Canadian Institute of Transportation Engineers
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Calgary 7th Street SW Cycle Track In-Service Road Safety Review
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Cycling in Calgary
Cycle Track in Calgary

7th Street SW Cycle Track

3.25m 2-Way Cycle Track

Existing Walk 0.8m 3.5m Lane 3.5m Lane 2.85m Parking Existing Walk
Is it a Road Safety Audit or an In-Service Road Safety Review?

Source: The Canadian Guide to In-service Road Safety Reviews 2004, Transportation Association of Canada (TAC)

Data/Reactive – In-Service Road Safety Review

Principles/Proactive – Road Safety Audit
In-Service Road Safety Review

TAC process with addition of stakeholder input:

Internal (Rocks, Transit, Parking, Planning, Police, etc.)

External (Bike Calgary, Eau Claire Community Association, Access Calgary special needs transport, etc.)

Workshop Settings to share information
Analysis – Traffic Control

Exhibit 7.5
7 Street Corridor Laning Configuration & Traffic Controls (After Cycle Track)

7 Street In-Service Road Safety Review
October 2014 - Scale NTS

Legend:
- Stop Sign
- Signal
- Number of Lanes

Base Map Source: City of Calgary
Analysis – Traffic Volumes

Exhibit 7.6
7 Street Corridor Traffic Volumes (Before Cycle Track)
Analysis – Collisions Before

Exhibit 7.10
7 Street Corridor Traffic Collision Diagram (Before Cycle Track)

7 Street In-Service Road Safety Review
October 2014  Scale NTS
Analysis – Collisions After

Exhibit 7.11
7 Street Corridor Traffic Collision Diagram (After Cycle Track)

7 Street In-Service Road Safety Review
October 2014  Scale NTS
Identification of Issues (1/3)

Safety Issues - 1 Avenue SW to 3 Avenue SW on 7 Street Corridor

Base Map Source: City of Calgary

Exhibit 10.1

7 Street In-Service Road Safety Review
October 2014  Scale NTS

LEGEND

Photograph ID & Direction
Recommended Improvements

Gateway treatments are not clearly defined.

Missing pedestrian crosswalk.

Location of markings in middle of intersection.

High risk left turn movement.

Non-standard stop controlled. Not consistent to typical operations.

Potential for wrong way movements.

Potential for wrong way movements.
Identification of Issues (2/3)

Safety Issues - 4 Avenue SW to 5 Avenue SW on 7 Street Corridor

7 Street In-Service Road Safety Review
October 2014 - Scale NTS
Identification of Issues (3/3)

Safety Issues - 6 Avenue SW to 8 Avenue SW on 7 Street Corridor
Mitigation Suggestions (1/3)

Base Map Source: City of Calgary
Exhibit 10.4
1 Avenue SW to 3 Avenue SW - Mitigation Measures
7 Street In-Service Road Safety Review
October 2014  Scale N15
Mitigation Suggestions (2/3)

Provide bike warning sign (WC-43).
Provide two-stage queue box and signage.
Provide yellow back plates.
Provide painted green/zone.
Rescinate lane designation sign.
Provide yellow back plates.
Provide turning vehicles yield to bicycles KB-37.
Provide bike warning sign (WC-43).

Base Map Source: City of Calgary
Exhibit 10.5
4 Avenue SW to 5 Avenue SW - Mitigation Measures
7 Street In-Service Road Safety Review
October 2014 Scale NT5
Mitigation Suggestions (3/3)

Three Possible Options:
1. Prohibit transit only left turn.
2. Provide separate transit only signal phase.
3. Revise signal timing plan to be similar to 5th Avenue.

Consider extending cycle track.
Provide painted green/zone.
Consider scramble phasing.
Provide larger sign (RB-27).
Provide do not enter signs (RB-23).
Provide turning vehicles yield to bicycles RB-37.
Provide yellow back plates and bike signal.
Provide yellow back plates.
Provide bike warning sign (WC-43).
Provide two stage queue box and signage.
Consider restricting parking.
Provide painted green/zone.
Provide do not enter signs (RB-23).
Revise warning sign and review sign spacing requirements.
Provide turning vehicles yield to bicycles RB-37.
Provide bike warning sign (WC-43).
Provide bike warning signs (RA-6 & RA-65).
Provide yellow back plates.
Provide bike warning sign (WC-43).
Add signage to encourage pedestrian to utilize desired crossing.
Confirm placement outside vehicle sweep path and provide additional signage.
Provide yellow back plates and bike signal.
Provide yellow back plates.
Provide bike warning signs (RA-6 & RA-65).
Provide bike warning sign (WC-43).
Provide two stage queue box and signage.
Consider restricting parking.
Provide bike warning sign (WC-43).
Provide yellow back plates.
Consider restricting parking.
Provide bike warning sign (WC-43).
Provide yellow back plates.
Downtown Cycle Track Pilot Project

Fast track of downtown network – Opened June 2015

Applied lessons learned from 7th Street Cycle Track In-Service Road Safety Review

RSA planned for Downtown Cycle Track Network as part of pilot
Closing Remarks

- RSA is different from ISRSR
- Stakeholders (internal and external) have valuable information
- Closing the loop to planners/designers regarding findings is critical to prevent issue propagation
Calgary 7 Street Cycle Track In-Service Road Safety Review

Questions?