Calgary Temporary Traffic Control Manual 2011 - indicating that the sidewalk is closed and pedestrians must use the adjacent sidewalk for access.

While reviewing and investigating the temporary pedestrian accommodation plan in case of a proposed sidewalk closure, it is ensured that sidewalks on both sides of the street are not closed. This is done with the help of '10 Days Ahead ArcGIS' layer. This is an essential part in planning proposed sidewalk closures. This GIS layer – an interactive mapping and data system, lets Roadway Operations and Detours observe existing sidewalk closures within close proximity of the proposed sidewalk closure applications. Roadway Operations and Detours make sure that sidewalks on both sides of the street are not closed for long-term construction; this leaves the option open to detour the pedestrians to the sidewalk on the other side of the street and thus maintain pedestrian mobility. The pedestrian volumes on the sidewalk proposed for closure are also assessed during the review of the pedestrian accommodation plan. During the review process, it is ensured that pedestrian accesses to commercial properties and residences are maintained safely. The temporary pedestrian accommodation plan has to be reviewed and approved by Roadway Operations and Detours before the work permit is issued to the applicant.

MINIMIZE IMPACT TO CALGARY TRANSIT

In addition to ensuring pedestrian safety and mobility, every possible effort is made to keep the impacts to Calgary Transit users to an absolute minimum. Should a sidewalk closure affect a transit stop, Calgary Transit is immediately notified so that temporary transit stops can be accommodated for pedestrians by Calgary Transit. Calgary Transit notifies public about the affected transit stop(s) and advertises about the temporary transit stop(s) in advance.

ENSURE SAFE MOBILITY OF CYCLISTS

In conjunction with the sidewalk closure, closure of a cycle track adjacent to the sidewalk may be necessary depending on the extent of the construction or any imminent risk to the cyclists. The application for the closure of a cycle track is thoroughly reviewed by Roadway Operations and Detours based on the assessment of any imminent risk(s) to the cyclists.

MAINTAIN CONTINUITY OF BUSINESS

Maintaining continuity of business in construction zones is another prioritized consideration that the City takes into account. In construction zones hoarding structures may cover or conceal large sections of businesses adjacent to the sidewalk. In the event that a hoarding structure conceals a business, Roadway Operations and Detours now require the contractor to create a banner displaying the business's name and status of the business (**Photo 3**). This is now being made a stipulation of a hoarding permit. It is in the best interest of the contractor to maintain strong relationships with all parties affected by their construction efforts.



Photo 3 Banner Displaying Name of a Concealed Business and its Status (Open/Closed)

While it is common for hoarding areas to close parking lanes on City right-of-way, it is usually a condition of the hoarding permit, that no access to privately owned parking areas is affected by hoarding closures. If such a closure is unavoidable for construction, an alternate access route to that privately owned parking area must be established by the contractors' traffic accommodation plan and approved by Roadway Operations and Detours.

HOARDING ACTIVITIES AND HOARDING FEE SCHEME

A traffic accommodation plan must be submitted by an applicant with the hoarding permit application. A traffic accommodation plan provides details of proposed closures, required traffic control devices, accommodation(s) for affected businesses and/or private properties, notice of closures to affected businesses or private properties, a detailed construction schedule with required closures for each phase, and any other additional documents the Traffic Engineer or Traffic Engineering Technician deems necessary for the application process. While the notice of closure for affected businesses and private properties is a requirement of the application, no process is in place to confirm that notices are delivered to the affected parties. Once approved by Roadway Operations and Detours, the construction of the hoarding structure commences.

A hoarding structure can be defined as a fence or wall of sturdy material no less than 1.8m in height. The typical materials used are chain link fence, concrete GM or jersey barriers, secured wood fencing, reinforced scaffolding, or Seacans. The type of material used for the hoarding structure is largely dependent on the scale of the construction and length of closure.

The fee structure for hoarding permits within the City of Calgary is presented in **Table 1**:

Table 1: Fee Structure for Hoarding Permits within the City of Calgary

Major Streets	Minor Streets/Alleyways	Sidewalk/Boulevard
46.00\$ per lineal meter up to 2.5m wide	23.00\$ per lineal meter up to 2.5m wide	23.00\$ per lineal meter up to 3.0m wide
18.50\$ for each additional square meter over 2.5m wide	9.50\$ for each additional square meter over 2.5m wide	4.50\$ for each additional square meter over 3.0m wide

Some special provisions may be applicable to the above fee scheme. The Boardworx program discount - wherein the contractor may use the Boardworx program to place artwork on their hoarding and receive a 25% discount on their hoarding fees for up to one year. A re-evaluation of this program is currently underway within Roadway Operations and Detours, it has been found that the program is under-utilized, that the discount structure may not be optimal and that a wider variety of choices, not only Boardworx, for decorative hoarding could benefit the downtown. In 2013, 65 sidewalk blockfaces took part in the Boardworx program, and currently (2014, to date) 40 sidewalk blockfaces are part of the Boardworx program.

In case of a sidewalk closure, if alternatives are in place to provide a protected sidewalk access to adjacent parking lane, the contractor would receive a 100% discount on the sidewalk portion of the hoarding fee. For pedestrian safety, a number of restrictions are investigated and explored before this type of protected pedestrian access is granted. In 2013, six protected sidewalk accesses were provided in parking lanes. The following tables present details of hoarding activities within the downtown core, Calgary in 2013, and 2014 to date:

Table 2.1: Summary of Hoarding Statistics in 2013

Hoarding Meterage 2013	Lineal Meters
Hoarding on Major Roads (m)	2,495
Hoarding on Minor Roads and Alleys (m)	4,708
Sidewalk Hoarding (m)	4,559
Protected Sidewalk Hoarding (m)	2,310
Total Hoarding (m)	14,072

Table 2.2: Summary of Hoarding Statistics in 2013

Hoarding 2013	Number of Blockfaces	Total Hoarding Blockfaces
Overhead Sidewalk Hoarding (Sidewalk Blockface)	65	183
Protected Sidewalk in Lane (Sidewalk Blockface)	6	183
Boardworx Programme (All Blockfaces)	19	323

Table 2.3: Summary of Hoarding Statistics in 2014

Hoarding Meterage 2014 (YTD)	Lineal Meters
Hoarding on Major Roads (m)	1,199
Hoarding on Minor Roads and Alleys (m)	4,141
Sidewalk Hoarding (m)	5,894
Protected Sidewalk Hoarding (m)	1,631
Total Hoarding (m)	12,865

Table 2.4: Summary of Hoarding Statistics in 2014

Hoarding 2014 (YTD)	Number of Blockfaces	Total Hoarding Blockfaces
Overhead Sidewalk Hoarding (Sidewalk Blockface)	40	145
Protected Sidewalk in Lane (Sidewalk Blockface)	1	145
Boardworx Programme (All Blockfaces)	13	263

2.2 Closures and Detours within the City of Calgary

Examples are presented in this section illustrating sidewalk and cycle track closures and detours within the City of Calgary.

SIDEWALK CLOSURE

Although every possible effort is made to avoid sidewalk closures, there are situations where the lack of sidewalk closure would pose an immediate risk to pedestrians. Such is the case with building demolitions, or construction of tower foundations that involves significant excavations. Both of these factors posed imminent risk to pedestrians on the sidewalk along 10 Avenue SW at 524 10 Avenue SW. In order to protect the pedestrians and ensure safe pedestrian mobility, the sidewalk was closed and pedestrians were detoured to the sidewalk on the other side of 10 Avenue SW with the application of appropriate signs as documented in The City of Calgary Temporary Traffic Control Manual 2011 (**Photo 4**). This sidewalk closure maintains pedestrian mobility and ensures pedestrian safety at the same time.



Photo 4 Sidewalk Closure and Detour of Pedestrians at 524 10 Avenue SW

Once the demolition and excavation phases are complete, it is planned to open with the installation of protective hoarding structures until the end of the project.

It should be noted that another request was submitted to the City to close another sidewalk adjacent to 10 Avenue SW and 4 Street SW for a separate construction project. This additional

sidewalk closure would have entirely shut down pedestrian access and mobility both along 10 Avenue and 4 Street SW. Roadway Operations and Detours carried out significant consultation with the contractors, an alternative solution was attained where the construction work could be completed without closing any additional sidewalks and maintaining pedestrian safety and mobility.

CYCLE TRACK CLOSURE

In conjunction with the sidewalk closure, closure of a cycle track adjacent to the sidewalk may be necessary depending on the extent of the imminent risk to the cyclists. Such was the case along the sidewalk on the east side of 7 Street SW and the 7 Street Cycle Track immediately south of 6 Avenue. The situation had arisen due to the failure of an exterior brick curtain wall on a building on the southeast corner of 6 Avenue/7 Street SW intersection. This posed a significant risk to the pedestrians on the sidewalk as well as to the cyclists on the cycle track. This ultimately led to the temporary closure of the sidewalk as well as the cycle track on May 30 2014.

Initially, Calgary Fire Department and the Safety Response Unit from City of Calgary Planning Development and Assessment had determined that both the adjacent sidewalk and cycle track should remain closed until the building could be fully assessed and secured. When the building was determined to be safe and adequately secured with hoarding structures, a cycle track detour was installed in the adjacent vehicle parking / travel lane on 7 Street SW to restore cycling access to along 7 Street south of 6 Avenue SW (**Photos 5-7**). This cycle track detour remained in place until July 24 2014 when it was determined that any risk to pedestrian safety had been properly addressed and that both the adjacent sidewalk and Cycle-Track could be restored to normal operating condition.



Photo 5 – Detour of 7 Street Cycle Track



Photo 6 – North end of the Cycle Track Detour



Photo 7 – South end of the Cycle Track Detour

2.3 Sidewalk Closures – Moving Forward

While reviewing applications for the use of the City right-of-way, Roadway Operations and Detours will continue to explore alternatives to sidewalk closures adjacent to construction sites. Every possible effort will be made to keep the sidewalks open during construction exploring alternative construction method or use of alternate City right-of-way. If the sidewalk closure is unavoidable for safety/practical reasons, staging or phasing of new constructions will be planned to minimize the time of the sidewalk closure. Detailed planning for hoarding and pedestrian accommodation will be carried out earlier in the engagement process to ensure pedestrian safety and mobility during construction.

With the continual effort from the City of Calgary towards pedestrian safety and mobility during construction, the number of sidewalk closures due to construction has significantly decreased over the time in downtown core, relative to the volume of construction.

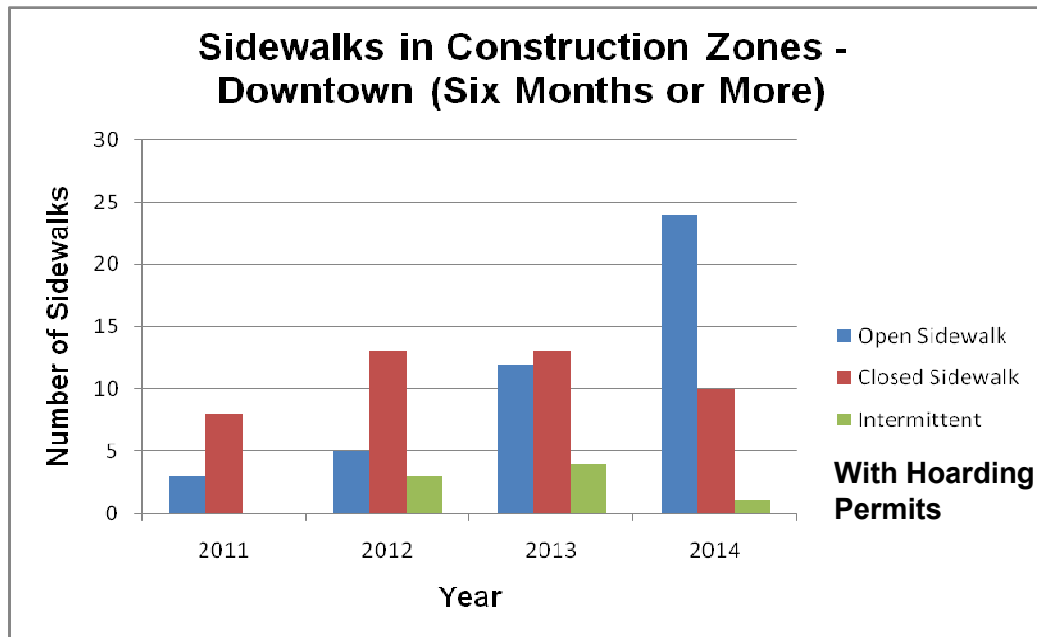


Figure 1 – Status of Sidewalks with Hoarding Permits in Construction Zones, Downtown Calgary

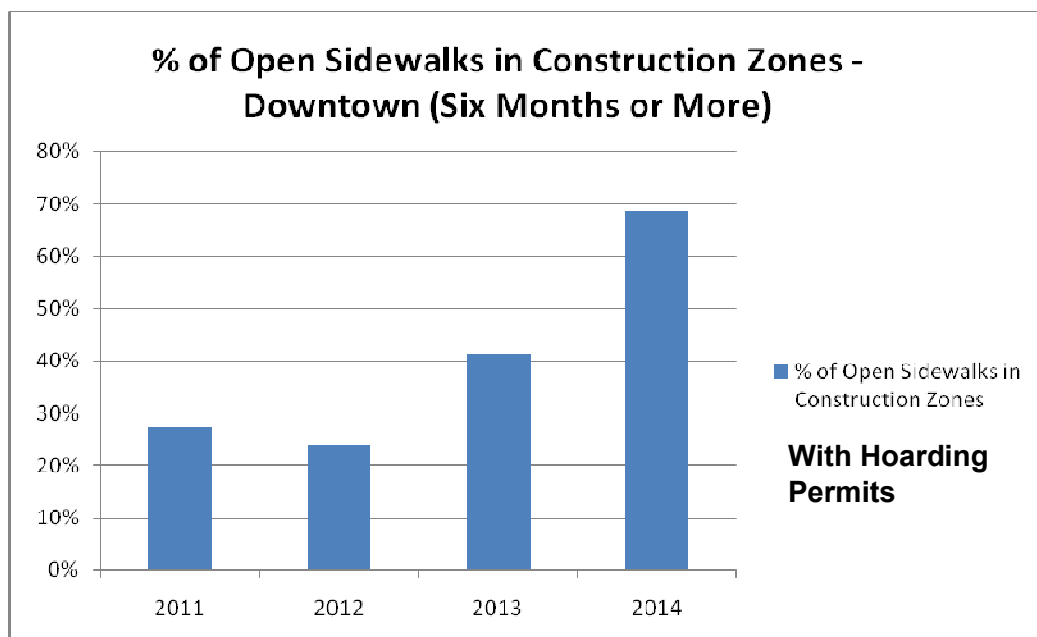


Figure 2 – Percentage of Open Sidewalks with Hoarding Permits in Construction Zones, Downtown Calgary

Figure 1 and Figure 2 presented above reflect the continual effort from the City of Calgary to minimize the sidewalk closures due to construction. **Figure 1** and **Figure 2** show that the number of sidewalk closures (six months or over) decreased over time from 2012 to 2014 whereas the number of sidewalks maintained open to pedestrians with the application of hoarding structures within downtown Calgary increased significantly from 2012 to 2014. This confirms continual efforts and success of Roads – Traffic Engineering in minimizing sidewalk closures for construction and providing safe and efficient pedestrian accommodation during construction. It should be noted that these figures do not take into account the many construction projects where Roadway Operations and Detours negotiated that the sidewalk not be impacted at all and no hoarding permits were required.

3.0 CONCLUSIONS

Many construction projects are usually underway in the downtown core and surrounding neighbourhood within the City of Calgary. The City of Calgary focuses on pedestrian safety and mobility by minimizing sidewalk closures and duration of closures due to construction projects. In order to maintain the pedestrian safety and mobility adjacent to construction sites, Roads – Traffic Engineering allows accommodation of pedestrians under a hoarding structure on the sidewalk or in the curb lane of traffic where feasible.

There are some instances where safe accommodation of pedestrians on the sidewalks may not be possible due to imminent risk to the pedestrians from the adjacent construction. In these cases, alternatives to sidewalk closures are explored. If it is not possible to accommodate the pedestrians on the sidewalk safely and an immediate danger to pedestrians exists on the sidewalk despite the use of hoarding structures, Roads – Traffic Engineering may allow sidewalk closure and detour of pedestrians.

APPENDIX A – TT2013-0361

S.P.C. ON TRANSPORTATION AND TRANSIT TT2013-0361 SIDEWALK CLOSURES DURING CONSTRUCTION

EXECUTIVE SUMMARY

Sidewalks are an essential part of the transportation network. When adjacent sites are under construction, the pedestrian realm, as well as key vehicular transportation corridors need to be protected while accommodating the desired economic investment. To better serve the transportation and safety needs of Calgarians, methods to enhance coordination of construction hoarding activities, including early engagement in site safety planning have been investigated. Benchmark reviews of hoarding fee structures, bylaws and policies have also been undertaken to identify opportunities for clarification and improvement. Key learnings resulting from investigations and reviews are outlined in the report.

ADMINISTRATION RECOMMENDATION

That the SPC on Transportation and Transit recommends that Council direct Administration to continue working collaboratively with the construction industry to address current policies, bylaws and directives related to pedestrian accommodation in work zones.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2012 November 6 in NM2012-45 (Attachment 1), Council directed Administration to implement standards and procedures that:

- “1. Ensure the safe passage of pedestrians under a hoarding structure on the same block face as a construction project on busy roadways (excluding low-volume local streets),
2. Accommodate pedestrian movement under a hoarding structure on the sidewalk or in the curb lane of traffic where feasible,
3. Place appropriate fees that take into account inconvenience of the general public, and loss of parking revenue if lanes are closed for extended periods of time, and

4. Mandate the posting of City policy on site for public information.”

BACKGROUND

Calgary has many major construction projects that are underway or planned for the downtown core and surrounding neighbourhoods as shown in Attachment 2. The cumulative impacts of closures arising from multiple construction sites can create an inconvenient and potentially unsafe environment for pedestrians. This can lead to some pedestrians violating traffic laws and walking in vehicle lanes.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Administration investigated the practices of five other municipalities (Edmonton, Toronto, Vancouver, Winnipeg and Denver) in regard to sidewalk closures for construction in the downtown core as shown in Attachment 3. Discussions by phone to these municipalities and web based research lead to the following key findings:

- Hoarding structures covering sidewalks are the preferred method of accommodating pedestrian movement in all cities. Four of the five municipalities approve the closure of adjacent curb lanes for pedestrian use when access to the sidewalk cannot be safely maintained.
- Only one allowed closure of the sidewalk on both sides of a street.
- No municipality charged increased fees for longer term projects or projects creating a greater inconvenience to pedestrians.
- Two municipalities discounted fees for sidewalk hoarding (by 90 percent or 100 percent) if the sidewalks are covered to accommodate pedestrian traffic.

Fees for sidewalk hoarding and closures in Calgary are consistent with other municipalities. Calgary reduces fees for sidewalk hoarding by 100 percent if protective hoarding is used to keep the sidewalk open for public use. This incentive is to minimize inconvenience to pedestrians by keeping the sidewalk open. Current practice in Calgary allows for sidewalk closures on one side of the street. Closures on both sides are not permitted but have occasionally been negotiated.

The Alberta Safety Codes Act and the Alberta Building Code (ABC) stipulate that the owner and contractor are responsible for maintaining public safety at their construction sites. One of the most critical components of the building code applies to protecting the public from objects projected onto a public way. When the safety of the pedestrian cannot be maintained through the provision of a covered way (hoarding), detours will be considered for pedestrian accommodation. The bylaw requirement and permit conditions are shown in Attachment 4.

Currently, Roads reviews pedestrian accommodation and detours for construction sites after a building permit is approved by Development and Building Approvals (DBA). As a new component of the building permit review process, DBA now requires a “Public Protection Site Safety Plan” (Attachment 5). This plan provides the opportunity to include Roads as part of the review. Earlier consideration of hoarding and detour requirements will support enhanced detour planning and ensure a more holistic approach to hoarding and pedestrian accommodation without compromising the overarching goal of protecting the public.

The Director of Roads and Manager of Traffic Engineering attended Calgary Construction Association’s (CCA) On-Site Construction Safety Committee meetings in early 2013 to discuss pedestrian accommodation and safety. Outside of these meetings, Roads and CCA representatives continued discussions. The CCA On-Site Construction Safety Best Practices as shown in Attachment 6 is in alignment with City direction and processes. It includes the use of hoarding structures to accommodate pedestrians in work zones.

Stakeholder Engagement, Research and Communication

Administration met with the CCA and DBA, collaborating on methods to enhance pedestrian accommodation in work zones. Roads will now participate with the CCA and DBA in monthly On-Site Construction Safety Committee meetings. The CCA is supportive of planned process changes and has provided a submission as shown in Attachment 7.

Administration also discussed sidewalk closures and process improvements with a variety of representatives including the Calgary Downtown Association, the downtown area Business Revitalization Zones and the City of Calgary’s Cycling Coordinator to ensure the needs of these groups were addressed.

Strategic Alignment

The process improvements outlined in this report align with the Sustainability Principles for Land Use and Mobility as well as goals outlined in the Calgary Transportation Plan and the Municipal Development Plan. These include provision of safe and efficient transportation services, provision of reasonable accessibility for all citizens, enabling walking as the preferred mobility choice and creating a prosperous economy by maintaining access to local business.

Social, Environmental, Economic (External)

Pedestrians will benefit through optimized safety and convenience when walking in construction areas, particularly within the downtown core. Sidewalk users who are mobility challenged are even more sensitive to impediments to ease of access.

Pedestrian accommodation during construction encourages active modes of travel which helps reduce green house gas emissions and noise pollution associated with motorized transport.

Pedestrian accommodation during construction supports the economy by ensuring employees, customers and visitors can easily access businesses and services in the area.

Financial Capacity

Current and Future Operating Budget:

In the 2012 Roads Traffic Engineering operating budget, \$4.0 million was to come from revenue generated by hoarding permits. The actual revenue from hoarding permits was \$2.3 million. As Roads continues to work towards minimizing the closure of sidewalks, the collection of these hoarding permit fees may decrease. Fee schedules associated with sidewalk hoarding are unchanged.

Current and Future Capital Budget:

There are no capital budget implications resulting from this report.

Risk Assessment

Development of hoarding permit process enhancements with key internal and external stakeholders help to ensure the needs of pedestrians, businesses and The City of Calgary are addressed.

Encouraging continuity in pedestrian access and covering these routes will improve public safety.

Developers and Contractors may have increased building costs as continued efforts to maintain pedestrian access are pursued. Additional impacts may occur if construction methods require extending construction into off peak or night time work.

REASON FOR RECOMMENDATION:

To inform Council about the collaboration occurring between Roads, the CCA and DBA to optimize accommodation and safety of pedestrians and encourage walking as a preferred method of transportation.

ATTACHMENTS (*NOT AVAILABLE IN APPENDIX A*)

1. NM2012-45
 2. Hoarding Permits For Downtown Calgary
 3. Sidewalk Closure City Comparison Table (Feb. 2013)
 4. Bylaw Requirement to Minimize Sidewalk Closures and Durations
 5. Public Protection Site Safety Plan
 6. 'On-Site Construction Safety: Best Practices' – The Calgary On-Site Construction Safety Committee
 7. Calgary Construction Association Letter
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