



Crowchild Trail Study

Adjacent Resident Idea Workshop Summary October 24, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held with residents immediately adjacent to Crowchild Tr. (within one block) on Saturday, Oct. 24, 2015 from 9:30 a.m. to noon at the Sunalta Elementary School (536 Sonora Ave. S.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 20 participants attended the workshop distributed across 4 table discussions in round one and 3 table discussions in round two.

The following members of the project team were also in attendance at the session:

Project Team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Peggy Chan, City of Calgary, Communications Lead
- Andrea Sichewski, City of Calgary, Communications Advisor
- Kirsty Neill, City of Calgary, Engagement Advisor
- Asif Kurji, City of Calgary, Transit Advisor
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Jana Sinclair, Russell Public Relations, Consultant Engagement Lead
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator
- Courtney Laurence, ISL Engineering and Land Services, Consultant and Table Facilitator

Table Facilitators

- Lara Tierney, City of Calgary, Table Facilitator
- Dominic Cheng, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jack Mason, ISL Engineering and Land Services, Consultant Technical Facilitator
- Mark Bagnall, Stantec, Consultant Technical Facilitator
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker



- Nathalie Tacail, City of Calgary, Table Note-taker

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail corridor that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - It is important to coordinate plans for Crowchild Tr. with other development planned along the Crowchild Tr. corridor and consider the impacts of these projects.
 - Some ideas cited ways to improve traffic flow in the short term with minimal effort, cost and impact, such as all green lights along Crowchild Tr. during peak rush hours (i.e. 7:30 to 9:30 a.m. and 4 to 6:30 p.m.).
 - Some participants explored ways to encourage alternate transportation other than personal vehicles, including transit, carpooling, and cycling.
- In the **North Section**, introducing an interchange at 24 Ave. and improving access to and from Crowchild Tr. and 16 Ave. were discussed as ways to improve traffic flow along the corridor while providing for access to, from and across Crowchild Tr. Considerations related to these ideas included discussion of a need for private property acquisition and loss of access to businesses. Participant discussion of the North Section also covered ideas for modifying pedestrian access across Crowchild at 24 Ave. to reduce traffic congestion and increase pedestrian safety related to pedestrians crossing at grade.
- In the **Central Section**, multiple forms of interchanges/intersections, modifying access during rush hour at 5 Ave. and Kensington Rd. (e.g. signal changes or lane reversals), and changes to the grade of the roadway (e.g. tunnel or raised expressway) were also explored as ways to improve traffic flow along the corridor and maintain access across Crowchild Tr. Considerations related to these ideas included local access to/from Crowchild Tr and potential physical, noise and environmental impacts to adjacent properties.
- In the **South Section**, widening the Bow River bridge to reduce lane changing and merging concerns received a considerable amount of discussion, as did introducing HOV (high-occupancy vehicle) lanes as a way to increase transit reliability and reduce single-occupancy vehicle use. The possibility of an additional river crossing to reduce the volume of traffic over the Bow River bridge at Crowchild Tr. was mentioned. Considerations related to these ideas included discussion of the importance of maintaining historical assets in the community and the need for changes to Crowchild Trail to align with larger transportation goals for reducing dependency on personal vehicle travel.



For a more detailed summary of the input that was provided, please see the Idea Workshop Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Align and coordinate with other plans/policies
<ul style="list-style-type: none"> Consider the impacts that development along Crowchild Tr. will have on traffic volume and flow Coordinate with West Village / CalgaryNEXT development Align with the Banff Trail Area Redevelopment Plan
Solid green lights along Crowchild Tr. during peak hours (e.g. 7:30-9:30 a.m. and 4-6:30 p.m.)
<ul style="list-style-type: none"> Benefits – free flow; doesn't require additional infrastructure Impacts – buses need to cross; forces people to use Memorial Dr., which is difficult; limits pedestrian access; increased neighbourhood traffic Constraints – doesn't address problems outside non peak hours; short term solution
Add High Occupancy Vehicle (HOV) / bus lanes for transit / carpool
<ul style="list-style-type: none"> Benefits – fewer cars moving people; it re-focuses on HOV and transit Constraints – physical space
Interchange at 24 Ave. (Crowchild Tr. over 24 Ave. or vice versa)
<ul style="list-style-type: none"> Benefits – improves flow along Crowchild Tr.; maintains access across Impacts – remove houses/property impacts to accomplish; easier access increases traffic along 24 Ave.; noise elevated; ramps would extend 1-2 blocks down 24 Ave.; need to provide pedestrian over/underpass Constraints – LRT tunnel Trade-offs – houses on S.E. side are older – less infill than other blocks; would prefer better/safer access at 16 Ave. vs. increased traffic along 24 Ave.
Overpass/underpass at Kensington Rd. and 5 Ave.
<ul style="list-style-type: none"> Benefits – improved traffic flow along and across Crowchild Tr.; more long term solution – consider digging Kensington Rd. and 5 Ave. under existing to lessen impact of interchange height; keeps access across Impacts – construction staging and detour routes; property impacts; visual Constraints – adjacent properties Trade-offs – improved traffic flow vs. property/community impacts; going under will lessen height of interchange
Widen existing bridge for more lanes / continuity
<ul style="list-style-type: none"> Benefits – improves traffic flow and reduces bottleneck; least impact on residents Impacts – Bow River; natural landscape Trade-offs – if fixing the bridge fixes everything else, can live with painful construction
Additional river crossing (outside of study area, west of Crowchild and adjacent to existing crossing)
<ul style="list-style-type: none"> Benefits – redirects flow of traffic Impacts – need to live with construction; expensive; environmental impacts Constraints – how would the structure tie into existing roads; Canadian Pacific Railway right-of-way

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

Overall Table Discussion

- Free flow north of 24 Ave. on Crowchild Tr. is good
- Like lane northbound Crowchild beginning around 23 Ave. Allows easy access to 24 Ave. eastbound
- Like train access in Banff Trail
- Provide housing for seniors in neighbourhood
- Charleswood interchange
 - Character of neighborhood is reflected
 - Doesn't appear intrusive to residents
- Increased density proposed in Banff Trail ARP will increase traffic in neighbourhood

Ideas Explored

- 24 Ave. over Crowchild Tr.
 - **Benefits** – improves flow; maintains access across Crowchild Tr.; reduces short cutting through neighbourhood to Charleswood or 16 Ave. because access to Crowchild Tr. is improved; allows access to both northbound and southbound Crowchild Tr.
 - **Impacts** – remove houses to accomplish; easier access could increase traffic along 24 Ave.; access ramp would need to extend 1-2 blocks down 24 Ave.; noise once elevated
 - **Trade-offs** – houses on S.E. side are older – less infill than other blocks; would prefer better/safer access at 16 Ave. vs. increased traffic along 24 Ave.
- Remove signals
 - **Impacts** – Businesses lose access
- 24 Ave. Intersection
 - Allow for left turn on solid green westbound 24 Ave. to Crowchild Tr. southbound
 - Double left turn lane because traffic backs up
- Pedestrian crossings
 - Pedestrian crossing at 24 Ave. and 23 St.: safety issue when travelling eastbound on 24 Ave.; needs to be light controlled; bushes block view
 - Pedestrian crossing at 24 Ave. not pedestrian friendly; not safe
- Improve 16 Ave. interchange
 - Safety issues when accessing Crowchild to/from 16 Ave.
 - Improve access ramp northbound
 - **Impacts of clover leaf** – large amount of land needed; land in between physical infrastructure is unused (lost space)
 - **Trade-offs** – less land required for merge lanes vs cloverleaf
- Motel Village access
 - Dealership site: increased density (10-25 stories) proposed
 - Don't impede access
- Noise Barriers – (Berms with pathways)
 - **Benefits** – Allows people to walk on top; creates a linear greenbelt
 - **Impacts** – Potential to see into people's houses

Map Highlights

North Round 1 – Table 1 Map A

- Avoids left turn onto Crowchild due to queues. Uses Charleswood interchange or uses 23 Ave to make left turn
- New infills on 24 Ave. between 23 St. and 22 St.
- Area around St. Pius Church mostly parking lot

- Prefer signal removal at 24 Ave.
 - Keep access to Crowchild
- Traffic backs up on 24 Ave.
- History of volume concerns
- Prefer 24 Ave. over top
 - Keep access to Crowchild
 - Potential to cul-de-sac 23 St.
 - Ramp would potentially extend to close to 22 St. east of Crowchild Tr.
- Consider dual left turn westbound lanes on 24 Ave.
- Pedestrian crossing on 24 Ave. and 23 St.
 - Overgrowth blocks pedestrian crossing sign eastbound
 - Cut trees (private property)
 - Add pedestrian signal
- Like living in Banff Trail; like living in the area; like the accessibility (LRT)
- Pedestrian crossing arms at Banff Trail LRT good – no need for trains to block pedestrian crossing when waiting
- Main areas
 - 24 Ave.
 - 16 Ave.
- Light pollution from McMahon Stadium – electronic billboards can be bright
- Likes continuous lane from 23 Ave. to 24 Ave.
 - Allows to bypass long queues
- Maintain business access to Motel Village
- Banff Trail ARP densification concerns
 - 24 Ave. intersection options
- 16 Ave. interchange with Crowchild Tr.
 - High speeds have to yield (all directions)
 - Not a safe access (merge/yield)
 - Is there merge lane space on eastbound 16 Ave. from southbound Crowchild Tr.?
 - Consider easier access from merge lanes. Prefer this to help reduce volume on 24 Ave. and other streets
 - Use University Dr. access to bypass queues on southbound Crowchild Tr.
 - Will use 16 Ave. interchange as alternate if Crowchild [is backed up]
 - Okay to use 16 Ave. if 24 Ave. not grade separated
 - Land required for clover leafs – don't want those
- Pedestrian bridge at 13/14 Ave. across Crowchild Tr. has stairs only
- Prefer pedestrians be allowed to walk on top of berm used as sound barrier
- No cyclists on Crowchild Tr.!
 - Don't take away driving lanes
- Traffic calming
 - No speed bumps
 - Curb bulb-outs – good for pedestrians/bad for traffic flow



North Round 2 – Table 1

Overall Table Discussion

- Priority should be free flow traffic
- Consider double stacked bridge
 - Visual impact of stacked bridge
- How does the Banff Trail redevelopment impact Crowchild Tr.?
- Peak hour green lights
 - Left turns are removed, reduced access

- Pedestrian access across is inhibited – this is an inconvenience but necessary!
- More traffic on side streets
- Emergency response time may be impacted – but they can have priority/switch lights
- This can be a long term solution. Don't tunnel or widen.
- Overhead pedestrian bridge at 24 Ave.
- 24 Ave. under Crowchild Tr.
 - **Constraints** – LRT tunnel
- University Dr. access should be maintained
- Viaduct from Banff Trail to south of the Bow River bridge
 - Concerns with sound
 - Improves travel time
 - House value drops
 - Unpleasant period of construction
- Preference for spending on transit
- Split 7 Ave. LRT line onto 8 Ave. so 5 car stations can be accommodated
- BRT – good for long distance, not as quick as LRT
 - Local buses feed to Crowchild BRT
 - Shoulder bus lanes need to be wider (approximately 1.0m)
- HOV – not just bus lanes
- More bus stop pull out bays
- Closing access at 23 Ave.
- More circuitous route using 16 Ave. is okay

Ideas Explored

- All green lights during peak flow (rush hour)
 - Backs up in McMahon section
 - **Benefits** – free flow, doesn't require additional infrastructure
 - **Impacts** – movement across Crowchild during peak hours limited to Memorial and 16 Ave.; unable to turn left from Crowchild Trail; limits pedestrian access across
- Viaduct northbound lanes between McMahon and Bow Tr./Elevate northbound lane
 - **Benefits** – free flow
 - **Impacts** – visual/noise; need sound barrier; detour routes during construction; house values
 - **Trade-offs** – redirect access across to 16 Ave. and Memorial Dr.
- At grade intersections – allows EMS to use
- Transit - 4 car trains/increase to 5 car
 - **Benefits** – vehicle traffic to transit – helps reduce congestion
 - **Constraints** – no room for platform extension - intersections blocked by train
- BRT Option
 - **Constraints** – less frequent than train; less attractive to use
 - Ease of access to train; comfort of experience
 - HOV/ Bus lane – should pursue/down south
 - Bus pull-out lane
 - Bus to run down Crowchild Tr. come off Crowchild Tr. for stops
- 24 Ave. – Crowchild at grade/ 24 Ave. under
 - **Constraints** – LRT runs below grade
 - **Impacts** – provide pedestrian over/underpass
- Motel Village access - Use 16 Ave. to access
 - **Benefits** – local access only reduces short cutting
 - **Impacts** – ARP considerations (increased density – more traffic)
- University Dr. important access point to University of Calgary



Map Highlights

North Round 2 – Table 1 Map B

- All green lights during peak – right turns only on 24 Ave. and 23 Ave.
 - No left turns
 - Long term
 - Low-cost solution
 - New pedestrian overpass on either side of 24 Ave.
 - Access across Crowchild Tr. via 16 Ave. and Memorial Dr.
 - Business and local access restricted
 - EMS response impacts?
- Southbound at grade and northbound elevated
 - Visual issues
- May need to upgrade 24 Ave. in future
 - At grade or grade separation
- Review Charleswood interchange
- How does Motel Village fit in with corridor?

North Round 2 – Table 1 Map C

- LRT tunnel – restrictions for lowering 24 Ave.
- What kind of development at Foothills Athletic Park/Foothills Stadium
- Control number of access points off Crowchild Tr. for development
- Viaduct northbound – at grade southbound
- 5 car LRT stations (long term)
 - Downtown stations are a restriction – 5 cars can't fit
- 16 Ave./University Dr./Crowchild Tr.
 - This is a messy interchange
- Ramps simple on/off for accessing 16 Ave.; right turn only at grade
- Bus lane with green during peaks
- Allow HOV for carpooling
- Should bus lanes on Crowchild Tr. – make wide enough for bus comfort
- Need high BRT frequency
 - Accessibility
 - Bus capacity
 - LRT capacity

Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- Sense there is a plan already
 - Crowchild Tr. is a skeletal road
 - No crossing at Shaganappi Tr.
 - Would like alternate routes
- 24 Ave. – Motel Village Area Redevelopment Plan & other developments
 - Are they part of the study?
- Could go over or under
 - Over starting at 16 Ave. to Memorial Dr.
 - Add sound barriers; add barriers for pollution
 - Cheaper than tunnel – less aesthetic impacts
 - Challenges with soil/river rock
- Affordable living next to Crowchild Tr. in West Hillhurst – high density

- Get people closer to Downtown
- Improved transit reliability
- Make more choices available for higher density
- Keep Kensington Rd. and 5 Ave. accesses
- More connected and integrated bike/pedestrian paths
- Lions Village is cut off and needs better connections to community and amenities
- Cross connections important for schools
- Expressway over Crowchild
 - Local traffic stays at grade – through uses express way
 - Concerns about pollution to commuters and community
 - More time efficient for commuters
 - Visually unappealing
 - Cheaper than underground – where will money come from to pay for upgrades
 - Property taxes are higher in inner city
 - Impacts to property values
 - Adjacent properties impacted
- 1978 plan is still current plan – we are updating now
 - Was very vehicle centered
- Tunnel
 - Significant safety concerns
 - Least impacts to surface – aesthetics
- Short weaving distance between University Dr. and 5 Ave. – need better acceleration/deceleration
- Bridge rehab coming up
- Are there better technologies for noise barriers
- Tunnel
 - Cut and cover method would have major detours for traffic
 - Boring still has space impacts – detouring
 - Where would tunnel tie into existing network?
- Flyover at Kensington Rd. – no access to/from Crowchild Tr.
- Close cross traffic during peak traffic – keep cross traffic red
 - Pilot project – see how it works. All green for Crowchild Tr. during rush/peak periods
- Add pedestrian/bike bridges to keep cross access across Crowchild Tr.
- Adding better westbound/southbound access at Memorial Dr. to Crowchild Tr.
- Emergency vehicles and accessing people in communities

Ideas Explored

- Shaganappi river crossing
- Tunnel Crowchild Tr. between 16 Ave. to Memorial Dr. or 17 Ave. S.W.
- Alternate routes for traffic vs. Crowchild Tr.
- Over/under options along Crowchild Tr.
- Access across Crowchild
 - Kensington Rd. open to Crowchild Tr.
 - 5 Ave. open to Crowchild Tr.
- Better integrated and connected bike and pedestrian pathways
- Improved transit timing/availability
- Cross connections east to west of Crowchild Tr. for communities is important
- More higher density/affordable options near downtown to discourage commuting
- Connecting Lions Village to the rest of the world safely
- Local roads/community traffic below raised Crowchild Tr. for through traffic
- Remove access to/from Crowchild Tr. at Kensington Rd. to 24 Ave. during rush hour

- **Impacts** – no access for communities to turn left on/off Crowchild at Kensington Rd., 5 Ave., 23 Ave., 24 Ave., etc. during rush hour
- **Benefits** – Improved traffic flow along the corridor during rush hour; low cost; low physical impact
- **Trade-offs** – improved traffic flow vs. reduced access during rush hour
- **Constraints** – barriers, barricades, infrastructure required
- All green on Kensington Rd./5 Ave./24 Ave. (all signals) for Crowchild Tr.
- Westbound/southbound movement to Memorial Dr.
- Crowchild Tr. over for through traffic to Downtown
 - **Impacts** – pollution to commuters and community; visual of raised road; house values impacted; noise
 - **Benefits** – improved traffic flow and less congestion; more cost effective than tunnel under
 - **Constraints** – where Crowchild Tr. over connects with existing Crowchild Tr. north and south
 - **Trade-offs** – improved traffic flow for commuters' vs impact to adjacent residents and communities (e.g. visual, pollution, property value).
- Sound barriers
- Lane Reverse
- Tunnel under Crowchild for through traffic to downtown
 - **Benefits** – less visual, pollution, impacts to adjacent residents/communities; less impact from weather
 - **Impacts** – safety; cost; detouring traffic to other routes; time to build; staging area to build
 - **Trade Offs** – taxes increased
 - **Constraints** – where tunnel connects back into existing Crowchild Tr. north and south

Map Highlights

Central Round 1 – Table 1 Map A

- Traffic weaving along the corridor from Memorial Dr. to University Dr. and over the bridge
- Acceleration and deceleration
- Raise Crowchild Tr. over existing for through traffic
- Tunnel under Crowchild Tr. for through traffic

Central Round 1 – Table 1 Map B

- No access to/from Kensington Rd. to 24 Ave. turning left off/into Crowchild Tr. during 7:30 to 9 a.m. and 4 to 6 p.m. rush hour.

Central Round 2 – Table 1

Overall Table Discussion

- Only consider realistic affordable solutions
- Interchanges
 - Doesn't have to be full access
 - Can go over or under
- Closing cross access during rush hour
 - Kensington Rd., 5 Ave., 24 Ave.
 - Try inexpensive solutions first
 - Communication to residents of changes
 - Impacts to other roads as people use other roads
- Rezoning impacts to added vehicle traffic – added density
- Puts residents next to intersections in limbo – concerns about property values not knowing what will happen
- Noise concerns – are noise barriers effective



- Has been done before – Glenmore Tr. and Elbow Dr.
- Interchange – going over has aesthetics impact
- Can drop Crowchild Tr. – but challenge is water table/old floodplain
- Vehicles are important mode of transportation in Calgary
- Putting east/west movements under would impact less in the case of flooding
- Pilot could tell where other pinch points are (with piloting green lights)
- Pilot would cut off pedestrians
 - If permanent could build pedestrian/bike bridges
- Moving bus stops off of Crowchild

Ideas Explored

- Interchange over Crowchild Tr. at Kensington Rd. and 5 Ave.
 - **Benefits** – improved traffic flow along and across Crowchild Tr.; more long term solution – better
 - Consider digging Kensington Rd. and 5 Ave. under existing to lessen impact height of interchange
 - **Impacts** – constructability; property impacts for interchange and ramps and for construction staging and detour; visual; decimation of existing properties
 - **Constraints** – adjacent properties
 - **Trade-offs** – improved traffic flow vs property impacts; decimation of a community
- Remove access from Kensington Rd. to 24 Ave. during rush hour - right in/out only
 - **Benefits** – less property impacts; good short term option
 - **Constraints** – infrastructure to implement access restrictions
 - **Impacts** – reduce access to/from communities
 - **Trade-offs** – improved traffic flow vs. reduced access
- Interchange with Crowchild Tr. under Kensington Rd. and 5 Ave.
 - **Benefits** – less visual impact; improved traffic flow along and across Crowchild Tr.
 - **Impacts** – constructability; property impacts for interchange ramps, construction and detours; decimation of communities
 - **Constraints** – adjacent properties
 - **Trade-offs** – improved traffic flow vs. property impacts; decimation of a community
- Long term solution? For all green on Crowchild Tr.
- Unrealistic proposals
- Impacts to adjacent owners. Left in limbo

Map Highlights

Central Round 2 – Table 1 Map C

- Remove access across Crowchild Tr. And left to/from Crowchild Tr. during rush hour
- Interchange/flyover at 5 Ave.
- Interchange/flyover at Kensington Rd.

South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

Overall Table Discussion

- Q. What is the flow of traffic on Crowchild?
 - A. 100,000 vehicles per day range on Crowchild Tr. and will grow. 15% to 20% going through from south to north, rest going to downtown.
- Q. Is that number representing peak flow? Because peak flow is a different issue. Don't build so you are just accommodating peak flow at a certain time of day.
 - A. The number represents the average number of vehicles throughout the day. Crowchild is a skeletal road – 3 lanes each direction
- Fix the bridge and the rest will fix itself (Bow River Bridge)

- Can widen bridge, just one more lane (not one more lane in each direction)
- Build a brand new bridge. If you had more bridge crossings over river further west, you might fix traffic flow.
- Consider doing work in other areas along Crowchild Tr. to alleviate traffic before it even gets to the bridge. Maybe Bow River Bridge isn't the whole issue.
- Q. Would be helpful to know if issue is the bottleneck on bridge because of people trying to get downtown. Where are people going? Where are they coming from?
 - A. We have technical information that explains the above questions.
- Without that information, we can't have a proper discussion.
- We want to see 10 recommendations that you come up with and then we can discuss, otherwise we don't have enough information. You are the subject matter experts.
- Q. When ring road is finished, will it offload some of traffic?
 - A. Not a lot.
- Scarboro not affected much by cut-through traffic
- Do not change the barriers currently preventing cut through traffic. They have been in place since the 80s. No right turns out on 17 Ave. Only two ways out of neighbourhood and we like that. Keep these and don't make any more access routes. Happy with those.
- Love access onto Bow Tr. (24 St. to Bow Tr.), but a lot of people burn through playground/school zone near Alex Ferguson. Like the limits on left turns going eastbound on 17 Ave., which forces people coming to Crowchild to continue – other table participants agreed.
- Left good from 17 Ave. coming east, but look at other traffic calming measures
- Good work with traffic flows near Pumphouse, etc. Can we look at things like that?
- Can you do lane reversals during peak times on bridge? Think this is a smart idea.
- Phase 1 information - can't rip out existing infrastructure, but want to know how to accommodate specific traffic flows.
- We look at lane continuity. Do we need to solve the weaving problem between 17 Ave. and Crowchild Tr.? If not, we look at other solutions. You would elevate roads one over the other if starting from scratch.
- Q. New interchange at Flanders Ave. will take more traffic that would go onto Crowchild Tr. Is there any way to do something like that so traffic doesn't come anywhere near 17 Ave. and Crowchild Tr.?
 - A. Roundabouts take a larger footprint.
- Is there an HOV lane currently?
 - A. No, just a transit lane.
- Put in an HOV lane
- Any intention of putting in a C-train or other transit down Crowchild Tr.; why don't we have another way to get down to downtown core?
- Peak hours, do a toll to force people to use public transit
- Q. Solutions have to come with context. Do we want to change idea that you need your car and make it prohibitive? Need a bigger, overarching policy to get Calgarians out of cars.
 - A. Calgary Transportation Plan has aggressive goals for transit use over next 40 years.
- I feel that the overarching idea is expansion, but how does this fit with transit policy? If we thought differently, we could free up sections of Crowchild Tr.
- We are trying to meet needs that exist today without thinking about future of how people will get from A to B.
- Europe, people have jobs to make driving near impossible (in cities such as Copenhagen). Are we trying to stop cars or encourage carpooling? Don't really see this.
 - City will continue to grow – need to accommodate but trying to do in different ways. We do want to reduce dependency on vehicle trips. Want to reduce rate of traffic flow (VPA).
- Look at London, way more density without ONE six lane road and they can get around. Instead of spending 2 billion on this, look at other ways.
 - A. Whatever we do, looking at getting a whole lot more time out of it.
- While you are doing that, just don't mess with my house on Scarboro Ave.
- Tunnelling under the school?

- **Trade-offs** – School not that close to road. It is the gym that is closer and it isn't a protected building. Wouldn't matter to me as much if it was moved - the gym and left the school alone.
- School doesn't own any of the park; that is City land.
- If you want to do something with gym, we could also look at widening at the other side. 6 lanes between 17 Ave and Bow Tr. Or don't touch gym and school, but okay with large retaining wall?
- How wide is six lanes?
- This is why people feel this process is rigged, because we aren't planners and have no idea if these ideas are really feasible and think that people that know what they are talking about will make their own decisions.
- Q. We need to know the clearly articulated vision in 20 to 30 years for Calgary? Is it like London? From that vision, we then create goals.
 - A. City spent several years going through visioning exercise.
- Q. 60 years ago, whoever built the bridge thought it was a great idea. Let's recheck the vision. I don't understand the vision.
 - A. As a City, we have to accommodate growth. 60 to 100 year vision, we want to reduce the rate of traffic (people in vehicles). Target is to get as low as 55%. We will use website as a way to get info about vision out, summarize it as best we can.
- More transit – how much does that fix? How much transit do you need?
- If widening bridge by one lane doesn't give us enough, can we look at another bridge crossing in the west?
 - **Trade-offs** – If this fixes everything, we can live with painful construction.
- Use bottom part of bridge for traffic.
- Go under 17 Ave. and Crowchild Tr. and then emerge at Bow Tr. or at bridge
 - **Constraints** – construction constraints with tunnelling – where do you build, deal with elevations?
- I think all the cycling, pedestrian paths work right now.
- A path up 19 St. to get to Sunderland Ave. would be nice. Sidewalk?
- Use pedestrian crossing from school over 17 Ave. Critical. Use it all the time. Connects communities. Not too busy. Also use crossing at 17 Ave, but not as much. Very busy, not as critical to communities.
- Q. How will all our ideas be categorized when you come out with them in March?
 - A. Operations improvement: lane reversal, what can we do with existing stuff and change infrastructure somehow. Working with what you have: changing signals, blocking traffic at certain times of day, tunnelling options, traffic light options, weaving options (safety problem of people crossing each other), dedicated lanes, access management (managing access points for businesses), transit solutions (safety, locations, etc.).
- Q. How does new arena they are building come into play?
 - A. Already approved land use plan in this area. If stadium comes in, traffic generated would change things for certain times. Might be a benefit for traffic flow.
- Seems like the east/west flow is the issue.
- Lowering the whole road - All underground and make whole area between 17 Ave and Bow Tr. a park (Swiss solution)
 - **Constraints** – similar to tunnelling

Ideas Explored

- What would a perfect scenario look like?
- What does a city of 2 or 3 million look like?
- What will you title the concepts?
 - Safety, infrastructure, access management, weaving, transit solutions
- Don't screw with the traffic calming in Scarboro
- Put all underground and make Crowchild Tr. a park
- Don't move Crowchild Tr. on the east
- Don't move Crowchild Tr. on the west
- Move Crowchild Tr. to the west
 - **Impacts** – would impact dog park

- Change philosophy of travel
 - We are not there
 - Make it prohibitive for people working downtown
- HOV lanes/car pooling
 - **Benefits** – fewer cars moving people; it re-focuses on HOV and transit – what does that fix?
 - **Constraints** – physical space
- Build a new bridge (x2)
 - **Impacts** – need to live with painful construction
- Keep access – the ones that exist
 - Don't make any new ones
- Move traffic around (i.e. further west) so it doesn't rely on Crowchild Tr.
- Accommodate future modes of travel tomorrow
 - e.g. Self-driving cars
- Tunnel start at 17 Ave. and take through-traffic to cross river or into downtown
- Limit left turns
 - **Trade-offs** – balance between no left turn into upper Scarboro and access into the community
- Don't move the gym/school (x2)
- Lane Reversals on Crowchild Tr./Bridge to address peak
 - **Benefits** – no infrastructure work required
- Another method of moving people – transit
- Fix the bridge
- Need to check the vision that was established for imagineCALGARY
- Accommodate traffic under the bridge
- Pedestrian/pathway – improve 19 St. connection to Scarboro
- Go down with Crowchild Tr. instead of up
 - **Benefits** – noise, aesthetics, “the Swiss solution”
- Transit into downtown another way? – Trains? Buses?
- Don't mess with the houses
- Don't build for peak
- Implement tolls
 - **Benefits** – force people off the road
- Move the gym – leave the school
 - **Trade-offs** – would affect adjacent homes
- Tunnel under the Sunalta School (x2)
- Parallel roads to Crowchild Tr. – improve and use – e.g. Richard Rd.
- Calgary Transportation Plan – West LRT in same timeframe as this and that project said no new river crossings
- Copenhagen example of prohibiting cars by policy?
 - London example – smaller space and more people
- HOV on Crowchild Tr. – make it more prohibitive for individual vehicles and cars
- How does technology play into the future?
 - Automatic cars? Other?
- Parallel roads like Richard Rd. – can we do that with Crowchild Tr.?
 - **Trade-offs** – still need ramps to get on/off Crowchild Tr.
- Take traffic under starting south of 17 Ave. or vice versa





- **Constraints** – building the tunnel; grades of the roads
- Share the vision of imagineCALGARY
 - What are we going to look like in 100 years?
- Noise wall would be improvement/walls okay – Good next to building (Sunalta School)
- Helpful to know background of bottlenecks.
 - Where coming from and going to go?
- Graph
 - Traffic vehicles increase, population increases – policy goals are to reduce single occupancy vehicles in city

Map Highlights

South Round 1 – Table 1 Map A

- Solve east-west movements along Memorial Dr.
- Add new bridge
- Go underneath the bridge – two levels
- Like access to Bow Tr. from 24 St. S.W. – do not remove
- Pedestrian bridge across Crowchild Tr. Between dog park and Sunalta Elementary School is good location – not too busy
- Retaining wall to protect school, including gym
 - Could look at moving gym?
- 19 St. S.W. needs a sidewalk
- Need pedestrian connection from 19 St. S.W. to Sunderland Ave. S.W./Scotland St. S.W.
- Review pedestrian connectivity around 12 Ave. S.W. and 18 St. S.W.
- Eastbound on 17 Ave. S.W. – prohibited left turns is good
 - Eastbound left turn from 17 Ave. S.W. allowed at Suffolk St. S.W. – good, but look at other traffic calming on 14 Ave. S.W.
- 17 Ave. crossing over Crowchild – good crossing, too many adjacent vehicles
 - What are restrictions of existing 17 Ave. bridge over Crowchild Tr.? Can we widen?

South Round 1 – Table 2

Overall Table Discussion

- Idea Generation:
 - Need to find solution for bridge choke point
 - Need for certainty in solution
 - Demolition of the school should be off the table
 - Consider widening the Bow River Bridge
- Idea: Remove traffic lights at Kensington Rd.
 - Crowchild Tr./Kensington Rd. as right in-right out access
 - Coordinate with West Village redevelopment
- Bow River Bridge needs to be fixed as top priority
- West Village – who pays for creosote clean up?
- Viaduct – double level bridge
 - **Benefits** – improved travel time
 - **Impacts** – cost; noise; limited access
- Northbound on the top - southbound on the bottom
- Local underpass for 5 Ave., Kensington Rd.
- Access is limited
- Not aesthetically pleasing
- Relocate southbound Crowchild Tr. connector road further east to traffic calm 24 St. S.W.
- Not desirable to put in new northbound ramp from 17 Ave. Okay with current configuration
- Need free flow – where will all the people in Currie Barracks go?

- Try extending green time for Crowchild Tr. at 5 Ave. and Kensington Rd.
- The city continues to grow. These impacts need to be considered
- Where is Crowchild on the City's priority list?
- Desire for certainty in property that needs to be acquired
- Need to have the school represented at this workshop
- How is the city addressing the impact of building bigger roads = more vehicle traffic
- Consider a toll road
- Put in more HOV lanes
- West Village and CalgaryNEXT need to consider traffic and parking
- Leave unrealistic options off the table. i.e. – cost prohibitive
- Trial of inexpensive solutions first
- Coordinate with Transit Oriented Development Plans
- If you build it – they will come...
- Final plans needs to be definitive about properties required
- Need to be mindful of impacts during construction
- Fixing only 2 of 3 areas will not be effective
- Pent up demand needs to be factored in

Ideas Explored

- Is all this really necessary when traffic only backs up at some times of the day (early morning (7:30-8:30), and 4-6pm weekdays only)?
- What happens to the school?
- Make 3 lanes through
- Choke point at Memorial Dr. – weave
- What else is going on behind the scenes? What decisions are already made?
- Tolls with money going to transit
- Coordination is critical – with CalgaryNEXT and other projects
- Demolition of school off table entirely
- Long term certainty for Summit St.
 - Do not leave open the possibility that Summit St. will someday be wiped out. Either wipe it out or say it will never happen
- Make public transportation an actual priority and reduce car traffic and leave Crowchild Tr. the way it is
- More lanes not necessary – creates greater bottleneck!
- Reduce speed limit on Crowchild Tr. so that cars can change lanes
- Get rid of lights at Memorial Dr. and Kensington Rd.
- No widening will help unless we bulldoze and start over
- Expanding bridges across Bow River impacts the river and all the natural landscape and animals
- If inner city is to remain vibrant then high speed traffic needs to be slowed down
- Bring West Village plan as reference
- 17 Ave. and Crowchild Tr. northbound works as is. Way too fast on Crowchild to merge in southbound from 17 Ave. (to 80 in 50m)
- To improve noise pollution, a sound barrier is needed on east side of Crowchild between 17 Ave. and Bow Tr.
- Try the cheap or free ideas first. They may help.
- Toll Crowchild Tr.
- Also reduce lights that intersect 14 St. to make it flow better to provide an alternate route to Crowchild Tr.
- Want school reps at public meetings
- Crowchild Tr. - all green lights



Map Highlights

South Round 1 – Table 2 Map B

- Take out lights at Kensington Rd. and 5 Ave.
- Try adjusting green time on Crowchild Tr. All green between 6:30 to 8:30 a.m. and 4 to 6 p.m.
- Long term growth of the city needs to be accommodated
- Bow River bridge and Memorial Dr. exits are choke points
- Toll lanes on Crowchild Tr. to reduce demand
- Pent up demand if you build it (accommodating) more people will drive on the road
- School represented at engagement sessions with citizens
- 24 St. S.W. merge lane southbound Crowchild Tr.
 - Traffic calming – noise pollution
 - Cul-de-sac street
- Create new merge to and from Crowchild Tr. from Suffolk St. S.W.

South Round 1 – Table 2 Map C

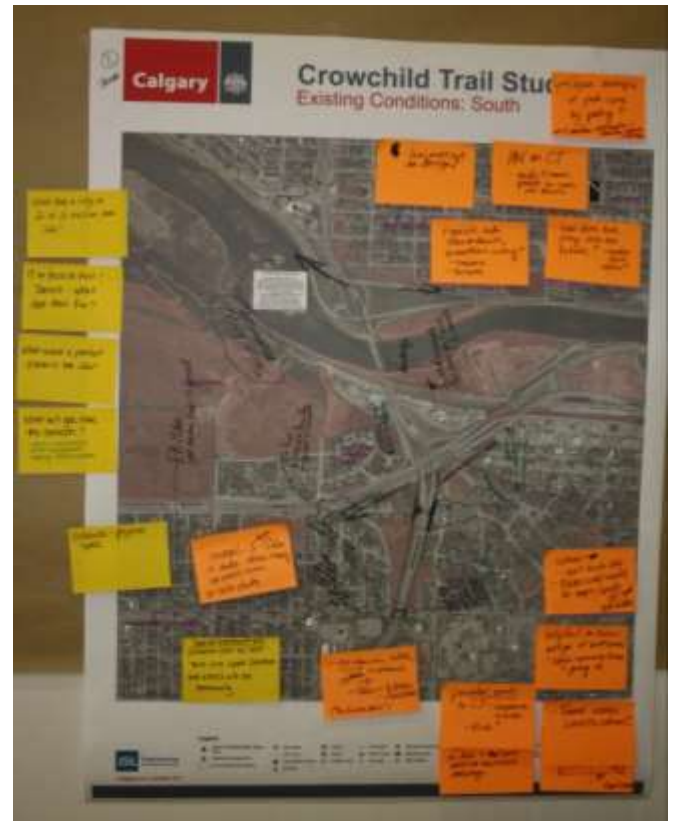
- Access
 - Pedestrian overpass or underpass with car access as well
- Two level viaduct
 - Lose a lane in each direction for the infrastructure
 - Lanes will be a challenge
 - Consideration – will it be visually pleasing?
- Right turns only between Kensington Rd. and Crowchild Tr.
- Remove signals – free flow
- Overpass/underpass
- Widen/add third lane to bridge
- Cost effective vs. trade-offs
- Northbound traffic with its own parallel bridge
- Construction only – no expropriation needed
- Coordinate with West Village/Arena proposal
- Add lane Crowchild Tr. northbound from Bow Tr. exit to bridge
- New connector from 17 Ave. S.W. to Crowchild Tr. southbound. Block off 24 St. southbound

South Round 2 – Table 1

Overall Table Discussion

- Q. Is tunnelling the most expensive solution?
 - A. Yes. There are different ways to do it. With the big dig in Boston, machines come and bore, which is costly. Or you can open cut and excavate (how airport tunnel was constructed).
- Why are we doing this? To whom is this a problem? My simplistic answer is it is the problem of people that don't live in these communities. They are passing through. Their frustration with traffic has become our problem. You could eliminate Summit St., but that becomes a very personal problem for people like residents who live on the street. The whole philosophy of a resident losing their house to solve a problem for another guy is a problem. Maybe it's just me, but we bear the brunt of infrastructure issues. We pay higher taxes and now we may have to lose our parks, house, etc. in order to accommodate the outliers? We are sacrificing for outliers.
- I get it, but if you take step back and look. The modernized bit of Crowchild with LRT looks great and then there is a block in the middle that sucks. You have to do something. Have to fix the roads - houses and taxes not just the most important.
- Why do we need to fix it if problem is only rush hour? Most pleasant times for residents near Crowchild Tr. is when it is backed up. It is quiet.
- But then you became an area with the highest greenhouse gas emissions.
- Q. Changes are going to happen, how do we make it the best it can be?

- There is a no build option. What is the impact to commuters, adjacent resident, etc. if we do nothing?
- Most economic to look at lane reversals, redesigning flow, etc.
 - A. Glenmore and more north sections of Crowchild Tr. have to be 80 km/hr. If it is designed for posted speed of 80 km/hr, would have to design differently.
- Q. Reduce speed limit. What does 50km/hr mean in terms of space required?
 - Much less than 150ft.
- If it flows at lower speed, it is better than stopped at 80km/hr.
 - Is this a valuable change to solve the problems?
- You still need to do something with the bridge, in addition to reducing speed. It is a mess. Less of an impact to residents.
- HOV lanes – now you have 4 people in the car and you have reduced traffic flow. Use this in combination with reducing speed and something with bridge
- We should be doing more transit. Like the idea of a toll too.
 - How do you see toll working?
 - Would force people on public transit. It wouldn't necessarily be for the money. If using corridor to go downtown, you would need to pay a downtown toll. Toll would need to be equal or greater than cost of bus ticket. Like London – congestion charge.
 - There will be a million people that will say no way to a toll and 20 of us here today (that are affected) saying yes.
- Would this impact communities? Cut through traffic?
 - Our community is protected, because there are already measures to prevent traffic from cutting through. Other communities would need to safeguard around that.
 - You would start to get a bunch of people parking just on the outside.
 - But there are parking bans?
 - People will go to where they can go, park, and take another option. Human beings are ingenious. Human behaviour funny – I need to get in the lane that goes so everything shifts. If something is moving, they will stay there.
- 3 lanes across bridge to improve flow. Bottleneck would be reduced.
- Look at driving training. People don't know how to merge and use lanes.
- Create access before bridge
 - A. Currently no plans to create access through that city land.
- Improve Memorial Dr. to 14 St. into downtown, keep them on north side of river. Stay on eastbound to go southbound on 14 St.
- Q. What was the speed limit when it was designed in 1967?
 - A. Design speed would have been 55 mph.
- Can't see where you are going at 80 km/hr. Feel like it was designed for slower than it is now.
 - City wouldn't post it for higher than a speed it was designed for.
- 17 Ave and trying to get southbound onto Crowchild from 24 St. You can't get on.
 - Why? You come to a dead stop and then have to get up to 80 km/hr. People behind me getting fed up of waiting. It is the merge that is a problem.
- Make improvements to merging (all participants at table supported idea).



- By the time people get past Bow Tr. and 17 Ave. southbound, people are gunning it. Makes it noisier. No way they are going 80 km/hr.
- If you put in an interchange or loop, you need to design with 50 to 60m radius.
- That is a lot of space. Speed needs space. I didn't know that.
- If speed higher, you need more space. For example, if you breakdown, you need room to move your car, etc.
- **Trade-offs** – look at merge from 17 Ave. onto Crowchild Tr. Would rather annex a parking lot than 5 houses.
- Q. How old is Bow River Bridge?
 - A. 1967 – pushing 60 years old.
- Q. When would you be replacing bridge?
 - A. There is a rehabilitation project for bridge next year. Just rehabilitation
- Q. Why keep throwing money at an asset at end of its life? Concentrate money in the area, build whole new bridge with full traffic one way and full traffic the other way and bike lane in the middle. Bridge handling east/west traffic and another handling north/south.
 - A. Bridge can be rehabbed and can last another 20 years; a low level bridge crossing was looked at in 2012; how do we tie new bridge to memorial?
- Use existing bridge for 80 km/hr through traffic. New bridge for separate flows.
- Getting from 17 Ave. to river valley to access pathway I know is a problem.
- Pedestrian crossing over Bow River Bridge (existing) is good. I like it.
- Lower level bridge could have great access for bikes and pedestrians.
- Q. Why are we so limited on our bridges across the rivers? Look at Chicago.
 - A. There were additional river crossings planned in late 50s. Those crossing looked at again in late 60s and early 90s. Through review of previous plans (GO plan), they maintained 14 street crossings, but removed Shaganappi river crossing. Twinning Stoney Tr. now. Bridges are expensive and have environmental impacts.
 - Bridges could be devastating to places like Edworthy Park.
 - Hills can be issues for building bridges. Need to connect to higher classification of roads on north side.
- Bridge at 19 St. in Parkdale. There will be a significant amount of environmental work happening there anyway. Could clean up area.
- Crossing further west would help east west flow.
- Q. Any talk of getting rid of Canadian Pacific tracks through town?
 - A. No, they are staying. In fact, they are expanding.
- Q. How high to you have to build to get over tracks?
 - A. 7.01 metres, fairly high (23 ft.).
- Transit east/west ridiculous. Frequency of buses is not good. Stops are good, but not enough buses come. They actually have to come when they say they are going to come.
- Q. How much land do you need to expand merge onto Bow Tr. from Crowchild Tr. southbound? How much land would be available?
 - A. There is room to expand, if you build a wall near school.

Ideas Explored

- 3 lanes across the bridge to improve flow
- Toll – Pay into downtown, equal or greater to a bus ticket
 - Need safeguards in place to prevent work around
- Concentrate money into river crossings
 - This is major bottleneck
 - Existing bridge
 - Use for 80 km/hr through traffic
 - New bridge
 - Separate flows and lower speed
- Can traffic ramps at interchange be reduced in size/change shape?

- Access/merge condition onto Crowchild Tr. from 24 St.
 - Not safe
- HOV in combination with other things like lane reversals
- East/West Transit
 - Along 17 Ave. need more frequent service and on time
- Can we bring people off the bridge into West Village?
- Crowchild Tr. curves south 17 Ave. What is it designed for? 80 km/hr
 - Can't see where you're going
 - Doesn't feel safe
- Reduce speed limit from 70 km/hr to 50 km/hr to get flow
 - Would still bottleneck at the bridge
- Fixing the bridge
 - **Impacts** – has least impact on residents; has impact on environment
- Instead of rehab – add another bridge to left of right of existing to handle the east/west movements.
 - **Constraints** – how does that structure tie to existing roads
- Driving training
 - Merging
- Why are we doing the study? Problems are of people who commute vs. adjacent residents who bear the brunt of the “problem”
- Look at most economical and least disruptive solutions
- Why not more river crossings allowed?
 - E.g. 19 St. east/Parkdale west
 - **Constraints** – Canadian Pacific Railway
 - **Impacts** – environmental considerations
- Crowchild Tr. most pleasant for residents during rush hour – due to stopped cars – less noise
- Fix rush hour/peak problems only
- Change lights for more green time during peak hours
- Help them find a different way
- Memorial Dr. at 14 St. – encourage traffic to stay on it going eastbound to go southbound on 14 St. (and other access points)
- Look at speed south of 17 Ave.
- Lane onto Crowchild Tr. by naval museum
- HOV policy/use
 - More people into cars
- Lower the Crowchild Tr. speed? What are impacts to flow/capacity?
- Redesigning flows
 - Least economic impact
- Tolls
 - Reduce flow by discouraging cars on Crowchild Tr. into downtown
 - Cost similar to transit
 - Other communities to deal with cut-through

Map Highlights

South Round 2 – Table 1 Map D

- Existing pedestrian crossing on bridge is good
- Add new bridge (parallel to existing) for east-west movement into downtown and lower speed
- Add new river crossing slightly west of existing (at point)
- Clean up contaminated environment in West Village
 - Opportunity to build bridge as a result
- Bridge is a mess
 - Least impact to residents to make improvements at bridge



- Access to downtown north of Bow Tr. (new)
- Improve eastbound Memorial Dr. to 14 St. into downtown
- How much space is needed to improve flow to Bow Tr.?
- Only 200m between weaving and ramp entrance/exit between 17. Ave. northbound to Bow Tr.
- Have to come to a dead stop from 24 St. S.W. merge lane onto Crowchild Tr. southbound and immediately go to 80 km/hr



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- *No feedback received.*

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- *No feedback received.*

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- *No feedback received.*

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x3	x2	x1		
• Project team's response to my questions	x3	x3			
• Opportunity to provide my input	x5	x1			
• Opportunity to hear others' input	x4	x2			
• Session location	x6				
• Session time	x5	x1			

2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

- Good – Liked facilitators/note takers
- I liked that we met people who had ideas that we had not considered. The facilitators were very good and very receptive to the comments of the participants.
- Great format, experts at table were well informed and could talk to issues raised. Was expecting to see more concrete ideas presented by the city. Still too esoteric, asking public for concrete planning ideas without context of larger vision. Still feel like city has plans they aren't sharing.
- Feel unqualified to provide meaningful input – lots of ideas but difficulty to give ideas that are technically feasible or too costly.
- All good today, but where does this all really go?



3. Which community do you live in?

- Scarboro – x5
- Banff Trail – x1

4. What are the main reasons you use Crowchild Trail?

- To commute to and from work or school. – x1
- To visit recreation facilities, shopping centres, or to visit friends and family. – x5
- I don't use Crowchild Trail. – x0
- Other: I use it only once per week or less – x1

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x3
- Online discussion – x1
- In-person session – x6
- Idea board – x3
- Walking tour – didn't know about it until the day before – could not attend
- Bus tour – was there one?
- Other – x0
- I have not participated in the study prior to this session. – x0

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x5
- Community Association – x1
- Community newsletter – x0
- Community road signs – x0
- Project email – x1
- Social media – Facebook, Twitter – x0
- On TV – Report to Calgarians – x0
- Word of mouth – x0
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x0
- Other, please specify: From a previous session – x1

Do you have any other comments about the project or the engagement process?

- Thank you!!
- I am very glad to hear that the people spearheading this project are communicating with the re-zoning people.
- Thank you for your time!
- People are starting to feel their time is being wasted by this process. Want to see some concrete options.
- We were glad that we got the letter in the mail, but the link on the invitation did not work, I tried many times and eventually called 3-1-1 to reply. Very few of the people who could be directly impacted were not present today. I wonder if they even knew about today.



Crowchild Trail Study

Businesses | Institutions | Emergency Response Agencies Idea Workshop Summary October 28, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held with business owners and operators, institutions and emergency response agencies located adjacent to Crowchild Tr., or whose patrons and staff generate high volume use of the corridor. The workshop was held on Wednesday, Oct. 28, 2015 from 1 to 3 p.m. at the Best Western – Village Park Inn (1804 Crowchild Tr. N.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 20 participants attended the workshop distributed across 4 table discussions in round one and 3 table discussions in round two.

The following members of the project team were also in attendance at the session:

Project Team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Peggy Chan, City of Calgary, Communications Lead
- Chris Delanoy, ISL Engineering and Land Services, Consultant Project Manager
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Jana Sinclair, Russell Public Relations, Consultant Engagement Lead
- Erin Russell, Russell Public Relations, Consultant and Table Facilitator
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator

Table Facilitators

- David Breu, ISL Engineering and Land Services, Consultant Technical Facilitator
- Brad Tiedemann, Stantec, Consultant Technical Facilitator
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker



- Vickie Megrath, City of Calgary, Table Note Taker
- Adelle Palmer, City of Calgary, Table Facilitator
- Devin Purdy, City of Calgary, Table Note Taker
- Adis Samardzic, City of Calgary, Table Facilitator

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail study area that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - It is important to maintain access to businesses adjacent to Crowchild Tr. Some changes may eliminate access, parking or reduce visibility of businesses resulting in a loss of 'drive-by' customers.
 - Transit, cycling and pedestrian improvements were raised to provide more options for people to access businesses, Foothills Hospital, University of Calgary, McMahon Stadium and Banff Trail LRT.
- In the **North Section**, there was a lot of discussion surrounding Motel Village and the desire to create an urban village feel through modernization; improving walkability; development of a transit 'hub'; and improving aesthetics and lighting to increase feelings of safety and security. The importance of improving transit, pedestrian and cycling connectivity between Motel Village/Banff Trail LRT and Foothills Hospital was also highlighted by participants.
- In the **Central Section**, different modifications to the Kensington Rd. and 5 Ave. intersections were explored, including eliminating/limiting left turns from 5 Ave. to Crowchild Tr., flyovers, and a raised freeway and/or tunnel from 5 Ave. to the Bow River bridge. The impacts of these modifications to adjacent businesses and residents as well as environmental, property, noise and visual impacts were discussed.
- A couple of ideas that were raised during the **South Section** discussions included lane reversals, improving the Bow Tr./10 Ave./Memorial Dr. access and adding a third through lane northbound across the bridge. Both widening the bridge and adding another level were explored as a means to improve free flow traffic. Cost, land required, adjacent properties and visual impacts were raised as considerations related to improving the bridge.

For a more detailed summary of the input that was provided, please see the Idea Workshop Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.



Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Bus/LRT routes between Foothills Hospital and Banff Trail LRT station (e.g. transit HUB)
<ul style="list-style-type: none"> Benefits – improve east-west connection Impacts – adjacent communities – where would it go?
Add HOV/bus lanes for transit / carpool
<ul style="list-style-type: none"> Benefits – improve transit flow/reliability; encourage transit use vs. driving; improve traffic flow by buses having own lane; move more people; EMS use; advantage for buses and for people to use Impacts – widen Crowchild to allow HOV lane; use one of current lanes – not enough of lanes; HOV misuse Constraints – adjacent property; not enough through lanes already Trade-offs – adjacent property; not enough through lanes already
16 Ave./13 Ave./University Dr. full access interchange
<ul style="list-style-type: none"> Benefits – combine and improve movement Impacts – property and park; impact on Suncourt Place
Vehicle activated light at 5 Ave. for left turns from Crowchild Tr.
<ul style="list-style-type: none"> Benefits – improve travel along Crowchild Tr. due to more green lights Impacts – no left turns to Crowchild Tr. from 5 Ave. on east or west side; moves traffic to residential streets Constraints – emergency vehicle access; improvements/capacity on residential/side streets Trade-offs – improve traffic along Crowchild Tr.; maintain access to 5 Ave. vs. no left turns from 5 Ave.
Flyover/Interchange/Ped Overpass at 24 Ave.
<ul style="list-style-type: none"> Benefits – improved traffic flow; consider splitting the grade differences; all accesses may not be required; no lights; improved north/south traffic flow on Crowchild Tr. Impacts – cloverleaf has property impacts; visual; 19 St./16 Ave. impact if there is no access on 24 Ave. Constraints – tunneling - conflict with LRT tunnel Trade-offs – 300m in order to go up or over any higher
Bow River Bridge improvements (improve Bow Tr./10 Ave./Memorial Dr. access; widen bridge)
<ul style="list-style-type: none"> Benefits – increases traffic flow; reduce frustration; improve safety; reduce stress; reduce weaving Constraints – short term – 1 lane; long term requires more changes Impacts – smoother flow; property impacts (dog park/school); use shoulder lane Crowchild Tr. north at 17 Ave. Trade-offs – may lose some park space
Move Crowchild Tr. to the west, north of 5 Ave.
<ul style="list-style-type: none"> Benefits – less impact to Motel Village; fewer residential impacts; easier to build; land swap with University of Calgary at University Dr.; Crowchild Tr. free flow; bus connectivity at Banff Tr. LRT and Motel Village Impacts – Suncourt Place; adjacent communities; increases traffic on 24 Ave., 19 St. and 16 Ave. Constraints – University Dr. access not needed; University Dr./16 Ave. interchange could close ramps and become a flyover; preference to maintain access to McMahon Stadium with west realignment of Crowchild Trade-offs – parking swaps; community impacts, but with access to important roads
Reversible lanes
<ul style="list-style-type: none"> Benefits – same lanes more capacity; minimize expropriations – balance – clear communication about plans; direct access from eastbound Bow Tr. to northbound Crowchild Tr.; Impacts – isn't easy to anticipate; where does the lane end?; people don't use it; lane reversal to off ramp? Trade-offs – where does it feed to?
Overpass/Interchange at 23 Avenue
<ul style="list-style-type: none"> Benefits – ramps to businesses; if 24 is closed it's easy; remove lights on Crowchild Tr. (to/from downtown); access east/west; facilitate bus hub from LRT Impacts – combining intersections – University Dr. and 16 Ave; Trade-offs – is this transit only?; not beneficial to Motel Village if only transit



Pedestrian improvements/connectivity to Motel Village, Foothills Hospital, U of C and McMahon Stadium
<ul style="list-style-type: none">• Benefits – eliminates lights at 23 Ave.; use of train; encourage pedestrian/cyclist; connect to hospital; improve access to McMahon; potentially more traffic to Nick's Steakhouse; a way to get to hotel and food; encouraging use of train; improving Banff Trail (improve busing); improve access to Banff Trail• Impacts – parking; pedestrian bridge in front of Nick's sign; not a benefit to many businesses

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

Overall Table Discussion

- Keep open access to Motel Village services
- Concerns about roads being taken for interchange and being replaced with pathways
- Option to go up higher
- Application for Land Use Amendment submitted
- Review needs to be conducted on accesses
 - Safety, geometry, access for the whole area
- Uncertain how much land is required
 - May not require land acquisition
- Impacts from all sides – but may be possible to attract people to the area in new ways
- Redesign Motel Village as a neighbourhood
- Accesses may change – but can provide alternate
- No direct bus routes from Foothills to Banff Trail LRT
 - Make station at Motel Village more of a bus hub – more like Sunnyside
- Hotel visitors about half vehicles/half pedestrians
- No good walking connections from Motel Village to University of Calgary – create a path
- Pathway connections between Motel Village and Foothills – needs improvement for pedestrians and cyclists
- 24 Ave. pedestrian and cycling connections need improvement
- Maybe connect to Motel Village at Nick's Steakhouse
- Give Banff Trail LRT station better lighting – security/safety
- Break up parking to help add to village “feel”
- University of Calgary LRT station
 - Make more interesting and widen bridge
 - Gateway to the University

Ideas Explored

- Separate slow moving vehicles to accesses and customers vs. Trans Canada through traffic
- How can we define a better point of entry
- Develop whole Motel Village area as a neighbourhood
 - Woven into one place
 - More urban feeling
- Opportunity to go up with building heights as option in Motel Village
 - Previously discussed at Banff Trail Area Redevelopment Plan open house
- Motel Village:
 - Enter from 16 Ave. – access closed
 - Cannot function without access
 - Access ideas?
- Be informed of land process
- An access to Motel Village needs to be maintained
- More info/answers on pedestrian vs. vehicle accesses in future for Banff Trail Area Redevelopment Plan
- Review of access/connections on 16 Ave.
 - Safety
 - Geometry
 - Operations
- Bus from Foothills Hospital to Banff Trail LRT needed

-
- Calgary** 
- Crowchild Trail Study**
Existing Conditions: North
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- A lot of development near the University LRT Station planned by University of Calgary.
- Pedway on either side of Crowchild Tr. and the University LRT Station (east and west)
- Make pedestrian crossing (at University LRT) more compelling? Wider? This is front door to the University – 75% people from this LRT Station go to the University of Calgary.
- Better connection to Banff Trail community from University via University LRT pedestrian bridge
- More pedestrian and cycle friendly routes at 24 Ave.
 - Crossing adjacent to cars is okay

- Crossing jumping pedestrian island to island is not okay
- Cycling and jogging athletes go back and forth between Olympic Oval and Motel Village
- Existing road along the University and city land – use this alignment for another pedestrian crossing
 - Pedestrian bridge landing east side of Crowchild Tr. north of 23 Ave. by Nicks Restaurant
- Development information for the McMahon Stadium Shopping Centre?
 - Motel planned?
 - Cancer Centre
- Additional pedestrian connection from University to Foothills Hospital
- Develop a pedestrian crossing through McMahon Stadium through to University Dr. – from Banff Tr. pedestrian bridge through parking lot and along the north side of the Stadium
 - “Nicer experience” from existing pedestrian bridge to University
- Traffic lights behind alley in Motel Village
- Can we use northwest of Crowchild Tr. and 16 Ave. to go northbound Crowchild Tr.?
- Bus Routes to Banff Trail LRT “Hub” more like Sunnyside
- Safety at Banff Trail LRT Station and connection from community
 - Very dark now
 - More lights for pedestrians to encourage walking
- Concern with retaining wall at Best Western and how it constrains access opportunities or access changes
- Pedestrian crossing for Motel Village to/from Foothills at 16 Ave.
- Properly controlled traffic lights at existing location on 16 Ave. across from McDonald’s
- Pedestrian safety concerns on 16 Ave.
- Transformers and electricity poles on 16 Ave. in front of Econo Lodge and Boston Pizza

North Round 1 – Table 2

Overall Table Discussion

- Overpass/interchange at 24 Ave./Crowchild Tr.
- Improve and reduce access into McMahon Stadium
- Improve 16 Ave./Crowchild Tr. and University Dr./16 Ave. connections – use as a system of interchanges to improve movement
- LRT tunnel bottom, 24 Ave. middle (at grade) and Crowchild Tr. above (layered) or switch 24 Ave. and Crowchild Tr.
- Could consider flyover at 24 Ave.– all accesses may not be required.
 - **Benefits** – improved traffic flow with flyover
 - **Impacts** – cloverleaf would have property impacts; residents and Church would have large structure in front of their property
 - **Constraints** – tunneling: conflict with LRT tunnel
 - Could consider splitting the grade differences
- Cul-de-sac 24 Ave. (or consider right in – right out)
 - **Benefits** – free flow traffic on Crowchild; preserves community integrity; ensure pedestrian and cyclist connection
 - **Impacts** – loss of access for people living around/on 24 Ave. Extra traffic on 16 Ave. as a result
- 23 Ave./Crowchild Tr. (desire interchange here to maintain access.)
 - Spacing is close to 16 Ave. and 24 Ave. So a combined facility is required (otherwise quick, unsafe lane changes are required)
 - **Benefits** – interchange here would maintain access for Motel Village and McMahon Stadium
 - Desire combination of 16 Ave. and University Dr. interchanges into one system which provides all movements
 - Okay with shifting alignment of Crowchild Tr. and University Dr.

Ideas Explored

- 23 Ave. overpass
 - **Benefits** – ramps to businesses; if 24 is closed it's easy
 - **Constraints** – combining intersections – University Dr. and 16 Ave.
- Interchange on 24 Ave. (overpass over Crowchild Tr.)
 - **Benefits** – no lights; Crowchild goes up north and south easy
 - **Impacts** – 19 St. and 16 Ave. would have been impacted; 16 Ave. impact if there is no access on 24 Ave.; disadvantage of building - view for Church
 - **Constraints** – relocating the LRT
 - **Trade-Offs** – 300m in order to go up or over any higher

Map Highlights

North Round 1 – Table 2 Map B

- Southbound University access
- What is the traffic volume on southbound Crowchild Tr. to 32 Ave. N.W.
- Three options: 24 Ave. N.W. over Crowchild Tr. (at grade), 24 Ave. N.W. over Crowchild Tr. (50/50) and Crowchild Tr. over 24 Ave. N.W. (at grade)
- Interchanges: Cloverleaf loops take up too much land.
- 24 Ave. N.W. flyover over Crowchild (not interchange) – no Crowchild access from 24 Ave.

North Round 1 – Table 2 Map C

- Get rid of the lights at Crowchild Tr. and 24 Ave. interchange
- Lights are a problem at the 23 Ave. N.W. and Crowchild Tr. intersection
- Cloverleaf overpass at Crowchild Tr. and 24 Ave. N.W.
- Is the Campus Gate N.W. access from the University of Calgary onto 24 Ave. N.W. necessary?
- Use a combination of interchanges to provide all movements – University Dr. and 16 Ave. and 16 Ave. and Crowchild Tr.
- University Drive N.W. and 24 Ave. N.W. intersection is gateway to University of Calgary
- Work with the flow (north-south) and (east-west)
- Improve driveways (access) at McMahon Stadium

North Round 1 – Table 2 Map D

- For traffic to move on Crowchild Trail - need to eliminate the lights at 24 Ave.
- Pedestrian and bike connection across Crowchild Tr. at 24 Ave. N.W.
- 24 Ave. N.W. can handle more traffic
- Closing access to Crowchild Tr. from 24 Ave. to vehicles
 - **Benefits** – free flowing traffic on Crowchild Trail; preserve the community; traffic calming
 - **Impacts** – adjacent residents wouldn't have access to Crowchild Tr. or across Crowchild Tr. between the communities
- Another option is right in – right out at 24 Ave.
- Motel Village access with stop sign – get rid of it
- Use 23 Ave. access – get off from Crowchild Tr. and access businesses
- Banff Trail LRT Station
 - Buses to Foothills Hospital
 - Add shuttles from Foothills Hospital and Banff Trail
 - Improve east-west connection
- Combine 16 Ave. and University Dr. as one intersection with Crowchild Tr.
 - **Impacts** – property and park; impact on Suncourt Place
- 16 Ave. and University Dr. intersection doesn't need all turns if 16 Ave. and Crowchild Tr. has all the turns.

- **Benefits** – bus runs to University Dr.; all turns at Crowchild Tr.
- Combine 16 Ave. 23 Ave. 24 Ave., and Crowchild Tr.
 - Intersections close together; need combined system

North Round 2 – Table 1

Overall Table Discussion

- Right in/right out at 24 Ave. N.W.
- Pedestrian overpass and walkway through McMahon/Foothills Athletic Park
 - **Benefits** – eliminates lights at 23 Ave.
 - Potentially transit only?
- LRT station more accessible
 - Access for pedestrians and bikes
 - **Constraints** – space/property lines
- Pedestrian connectivity across 24 Ave. is important
- Not necessary to fix all traffic issues, just improve
- Shifting alignment of Crowchild Tr. is okay and would benefit Motel Village
 - **Impacts** – Suncourt Place apartments
 - Easier to build
 - Preference to maintain access to McMahon Stadium with shift
 - University Dr./16 Ave. interchange could close ramps and become a flyover
 - Desire for bus connectivity at Banff Tr. LRT and Motel Village
- Pedestrian connectivity across McMahon/Foothills Athletic Park would be beneficial
- Local access from Crowchild Tr. to Motel Village is not required

Ideas Explored

- Pedestrian connectivity to University Dr.
 - **Benefits** – use of train; encourage pedestrian/cyclist; connect to hospital; improve access to McMahon; potentially more traffic to Nick's Steakhouse
 - **Impacts** – parking; pedestrian bridge in front of Nick's sign
- Crowchild Tr. below/23 Ave. over
 - **Benefits** – remove lights on Crowchild Tr. (to/from downtown); access east/west; facilitate bus hub from LRT
 - **Trade-offs** – is this transit only?; not beneficial to Motel Village if only transit
- Move Crowchild Tr. west and improve access at 16 Ave.
 - **Benefits** – less impact to Motel Village; fewer residential impacts; easier to build; land swap with University of Calgary at University Dr.; Crowchild Tr. free flow
 - **Constraints** – University Dr. access not needed
 - **Impacts** – Suncourt Place; adjacent communities; increases traffic on 24 Ave., 19 St. and 16 Ave.
 - **Trade-offs** – parking swaps; community impacts, but with access to meaningful roads
- Bus Hub at LRT
 - **Impacts** – adjacent communities?
 - Where would it go?
 - How define "hub"
 - On street okay
 - Integrate existing services better
- Move Crowchild 30m other way (meaning west ward from the location it is now)
 - **Benefits** – by coming over to west side would be easier to build (could accommodate building it, and having west, east flyovers, bigger flyover, 4 cloverleaf etc.); all turns at Crowchild (east, west, north, south); plus have access to south Crowchild Tr. at 16 Ave.
 - **Impacts** – size of cloverleaf intersection would have brutal impact on land required
 - **Trade-offs** – requires property (Suncourt Place) and land around housing unit



Map Highlights

North Round 2 – Table 1 Map E

- Right in/right out at 24 Ave. N.W.
- Pedestrian bridges with right in/right out at 24 Ave. N.W.
- Pedestrian/cyclist connection to University Dr. N.W.
- Continuous pedestrian route from Banff Trail to Foothills Hospital and McMahon Stadium
 - **Benefits** – a way to get to hotel and food; encouraging use of train; improving Banff Trail (improve busing); improve access to Banff Trail
 - **Impacts** – not a benefit to many businesses
- Motel Village/Banff Trail pedestrian bridge – cold, sterile, bleak
- Vehicle bridge across Crowchild Tr. at 23 Ave. N.W.
 - **Benefits** – gets rid of Kensington Rd. lights; bus connection across Crowchild Tr. to University, Health Centre
 - **Constraints** – bus hub; is this transit only?

North Round 2 – Table 1 Map F

- Use service roads parallel to Crowchild Tr. fronting businesses
- Less access to Crowchild Tr.

Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- Vehicle activated light at 5 Ave. for traffic turning left from Crowchild Tr.
 - **Constraints** – Emergency vehicle access; improvements/capacity on residential/side streets
 - **Trade-offs** – improve traffic along Crowchild Tr.; maintain access to 5 Ave. vs reduce access from 5 Ave. (no left turns)
 - **Benefits** – improve travel along Crowchild Tr. due to more green lights
 - **Impacts** – no left turns to Crowchild Tr. from 5 Ave. on east or west side; moving traffic to residential streets

Ideas Explored

- Raised freeway south of 5 Ave. to Bow River bridge
 - **Benefits** – improved access to/from Kensington Rd.; improved traffic flow between 5 Ave. to Bow River bridge
 - **Constraints** – shifting traffic from Kensington Rd. to new interchange south of Kensington Rd.; property adjacent to Crowchild Tr.
 - **Impacts** – property impacts; increased traffic on residential streets; visual impact; environmental (Bow River); noise
 - **Trade-offs** – improved traffic flow on Crowchild Tr. vs. reduced access at 5 Ave.; changed access at Kensington Rd.
- Raised freeway from Bow River to north
 - **Benefits** – improved access to/from 5 Ave. and Kensington Rd. for local traffic; improved traffic flow along Crowchild Tr.
 - **Constraints** – property adjacent to Crowchild Tr.
 - **Impacts** – reduced drop-in visitors to businesses on freeway; visual; noise
 - **Trade-offs** – improved traffic flow on Crowchild vs. visual/noise/property impacts

Map Highlights

Central Round 1 – Table 1 Map A

- Needs significant improvement at Kensington Rd. from 5 Ave. to Crowchild Tr.
- No left turn from 5 Ave. to Crowchild Tr. and vehicle activated light for left turns from Crowchild Tr. to 5 Ave.

- Interchange Options: 1) Kensington Rd. at Crowchild Tr., 2) North of Memorial Dr. at Crowchild Tr. and 3) Memorial Dr. and Crowchild Tr.

Central Round 2 – Table 1

Overall Table Discussion

- Vehicle activated light for traffic turning left onto 5 Ave. from Crowchild Tr.
- Maintain transit
- Transit at 5 Ave. is critical – need to maintain with more transit
- Dedicated transit lane
- 5 Ave. access - all turns on Crowchild Tr.
- Crowchild Tr. goes over (x2)
- Bottleneck by river and 16 Ave.
- 5 Ave. access to Crowchild Tr. – lights vehicle activated
- Important for people to get from 5 Ave. to Crowchild Tr.
- Staging bridge and north of 5 Ave.
- Leave mid-section
- Double decker road
- Address north section and Bow River bridge first before central section
- Removing bottleneck at 5 Ave. will move it to Kensington Rd.
- Tolls for people not using transit
- Don't want interchange at 5 Ave. that would impact businesses



Ideas Explored

- Layby for parking along Crowchild Tr. – requires additional space
- Bus only lane
- Reversible lanes
- No 5 Ave. flyover
- Crowchild Tr. south / Crowchild Tr. downtown – split traffic
- Tunnel below Crowchild for through traffic
 - Tunnel preferred by businesses in area
 - **Benefits** – maintain access to businesses; improve traffic flow through area/along Crowchild Tr.; maintain local access as existing for area; maintain integrity of bordering communities
 - **Impacts** – through traffic can't see/access businesses; property impacts to build tunnel (staging, detours); noise/vibration (construction)
 - **Constraints** – Bow River bridge; environmental; adjacent properties
 - **Trade-offs** – improved through traffic vs. property impacts
- Tolls
 - **Benefits** – encourage traffic to use other roads to reduce traffic congestion on Crowchild Tr.; encourage transit, cycling, walking
 - **Impacts** – traffic would avoid using Crowchild Tr.– not see businesses
 - **Constraints** – cost in installing infrastructure for tolls
- HOV Lane for transit

- **Benefits** – improve transit flow/reliability; encourage transit use vs. driving; improve traffic flow by buses having own lane
- **Impacts** – widen Crowchild to allow HOV lane; use one of current lanes – not enough of lanes
- **Constraints** – adjacent property; not enough current through lanes
- **Trade-offs** – improved transit and traffic flow vs. property impacts with adding lanes
- Layby for parking along Crowchild
 - **Benefits** – improve access to businesses; provide vibrant community atmosphere; slows traffic to make more safe
 - **Impacts** – widen road to allow layby parking lane; property impacts
 - **Constraints** – speed on Crowchild Tr. e.g. safety; adjacent properties
 - **Trade-offs** – improved parking and access to businesses vs. property impacts

Map Highlights

Central Round 2 – Table 1 Map B

- HOV lane from Memorial Dr. N.W. to University Dr. N.W.
- Tunnel for through traffic
- On street layby parking

South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

Overall Table Discussion

- Lane reversals at peak times
 - **Trade-offs** – where does it feed to?
 - **Benefits** – more capacity
- Small fixes could result in major fixes
- Wider the better
- Incorporate bike traffic on Crowchild Tr.
 - Unsafe – near Crowchild Tr. not on Crowchild Tr.
- Change northbound access from Bow Tr. and Crowchild Tr.
 - **Impacts** – property
- Minimize the number of expropriations
 - Expense and anger management
- Crowchild Tr. and Memorial Dr. diverging diamond
- Free up space along river
- Interchange at 17 Ave. and Crowchild Tr.?
 - Emergency Access

Ideas Explored

- Bottleneck over the river
- Pumphouse biggest concern is construction impacts
 - Debris from original construction still present
- CalgaryNEXT plan doesn't involve re-aligning Bow Tr.
- “Gauntlet of Death” – weaving both directions (10 Ave. access and Memorial exit)
- EMS pretty constant during rush hour
- Pumphouse access right in right out
- CalgaryNEXT is not a forgone conclusion – Flames are starting engagement
- City of Calgary/Mayor Nenshi looking for 2026 Olympics bid?
- Sunalta Elementary School
 - What impacts would additional lane have on Sunalta School?
 - School right up to the property line

- **Trade-offs** – consider widening to west before east (city-owned land)
- 17 Ave. and Memorial Dr. access seem to be awkward (loops)
 - A lot of real estate on north side of river for ramps
 - Could the footprint be reduced?
- Optimize the drop off lanes at University Dr. and Memorial Dr. – people don't use the lanes – waste of space
- Double diamond interchange on north side of river
 - **Benefits** – free up space by the river; more direct; free flow, or at least continuous movement
- Bow River bridge
 - Would like additional info on bridge rehab
 - Water will be doing outfall work in 2016 (coffer dam?)
 - Same time is good, but coordination is important
- 17 Ave. at Crowchild Tr.
 - Possible interchange
 - Continuous lanes
 - Wider is better
- Lane reversals starting at 17 Ave.
 - Not sure it's easy to anticipate
 - Where does the lane end – people don't use it
 - Perhaps lane reversal to off ramp?
 - **Benefits** – same lanes more capacity; minimize expropriations – balance – clear communication about plans; direct access from eastbound Bow Tr. to northbound Crowchild Tr.
- Start fresh
 - Maybe cheaper and better
- What about bikes on Crowchild Tr.?
 - Not likely to put lanes on Crowchild Tr., but will try to reduce the barrier Crowchild presents
- Bus Rapid Transit (BRT) lanes across the bridge
 - Peak period BRT
- HOV lane?
 - **Benefits** – move more people; EMS could use as well; needs to be an advantage for buses and for people to use
 - **Impacts** – taking another lane from vehicles; HOV fraud – people use mannequins to fake additional people
- BRT continues across Bow River bridge, including HOV. Optimize the northbound lanes on Crowchild Tr. over the river
 - **Benefits** – move more people and emergency services; encourages drivers to take transit
 - **Impacts** – takes away a lane

Map Highlights

South Round 1 – Table 1 Map A

- BRT/HOV lane
- 3 through lanes from 17 Ave. S.W. to Kensington Rd. N.W.
- Add access from eastbound Bow Tr. to northbound Crowchild Tr.

South Round 1 – Table 1 Map B

- Example of diverging diamond interchange in area of Memorial Dr. and Crowchild Tr. existing interchange
- Shift southbound exit onto 17 Ave. north of 17 Ave. bridge over Crowchild Tr.

South Round 2 – Table 1

Overall Table Discussion

- Short term – 1 lane / long term – more than one lane needed
- Widening the bridge – have to weave from far right to far left to continue across the bridge
 - **Benefits** – more lanes – reduce frustration, improve safety; less stressful; smoother traffic flow

- Use shoulder lane instead of widening road (possible short term)
- More distance between weave movements
- Dual turns to Bow Tr. (northbound to eastbound)
- 10 Ave. access merge on right instead of left
 - **Benefits** – natural, intuitive; less weaving; would be nice to know distances for wide vs. long (two level bridge); could add bike lane on lower deck bridge
- Two-level bridge
 - Free flow upper deck
 - Local access lower deck
 - **Benefits** – widen where you have land and reduce footprint over river; free flow
 - **Impacts** – land acquisition; signage/way-finding; long footprint; visual “disturbance” – high structure; cost – loss of local business visibility; might still land at traffic light

Ideas Explored

- Which is more cost efficient? Widen or stack the bridge?
 - Stack the bridge where land is scarce
 - Free flow on upper deck over river
 - Widen the bridge resolves lots of the issues
- Add extra lane Crowchild northbound to Memorial Dr.
 - Footprint distances to incorporate additional lanes?
- Widen the bridge, 3 continuous lanes 17 Ave. to Kensington Rd.
 - **Benefits** – increases traffic flow; reduce frustration; safety concerns
 - **Constraints** – short term – 1 lane; long term more changes
 - **Impacts** – smoother flow; possible property impacts (Dog parks/school); use shoulder lane Crowchild north at 17 Ave.
 - **Trade-offs** – may lose some park space
- Pedestrians and bikes on lower deck
- What about stacking the bridge?
 - **Benefits** – keeps footprint small
 - **Constraints** – raised deck is thoroughfare; Kensington Rd. lights
 - **Impacts** – free flow on upper deck; costs; pedestrians and bikes lower deck
 - **Trade-offs** – doesn’t address business that go by front door
 - Access is awkward over the river
- Crowchild/Bow Tr. interchange
 - **Impacts** – construction
- Timeline for bridge repair work?
- Land requirements and effect on Sunalta School
- Double diamond interchange or smaller footprint

Map Highlights

South Round 2 – Table 1 Map C

- Options for interchanges at Bow River bridge / Memorial Dr./ Kensington Rd.
- Bottleneck and construction impacts at 10 Ave. S.W. access to Crowchild Tr. northbound
- Impact of CalgaryNEXT?
- Space requirements for Sunalta School

South Round 2 – Table 1 Map D

- Bottleneck starting south of Bow River bridge
- 3 lanes currently exist between Sunalta School through to Kensington Rd., but not all continuous
- Between 17 Ave. S.W. and Bow Tr. could use shoulder lane or add new lane and have two exit lanes to Bow Tr.
- Shift access from Bow Tr. S.W. to northbound Crowchild Tr. to the right vs. left
- Widen Bow River bridge and add extra through lane



South Round 2 – Table 1 Map E

- Add second level on bridge starting approximately at Sunalta School and ending connecting back to one level around Memorial Dr.
 - **Constraints** – two levels currently where Memorial Dr. crosses over and under Crowchild Tr.



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- *No feedback received.*

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- Would like to have left turn vehicle activated light on Crowchild north onto 5 Ave. west

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- *No feedback received.*

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x10	x2			
• Project team's response to my questions	x11	x1			
• Opportunity to provide my input	x12				
• Opportunity to hear others' input	x12				
• Session location	x10	x2			
• Session time	x9	x1			

2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

- Kept us moving forward
- Staff listened well and tried to accommodate. Outlined impacts of suggestions
- Had no interest in the other sections
- Informal, can hear other issues, ability for all to talk
- Was much more informative than I expected!
- My ideas were received very positively!
- Like: short, easy to work into my day
- We felt heard – thank you!
- Good!
- Clear. Very valuable information. Open to ideas. Supportive.



3. Which section of the corridor is your organization located in?

- North – x5 (between University Dr. and 24 Ave. N.W.)
- Central – x4
- South Central – x1
- South – x2

4. What are the main reasons you use Crowchild Trail?

- To commute to and from work or school. – x7
- To visit recreation facilities, shopping centres, or to visit friends and family. – x5
- I don't use Crowchild Trail. – x0
- Other – x6:
 - Owner of Building;
 - Have a business at Crowchild Tr. and 5 Ave. Carrington Maguire's Building;
 - Ten Thousand Villages as a business;
 - Travel to Ten Thousand Villages for volunteer work as business;
 - I work in Motel Village;
 - Work off Crowchild

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x3
- Online discussion – x1
- In-person session – x10
- Idea board – x1
- Walking tour – x1
- Bus tour – x0
- Other – x0
- I have not participated in the study prior to this session. – x1

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x5
- Community newsletter – x0
- Community road signs – x0
- Project email – x6
- Social media – Facebook, Twitter – x0
- On TV – Report to Calgarians – x0
- Word of mouth – x0
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x1
- Other, please specify: From other staff representing Ten Thousand Villages; email – x1

Do you have any other comments about the project or the engagement process?

- Our major concern is access to our locations traveling north on Crowchild and turning left and south on Crowchild and turning right on 5 Ave.
- Other invitee was unable to attend so I came
- Was interesting
- Well done!



Crowchild Trail Study

Adjacent Resident Idea Workshop Summary November 3, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held with residents immediately adjacent to Crowchild Tr. (within one block) on Tuesday, Nov. 3, 2015 from 6:00 p.m. to 8:30 p.m. at the Hillhurst United Church (1227 Kensington Close N.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 35 participants attended the session distributed across 7 table discussions in round one and 6 table discussion in round two.

The following members of the project team were also in attendance at the session:

Project Team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Peggy Chan, City of Calgary, Communications Lead
- Andrea Sichewski, City of Calgary, Communications Advisor
- Kirsty Neill, City of Calgary, Engagement Advisor
- Asif Kurji, City of Calgary, Transit Advisor
- Misty Sklar, City of Calgary, Planning Advisor
- Neil MacDonald, City of Calgary, Planning Advisor
- Chris Delanoy, ISL Engineering and Land Services, Consultant Project Manager
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Jana Sinclair, Russell Public Relations, Consultant Engagement Lead
- Erin Russell, Russell Public Relations, Consultant and Table Facilitator
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator
- Courtney Laurence, ISL Engineering and Land Services, Consultant and Table Facilitator



Table Facilitators

- Jolene Ondrik, Russell Public Relations, Table Note-taker
- Morgan McLeod, ISL Engineering and Land Services, Consultant Table Note-taker
- Mario Prezelj, ISL Engineering and Land Services, Consultant Technical Facilitator
- Dominic Cheng, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jack Mason, ISL Engineering and Land Services, Consultant Technical Facilitator
- Andrew Vandertol, Stantec, Consultant Technical Facilitator
- Ryan Martinson, Stantec, Consultant Technical Facilitator
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker
- Tori Wright, City of Calgary, Table Facilitator
- Kyle Marr, City of Calgary, Table Facilitator
- Bradley Linn, City of Calgary, Table Facilitator
- Heather Chapple, City of Calgary, Table Facilitator
- Cassie Brannigan, City of Calgary, Table Note-taker

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail study area that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - Some participants explored ideas to widen Crowchild Tr. to increase the number of through lanes for traffic as well as ideas that would make improvements without widening the existing corridor.
 - Removing the lights at the four intersections in the study area (Kensington Rd., 5 Ave., 23 Ave. and 24 Ave.) to help improve traffic flow was also raised and ideas to trench intersections similar to Glenmore Tr. were also explored
- In the **North Section**, access points to Motel Village were discussed. A common idea raised involved removing access to Motel Village from Crowchild Tr. and redirect traffic to 16 Ave. for access instead. Implementing a full access interchange at the Crowchild Tr./16 Ave./University Dr./13 Ave. intersections was also explored. In addition, the pedestrian environment around Motel Village and connections to it, were raised as areas that could be improved.



- In the **Central Section**, different options at the Kensington Rd. and 5 Ave. intersections that would provide access to Crowchild Tr. and improve traffic flow while maintaining the connectivity across were discussed. In addition, improvements to the Memorial Dr./19 St. intersection was an idea raised as a way to create another entrance into West Hillhurst and remove some traffic from Crowchild Tr.
- In the **South Section**, improving the Bow Tr./Crowchild Tr. access and connection to Memorial Dr. was suggested as a way to improve the movement across the river and reduce problems associated with merging across lanes. In addition, options to bring traffic directly off the Crowchild Tr. bridge into the West Village area were explored.

For a more detailed summary of the input that was provided, please see the Idea Workshop Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Widen Crowchild Tr. to add more lanes to handle through traffic
<ul style="list-style-type: none"> • Benefits – improves traffic flow • Impacts – adjacent homes and businesses; noise; not community focused • Constraints – property acquisition; topography
Work within existing corridor limits
<ul style="list-style-type: none"> • Benefits – doesn't require property acquisition • Constraints – some properties are built-out directly to edge of the right of way
Remove lights at all four intersections
<ul style="list-style-type: none"> • Benefits – improve free flow • Impacts – reduces access; increases congestion in neighbourhoods • Constraints – will need to provide access into/out of neighbourhoods
Remove access to Motel Village from Crowchild Tr. (replace with 16 Ave. access)
<ul style="list-style-type: none"> • Benefits – eliminates uncontrolled intersections from Crowchild Tr. • Impacts – increased neighbourhood in traffic around 16 Ave. • Constraints – access points need to be improved to handle capacity
Improve pedestrian environment around Motel Village/University Dr.
<ul style="list-style-type: none"> • Benefits – better connectivity to surrounding neighbourhoods; increased safety; aesthetically pleasing • Constraints – physical space for improvements
Overpass/underpass at Kensington Rd. and 5 Ave.
<ul style="list-style-type: none"> • Benefits – improved flow; maintains access across Crowchild Tr. • Impacts – noise; visual; property impacts • Constraints – may have to purchase property; cost; possible flooding; need to improve bridge as well
Improve access to West Hillhurst at Memorial Dr. and 19 St.
<ul style="list-style-type: none"> • Benefits – redirects traffic from Crowchild Tr.; low cost • Impacts – increases neighbourhood traffic on 19 St. in West Hillhurst • Constraints – will have to add lights onto Memorial Dr.
Bring traffic directly into West Village from Crowchild Tr. bridge
<ul style="list-style-type: none"> • Benefits – improves access into West Village from the north • Impacts – visual; noise; property • Constraints – topography; Bow River

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

Ideas Explored

- Increase Crowchild Tr. speed to 100 km/hr.
- Bike lane on University Dr. – from 16 Ave. to 24 Ave.
- Crowchild Tr. and 24 Ave. – long red light for 24 Ave.
- Make area along east Crowchild Tr. noise wall more walkable from 24 Ave. south to 16 Ave. and east to 16 St.
- Expand visually appealing noise wall (brighter) from Crowchild to 20A St. (Along 16 Ave.)
- Make Crowchild Tr. to University Dr. more walkable (along 16 Ave., across McMahon Stadium to University Dr.)
- Rush hour traffic on Crowchild Tr. is bad, but it is also hard to get onto Crowchild Tr. during rush hour (turn on to Crowchild Tr.); traffic bad 3 blocks from Crowchild Tr.
- Widening Crowchild Tr.
 - Q: Would you expand east into space between University Dr./McMahon or expand west? It would have less impact on residential
 - A: City does have an easement to the west on McMahon and to 13 Ave. but south there is more city property on the east side
 - **Constraints** – hill is narrow along Crowchild Tr. and University Dr.
 - Q: Will you buy residents on the east side out?
 - Q: What is the impact to property value with the uncertainty?
- 19 St. to Motel Village (all Motel Village) should be more walkable with trees/pubs/seating etc. Including McDonalds/Denny's etc. Poor walking especially to University of Calgary/McMahon Stadium
- Bike lane along University Dr. and also 24 Ave.
- Hard to get out of community during rush hour
- Corridor aesthetics – make the corridor look good so that it reduces the impact of widening or other traffic solutions (greenspaces/trees)
- 24 St. and 16 Ave. – pedestrians cut across because sound wall ends – to McMahon Stadium, etc. instead of going under using the pedestrian underpass
- Barriers – should have some amenities/appeal to community – i.e. bike lanes along or trees – so that it isn't a stark wall – useable greenspace
- Banff Trail Area Redevelopment Plan – if introducing offices, consider parking – lots of parking issues, including service road parking issues
- 16 Ave. and Crowchild Tr. – improve Crowchild so it is the more attractive route instead of cut-through the community – i.e. 16 Ave. to Banff Tr. past Nick's restaurant to get to Crowchild northbound

Map Highlights

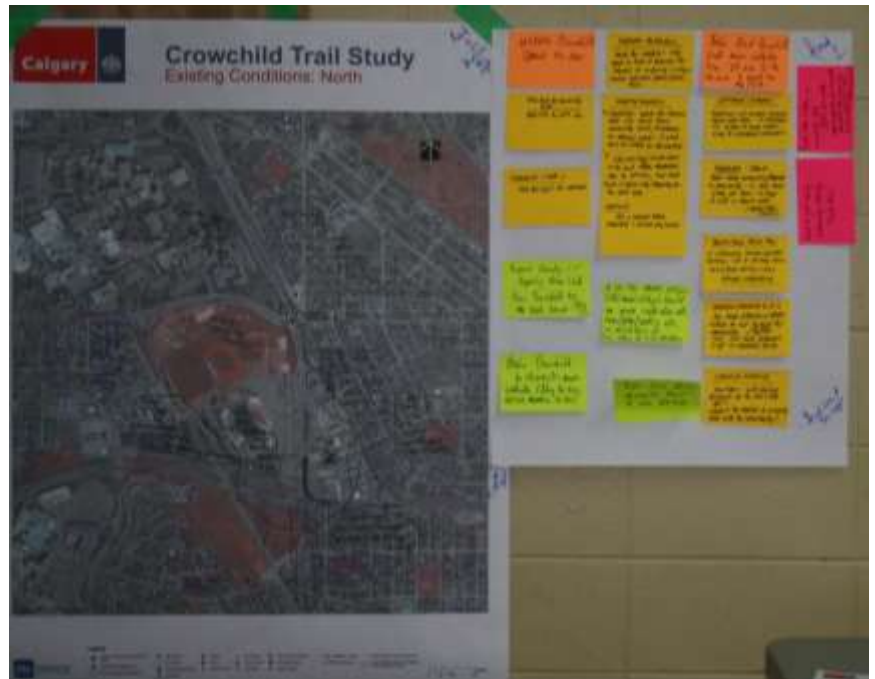
North Round 1 – Table 1 Map A

- Make Motel Village a desirable location
- Improve pedestrian access on east side of the LRT tracks
- Better pub on 16 Ave. than Tipperary's
- Useful, enjoyable and functional green buffer between Crowchild Tr. and the community
 - Look at west side of Crowchild Tr. south of University
- Make 16 Ave. more walkable
- Uncontrolled left turn from southbound Crowchild to Banff Trail – not great – relocate to 23 Ave. traffic light

North Round 1 – Table 1 Map B

- Bike lane along University Dr. and 24 Ave.
- Long red light for 24 Ave. traffic at Crowchild Tr.

- Improve Crowchild Tr. so that people do not cut through the community
- Banff Trail roadway is narrow
- Easement on east side of McMahon Stadium property to expand Crowchild Tr.
- Pedestrians cut across 16 Ave. at Motel Village
- Narrow road (24 St. south of 16 Ave.) for garbage pickup (because of slope – garbage trucks can't use)
 - No parking zone should be expanded to the bend on the road (24 St.)
- Extend the sound wall along Crowchild Tr. and 16 Ave.
- Opportunity for park space for the City owned property at southeast corner of 16 Ave. and Crowchild Tr. if Crowchild Tr. expanded to the west
- Barriers should be aesthetically pleasing and provide a buffer between houses and Crowchild Tr.
- Parking needs to be provided for offices in Banff Trail Station Area Redevelopment Plan in Motel Village
- New noise wall on Banff Tr.
- Update noise wall on 16 Ave.
- Indirect and not intuitive access to and from Crowchild Tr. to University Dr.



North Round 2 – Table 1

Ideas Explored

- Realign Crowchild Tr., push east (24 Ave.)
 - **Benefits** – gets away from LRT; pushes east; gets away from grading issue
 - **Impacts** – possibly the Church; cuts into parking of Latter Day Saints at University Dr. N.W.
- Different options at 24 Ave. and Crowchild Tr.
 - **Constraints** – LRT is tunneled, Church on west side
- Can we remove lights on 24 Ave. and Crowchild and place 24 Ave. over
 - **Constraints** – LRT is already under
 - **Impacts** – residents on east side
- Could we do the whole thing (improve) without widening? Just addressing intersections (24 Ave./16 Ave.)?
- Banff Tr. between 24 Ave. and 16 Ave. – too narrow; bottleneck
- Transit/park-n-ride
 - How do we get people not to drive on Crowchild Tr. south of 16 Ave. Park-n-ride as one option?
 - Better transit? Parking at McMahon Stadium?
- Widening
 - Can we solve issues without taking out houses? Against acquisition for widening
- Would lane reversal make sense in any sections?
- Get rid of University Dr. to Crowchild section
- Crowchild lane reversal a possibility?
- Re-imagine the University Dr. and Crowchild interchange
 - Push it north (the bridge)
- Don't want to remove homes

- Preserve community
 - Opportunity if CalgaryNEXT happens and McMahon is redeveloped – parking structure to promote transit ridership
- Struggle with idea of widening – because people will use it – need to be community focused
- Maintain and modernize pedestrian crossing (14 Ave. and 16 Ave.)
- Pedestrian crossings – can they be green/wider (16 Ave. and 14 Ave.)
- McMahon/Foothills – University Dr. is wastelands – very poor pedestrian, poor walking and cycling
- How to improve 24 Ave. interchange?
 - Bridge? South lane around Mormon Church?
- Walkability/streetscape
 - Motel Village area and McMahon/Foothills Athletic Park
 - Not very walkable currently
- West Village – will add to volumes on Crowchild?

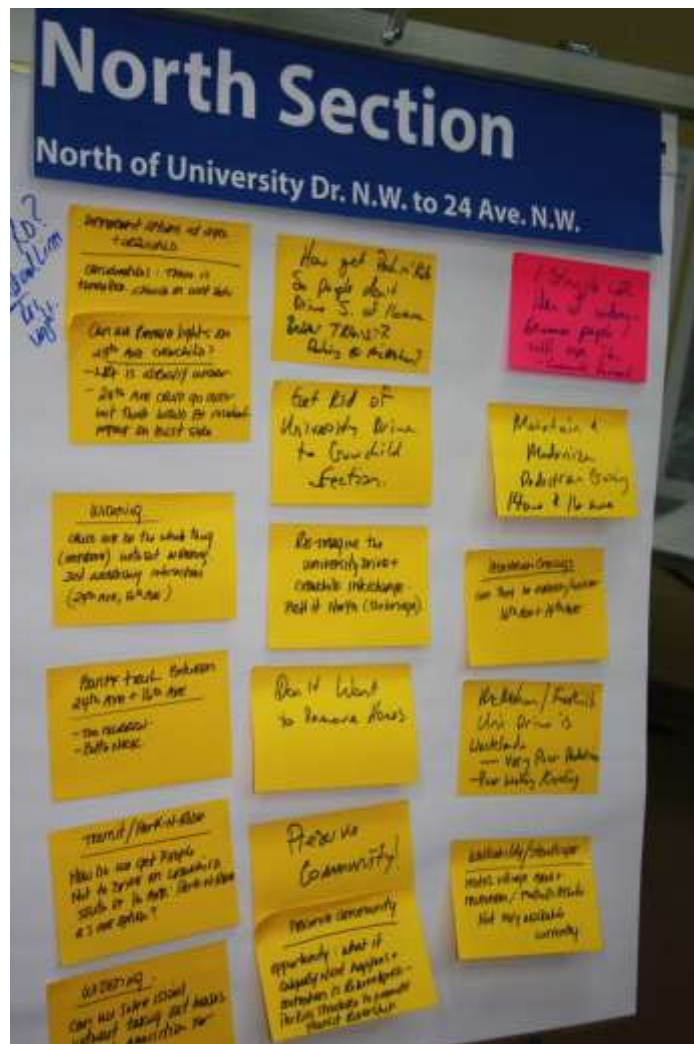
Map Highlights

North Round 2 – Table 1 Map C

- 24 Ave./Crowchild Tr. – new changes recently made are confusing
 - Traffic backs up on east side of Crowchild Tr. down 24 Ave.
 - Worse bottleneck
 - How to put 24 Ave. over Crowchild Tr. or vice versa
 - Need to learn to merge northbound
- Make best use of what we have
- Banff Tr. is bad
- Put Crowchild Tr. underneath Motel Village/McMahon Stadium/park area
- 16 Ave. south of Motel Village – improve sound wall and fill in gaps like Rosemount; brighter sound wall
- No widening of Crowchild Tr.
- Bring pedestrian overpass up to modern standards or like wildlife crossings in Banff
 - Maintain and modernize pedestrian crossings at 14 Ave. and 16 Ave. across Crowchild Tr.
- Get rid of University Dr. exit to alleviate bottleneck

North Round 2 – Table 1 Map D

- Separate northbound and southbound carriageways
 - 2 signals
 - Possible first stage of interchange
 - Opportunity for continuous flow treatment for eastbound lane





Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- Lights at Crowchild Tr. And Kensington Rd. – want a 4-way stop
 - Difficult to change lanes
 - Arrow too short – 5 to 6 vehicles per light
 - Can be done right now
- Kensington Rd. and 5 Ave. – sink a couple lanes; underpass at both 5 Ave. and Kensington Rd.
 - Done on east coast all the time
 - Seems feasible
 - People complain about the congestion
 - Seems there is enough room to do it
- Issues
 - Bad weather
 - Accidents
- Not going to be a Ring Road – this is the middle of Calgary
- Not okay to take out current city-owned land
- Q: Is the city looking at widening the corridor?
- Q: What is the city's plan?
- Going to get busier
 - What choice is there other than widening the road? (widening not the issue, it is a traffic flow issue)
 - Is city going to change the traffic flow?
- Discussion of 2012 study and 1978 study
- Traffic jam at Kensington Rd. – flyover or underpass at this location
- Kensington Rd. – need good access to Crowchild Tr.
- Close access at 5 Ave. from Crowchild Tr.
- Accidents on bridge every couple days – that closes entire bridge
- Join Sarcee south to Shaganappi
- Looking for compact solution
 - Washington, DC; Boston
- Don't want large "standard" "Calgary-style" interchange at Crowchild Tr. and 5 Ave.
- Crowchild Tr. and 5 Ave. interchange
 - **Constraints** – awkward to build; disruptive to traffic; this will not be cheap. We are past the point of cheap
- Crowchild Tr. and Kensington Rd.
 - **Impacts** – loss of property an issue
- Unreasonable expectation – to travel Crowchild Tr. at 80km/hr
- Backup going north starts south of downtown area
 - Traffic "going through" downtown
- Closing 5 Ave.
 - **Impacts** – forces that traffic to Kensington Rd.
 - Love the idea of a flyover there
- 4 way stop at Kensington Rd. and Crowchild Tr.
 - Short term idea
 - Many would go for it with volume what it is
- Would love a minute by minute heat map of traffic backup
- Grade separation at Kensington Rd. and Crowchild Tr.
 - Multiple choices of how to execute flyover or overpass
 - **Impacts** – creates wall between east and west; flood?
 - **Benefits** – improve traffic flow north/south
- Connect Sarcee South to Shaganappi

- **Constraints** – Edworthy Park users (pushback)
- **Benefits** – creates alternative for emergency services
- **Impacts** – creates more traffic on Shaganappi
- Build interchange at Sarcee and Bow Tr.
- Debate over statistic of 15% going past downtown
 - Skeptical

Ideas Explored

- 4 way stop east/west at Crowchild Tr. and Kensington Rd. – short term
 - **Impacts** – more block up
- Grade separation Crowchild Tr. and Kensington Rd. (one road over the other)
 - **Benefits** – free flow traffic on Crowchild Tr. and Kensington Rd.
 - **Constraints** – storm problem utilities, flooding issues; deal with the fact that there will be water
 - **Impacts** – separation of east/west
- Connecting Sarcee to Shaganappi, minimize change to Crowchild Tr.
 - **Benefits** – possible connection to employment centers; keeps traffic off Crowchild, alternative; may allow a do nothing option on Crowchild Tr.
 - **Impacts** – impacts Edworthy Park; more traffic on Shaganappi
- Closing 5 Ave.
 - **Impacts** – Traffic would need to go somewhere else i.e. Kensington Rd.
- Underpass – compact style Washington DC style (14 St. and John Laurie Blvd.) – not Calgary standard
 - **Impacts** – costly; potential loss of property
 - **Constraints** – awkward to build; disruption to traffic during construction
- Lights at Crowchild Tr. and Kensington Rd.
 - 4 way stop
 - East/west
 - Difficult to get into right lane
- Underpass at 5 Ave./Kensington Rd.
- Not free flow traffic is unrealistic
- Kensington Rd./Crowchild intersection is busy in the morning
- Significant accidents on Crowchild Tr. – join Sarcee south to Shaganappi
- Traffic management – would like to see min/min traffic flow
- Process – think beyond Crowchild Tr. – outside box



Map Highlights

Central Round 1 – Table 1 Map A

- Underpass for core lanes at Crowchild Tr. and 5 Ave.
- Close 5 Ave. intersection
- 4-way stop (east-west) at Crowchild Tr. and Kensington Rd.
- Grade separation at Crowchild Tr. and Kensington Rd.
- Shaganappi – add new river crossing

Central Round 1 – Table 2

Overall Table Discussion

- No traffic lights or reduce traffic lights
- Emphasize transit
- Work within the corridor – no widening
- Restrict crossing/limit access
- No need to access businesses off Crowchild Tr.
- Separation of local and through traffic
- Fix northbound Crowchild Tr. to Memorial Dr. westbound – hard to change lanes
- Access from westbound Memorial Dr. to Crowchild Tr. is circuitous
- No need for northbound left at University Dr.
- Getting across 5 Ave. as a pedestrian is a hazard
- Solve area over the river before 5 Ave. and Kensington Rd.
- Reduce noise/active technology
- Widen to accommodate for 3 lanes
- Direct road for access to McMahon stadium
- Top 4 ideas
 - Bridge at Crowchild
 - Transit
 - Causeway
 - Stay within corridor
- Ensure property value is maintained
- Maintain access across
- Willing to give up access to Crowchild at 5 Ave., keep 16 Ave. and Kensington Rd.
- Sink road and elevate access
- Set back stairs on east side of pedestrian bridge between 5 Ave. and 16 Ave.
- Desire to work within the corridor
- Concerns with digging into the river valley - cost unknown
- 5 Ave. flyover would lessen cut through traffic
- Consider permitted parking for Lions Park LRT

Ideas Explored

- Causeway – 16 Ave. to river, keep Kensington Rd. and 16 Ave. for vehicle access, 5 Ave. is for pedestrian and cyclists
- Focus more on transit
- Consider bus along Crowchild Tr.
- Reduce traffic lights
- Working within corridor, not widening
- Noise on Crowchild Tr. – use technology to reduce
- More bridges and more lanes
- No traffic lights
- Limiting crossing Crowchild during peak traffic

Map Highlights

Central Round 1 – Table 2 Map B

- Causeway (lower Crowchild Tr.) from 16 Ave. to river. Keep Kensington and 16 Ave. (like Glenmore); work within corridor
 - **Constraints** – river valley water underground; no park n' ride station within downtown; expensive; bus routes (72, 73, 9)

- **Impacts** – traffic – where does it go?; properties along ramps; emergency vehicles; does not destroy community sense and property value; visitor education; Lions Village
- **Benefits** – noise is less when lowering; less traffic on 5 Ave.; bus route
- **Trade-offs** – traffic goes through community to get access
- LRT parking and permit parking near Lions Park LRT Station
- Keep 16 Ave. access
- 5 Ave. is for pedestrians and cyclists
- Stairs behind the sound wall on Crowchild Tr. north of 9 Ave.
- Maintain crossing access and inter community connectivity
- Keep Kensington Rd. access
- Crossing at 5 Ave. only, no access to Crowchild Tr.
 - **Impacts** – bus diverted

Central Round 1 – Table 2 Map C

- Noise abatement – what tech is available/in-use
- New river crossing east of Crowchild Tr.
- 10 St. bridge improvements
- Direct access to McMahon Stadium
- Need to remove turning lane on to University Dr.
 - Will this access be needed with 16 Ave. interchange upgrades?
- Lane balance
- Crossing 5 Ave. improvements for kids
- Direct business access – modifications?
- Make Kensington Rd. way more favourable.
- Widen bridge and bridge crossing for downtown access
- Straighten out to merge to northbound Crowchild from westbound Memorial Dr



Central Round 1 – Table 3

Overall Table Discussion

- Do not want the road widened
- Double Decker – similar to Glenmore Tr. – upper level roadway lane
 - **Impacts** – cost; long time for construction
 - **Benefits** – gives additional access
 - Free flowing fast moving traffic would be on the lower level
- Sound barriers
- Get rid of the lights at Crowchild Tr. and Kensington Rd.
- Larger bridge from across Bow River
 - Increase number of lanes
- Improve entrance into community at 19 St. and Memorial Dr.
- Keep the lights at Crowchild Tr. and Kensington Rd. – roundabout won't work
- Keep the lights at Crowchild and 5 Ave.
- Concern is access to the Hospital
- Overpass at Crowchild Tr. and 5 Ave. with access

- Overpass at Crowchild Tr. and Kensington Rd. with access
- Bottleneck at University Dr, - confusing and lanes drop off
- Access for pedestrians across Crowchild Tr. particularly at Kensington Rd.
- Connection of Kensington Rd. and Lions Village to parks north of Memorial Dr.
- Tunnel (multiple options)
 - Option 1: Ave would have bridges over Crowchild Tr.
 - Option 2: Double decker 2 lanes along all of Crowchild Tr.
 - Option 3: Double-decker. Close lane – only 2 lanes, use one lane for tunnel construction
 - **Impacts** – boring machine requires a lane be taken on one side of Crowchild to create room for tunnel construction.
- 5 Ave. Overpass
 - Need to be approximately 8m higher than level below
 - **Benefits** – overpass increases the ground level – re: flood plain
 - **Impacts** – physical impact to all houses on 5 Ave.; visual impact of higher road for residents; heritage building on 5 Ave.
- Access from Memorial Dr. to Crowchild Tr.
 - No access or right in right out
- Improve intersection at Memorial Dr. and 19 St.
- Improve intersection at Memorial Dr. and 14 St. – add lights
- Traffic calming along 19 St.
 - **Benefits** – reduce the use of residential roads
- Light at Kensington Rd. and Crowchild Tr. in order to turn left
 - **Benefits** – better access
- Do not like closing off Crowchild from 5 Ave./Kensington Rd.
 - **Impacts** – Transit users
- 2 lanes create bottleneck – increase to 3 lanes
- 5 Ave. under Crowchild Tr.
 - **Impacts** – adjacent properties; businesses

Ideas Explored

- Tunnel without community access
 - **Benefits** – don't impact as many properties
 - **Impacts** – construction; property access
- 5 Ave. over Crowchild Tr.
 - **Benefits** – above flood plain; access across
 - **Impacts** – visual; physical property impacts; noise; access
- Overpass at 5 Ave. or Kensington Rd.
 - **Benefits** – access
 - **Impacts** – noise; property impacts
- Tunnel similar to Glenmore Tr.
 - Double-decker
 - **Benefits** – provides for through traffic and local traffic
- Tunnel under Bow River to 24 Ave.
 - **Benefits** – free flow; local access
 - **Constraints** – flooding (potentially?)
 - **Impacts** – visual/noise; construction
- Removing lights at 5 Ave. and Kensington Rd.
 - **Benefits** – free flow
 - **Trade-offs** – access to Hospital
 - **Impacts** – congestion in neighbourhoods (increased traffic in adjacent communities)
- No access or right in/right out – close access at 5 Ave. and Kensington Rd.

- **Impacts** – lack of bus access; community traffic; increased commute time for local residents; capacity of local streets to handle traffic; safety of school zones with increased traffic
- **Benefits** – traffic calming
- Improve access at 19 St. and 14 St. from Memorial Dr.
- Shift flow to Shaganappi
 - **Benefits** – Removes traffic from Crowchild Tr.; reduces congestion
- University Dr. creates bottleneck – need to improve/widen
 - **Constraints** – Apartment building (Suncourt Place)
 - University Dr. needs more room
- Crowchild Tr. over 5 Ave.
 - **Impacts** – visual, physical space for retaining walls and ramps
- Pedestrian bridge crossing Crowchild Tr.
 - **Benefits** – access across Crowchild Tr. at West Hillhurst; improved safety

Map Highlights

Central Round 1 – Table 3 Map D

- Tunnel example with no access along Crowchild
- Tunnel example with some access along Crowchild
- Example of detour road that may be needed to tunnel Crowchild
- Tunnel would require boring and open cut



Central Round 1 – Table 3 Map E

- There should be an entrance at Memorial and 19 St.
- Direct traffic from Crowchild Tr. to Memorial Dr. to Shaganappi Tr.
- Remove lane drops on Crowchild before Bow River bridge
- Have access across 5 Ave.
 - Keep the lights
 - Remove the lights
 - Overpass with access
- 2 levels of road on Crowchild – one with free flow, one with access from Bow River to 24 Ave.
- Access to the hospital through St Andrews Heights
- Crowchild goes down to two lanes at University Dr.

Central Round 1 – Table 3 Map F

- No access or right-in/right-out on Kensington Rd.
- More/better access on Parkdale Blvd.
- Overpass on 5 Ave. or Kensington Rd.
 - **Benefits** – access
 - **Impacts** – noise; property
- More access/better access lights at Memorial Dr. and 19 St.
- 2 options:
 - Overpass at Crowchild Tr. and Kensington Rd./5 Ave.
 - No access or right-in, right-out, but more access along Memorial Dr.
- More lanes on Crowchild

Central Round 1 – Table 4

Overall Table Discussion

- Q: Why was the 2012 plan shelved?
- Q: What needs to be done?
- 3 lanes to the north, 3 lanes to the south with interchanges – should the central section look the same?
- Q: How much vehicle volume needs to/can be accommodated?
- Q: What are interchange options and what are the footprints?
 - Property acquisition
- No access overpass at 5 Ave.
- Diamond (right) interchange at Kensington Rd.
 - **Impacts** – all residents have to use Kensington Rd. for access to Crowchild Tr.; more speeding in communities; more noise
- Concerns about limited access to St. Andrew's Heights and added volume from new developments
- Keep greenspace by University Dr. entrance – barrier for traffic
- Concerns about short cutting through University Dr. and 13 Ave.
- Pedestrian bridge (existing) by University Dr.
 - Safety and security concerns
 - Want nature/greenspace pedestrian bridges
- Fix Memorial Dr. and Crowchild Tr. interchange
- Lack of bike connections from Crowchild Tr. to Bow River
 - Want direct access (tunnel?) to lower Crowchild Tr. pedestrian bridge from Kensington Rd.
- Potential diamond interchange at Memorial Dr. – no stopping along Crowchild Tr. and reclaim some greenspace/park space

Ideas Explored

- Make 3 continuous lanes
- Tunnel
 - **Trade-offs** – construction period
- River access – add a lane to each bridge and include better cyclist access to bike bridge for communities (north–south)
 - **Benefits** – improve traffic flow; access to bike bridge
 - **Constraints** – exits along bridge, weaving does not make sense – some of the exits seem redundant
 - **Impacts** – shorter commute time for cyclists; would potentially need to reclaim greenspace under the bridge. Lights on Memorial Dr. to keep Crowchild Tr. moving
- Expand pedestrian bridge at 9 Ave. across Crowchild Tr. – widen to street width and make a green and park like access
 - **Constraints** – retaining wall along Crowchild and 9 Ave.
 - **Benefits** – beautification; pedestrian/cyclist access
- Pedestrian and road overpass (flyover) at 5 Ave.
 - **Benefits** – good for pedestrians and cyclists; smallest footprint
 - **Constraints** – would need to acquire property
 - **Impacts** – noise of traffic; volume of cars in neighbourhood; speeding in neighbourhood; could only go across 5 Ave., not access Crowchild Tr.; cars would be driving through neighbourhoods; if you lose 5 Ave. access, everyone will pile up at Kensington Rd.
 - **Trade-offs** – traffic flow vs. home/business loss
- University Dr. and 13 Ave. maintain southbound access and green space
 - **Impacts** – high number of new developments planned for the area, there will be many new residents trying to access Crowchild Tr.; 13 Ave. could become a very busy short cut option
 - **Trade-offs** – to increase access for the area around McMahon Stadium, chance of loss of green space
- What does the bookend look like (north and south sections of the corridor)?
- Does the middle (central section – West Hillhurst) need to look like the north/south sections?



Map Highlights

Central Round 1 – Table 4 Map G

- Pedestrian bridge crossing Crowchild Tr. at Suncourt Place is small
- Drivers are shortcutting on 13 Ave. to continue southbound on Crowchild Tr.
- St Andrew Heights – limited access to the west
- Great green space on 24 St. and Hamilton St. in St. Andrew's Heights – keep!
- Keep access from St. Andrew's Heights to Crowchild Tr.
- Pedestrian bridge at 9 Ave. is a "goofy" bridge (not safe feeling)
- Maintain retaining wall on the west side of Crowchild Tr. on the south end of the green space (that backs onto Hamilton Street.)
- Keep the existing line/boundary of Crowchild Tr. between 9 Ave. south to 5 Ave.
- Good walk and cycle connection on 5 Ave.
- With free flow does the sound levels change on 5 Ave.?
- Will keeping lights green at Kensington Rd. and 5 Ave. intersections do the trick?
- Add new river crossing east of current Bow River bridge to connect to Memorial Dr. and add new parks on either side of the south side entrance to the bridge
- Fix the weave on Crowchild Tr. between the bridge and Memorial Dr.
- What about a Crowchild Tr./33 Ave. interchange with Crowchild Tr. free flow and Memorial Dr. traffic stopping; gain park space
- One pedestrian access to the river from the north is at 27 St. and the second is at 21 St. – spread out
 - Make pedestrian/bike connection from Kensington Rd. to Bow River bridge
- Make 3 continuous lanes on Crowchild Tr.

Central Round 2 – Table 1

Overall Table Discussion

- Traffic lights are main problem
- City report – says 17 minutes from 24 Ave. to Glenmore Tr.
 - Don't believe this stat
 - Can be 30-60 minutes if there is an accident or bad weather
- Remove lights – all? / one? / two? (Kensington Rd., 5 Ave., 23 Ave., 24 Ave.)
 - Similar capacities, similar congestion at each
- Slow down traffic – "slow living"
 - Make one way, no crossing
- Many crossings, many bridges
 - Drive slowly – enjoy the city
- Reduce volume
 - Improve access on Memorial Dr. and 19 St.
- Take the lights out – may be painful but they are flawed
 - Grade separation where needed
- Major flyover – discussed at past engagement
- 15% of traffic going straight through north-south – question this data
- Who is complaining about Crowchild Tr.? There is no money to make changes
 - What is the problem? Frustration crossing bridge to north side of river
 - Not a priority of the City
- Traffic light removal
 - Currently high speed then have to come to stop
 - **Impacts** – increased speed with no signals (90 km, 100 km); business impacts; harder to cross west/east
- Increase access to Memorial Dr. and 19 St.
 - Good idea – a northbound solution (not a southbound solution)
 - **Benefits** – low cost

- **Impacts** – more traffic on 19 St.– upset area neighbours
- Increase bridges/slow traffic
 - Enhanced safety
 - Heard City has environment concern with increased bridges
 - Slowing traffic is low cost solution – slow, but never stop
 - A cultural thing – not Calgary style. More like Madrid. An attitude
- Toll on Crowchild Tr.
 - **Benefits** – encourage car pooling
- Separation of grade at Kensington Rd. and 5 Ave.
 - Won't be successful
 - **Impacts** – separates communities
- Remove lights at 5 Ave. and rebuild Kensington Rd. intersection
- Need easier access at Memorial Dr. and 16 Ave.
- Memorial Dr. westbound to Crowchild Tr. south is challenging – not “a civilized” turn
 - Awkward
 - Need longer merge
- You can get into Scarborough, but can't get out – closed off – not good example

Ideas Explored

- Exit Memorial Dr. westbound to Crowchild Tr. south make use of ramp to Memorial Dr. east
 - **Constraints** – not sure about grade issues; didn't have time to discuss but would alleviate troubles at Kensington Rd. and Crowchild Tr. – awkward intersection
- Grade separation 5 Ave. and Kensington Rd.
 - **Benefits** – accelerate speed; more time needs to focus on Kensington; how are people getting onto Kensington and why; engineer a solution easier fix
 - **Impacts** – upset neighbors; complicated
 - **Constraints** – makes no sense unless you also do the bridge
- Additional bridge over river
- Traffic light removal (or option to remove light at 5 Ave. with bigger engineered solution at Kensington Rd.)
 - **Benefits** – reduce travel times
 - **Impacts** – reroute traffic crossing Crowchild Tr.; doesn't solve problem if you don't deal with bridges; isolates communities; congestion into communities; impacts businesses
 - **Constraints** – would you be able to get speed limits of 80 km/hr?
 - **Trade-offs** – improved flow at that section to have to wait at bridge
- Slow down traffic, more bridges/crossings (Spain/Madrid), enjoyable
 - **Benefits** – safety; interest in local business; less impact on residents; continuous harmonious traffic
 - **Impacts** – additional bridges
 - **Constraints** – not an easy sell; cultural
 - **Trade-offs** – doesn't solve problem
- Toll on Crowchild Tr.
 - **Benefits** – reduce traffic dramatically; encourage car pool
- HOV
 - Not a priority
- Reduce volume, improve access Memorial Dr. and 19 St., make it easier flow onto Memorial Dr. and 16 Ave.
 - **Benefits** – take Crowchild Tr. traffic away by making easier option into other communities; low cost
 - **Impacts** – northbound solution doesn't solve S/B; more traffic on 19 St.
- Eliminate lights – overpass/underpass; pedestrian overpass
 - **Benefits** – eliminate lights; improved flow
 - **Impacts** – noise from overpasses
 - **Constraints** – flooding in underpasses; space for off ramps
- Eliminate lights – make 19 St. a main entrance to neighbourhood
 - **Benefits** – lights are gridlock so it will improve traffic flow



- **Impacts** – there appears to be a lot of cars that exit Kensington
- **Constraints** – you would have to have a light at Memorial Dr. and 19 St.
- Bike access across to Crowchild bridge
- 13 Ave. at Foothills Hospital access needs improvement
 - **Benefits** – access
- Protect green space at St. Andrews and Crowchild interface

Map Highlights

Central Round 2 – Table 1 Map H

- Encourage traffic away from Crowchild Tr.– north/south vs. east/west
- Signal for left turns at the corner of Memorial Dr. and 19 St.
- Bridge tolls on Crowchild Tr. bridge
- Ramp from Memorial Dr. overpass near bridge to Parkdale Blvd
- More river crossings
- Remove signals (grade separate) is awkward at the Kensington Rd and Crowchild Trail or hybrid remove lights bigger solution in Kensington or vice versa.
- Bridge over river row trail
- More attention needed where traffic coming from minimize volume provide other options
- Major solution: Kensington and bridge and rest falls into place.
- HOV lane on Crowchild Tr.
- Toll on Crowchild Tr.
- Easier access onto Memorial Dr. and 16 Ave.
- Possible speeds and timing expectations – notification systems

Central Round 2 – Table 2

Overall Table Discussion

- Green space facing residents on both sides of corridor – to enhance pedestrian access. Mitigate pollution and noise
- Bike access on east side leading to Memorial Dr. pedestrian overpass
- Traffic circle at 5 Ave. and Kensington Rd.
- Overpass at 5 Ave. and Kensington Rd.
- 5 Ave. and Kensington Rd. as access over Crowchild only (over/under)
- Memorial Dr. interchange is underutilized because of Kensington Rd.
- Underpass preferred over overpass
- Curved walls over road for noise protection
- Bus and emergency vehicle lane or HOV lane
- Add a train line down Shaganappi over the river to Sarcee/Bow Tr.
- Be sure to coordinate with Calgary Next, West Village, redevelopment of McMahon
- Provide access from southbound Crowchild Tr. to West Village
- Roundabout with 2 levels
- Convert any available space to green space
- Need to develop master plan for Crowchild and the surrounding area
- When constructing the over/under, compress the through lanes and use the extra space to eliminate property impacts
- During construction, it may be required to detour traffic on Bow Tr. this is okay
- Preference for those who live in the community nearby is for no improvements
- Stay within the existing corridor
- 60 km/hr is as good as it will get and that's okay

Ideas Explored

- Most important to us not me....a community. The corridor has been established, work within



Map Highlights

Central Round 2 – Table 2 Map I

- Elevate Crowchild Tr. from Bow River to 24 Ave.; LRT as well
 - Reduce land needed
 - Cost
- Flyover access to CalgaryNEXT from Memorial Dr.
 - **Impacts** – water concerns; emergency services; people north on Crowchild Tr.; more for commuters?
 - **Benefits** – connecting neighbourhoods
- Rework the interchange to handle more traffic for Memorial Dr. to Crowchild Tr. access
- Roundabout at Kensington Rd.
 - 3 lane?
 - Upper level one direction, lower level opposite direction
 - Counter flow roundabout – over/under
 - Over or underpass with smaller footprint at Kensington Rd. and 5 Ave. – John Laurie Blvd. and 14 St. N.W. as an example
 - Do we need all options for access?
 - If it takes up too much space it's not good
- People are short cutting from Kensington Rd. through Bowness Rd.
- Greenspace along the corridor on both sides
 - Usable
 - Pathways linked to bike paths
 - Near and long term
 - Plants, trees, pollution, noise and visual
 - Would be okay with greenspace but not more pavement (green not road)
- 5 Ave. across Crowchild only – no access to Crowchild
 - EMS access?
- Bus and emergency lane-dedicated
- HOV lanes – encourage public transit
- Digging down
 - Drainage on road
 - Flood concerns
 - Mitigate water issues
- Entry points into neighbourhood from Memorial Dr. – expand
- LRT line to Shaganappi over river to Sarcee; meet with West LRT
- LRT to the hospital
- Preference to do nothing
- De-incentivize Crowchild Tr. as a major route
- Stay within the footprint
- Construction
 - Stoney Tr. across Bow River
 - 16 Ave. to 14 St.
 - Shortcutting
- Kensington Rd. under Crowchild Tr.
 - **Constraints** – river; noise wall that impacts homes
- Crowchild Tr. not a ring road
- Keep the speed 60 km/hr



South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

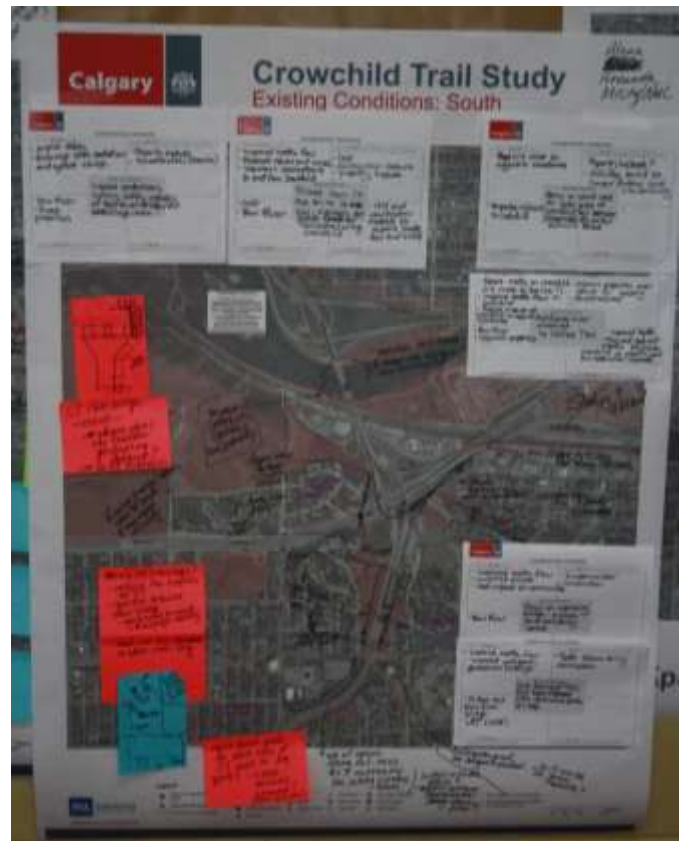
Overall Table Discussion

- Are the Calgary Flames stakeholders?
- West Village has an ASP/ARP in place. Study uses current planning document
- Major redevelopment needs to be considered, city is changing rapidly
- South area very much affected by Stadium redevelopment
- Work/consultation will change substantially within West Village
- West Village/Stadium will be overlaid and derail work today
- Historical school is important
- Calgary Flames need to be considered/need to see plans
- Pedestrian overpass would need to be done early on
- Noise control on Crowchild Tr. if road widened, noise will increase
- Sink road, not tunnel, to deal with noise
- Sinking road would really help
- Hide the cars
- Drop road and put pedestrian overpass
- Other neighbours can take traffic
- Engineers business to deal with cars
- Ramp to Bow Tr. would be steeper
- Northeast to southwest traffic flow - we need to help flow
- Straightening road would help on and off ramps
- People rent houses along proposed road widening area
- Straighten Crowchild mainline
- Traffic weaving/lane continuity is an issue
- Using park space is a trade off
- Bow Tr./Crowchild Tr. interchange worst mess for pedestrians in the city
- Hard to access Bow River from Scarboro
- Parks truck because can't access Bow River
- River access is very important
- North bound needs river access from Bow Tr.
- Fence on ramp to stop kids from jumping on it
- Really nice playground and fields are important to community
- Love 24 St. pedestrian bridge
- Park and walkability
- Cyclists need to be considered elsewhere in study area
- Access off Crowchild Tr. needs to be enhanced to support West Village. More than just off of Bow Tr.
- Grid system from downtown to be extended into West Village
- Retain multi-use pathway along river
- Much concern regarding Flames proposal
- More bridges across the river
 - Vehicle and people
 - Would facilitate movement
- The city is studying adding a lane to the Crowchild Tr. Bridge
- Traffic is only congested during rush hour
- Up to 20 minutes delay is okay
- Using license plate numbers to only allow access at certain time
- Tolls are not socially equitable
 - Poor cannot afford

- Chicago: parking stickers are sold to facilitate access to Downtown
 - Still have to pay for parking
- London: uses a zone system to control access
 - Certain times cost more
 - Access levy/border toll
 - Have non-residents pay for use for roads – must have permit
- Portland: Ramp metering to access skeletal – reduce
- Additional river crossings every ten blocks
 - Edworthy Park
 - Sarcee – join Shaganappi
 - Environmental impact
 - Stoney Bridge well-constructed – reduced impacts
- Move people out when travelling through the city (Stoney) – off Crowchild

Ideas Explored

- Border tolls into downtown (London example)
- Parking paid – sticker for access to downtown area (in addition to fee) – will reduce the number of cars in the city (Chicago as an example)
- Noise control on Crowchild Tr. – don't care how busy it is – deal with the noise
- Southwest to northeast traffic flow, solve this movement across the river
- 17 minutes ok on Crowchild Tr. from Glenmore Tr. To 24 Ave., 20 minutes – lose patience. (see these times on the traffic boards)
- Another bridge across the river for vehicles and pedestrians. Every 10 blocks and more accessibility
- Toll – unfair cost taxation to people who don't have choices? Demand management – limit by license plate number for access to Crowchild Tr.
- Portland – I-5 access; ramp metering; reduce bottlenecks; flow is monitored; reduce accidents
- Consideration: ramp to Bow Tr. steep – possible corridor impact (if trenched)
- Drop the road bed lower to create a noise buffer for residents (17 Ave. to Bow Tr.)
- Any changes to road width must be accompanied by pedestrian overpass
- Improve pedestrian connections from bridge at Sunalta school
- Sink Crowchild below grade
 - **Benefits** – improve traffic flow; reduce noise
 - **Constraints** – Bow River and bridge (environmental and grade)
 - **Impacts** – impacts during construction e.g. detour roads; steeper grade north toward Bow River Bridge
 - **Trade-offs** – reduced noise and improved traffic flow vs. construction impacts
- Parking paid sticker for use/access to park downtown; additional parking fees would apply e.g. Chicago
 - **Benefits** – improve traffic flow; reduce number of cars on road
 - **Constraints** – infrastructure to monitor usage/stickers
 - **Impacts** – share costs of infrastructure with users
- Enhance Sunalta School pedestrian crossing – widen possibly at grade and wider if Crowchild is dropped below grade



- **Benefits** – improved pedestrian and cyclist access and safety
- **Constraints** – existing at grade Crowchild; property adjacent to pedestrian bridge
- **Impacts** – potential property impacts to improve approaches
- Ramp metering
 - **Benefits** – reduce bottlenecks; flow is monitored; reduce accidents
- Straighten Crowchild Tr. To the west between 17 Ave. and Bow River Bridge
 - **Benefits** – improve access flow and safety from Crowchild Tr. To Bow Tr.; stay away from school playground and Scarboro Ave.
 - **Constraints** – adjacent park space and properties
 - **Impacts** – impacts Shaganappi Dog Park; impacts to properties on east side of Crowchild near Bow Tr.
 - **Trade-offs** – improved access vs. potential impacts to parks and residential property
- Additional river crossing for vehicles and pedestrians – every 10 blocks, or just Sarcee?
 - **Benefits** – improved traffic flow; improved access
 - **Constraints** – Bow River; adjacent properties
 - **Impacts** – environmental; new bridge; property impacts
 - **Trade-offs** - improved access and traffic flow vs. property and environmental impacts

Map Highlights

South Round 1 – Table 1 Map A

- Connect the major movement from southwest to northeast (Bow Tr. to Memorial Dr.)
- Southbound Crowchild Tr. to eastbound 17 access at 17 Ave. instead of at Bow Tr.
- Pedestrian bridge between park and Sunalta School across Crowchild Tr. is critical connection to river
- Sink Crowchild Tr. (17 Ave. to Bow River)
 - Consider noise, traffic, steep grade to Bow Tr.
- Fence around Crowchild southbound access to Bow Tr. eastbound for safety
- How is potential stadium included in the project?
 - Coordinate projects
 - Consider noise, traffic, access
- Better access to River pathway instead of parking at Pumphouse
- Straighten Crowchild Tr. mainline (to the west) to change ramp to Bow Tr.
 - Build more park on east
- Stay away from private property and playground
- Enhance pedestrian crossing, possibly at grade; wider pedestrian bridge if Crowchild Tr. dropped for pedestrians and cyclists

South Round 1 – Table 2

Overall Table Discussion

- What plans have been done for Calgary Next? How does it tie into what we are doing today? Wanted to see it drawn out on map; how will it impact access into West Village?
- Is what we are talking about for Crowchild going to be trumped? This is a 20 year project, Calgary Next is 5 years, why is it not a bigger consideration for this project?
- One option is to leave Crowchild Tr. as it is today
 - Disagreement – improvements can be made
 - Sound studies are done in August when it is quieter
- When southwest Ring Road is finished, what are the traffic predictions on Crowchild?
- Q: What is the city ruling out as options because of finances etc.?
 - A: Nothing has been ruled out
- Restrictions – historical buildings that won't be options for removal?
- Have you determined how you will measure ideas?
- When process is done, will one plan be presented to council or will multiple options be given to them?

- How do you measure the fabric of the community/community feel and how this project will change that?
- Tunnel – only under river? All of corridor? build over by Scarboro then there would be no need to tunnel, just build over
- Crowchild Tr. under ground
- Is the bridge strong enough to support another lane?
- Can it just be widened using bus lane and outside lanes?
- Toll road
- Build a flyover (second bridge) Crowchild Tr. to West Village area – now no access for those living in the north
- Without more information about West Village, waste of money to make changes now
- How does 17 Ave. fit into the plans for this?
 - Is long term plan for 17 Ave. to continue to carry a lot of traffic?
 - Need to re-evaluate access to/from 17 Ave. – is it required?
- 17 Ave – Was helipad landing – is that now available space? Military museum available space for Crowchild access improvements?
- Bow River bridge
 - Double deck
 - Add lane by using shoulder
 - Widen bridge – change structure
 - If we can add one lane each direction what would be the benefits to traffic?
 - 6 lanes before and after, only 4 on bridge even out to improve traffic flow
 - Ideal how many lanes?
- Bridge widening
 - **Benefits** – improve flow; also related to lights; safety; increase impact for decreased cost; least impact to area communities; don't need to close road to make improvements
 - **Impacts** – to industrial area or pump house?; would be 4 lane change (on ramps) Sunalta to Memorial Dr.; LRT line
 - **Constraints** – grade on south; land for West Village?; railway; with some changes could city get funding from federal government?

Ideas Explored

- Adding lanes to Bow River bridge – connect lanes
 - **Benefits** – ease of construction; improve flow – without impacting communities; improve safety; least impact to communities; most gain for least investment
 - **Constraints** – entrance and exit ramps; grades
 - **Impacts** – possible impact to industrial area
- Double-decker bridge
- Add lanes to the bridge
- Re-engineer Bow Tr./Memorial Dr. accesses
- Do nothing
- Tunnel
- Toll Road
- Flyover access to downtown
- Access to West Village
- Solid green in peak periods

Map Highlights

South Round 2 – Table 2 Map B

- Available land at Military Museums and old helipad on 17 Ave.
- Evaluate Access at 17 Ave. – is access required?
- Tunnel starting from just north of 17 Ave. S.W. to Kensington Rd. N.W.
- Focus on bridge by adding another lane in each direction

- Tunnel bridge from West Village to Memorial Dr.
- Provide access to West Village

South Round 2 – Table 2 Map C

- Tunnel from Bow Tr. to Memorial Dr. across the river – no impact to land on north side of river

South Round 2 – Table 1

Overall Table Discussion

- Bridge assessed for additional lane
 - Concern about bridge structure
 - Assessment has been done
 - Structural/mechanical challenges
 - **Impacts** – significant time required; major impacts while work is being undertaken; few options available while work being undertaken (north/south alternative not meaningful); transit; environmental; other communities where new bridge will go
 - **Benefits** – more quickly to implement; reduced impact on communities
 - River crossings required (do Shaganappi) or reduce traffic
 - Stoney an amazing bridge
 - Bridges leading to West Village would assist
 - Calgary Transportation plan does not contemplate an additional crossing
- Expand Crowchild Tr. to six lanes – more continuous lanes “lane continuity”
- Bury Crowchild Tr. coming down (going north) to river
- Trench/cut fill/tunnel
 - Where does traffic go during construction?
- Continuous park over road once buried
- Access to from Crowchild Tr. critical component in demand
- Single lane turn lanes – increase to 2 lanes
 - **Impacts** – land used for additional lanes
 - **Benefits** – increased free flow
- Bow Tr./from Crowchild concerned about removing houses
 - Options: loop; flyover; diamond ramp
- Bow River bridge – too many lanes joining the bridge
- 17 Ave./Scotland St. S.W. – safer to use that turn rather than bridge
- 19St. /12 Ave. S.W. – dangerous corner
- 10 Ave./19 St. S.W. – unsafe pedestrian crossing
- Need fencing around Bow Tr. loop ramp
- Tunnel entire way – only good for those going straight through
 - **Impacts** – access is needed, construction detours
 - **Benefits** – improve traffic flow, pedestrian crossing, park space
- Potential Stadium – near Sunalta – concern is parking
- Concern with homeless people around bridge
- Improve pedestrian and cycling – bridge
 - **Benefits** – visibility, lighting, safety
- Footprint of military museums is large
 - Rarely occupied – could it be more usable space?
 - Safety issues/vagrants
- Helicopter pad – is this usable space – not being used anymore



- Not equivalent sound barriers along either side of the off leash dog parks
 - Noise louder on the west side
- Process of public participation – all people in the workshop should have been able to bring up their ideas in one group rather than focus groups – chance for people to join together as a group
- Strongly oppose stadium proposal (West Village)
 - **Constraints** – Bow River Tr.
 - **Impacts** – parking and traffic

Ideas Explored

- Sink Crowchild Tr. and expand lanes with continuous park on top
 - **Benefits** – improved traffic flow; improved park space; improved pedestrian crossings
 - **Constraints** – 17 Ave. and Bow River Bridge; LRT (West)
 - **Impacts** – traffic detours during construction
- Focus on improving bridge – 6 lanes, plus exit/entry lanes
 - **Benefits** – improved traffic flow; improved access; less impact on communities
 - **Impacts** – environmental; construction
 - **Constraints** – Bow River
- Berm or sound wall on both sides of Crowchild Tr. near Shaganappi dog park/Summit St.
 - **Benefits** – reduce noise for adjacent residents
 - **Constraints** – property adjacent to Crowchild
 - **Impacts** – property impacts?; reflecting sound to houses further back into community
- Additional river crossings e.g. Sarcee Tr.
 - **Benefits** – reduce traffic on Crowchild and move to Sarcee Tr.; improve traffic flow on Crowchild; reduce impact of Crowchild on adjacent residents
 - **Constraints** – Bow River; adjacent properties
 - **Impacts** – adjacent properties near Sarcee Tr. crossing; environmental
 - **Trade-offs** – improved traffic flow and reduced traffic volume on Crowchild vs. property and environmental impacts
- Tunnel from 17 Ave. S.W. to 16 Ave. N.W. – maintain at grade streets for connections along Crowchild
 - **Benefits** – improved traffic flow; reduced visual and noise; maintain connections to and from Crowchild
 - **Constraints** – cost; Bow River
 - **Impacts** – cost; construction detours; property impacts
 - **Trade-Offs** – cost and construction impacts vs. improve traffic flow and access
- Improve pedestrian, cycling, safety, aesthetics of Bow River Bridge/West Village area
 - **Benefits** – improve safety; encourage more pedestrian and cyclist usage
 - **Constraints** – Bow River; private properties
 - **Impacts** – property impacts; environmental (possible)
- Crowchild Tr. River bridge
 - Rehab – where does the traffic go during detour?
 - No alternate routes (N-S)
- What are the distances to other river crossings?
- More river crossings?
 - Reduce the traffic on Crowchild Tr.
 - Quicker to build new bridge, More bang for buck and taxpayer money
- Equivalent sound wall on west side of Crowchild next to Dog Park?
 - Noise bounces around? (from east side)

Map Highlights

South Round 2 – Table 1 Map D

- Maintain exits/entrances on Bow River bridge
 - 6 lanes on bridge
 - Lane continuity



- Opposed to proposed Stadium (CalgaryNEXT)
- 10 Ave. and 19 St. pedestrian crossing is a concern
- 12 Ave. and 19 St. is a safety concern
- Grade concerns with ramp to Bow Tr. from Crowchild heading northeast toward West Village
- Develop the helicopter pad as it is no longer needed – is it usable vs. community impacts?
- Use of space along military museum and Crowchild Tr. currently has safety and crime issues
 - Is this usable space? What is military museums long term plan
- Tunnel Crowchild Tr. – continuous park over Crowchild Tr. – use existing grade
- Fencing at edge/either side of berm at southbound Crowchild Tr. exit to Bow Tr. to address safety concerns
- Diamond ramp to Bow from Crowchild Tr.
- Flyover ramp – what is the height required?
- Improve safety, visibility, lightening at Bow River pathways

South Round 2 – Table 2

Overall Table Discussion

- Calgary Next - will it definitely proceed?; West Village; With everyone going to that area there is a concern for traffic impacts
- I know we need to open up Crowchild, but want to keep the green spaces surrounding it. Concerned about impacts to pedestrian pathways
- Scarboro pedestrian bridge
- Problem is bottleneck going over bridge
- Fix the 'spaghetti' (Bow Tr./10 Ave./Crowchild Tr.) – need to keep 3 free flowing through lanes from 21 Ave. S.W. north to Bow Tr.
- Add a tunnel from 21 Ave. S.W. alignment under the river to meet Crowchild on north side
 - **Impacts** – significant cost to communities
 - **Benefits** – enable north/south free flow
 - **Constraints** – soil as a potential constraint; to manage elevation, change may have to start further out
- Add a lane to each side of the bridge – 3 lanes in each direction
 - **Constraints** – bridge is currently up for rehabilitation
 - **Impacts** – bridge is old; would need to look at all surrounding level
- Potentially eliminate 10 Ave. access to Crowchild to reduce weaving and concerns with weaving
- Build a bridge or a flyover from Bow Tr. to Memorial
 - Would also include removing the 10 Ave. access;
 - **Benefits** – increase safety; more options for access; space is there; would open up access to Memorial heading West
 - **Impacts** – noise; visual; aesthetics – might look ugly; re-routing current bus routes
- Improve access on both north and south sides to the pedestrian bridge under Crowchild Tr.
- Sink/lower Crowchild
 - **Constraints** – issue with grading – too steep
 - **Benefits** – reduce noise; get rid of 10 Ave. loop

Ideas Explored

- New crossing to connect Memorial Dr. to Crowchild Tr.
 - **Benefits** – improve transit service; improve “spaghetti” by eliminating swirl ramps – especially 10 Ave./Bow Tr.; improve continuous lanes across Bow River; add pedestrian bridge to new bridge – provides new pedestrian/cycle access
 - **Impacts** – aesthetics (West Hillhurst and West Village); increased noise; increased traffic on Memorial Dr.
- Tunnel on 24 St. alignment
 - **Benefits** – reduce noise; no signals for north-south traffic; maintain access; reduce need for more lanes on bridge

- **Impacts** – cost; impact to communities during construction; length required; at least one row of houses on either side
- Continue 3 through lanes between Bow Tr. and 24 Ave.
- Fix ‘spaghetti’ (Bow Tr./10 Ave./Crowchild Tr.) first; not enough lanes; add lanes
- Depressing Crowchild Tr.
 - Reduce noise – different surface considerations (especially wet)
 - Tunnel – 20 meters
 - Boring machine tunnel on 24 St. Alignment and Crowchild Tr.

Map Highlights

South Round 2 – Table 2 Map E

- Tunnel from 17 Ave. to Kensington Rd.
 - Existing homes on top of tunnel would have to be removed
 - Elevation risk may need to back out further
- Pedestrian access is important
- Save green space (Oliver Quarry Park) while improving the road
- Bad merges at 10 Ave. and Bow Tr. to Crowchild Tr.
 - Weaving is dangerous
- Eliminating 10 Ave. ramp
- Access (bridge or tunnel) from Memorial Dr. to West Village (would need to be dual access – both ways)
- Can they add a lane to each side of the Bow River bridge?
- Pathway connection from Bow River bridge direct to Kensington Rd.

Additional Submitted Ideas

Ideas Explored

- Feel that there has to be Kensington Rd. and 5 Ave. access on and off Crowchild Tr., otherwise have to travel very far out of way to home having to use 16 Ave., Memorial Dr. east and west and 19 St., 14 St. and 10 St. N.W. to get back to West Hillhurst thus perhaps if possible overpass east and west routes
 - **Impacts** – Crowchild Tr. is very important access to and from St. Andrews Heights (using University Dr.), Parkdale, West Hillhurst communities and will create massive traffic jams on 14 St., 19 St., and Memorial Dr.
- Eliminate lights – overpass/underpass
 - **Benefits** – eliminate lights; improve flow
 - **Constraints** – flooding in underpasses; space for off ramps
 - **Impacts** – noise from overpasses
- Eliminate lights – make 19 St. a main entrance to neighbourhood
 - **Benefits** – lights are gridlock
 - **Constraints** – you would have to have a light on Memorial Dr. and 19 St.
 - **Impacts** – there appears to be a lot of cars that exit Kensington Rd.
- Bike access across to Crowchild Bridge
- 13 Ave. at Foothills access needs improvement
 - **Benefits** – safer access
- Protect greenspace at St. Andrews and Crowchild Tr. interface
- Realign Crowchild (at 24 Ave.) but have north on one side, south on the other
 - **Benefits** – works with current alignment and LRT tracks
- Create a free flowing Crowchild Tr. from Memorial to 24 Ave. by creating a dual level roadway (i.e. tunnel). Somewhat similar to recent changes along Glenmore between 14 St. and Blackfoot Tr. Make the lower level free flowing and the upper level at street level with intersections and on/off access at Kensington Rd., 5 Ave., University Dr., 16 Ave., 23 Ave., and 24 Ave.



- **Benefits** – free north/south flow in tunnel; continued access to communities via existing intersections; potentially less road noise (buried roadway); no need to widen ROW between Memorial Dr. and 24 Ave., already have 3 lanes in each direction
 - **Constraints** – cost; long, difficult construction phase
- Get 3 lanes at University Dr. and across Bow River. It's the loss of lanes that causes bottlenecks, not the lights at Kensington Rd. and 5 Ave.



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- Toll Road – test this and learn, its relatively cheap and easy to do

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- Small over/unders that provide flow through for Crowchild but does not result in tearing down houses EVEN CITY OWNED HOUSES.
- Trading houses for green space O.K.
- Toll Road
- Submitted through the group sessions

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- I support original West Village – NOT stadium
- Let us see plans you have – Not appropriate to ask piece meal for ideas
- Toll Road
- I feel we have covered most ideas
- See input at table

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x11	x4	x2		
• Project team's response to my questions	x12	x4		x1	
• Opportunity to provide my input	x13	x4			
• Opportunity to hear others' input	x14	x2		x1	
• Session location	x11	x5	x1		
• Session time	x11	x6			

2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

- Great use of the large print maps. Good to be able to draw right on the maps.
- Maps were great. Group [*indecipherable*].
- Excellent effort in engagement. Now need to get the city to think beyond the blue shaded line.
- It was great to have technical people at the table to present and record the ideas
- Good format, well informed presenters and facilitators
- ISL was present to provide input
- Lots of interaction with consulting group, 2 residents vs. 1 consultant at meeting
- Really enjoyed it! Great format to get everyone included. Liked that there were no pre-existing solutions...true blank page for all ideas, no matter how crazy.
- Sharing ideas is always good.



- Liked that it occurred
- Very helpful

3. Which section of the corridor is your organization located in?

- West Hillhurst - x8
- Scarboro – x6
- Briar Hill – x1
- Parkdale – x1
- St. Andrews – x1
- Upper Scarboro – x1

4. What are the main reasons you use Crowchild Trail?

- To commute to and from work or school – x6
- To visit recreation facilities, shopping centres, or to visit friends and family – x12
- Other: I use Crowchild for everything. It is my neighbourhood street. I walk it. Drive it. We use it for everything, it's the access in and out of our community – x2
- Not specified – x1
- Occasional driving – x1
- I don't use Crowchild Trail – x0

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x6
- Online discussion – x3
- In-person session – x10
- Idea board – x5
- Walking tour – x3
- Bus tour – x1
- Other – x4
- I have not participated in the study prior to this session – x1

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x11
- Community newsletter – x2
- Community road signs – x0
- Project email – x3
- Social media – Facebook, Twitter – x0
- On TV – Report to Calgarians – x1
- Word of mouth – x4
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x1
- Other, please specify – x0

Do you have any other comments about the project or the engagement process?

- It was very informative
- Our discussion was productive
- Make sure not to lose community spirit – It's the backbone to Calgary
- Keep the public engagement going! Listen to what comes out of these sessions.
- Because the Flames may displace other approved
- Would like more info regarding Calgary Next & West Village plans the discussion do not have an air of reality



Crowchild Trail Study

Public Idea Workshop Summary November 7, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held for community members and the public on Saturday, Nov. 7, 2015 from 9:30 a.m. to noon at the Sunalta Elementary School (536 Sonora Ave. S.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 35 participants attended the workshop distributed across 9 table discussions in round one and 6 table discussions in round two.

The following members of the project team were also in attendance at the session:

Project team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Peggy Chan, City of Calgary, Communications Lead
- Andrea Sichewski, City of Calgary, Communications Advisor
- Kirsty Neill, City of Calgary, Engagement Advisor
- Asif Kurji, City of Calgary, Transit Advisor
- Misty Sklar, City of Calgary, Planning Advisor
- Neil MacDonald, City of Calgary, Planning Advisor
- Chris Delanoy, ISL Engineering and Land Services, Consultant Project Manager
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Jana Sinclair, Russell Public Relations, Consultant Engagement Lead
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator
- Courtney Laurence, ISL Engineering and Land Services, Consultant and Table Facilitator



Table Facilitators

- Nathalie Tacail, City of Calgary, Consultant Table Note-taker
- Lara Tierney, City of Calgary, Table Facilitator
- Christina Pyne, City of Calgary, Table Facilitator
- Ryan Siersma, Consultant Table Note-taker
- Paula Hall, Consultant Table Facilitator
- Gay Robinson, Consultant Table Facilitator
- Jolene Ondrik, Russell Public Relations, Consultant Table Facilitator
- Tamille Beyon, Russell Public Relations, Consultant Table Note-taker
- Violet MacLeod, Russell Public Relations, Consultant Table Note-taker
- Faiqa Ahmed, ISL Engineering and Land Services, Consultant Table Note-taker
- DJ Wickham, ISL Engineering and Land Services, Consultant Table Note-taker
- Cathy Sears, ISL Engineering and Land Services, Consultant Table Note-taker
- Morgan McLeod, ISL Engineering and Land Services, Consultant Table Note-taker
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker
- Mario Prezelj, ISL Engineering and Land Services, Consultant Technical Facilitator
- Dominic Cheng, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jack Mason, ISL Engineering and Land Services, Consultant Technical Facilitator
- Mark Bagnall, Stantec, Consultant Technical Facilitator
- Andrew Vandertol, Stantec, Consultant Technical Facilitator
- Ryan Martinson, Stantec, Consultant Technical Facilitator
- Dave Thatcher, Stantec, Consultant Technical Facilitator

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail study area that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - Widening Crowchild Tr. to accommodate additional through lanes, both northbound and southbound, was a common idea heard during several table discussions

- Peak hour green lights was an idea that was identified as a solution that could be implemented immediately. Some considerations included restrictions to access and an increase in traffic through adjacent neighbourhoods.
 - Elevating/building an additional level on top of the existing roadway was also raised at multiple tables as a way to facilitate the movement of through traffic moving north-south.
- In the **North Section**, the current merging to/from the Crowchild Tr./University Dr./16 Ave. interchange was raised as a safety concern. During the table discussions, combining and simplifying this interchange was raised as an idea. Also in the North Section, a flyover or interchange at 24 Ave. was suggested to improve traffic flow while also maintaining access.
- In the **Central Section**, as a long term solution, underpasses or overpasses at either Kensington Rd. or 5 Ave. were raised an idea to improve traffic flow along Crowchild Tr., while also maintaining connectivity across Crowchild Tr. for vehicles, buses, pedestrians, and cyclists.
- In the **South Section**, ideas to directly connect Bow Tr. to Memorial Dr., such as a flyover, were identified to reduce the amount of traffic weaving that currently occurs within a short distance. An additional river crossing was also suggested to provide an alternate route for traffic and help alleviate congestion on Crowchild Tr.

For a summary of the input that was provided, please see the Idea Workshop Summary of Input section.

For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Widening Crowchild Tr. to accommodate additional through lanes
<ul style="list-style-type: none"> • Benefits – reduce bottleneck; improve traffic flow; reduce weaving across lanes • Impacts – adjacent homes, businesses and school; will only increase traffic • Constraints – adjacent homes and businesses currently built up to edge of existing Crowchild Tr.
Solid green lights along Crowchild Tr. during peak hours (e.g. 7:30-9:30 a.m. and 4-6:30 p.m.)
<ul style="list-style-type: none"> • Benefits – improves flow during peak periods; • Impacts – buses still need to cross; forces people to use Memorial Dr., which is difficult; limits pedestrian access; increased neighbourhood traffic • Constraints – doesn't address problems outside non peak hours; short term solution; doesn't address issues with lane continuity
Elevating Crowchild from 17 Ave. to 24 Ave.
<ul style="list-style-type: none"> • Benefits – improves traffic flow; doesn't expand existing footprint • Impacts – noise; visual; property acquisition; divides communities • Constraints – physical space; need room for construction • Trade-offs – cost/noise/visual/property impacts vs. improved traffic flow
Interchange/flyover at 24 Ave. (Crowchild Tr. over 24 Ave. or vice versa)
<ul style="list-style-type: none"> • Benefits – improves flow along Crowchild Tr.; improves pedestrian access across; reduces shortcutting through neighbourhood • Impacts – visual; adjacent properties • Constraints – may not be room to build without taking properties
Improving access at 16 Ave./13 Ave./University Dr./Crowchild Tr.
<ul style="list-style-type: none"> • Benefits – improves safety of merging lanes; simplifies accesses • Impacts – Suncourt Place; changes access to Motel Village; high initial cost • Constraints – requires improvements at Banff Tr. • Trade-offs – purchasing one property vs. several property owners on other side; using park/green space vs. private property
Overpass/underpass at Kensington Rd. and 5 Ave.
<ul style="list-style-type: none"> • Benefits – improved traffic flow along and across Crowchild Tr.; improved access across for pedestrians/cyclists • Impacts – property acquisition; visual • Constraints – adjacent properties; utilities; topography
Flyover from Bow Tr. to Memorial Dr.
<ul style="list-style-type: none"> • Benefits – not as much impact on existing neighbourhoods; can eliminate weaving • Impacts – adjacent properties; West Hillhurst (west) may be impacted (increased traffic) • Constraints – starting flyover construction south of the bridge; separating traffic south of bridge; large structure; already 3 levels of road at Memorial Dr.
Additional river crossing (west of Crowchild and adjacent to existing crossing)
<ul style="list-style-type: none"> • Benefits – improved traffic flow; redirects flow of traffic; safety • Impacts – need to live with construction; expensive; environmental impacts; tying additional bridge into network • Constraints – Edworthy Park is a historic resource; height of intersection between Bow Tr. and Sarcee – 100m; Crowchild Tr. at the river is approximately 50m • Trade-offs – improve traffic flow vs. environmental and property impacts

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

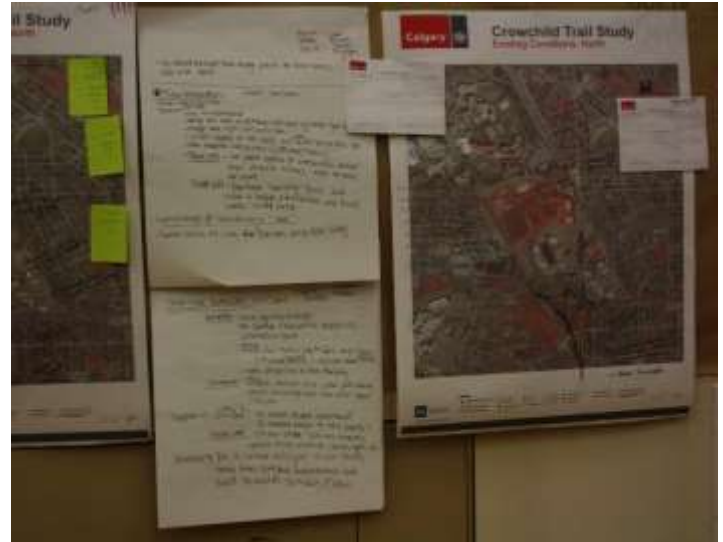
Overall Table Discussion

- 3 lanes both sides of Crowchild Tr.
 - **Benefits** – move quickly through; not bother residential roads as alternative route
 - **Constraints** – unless carpool/transit lane – you're just asking people (S.O.V.) to bring more cars onto Crowchild; increased density at McMahon Stadium Shopping Centre – more cars on 16 Ave. and Crowchild Tr.; free flow will reduce access to residential areas and that will affect and change routes for residents
- Remove access for 5 Ave. and 24 Ave. onto Crowchild Tr.
- Overpass (one-lane) for 24 Ave.
 - **Trade-offs** – 24 Ave. and Crowchild Tr. – one lane overpass rather than remove church, apartments etc.
- Flyover lane eastbound to northbound for 24 Ave.
- Remove lights along Crowchild Tr. so it is free flowing
- Purpose of Crowchild Tr. Corridor? To move people downtown? To move people to the south?
- University Dr. is underutilized
- Direct traffic away from 5 Ave. intersection towards 16 Ave./Crowchild Tr.
- Concern over short term improvements at 24 Ave.
- Poor visibility on 16 Ave. when merging
- Safety concerns at merge lane on Crowchild Tr./16 Ave. (east side)
- Lack of good east-west connectors in this city
- Widening on Crowchild Tr. south of 16 Ave. – tunnel; narrow – safety concern
- Build a better interchange at Crowchild Tr./16 Ave./University Dr.
- All turn-offs should be removed, so it's a free flow – 3 lanes
- Improve pedestrian access near University Dr.
- Remove the west access to McMahon Stadium on Crowchild Tr. during football game days
- Better pedestrian, bike and transit access to the University of Calgary
- No interchange on 24 Ave./Crowchild Tr.
- City should measure how many people use bike lanes, not a lot – why?
- 16 Ave./Crowchild Tr. intersection – change intersection to be free flow
 - Merge lanes westbound/eastbound on 16 Ave. are sharp right turns
 - **Benefits** – save homes; free flow; easy to understand; greenspace is not used and land could be helpful for better intersection (16 Ave./Crowchild Tr./13 Ave.)
 - **Trade-offs** – purchase Suncourt Place and make a better intersection and keep homes in the area
- Interchange at University Dr. and Crowchild Tr.
- Remove access on Crowchild Tr. for business area – Motel Village

Ideas Explored

- Concern over short term improvements at 24 Ave. lots of cones/no activities
- Plan carefully/do quickly
 - Why work during rush hour
- Access onto 16 Ave. from Crowchild Tr.
 - Bottleneck with 23 Ave.
- Poor visibility on the 16 Ave. bridge
- 16 Ave. ramp – dangerous especially when icy
- Critical to widen at University Dr. intersection
 - **Trade-offs** – have to remove Suncourt Place

- 3 lanes all the way through
- Do we need that many accesses to University Dr.
- Game day football get rid of access off Crowchild Tr., make them come up University Dr.
- Better cycle/pedestrian/transit access across Crowchild Tr.
- City transit avoids this part of Crowchild Tr. (between University Dr. exit to 24 Ave.)
- 3 lanes, remove lights, flyover at 24 Ave.
 - **Benefits** – gets people flowing, not shortcutting; moves people both to downtown and to south
 - **Constraints** – is there room for an overpass at 24 Ave.; might not be land
 - **Impacts** – University/Children's Hospital will need to accommodate; requires overpass/flyover; just accommodating more single vehicles commuters – counterbalance with HOV lanes
 - **Trade-offs** – does it cause problems to 32 Ave./Brisebois Dr.?
- 16 Ave. improve ramp. Dream scenario – full interchange
 - **Benefits** – make this area ideal, solves a lot of the other problems; lots of room; saves a fight in Hounsfield Heights
 - **Constraints** – requires improvements at Banff Tr.
 - **Impacts** – Loss of Suncourt Place (lower income/student housing 75-80 unit building); changes access to Motel Village; need to balance with Banff Tr.; high initial cost
 - **Trade-offs** – purchasing one property vs. several property owners on other side



Map Highlights

North Round 1 – Table 1 Map A

- Pedestrian and cyclist access across 24 Ave. N.W.
- Remove lights at 23 Ave. N.W. – three lanes through
- Confusing access route to Crowchild Tr. from 16 Ave. N.W.
- Poor visibility approaching Crowchild Tr. from west on 16 Ave. N.W.
- Extend merge lanes at 16 Ave. N.W. intersection
- Improve movement southwest interchange between Crowchild Tr. And 16 Ave. N.W.
- Widening to three lanes earlier than 12 Ave N.W.

North Round 1 – Table 1 Map B

- Flyover for eastbound to northbound – this is to accommodate University of Calgary access in a three lane scenario, can we expropriate this property and do a proper interchange
- Respect / improve access to Motel Village
- Remove lights to service road (Motel Village) on 16 Ave. N.W.
- Shift interchange west combining University Dr. and Crowchild Tr. – all movements all directions
- This map shows ideal scenario of upgrades at 16 Ave. N.W. and University with three lanes throughout. Side discussion about access to Motel Village and upgrade Banff Trail
- Possible University of Calgary access issues:
 - flyover at 24 Ave N.W.;
 - full overpass;
 - reroute onto University
- Necessitates upgrades at 32 Ave N.W. and Brisebois (off map)

- Improvement on 14 St. N.W.

North Round 2 – Table 1

Overall Table Discussion

- Concern of Banff Tr. – 2 lanes has been converted to 1 lane
 - Access concerns to Crowchild Tr.; access concerns for all business roads; bike lane – unsafe on Banff Tr. as bike lane stops abruptly; symptom of backup on Crowchild; only access to Northland Tr. – miss the turnoff to Northland and have to drive to Shaganappi.
- Bike lane on 5 Ave.
 - Safety concern – have to go around buses. The bus passes you and you have to continue to go around the bus
 - Transition to bike only road on 5 Ave. problematic because there are only 3 roads into West Hillhurst (5 Ave., 2 Ave., Kensington Rd.)
 - Bi-directional bike lanes – save parking on side of street
- Concerns with service roads around Motel Village
 - One direction all around Motel Village; block access to Motel Village from Crowchild; U-turn at 23 Ave. to access Crowchild in order to change from north to southbound; symptom of busy Crowchild Tr.; pillar at 23 Ave. is difficult to see who is coming; too many illegal U-Turns – create safe U-turn routes.
- Noise at 7 a.m. has increased/earlier at 5 a.m. – 5 Ave. and Crowchild Tr. Crowchild Tr. at 5 Ave. is 8 lanes – no room for increasing the lanes – would like to see less cars on Crowchild Tr.
- Not to make Crowchild Tr. a major road – one major accident shuts it down; need alternative routes that run parallel
- Get rid of left turns at 23 Ave.
- Build into the City owned green area (Crowchild Tr., University Dr. and 16 Ave.)
- More lanes on 16 Ave.
- City acquisition of Suncourt Place for better intersection (University Dr./Crowchild Tr./16 Ave.)
- Full access interchange at Crowchild Tr. and 16 Ave.
- Look for solutions to alternate routes (diversion) in parallel roads (i.e. east-west: 5 Ave., 16 Ave, 24 Ave; north-south: 14 St., 19 St.)
- Full cloverleaf at Crowchild Tr. and 16 Ave.
- Sound barriers – location?
 - Ugly looking; people move away from it; building vertical
- Multi-tier roadway
 - **Constraints** – LRT under the road at 24 Ave.; possibly relocate (tunnel); depress Crowchild Tr. at 24 Ave – southbound
- Depressing Crowchild Tr. and 24 Ave. – southbound
 - Requires interchange at 24 Ave. without traffic lights
 - **Constraints** – move church; new 6 lanes going southbound; use greenspace in center (University Dr., Crowchild Tr. and 16 Ave.) to widen road

Ideas Explored

- Depressed road/expanded or full cloverleaf
 - **Constraints** – LRT relocation (tunnel)
 - **Impacts** – move Church; move Suncourt Place; cost
- Remove bikes lanes from Brentwood Village Shopping Centre
- Banff Tr. is narrow; traffic backs up in the afternoon
- Problem 5 Ave. becoming bike street – no need
 - Need to make allowances but these are wrong roads
 - Keep costs down for bike lanes and segregate traffic forms
- Motel Village
 - 24 St. make one direction around village; block access into Executive Place and at same location for Stadium; build at U-turn stadium parking lot

- Large employment centre for the northwest
- Safe u-turns – legal off Crowchild Tr.
- Redirect traffic – don't make Crowchild Tr. major route
- Suncourt Place
 - Natural bottleneck; address acquisition of that land
- 16 Ave. intersection improvement
- Find solution in parallel area to Crowchild Tr.; move 16 Ave. intersection to University Dr.
- Change behaviour vs structural ways – to get traffic off Crowchild Tr.
- Full cloverleaf for Crowchild Tr. and 16 Ave.

Map Highlights

North Round 2 – Table 1 Map C

- Remove east / west access to 16 Ave N.W. from Crowchild Tr.
- Move access to 16 Ave. from University Dr. interchange
- Direct southbound Crowchild traffic to 24 Ave. and University Dr. if wanting to access 16 Ave.

North Round 2 – Table 1 Map D

- Alternate routes during accidents and rush hour – move traffic onto Sarcee Tr. or Shaganappi from Crowchild
- 32 Ave. University Towers – access concerns onto Crowchild Tr.
- Bike lanes separate from roads
- Like the dual left at 24 Ave. N.W.
- No left turns at 23 Ave. N.W.
- Traffic to parallel roads Shaganappi and Sarcee – accidents block whole road
- More lanes approaching 16 Ave. N.W. from the west and south
- Crowchild to 16 Ave. access to University Dr.
- Don't impact with improvements find another place for upgrades or traffic
- Three lanes to two lanes southbound
- Acquire lands at Suncourt Place
- Too many illegal u-turns off of Crowchild – make a safe option to do it
- Different speed / size / roads / parking
- Buses, cars and bikes on 5 Ave. dangerous
- Don't like cycle tracks in place of vehicle lanes
- Only three roads in West Hillhurst
- Intersection improvements to fix service road connection at 23 Ave.
- Block access to Motel Village completely
- Vehicles can't navigate service road, convert to one direction
- Full access interchange at 16 Ave – redirect traffic from Crowchild to other major roads (emphasize alternate routes)
- Noise prevention in communities adjacent
- Divert volume elsewhere



North Round 2 – Table 1 Map E

- Realign LRT Tunnel at 24 Ave. (alternate LRT alignment at South of Foothills Athletic Park, potential station in parking lot northeast of McMahon Stadium)



- Depress Crowchild Tr. between 24 Ave N.W. and 16 Ave N.W.
- Shift Crowchild Tr. west at 16 Ave N.W. and include full intersection
- Suncourt Place has to go
- Very large infrastructure – costly, not nice to live by, change how people commute

Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- Q: Are there any constraints in this area?
 - A: We are working to fit the upgrades within City property. If private property is needed, we will explain why.
- Super overpass
- One of the challenges – plugs traffic at 5 Ave. and Kensington Rd. N.W. – solution – make third lane the merge on merge off lane. Solution is an overpass lights under the overpass
 - **Benefits** – free flow traffic on Crowchild Tr.
 - How would pedestrians cross? Underneath?
- Grade approach would have to be two blocks back. Want overpass at Kensington Rd. and 5 Ave.
 - Q: Is there enough space for two so close?
- Construction methodology – start on one side then the other to minimize disruptions
- Sound (traffic) is a concern for adjacent communities
- What about sound absorbing asphalt with sound walls
 - What is disruptive is the squeal of tires if lights are removed could remove this concern (stop-start is bad)
- Do not limit community access (cross movement is important)
- Is there a shape of wall that could minimize noise?
 - Maybe use natural battling noise minimizing like trees, shrubs instead or concrete
 - Maybe a sound wall with a green sound edge.
- Community pedestrian connections should be at grade (no stairs) instead of bridge because it's accessible for all (don't have to carry bikes)
- How do you get into Briar Hill from Crowchild Tr.? (Why do we use Crowchild Tr. to get in there)
 - No left from Memorial Dr. (eastbound to northbound 19 St. forcing traffic to Crowchild Tr.
- U-turn traffic circle at Memorial Dr. eastbound exit to redirect traffic to westbound in the greenspace
 - It is a dead space
- Example of the suggested underpass for 5 Ave. and Kensington Rd. at Kensington Rd. and Parkdale Ave. north in Hamilton, Ontario.
 - How do you close it in to reduce the noise to neighbouring communities
 - **Benefits** – maintain traffic flow during construction
 - Could maintain a service road below for the turns
 - Would the underpass (service road) have access to the businesses? The Ski Shop, Esso etc. all get through traffic customers
 - Underpasses can become dangerous dumps; need lighting and other measures
- You don't want the infrastructure to damage the community's vibe
- What about shifting traffic away from Crowchild Tr.
 - We could cause unwanted community shortcutting
 - By providing alternate route could cause more community commercial opportunities
- Would community like improved business revitalization zone areas maybe along 19 St. etc.?
 - Yes, I would appreciate walking to coffee shop etc.
- How do we improve Crowchild Tr. and bordering communities
 - Maybe consider Kensington business revitalization zone
- What if West Village gets new stadium? Roadway would have increased use?
 - West Village Area Redevelopment Plan does not show plan for Stadium

- Regardless of use, we will see increased traffic. 1967 transporter overpass at Shaganappi would have reduced traffic pressure
- Revisit Shaganappi and/or Sarcee for an overpass
 - **Constraints** – Edworthy Park is a historic resource; height of intersection between Bow Tr. and Sarcee – 100m; Crowchild Tr. at River is approximately 50m
 - Will probably not re-visit as part of this study
- For the possible Kensington Ave. overpass may require changed grade at Crowchild Tr. north of the river
- Q: Do we need to change the design of bridge? Even if we remove lights?
 - A: Northbound Crowchild Tr. to Memorial Dr. is difficult – left lane to right lane. Eastbound Bow Tr. have to go underneath and do U-Turn; not bad now but with increased traffic will be horrible
- 10 Ave. and 12 Ave. need to get to Bow Tr.
 - Why doesn't Bow Tr. connect to Crowchild Tr. better?
- So many accidents at bridge = bottlenecks
- Fixing bridge means may be able to add one lane; northbound lane would potentially improve rush hour traffic flow
- In morning easy to get to City Centre and 12 Ave. but northbound traffic is poor
 - If we could free flow northbound traffic like an express lane?
- Crossing three lanes to exit when northbound traffic is traveling straight
- What about lane restrictions?
- Flyover Bow Tr. to Memorial Dr.
 - **Constraints** – starting flyover construction south of the bridge; separating traffic south of bridge; large structure
- Opportunity for U-Turn at Crowchild Tr. and Memorial Dr. west side southbound on ramp
- Evening issue traffic into communities
- What about a second bridge?
 - **Constraints** – is the rail, would have to start elevating far south
- What about one intersection 5 Ave. or Kensington Rd is a greenlight?
- What about all green signals as short term fix? (during rush hour)
 - **Impacts** – buses need to cross; all people would have to use Memorial Dr., which is difficult
- Creating signaling so efficient flow northbound Crowchild Tr. into West Hillhurst
- What about traffic circle concept through neighbourhood
- Need alternatives, creating that mindset will help with traffic during construction

Ideas Explored

- Don't try to solve the problem where the problem is

Map Highlights

Central Round 1 – Table 1 Map A

- Line drawing indicates lanes, traffic demand and an increase in lanes over the Bow River; existing lane continuity over Bow River bridge
- Look at Woodbridge Avenue in Detroit
- Sound wall material that absorbs noise rather than reflecting noise back
- Noise wall – is there a shape that directs noise back to Crowchild?
- Traffic that moves has a constant hum which is okay but stop and start is noisy
- No lights takes away the stop and start noise
- Don't take away access across Crowchild for pedestrians and vehicles
- Pedestrian connection underneath roadways rather than walking up and over the road at 5 Ave N.W.
- At Kensington Rd. or 5 Ave N.W. – Crowchild Tr. over intersections. Separate bridges to stage the work of overpasses.
 - **Benefits** – traffic on Crowchild moves on bridges over intersections
 - **Constraints** – sound from road is elevated

Central Round 1 – Table 1 Map B

- Parallel bridge
- Find alternative paths for traffic (communities)
- Bus routing on Crowchild Tr. as well as across Crowchild Tr.
- Left turn restrictions at Kensington Rd. and 5 Ave. at AM and PM rush
- Lane restrictions for Bow Tr. access to northbound Crowchild Tr. – constant cut-through traffic in communities
- Bow River bridge is a problem; traffic backs up to 33 Ave. northbound in the afternoon rush
- How do we fit the additional lane into the other ramps (re: Crowchild Bridge over Bow River)
- Flyover of traffic from Bow Tr. to Memorial Dr.
- Eastbound Bow Tr. to northbound Crowchild Tr. to Memorial Dr. - access to Crowchild Tr. is a nightmare



Central Round 1 – Table 1 Map C

- Shaganappi Tr. river crossing taken off The City's long range plans; not part of Crowchild Tr. Study
- The businesses (around 5 Ave. along Crowchild Tr.) rely on pass by business
- Make 19 St. a more attractive route for community access
- An overpass / interchange example - Burlington St. and Parkdale Blvd. in Hamilton, ON
 - **Benefits** – you can build the overpass while maintaining traffic
 - **Constraints** – dead space underneath – how do we activate the same park
- Travel time sign to identify congestion and motorists can change to alternate route (approaching Crowchild Tr. and Memorial interchange)
- No left (at Memorial and 19 St.) forces traffic onto Crowchild; no lights alternate route for people using Crowchild
- U-turn move next to or roundabout approaching Memorial Dr. / Crowchild Tr. interchange from the east
- On Bow Tr. (east of Crowchild Tr.) now Stadium / Hockey Arena as an input into the study

Central Round 1 – Table 2

Overall Table Discussion

- Ineffective noise barriers
- Commercial vehicles create lots of noise and dust in the evenings/overnight
- Flyover between Memorial Dr. and 16 Ave. (concept from Beijing) – shadows a problem?
- Decarie expressway (example of a solution from Montreal)
- Pedestrian path connectivity north Kensington to Parkdale
- Pedestrian access along Crowchild Tr. between 5 Ave. and Kensington Rd.
- Traffic weaving
- Widening
- Sound is a major issue that could be increased with an increase in traffic flows
- Rounded sound barriers? Other sound barrier solutions in general
- Car wash – noise sometimes occurring outside of time allowed by permit (7 a.m. to 7 p.m.); complaints have been made by adjacent residents and West Hillhurst Community Association
- Tax increases not really generating any changes for the better
- Sound barriers ideas

- Access for pedestrians through barriers (glass etc.); different designs; modern materials
- How might automated/driverless cars change decision making?
- How will ideas impact business?
- Traffic flows on 5 Ave. (reduce flow) (parking issues with cars having to cross multiple lanes)
- Concerns with cyclists on 5 Ave. (6 Ave. is better)
- Cyclists and pedestrians don't belong together, too many in city
- Don't like the idea of 5 Ave. being declared as strictly a bike lane
- Ideas for changing behaviour of cyclists
 - Student cyclists are an issue
- Pedestrian/cyclist crossing at 5 Ave. is an issue (connectivity)
- Do opinions differ between newer residents of the area vs. longer term residents?

Ideas Explored

- Dust also an issue during summer especially
- Sound barriers not effective. Big trucks and motorcycles can be heard from car wash
- Sound solution idea 1 – Rounded (flat doesn't work) sound barriers attached to highway (see Central Map D – Shanghai example)
- Flyover; would require more roads; would probably need to be north of 16 Ave. to south of Kensington Rd.; if McMahon goes maybe there would be more room – add greenery to help with sound barriers
 - **Benefits** – still able to access businesses; option to go low at a later time; separate through traffic from local; better community feel
 - **Constraints** – space; 50% of traffic would stay on the main road
 - **Impacts** – shadows; visual impact – some houses would be eye level with traffic
- Trenching, like on Glenmore, on 24 Ave; on 5 Ave.
 - **Constraints** – LRT line runs under 24 Ave; river on 5 Ave. (flooding)
- Widen road; from ESSO station to 16 Ave.; address capacity and weaving issues
- Remove lights
 - **Impacts** – potentially increases traffic (they don't want that); need to have lights on side streets; sound still an issue

Map Highlights

Central Round 1 – Table 2 Map D

- Dust concerns, visual impact
- Transit stop concerns along Crowchild (between 9 Ave. and 12 Ave.)
- Weave issues between 5 Ave. and University, separate through traffic
- Pedestrian / cycle traffic connectivity concerns crossing Crowchild
- Do bike lanes on 5 Ave. makes sense?
- Limited access into community
- Enhanced beautification? Noise barrier concerns
- Pathway concerns on east side
- Future growth (capacity): adding lanes, improve community connectivity
- Improve lane continuity on northbound Crowchild Tr.
- Weave issues (on bridge)

Central Round 1 – Table 3

Overall Table Discussion

- Concern – worried about school; rather than widening road and encroaching on neighbourhoods, perhaps roundabout
- Bridge – backs up traffic
- Removal of left-turns

- Choke points at Kensington Rd. and 5 Ave.
- Lanes could be open and closed at certain times of the day in order to alleviate congestion over rush hour
 - Routes should be consistent throughout the day, which is easier on commuters
- Barrier at Kensington Rd. – would have to build pedestrian overpass
- Barriers at 5 Ave. – fewer signal phases
- Need alternate routes when banning left turns
- People do U-Turns rather than turning left (right on 5 Ave and U-Turn)
 - Difficult to get into left hand lane
- Suggestion – cloverleaf at Crowchild Tr. and 5 Ave.
- High bus traffic on Kensington Rd.
- HOV lane/bus lane southbound Crowchild Tr.
- Get two intersections working together (5 Ave. and Kensington Rd.)
- Consistency is key
- If left hand turns are removed how do we maintain crossing over Crowchild Tr. and through movements on at least one intersection and which intersection? Don't want to ban through movements on either intersection; barriers are not an option
- Heavy volume of movement east-west on Kensington Rd.; buses are priority
- Anyone can make right turns on and off Crowchild. Could squeeze in another lane in each direction (north/south) Kensington Rd. traffic could turn right but not left, buses could go through (triggered light), operation of Crowchild Tr. intersection improved, however how will people get across?
- Upstream impact across bridge; creates back up
- Left hand turns from 5 Ave. okay; no left hand turns from Crowchild Tr.; U-turns or go around block
 - **Impacts** – no northbound left hand turn would result in re-routing people through residential communities; however, not large amount of traffic making this movement
 - Create loop around Grand Trunk Cottage School House (between park and Esso Station on 5 Ave.)
- Foothills Hospital
 - Encourage less traffic traveling to and from; better transit from Sunalta – hospitals
- Crowchild Tr. southbound – right lane mandatory right at 13 Ave.
 - Observation – people exiting on 13 Ave. and looping back onto Crowchild Tr.
- Memorial Dr. almost impossible to get over the 2 lanes when coming from downtown
- Build an extra single or double lane bridge Sarcee to Shaganappi
 - **Impacts** – environmental
 - **Constraints** – expensive
- Where are people coming from? Why are they choosing Crowchild?
- West Village – The City has plan for this area, big undertaking; impact on Crowchild Tr. is fairly small; will be considered, but overall traffic volumes not affected
- Consider this area as an expressway; limited access; if going to allow turns into residential areas, need collector roads; 80 km/hr
- 80 km/hr along whole corridor
- Overpasses at 5 Ave. and Kensington Rd.
- What is demand for traffic at 5 Ave.? Intersection design depends on demand
- Crowchild Tr. over 5 Ave. – good for 5 Ave., but going under large bridge
 - How would this happen? Rip out large portion of road; how would we mitigate this area during this?
- Raising is better than lowering because of water/river flow
- Could build Crowchild Tr. up – but how do you keep Crowchild Tr. going when building overpass?
- Viaduct from approximately 9 Ave. over bridge; existing road remains underneath
 - **Impacts** – visual aspect for homeowners
 - **Constraints** – expensive
 - Example – Austin, Texas
- Current design – turns are too tight coming off bridge; during rush hour – safer by making turns more gradual; increasing connectivity at Memorial Dr./Crowchild Tr. would be very beneficial

Ideas Explored

- Regarding the Saddledome/stadium relocation, some concerns on the river flow and flood plain impacts
- Better transit to the Foothills Medical Centre/Children's Hospital – BRT lane
- Major bus routes along Parkdale/Kensington should be maintained as a priority
- Consider a light for buses only
- Barriers at Kensington Rd.
 - **Constraints** – ends through traffic across Crowchild Tr.
 - **Impacts** – blocks pedestrian crossing – will need a bridge for pedestrians
- Need through traffic across Crowchild Tr. on at least one of 5 Ave. or Kensington Rd.
- If we ban left turns onto Kensington Rd., allow right turn
- Need to add a lane? Could squeeze one in
- Banning left turns increases the through times, maybe be a trade-off
- Key is consistency for banning left turns on Kensington Rd. and 5 Ave.
- Mandatory right turn on 13 Ave.
 - Find that odd
- Removing left turns from Kensington Rd. and 5 Ave. (all the time or during rush hour)
 - **Impacts** – impacts on the bridge; will need to loop through residential to turn
 - **Benefits** – better flow; more traffic making right turns to get out to Parkdale Blvd.
 - **Constraints** – makes it difficult to get from Memorial Dr. back onto Crowchild Tr.
- Use Memorial Dr. for access to Parkdale Blvd.
- Chokepoints begin when approaching the bridge northbound; the problem is here; start-point
- Hoping the chokepoints can be addressed rather than widening the corridor
- Bus Lanes/HOV lane from University Dr. to 5 Ave.
- Is the neighbourhood and school going to be impacted?
- Cloverleaf at 5 Ave.
- With fewer light sequences it would push traffic through
- Leave signals but ban left turn?
 - **Impacts** – U-turn on 5 Ave. to avoid left turn; increase U-turn traffic
- Crowchild Tr. should be a full limited access road
- Limited access road with a 80 km/hr speed limit all the way through
- Viaduct from 9 Ave. to the bridge – no turns
 - **Impacts** – visual, house prices, etc.
 - **Benefits** – keeps all access
- Two level bridges/roads to move traffic
 - **Impacts** – lots of implications to residents around
- Turns are too tight coming off the bridge; need smoother turns and exit ramps are not banked properly (generally in Calgary too shallow)
- Build Crowchild Tr. over 5 Ave.
 - **Impacts** – would need to rip out a chunk of the road, construction would be difficult
- With overpasses at Kensington Rd. and 5 Ave. – interchange design should be based on traffic demand
- Building lower, not a good idea for water table. Raising, building over will impact view, houses
- On 5 Ave., what about historical site? Building up?

Map Highlights

Central Round 1 – Table 3 Map E

- Maintain through (across Crowchild) on Kensington Rd. and 5 Ave.
- Buses a priority
- Through for buses only – West Hillhurst
- Ban left turns from both southbound and northbound Crowchild Tr.
- Displace northbound lane at 5 Ave



- Squeeze in extra through lanes
- Bridge connecting Sarcee and Shaganappi

Central Round 1 – Table 3 Map F

- Bus / High Occupancy Vehicle (HOV) lane
- Weave is a problem between 5 Ave. and University Dr.
- Allow through at 5 Ave.
- Left turn alternate
- Ban left turns all times at 5 Ave. and Kensington Rd.

Central Round 1 – Table 3 Map G

- 80 km/h on whole corridor
- Viaduct the corridor
- Remove lights at 5 Ave. – make through way
- Higher speed left turns north of bridge over Bow River
- Realign on and off ramps to and from Crowchild Tr. and Memorial Dr.

Central Round 1 – Table 4

Overall Table Discussion

- Noise travels 2 or 3 houses in
- Free flow traffic has less noise impacts - more hum
- Businesses impacted with diverging diamond
- McMahon Stadium area redevelopment potential – interchange at 24 Ave.?
- Sunalta school needs to stay
- If you can't widen Crowchild Tr. at University Dr. to 6 lanes, problem will continue
- Stack north and south bound lanes – descending hill; pedestrian underpass east-west at 16 Ave.; flyover at 16 Ave./University Dr.
 - **Impacts** – property (west side); Suncourt Place becomes an island; visual impact/noise
 - **Trade-offs** – losing public land
- Underpass less noise than flyover (underpass with Crowchild Tr. access); at 5 Ave and Kensington Rd.
 - **Impacts** – land, visual
 - **Constraints** – utility
- What are they going to do – need definitive answer
- Bus problems with light timing – stops sharing lanes; worse northbound
- Bike lanes, creating a direct route – safety
- Pedestrian accessibility
- Medium-long term solutions better than short term
- Fix traffic lights; there shouldn't be any lights
- Bottleneck 2-3 lanes
- Bridge causing issues – if it's not expanded nothing changes (Calgary Transportation Plan policy – no bridge)
- If lights are removed, will it be an interchange? Flyover?
- 3 p.m. to 7 p.m. all green lights – short term solution
- Lights doesn't improve lane problems
- Cloverleaf – property concerns
- Lane reversal a possible solution during rush hour – won't help exit merge lane at 10 Ave.
- Future high density (West Village)
- Extra lane on bridge – northbound
- Don't want to end up with a viaduct like the Gardiner or Spadina

Ideas Explored

- Remove McMahon Stadium – more land available; high density redevelopment – need to consider for 24 Ave.

- Funnel at University Dr. and bridge
- Fix the bottom of the Funnel – from bridge to 24 Ave.
- Lane reversal – with additional lane during rush hour
 - **Constraints** – lanes drop; infrastructure/median
- University Dr. bottlenecks – stack (over/under)
 - **Impacts** – view; property; descending hill so less visual impact for stacking
- North of 16 Ave. – 3 lanes northbound
- University Dr. flyover
 - **Impacts** – noise/visual
 - **Benefits** – eliminates bottleneck St. Andrews Heights
 - **Trade-offs** – lose park space for improved flow; pedestrian access – between levels of road; use differently
- Bottleneck is between Memorial Dr. and University Dr.
- Freeway
 - **Impacts** – property acquisition
- Remove lights 5 Ave. and Kensington
- Rush hour green lights
 - **Benefits** – free flow traffic; less vehicle noise
 - **Impacts** – cross Crowchild traffic; increased traffic on adjacent streets; noise; increased community traffic; community loses access during rush hour; bus routes
- Bus stop access (access to stops for pedestrians – needs to be improved)
- Long term solutions better than short term solutions
- Sunalta school – don't take down
- Northbound traffic bigger issues
- Lights and lane – bottleneck
- Kensington Rd./5 Ave. – 2 interchanges at both intersections;
 - **Impacts** – businesses
- Underpasses vs flyovers with Crowchild access
 - **Benefits** – less noise
 - **Constraints** – utilities
 - **Impacts** – property acquisition; visual
- New bridge
 - **Constraints** - environmental

Map Highlights

Central Round 1 – Table 4 Map H

- Remove lights
 - At rush hour – cheap to try
- Tunnel at University and widen west
- Remove lights at 5 Ave.
- Underpass at 5 Ave.
- Underpass at Kensington Rd.
 - **Constraints** – flood?
- Tunnel under Bow River
- Future high density – future issues!!
- Lane reversals?
 - **Constraints** – northbound and southbound traffic split 50 / 50

Central Round 1 – Table 4 Map I

- All access interchanges at both Kensington Rd. and 5 Ave.

Central Round 2 – Table 1

Overall Table Discussion

- Until the bridge is sorted other changes are useless
- Need bigger bridge
 - Q: Can only add one lane?
 - A: Correct (during bridge rehab)
 - This will not be enough
- Bridge is not choke point
- Bridge merging left movement right across 3 lanes to Memorial is a problem. Left to Kensington Rd. is an option, but only locals
- Bottleneck from lane changes at bridge
- Northbound bridge, people trying to get on Memorial Dr. and side roads are the issue
- Needs to be simpler for people to figure out where they want to go
- Accidents caused by drifting; collisions are north of bridge
- Second bridge by Point McKay, cuts traffic on Crowchild Tr.
- Why are we focusing on Crowchild Tr.? Should consider creating alternate routes?
- Need 3 lanes all the way through the corridor
- Many small community ins and outs – close this access
- No bandaid fixes
- Lane reversals
- There are problems with people turning into communities
- Lots of road between Memorial Dr. and University Dr.
- Problem is by 13 Ave.
- Buy Suncourt Place and move road 150m west
- Lane confusion
- People use left lanes to cut in front of traffic
- Last transit stop north of 5 Ave. and need to change lanes to University Dr. Stop at 9 Ave. bus stops traffic with no bus pull out lane
 - Could we move this?
- Transit possible re-route
 - Where are people traveling?
- Memorial Dr. and Crowchild Tr. improve by right in right out only off Kensington Rd. intersection (but respect cyclists), to keep communities connected. Have an east-west flyover
- Need to maintain businesses and community access, keep at least one intersection with east-west access (either 5 Ave. or Kensington Rd.)
- Buses leaving schools on the east side of Crowchild Tr. which need access to south
- All turns access at 19 St. (maybe at non-peak hours)
- Cloverleaf at Memorial Dr. and Crowchild Tr.?
 - Q: Could we create no lights free flowing with over and underpasses?
- Free flow lanes southbound with dedicated turn lanes
- Southbound on the bridge is fine, it's the north that causes problems
- Bridge wider, could improve. It is 6 lanes now. The main problem is the merging across lanes. Northbound lane over bridge would be best use for widening
- Need to identify major community connection roads and maintain those and close others (Bowness is a wide road that could handle more traffic)
- Memorial westbound – extend the north lane that ends now
- 19 St. seems underutilized, use as a secondary
- Make Memorial Dr. and Crowchild Tr. intersection better to draw away cut-through traffic
- Eliminate southbound left turns at Crowchild Tr. and 24 Ave.
- Eliminate all left turns to and from Crowchild Tr.

- 5 Ave. is a connection to 14 St. There are playground zones here. What are the reasons people make a left onto 5 Ave. if not accessing residential
 - Cut through to Branton School to avoid the traffic north of 5 Ave.
- Widen north of 5 Ave.
 - Challenge is property impacts, but at some point it will need to be gone
 - Need to consider the development in West Calgary and the traffic impacts
- Eliminate access between Kensington and 5 Ave. (one of these two intersections would be an overpass)
 - Would be a trade-off for some businesses
- Closing access between 5 Ave. and Kensington Rd could allow for sound walls to reduce dust and noise for residents
- Pedestrian and cyclist infrastructure on overpass at either 5 Ave. or Kensington Rd.
- Kensington Rd. seems like desire line for pedestrians and cyclists to river pathways
- Move Memorial Dr. closer to bridge to make a more direct route for pedestrians and cyclists
 - Shifting Memorial Dr. south
- 19 St. is main bike desire line
- Address the pinch points
- Crowchild is great in South and North sections, it's worse in Central section
- Crowchild Tr. isn't only moving people downtown (e.g. Chinook Centre)
- The ring road will not reduce traffic pressure
- Ring road could eliminate truck traffic
- Ring road will reduce traffic but the growth will increase traffic again
- But there is not much current truck traffic on Crowchild Tr.
- Because Crowchild Tr. is not good, it causes people to avoid it
- Don Valley Parkway in Toronto – can we compare Crowchild Tr. to this for ideas and goals?
- West Village Area Redevelopment Plan – how will it impact traffic; we need to consider this in the final design

Map Highlights

Central Round 2 – Table 1 Map J

- Extend merge lanes approaching Crowchild at Memorial, U-turn movement
- Sound barriers existing
- Crowchild is busy all day, every day. People avoid it. We need to focus traffic on traffic on traffic moving corridors like Crowchild Tr.
- Eliminate access for business – too much slow-moving traffic
- A lot of people and bikes access across Kensington Rd. and 5 Ave.
- Southbound and northbound left turn restrictions at 5 Ave. – right in / right out



- Instead of two connections to Crowchild have only one either Kensington Rd. or 5 Ave. Whatever can handle more traffic
- Trade-off of restricting access is that more traffic can use Crowchild Tr.
- Address two big pinch points at the river and north of the University
- 400 lb gorilla – Flames Partnership

Central Round 2 – Table 1 Map K

- All turns access at 19 St.
- Better lane continuity from 17 Ave. north
- Merge problem on bridge – left hand merge and then moving over to the right side
- Eliminate the need to change lanes on bridge
- Add lane for right turn from eastbound Kensington Rd. to southbound Crowchild Tr.
- Bigger bridge. One more lane is not enough
- Commuters avoid Crowchild because of traffic congestion
- Collisions in this area (north of the bridge) due to congestion
- Three lanes northbound and southbound is needed
- Lane reversals on Crowchild Tr.
- Left turn restrictions to help traffic move at intersections to help traffic flow
- Restrict left turns at Kensington Rd. and 5 Ave. Right in, right out access. Flyovers like 26 Ave.
- More access across the river? No new river crossings west of Crowchild
- Buses need to move over lanes on a hill re-route transit area
- Confusion of what lane to be in south of University Dr.
- Pinch point at University Dr.

Central Round 2 – Table 2

Overall Table Discussion

- Long term expressway (elevated) – cheaper than tunnel
 - Take existing structure and add elevated section across river and all the way to University
 - **Impacts** – sound barriers difficult and visual issues (community concerns)
 - **Trade-offs** – sound barriers can make sound worse on one side
- Tunnel
 - **Constraints** – expensive; under river; technically very difficult; most risk
- Sound barriers affect cycling/pedestrian connectivity
- Forward thinking is key
- Consider property value – long term impacts
- Other surface solution
 - Knock out row of houses
 - Property acquisition
- Do nothing
 - High density increases, capacity requirements on Crowchild Tr. increases
 - Not possible to do nothing
 - Other forms of transportation encouraged (BRT Crowchild Tr.), but transit not solution
 - Mount Royal University – University of Calgary BRT/HOV lane
- North/South LRT – Mount Royal University/Currie Barracks, etc.
- Need to know projected use on Crowchild Tr. in future (200,000 extreme?)
- Pedestrian/cyclist overpasses would be needed
- Right-turn only
 - **Benefits** – quick and fairly inexpensive; short-term mitigation; 3 sets of lights need to be killed to have largest effect
 - **Impacts** – emergency access concerns; possibility of emergency/transit access light; preferential treatment for emergency services (control lights)

- Q: How effective are transit only lanes?
 - A: Working well, people are self-managing, but looking to enhance and make even better
- Northbound at University Dr. exit – people using left-only lane to bypass cars and cut in, which results in backed-up traffic
 - Deliberate behaviour; perhaps put in a barrier and more signage; get traffic moving/flowing consistently
- People criss-crossing/changing lanes as they travel southbound to merge out of the far left lane that exits to University Dr.
- 5 Ave. or Kensington Rd. (pick one) under Crowchild
 - **Impacts** – dig up whole block (length of time for this)
 - **Benefits** – community still able to get across
- If Crowchild Tr. is free flowing – cars will stop taking 19 St.
- No left turns results in people taking round-about ways to get to destination
 - Temporary barriers, lights, observe
- Between 80 000-100 000 vehicles per day (don't have exact numbers). 60 years from now – similar volumes to Deerfoot Tr. (200 000) morning and afternoon rush hour (northbound always backed up)
 - Southbound seems to be free-flowing (somewhat)
- Number of lights results in bottleneck
- Remove lights at Kensington Rd. and 5 Ave.
 - Short-term – only right turn access could help with peak demand
 - Long-term – underpasses at 5 Ave./ Kensington Rd. to reduce impact on residents and business; expressway connection
 - **Impacts** – no left turns require maneuvering through residential streets
- Southbound right-hand merge lane is backing up traffic because people use it to get around traffic
- Second bridge (river crossing)
 - Separate express lanes from others (people who want to get on/off don't use express lane); tunnel the whole thing; Crowchild Tr. under Kensington Rd (have to take out 2 blocks); elevated expressway all the way across; just one underpass (5 Ave. under Crowchild Tr.)
- Right in/right out – add merge ramps/acceleration
 - **Impacts** – some residents may like the idea/some may not

Ideas Explored

- Elevated expressway from 33 Ave. to University Dr.
 - **Impacts** – sound and sight; can't do sound barriers; barriers will effect pedestrian/bike access and connectivity; sound barriers can just cause reverberation
- What about adding a lane, other surface solutions? To achieve the expressway effect?
 - **Impacts** – mainly land, property
- What if we do nothing? People need to find alternative transportation
 - Strong feeling about transit not fulfilling that load
- Bus rapid transit would work well with the right in/right out options
- Second bridge to help with flow
- Expand surface lanes to handle express (through and local)
- What are the numbers regarding traffic flow?
- Residents that are long-term (25+ years) just want this to get going – no bandaid solutions
- Right in/right out
 - **Impacts** – now go through the neighbourhood; merge lane results in back up onto Memorial Dr.
 - **Benefits** – will increase southbound flow with no lights
 - Right in/right out solution is a good short-term solution. Also can be a good experiment. See if we can make it work before going crazy
 - Right in/right out could be all the time (consistency)
- Need to add pedestrian/bike bridges
- Q: How effective are the transit only lanes?

- A: Pretty well, there is some self-policing going on
- Traffic control for emergencies; red-light traffic for ambulance, EMS
- Increase signage and barriers so that if you are in the lane to turn on University Dr., you are stuck
- Could The City change the lights as a short term study to see what is actually needed?
- Northbound gets more backed-up than southbound
- University Dr. ramp causes all kinds of problems; people using the lane to get ahead and cutting off other traffic
 - Would need on-ramp for Crowchild Tr.
 - **Impacts** – must be sensitive to neighbours; reducing shortcuts, but also access
- Remove lights at Kensington Rd., 5 Ave., 24 Ave. (short term solutions); use 19 St. to get over (no left turns)
- Merge onto Crowchild Tr. from University Dr., crossing over to turn left onto 5 Ave. – difficult
- Can't make left turn onto 19 St. from Memorial, too much impact on residents
- Seems the under/overpass would be more useful at Kensington Rd.
- Putting 5 Ave. under Crowchild Tr.
 - **Impacts** – also lots of impact to residents and businesses
 - **Constraints** – limited by how deep we can go (water table);
- 5 Ave. or Kensington Rd, add underpasses. Only one intersection to minimize impact to residents
- Dedicated expressway and second bridge
 - **Benefits** – makes two flows of traffic for local and through
 - **Impacts** – make Crowchild Tr. under and build expressway above it

Map Highlights

Central Round 2 – Table 2 Map L

- Tunnel vs. Viaduct vs. Surface
- BRT / LRT along Crowchild – bus lanes

Central Round 2 – Table 2 Map M

- Re-vamp decision point for University Dr. further south
- Bad weaving between 5 Ave. and University Dr.
- Pedestrian overpass between 5 Ave. and University Dr.
- 5 Ave. or Kensington Rd. under Crowchild Tr. Leave Crowchild Tr. at grade
- Pedestrian overpass north of Kensington Rd.
- Right in, right out only at Kensington Rd. and 5 Ave.
- EMS can pre-empt signals at Kensington Rd.
- Second bridge over Bow River – separate through traffic and local traffic

South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

Overall Table Discussion

- Problem – not access in all directions at current interchange at Bow Tr. and Crowchild Tr., some trade-offs with communities might make access in all directions more feasible
- Exit Garrison Woods onto 37 St. could be idea to lessen traffic. Concern is with growth in Garrison Woods. A few more outlets to decrease impact on Crowchild Tr.
- Elevate roads instead of widening. Use additional lanes as express lanes
- Go down rather than elevate because going up causes noise. Glenmore is a good example
- Depress roads – to reduce noise and preserve neighbourhoods
 - Overpass currently, so depressed may increase safety for pedestrians and bikes
- 17 Ave. to Bow Tr. tunnel because natural topography is good for that
- 10 Ave. onto Crowchild Tr. is currently dangerous and 5 Ave. changes are compounding problem
- Access on Crowchild Tr. all going to same point and is extremely frustrating

- Use open space near Memorial Dr. and Scarboro (2 points) focus access onto Crowchild Tr.
- Consider traffic when West Village comes on – increase traffic generation/congestion
- Clean up Bow Tr. and Crowchild Tr. interchange, but not in favour of adding lanes
- Problem up by McMahon Stadium where 5 lanes funnel to 2. Lane adjustments may solve issues during rush hour. Get average speed close to 60km/hr. at rush hour. As long term – another set of lanes elevated, therefore, not building 4 but 2 and use express lanes. Don't need to build anything near the river area. Think differently do some lane reversal during rush hour
- Another idea is to redirect and not allow people direct access onto Memorial Dr. eastbound
- Discussion is too focused on traffic – issue is neighbourhoods. Don't solve traffic for people in the suburbs. Do not widen Crowchild Tr. nor build elevated roads
- Elevate road (to north of 24 Ave. where the bottleneck is)
 - **Impacts** – aesthetics; noise; inner city neighbourhoods will lose vitality (Detroit)
 - **Constraints** – need room for construction
- Do nothing
 - **Impacts** – shortcutting traffic
- Flyover Bow Tr. to decrease pinch and access to Memorial Dr. and other points
 - Flyover both east and west on Memorial Dr. without interfering traffic on Crowchild Tr.
 - **Benefits** – not as much impact on existing neighbourhoods; can eliminate weaving
 - **Impacts** – property (lumber yard); West Hillhurst (west) may be impacted with idea
 - **Constraints** – grades at ends of flyover
- Depressed roadway (17 Ave. to Sunalta)
 - **Trade-offs** – construction challenges are temporary therefore considered a trade-off

Ideas Explored

- Depressed road (reduced noise)
- Crowchild Tr. and Bow Tr.
 - Westbound – southbound no access today
 - Eastbound – northbound not easy access
- Use the roads for people who make sacrifices
- Tunnel Crowchild Tr. between 17 Ave. and Bow Tr.
- Excavate down 17 Ave. to Bow River to keep noise down – Glenmore good example
- CalgaryNEXT and West Village
 - Location and Area Redevelopment Plan differences?
- Look at A2 x A12 interchange in Utrecht as an example (Netherlands)
- Flanders interchange
 - Garrison Woods access to Crowchild Tr. with 8,000 vehicles per day
 - Is it using 37 St.?
 - Can Crowchild Tr. handle more traffic?
- Close cross traffic during rush hour (24 Ave., 5 Ave., Kensington Rd., University Dr.)
- Flyover for through traffic
- Elevated roadway 17 Ave. to McMahon Stadium – expand up instead of out
 - Elevated lanes used as lane reversal
- Traffic expands so as to fill the space available (Parkinson's law, amended)
- Crowchild Tr. and 10 Ave. biggest accident areas in city?
- Northbound Crowchild Tr. from City Centre all at one access point now
- Prevent movement during rush hour from downtown to Memorial Dr. eastbound (across bridge)
- Full access between Bow Tr. and Crowchild Tr. – clean up traffic
- Elevated roadway 17 Ave. to McMahon; northbound on top, southbound on bottom or vice versa
- Rush hour turn off traffic lights at Kensington Rd., 5 Ave., 23 Ave., 24 Ave.
 - Short term solution
 - Achieve 60km/hr through

- Noise and aesthetics – big concerns with elevated roadway
- Traffic volumes are not as directional at peak times
- Depressed Crowchild Tr. south of river
 - **Benefits** – reducing noise and visual impacts to communities; pedestrian and cycling access improved (at grade)
 - **Constraints** – right of way and construction
 - **Impacts** – require space for construction
 - **Trade-offs** – use dog park only for construction
- Flyover to from Bow Tr./10 Ave. to Memorial Dr. and Crowchild Tr. northbound
 - **Benefits** – space available; improve safety and traffic flow
 - **Constraints** – grades; possibly move/re-align Memorial Dr.
 - **Impacts** – possible land acquisition; brings traffic closer to West Hillhurst
- Do nothing
 - **Impacts** – shortcutting through communities
- Elevated roadway north of the Bow River
 - **Impacts** – major impacts to adjacent communities (visual and noise); land acquisition
- Re-align 10 Ave. access to right side
 - **Impacts** – land acquisition



Map Highlights

South Round 1 – Table 1 Map A

- Look at options for access off Crowchild Tr. at Memorial interchange
- Elevated roadway north vs. south plus lane reversals
- Safety issues and increased traffic where Bow Tr. joins Crowchild Tr. North
- Eastbound Bow Tr. to northbound Crowchild Tr. and westbound Bow Tr. to southbound Crowchild Tr. interchange / access
- Regarding pedestrian / cycle bridge south of Bow Tr. – cycle crossing is steep, pedestrians and bikes safer if Crowchild Tr. went down
- Not in favour of widening Crowchild Tr. to three lanes in both directions

South Round 1 – Table 1 Map B

- Move westbound Memorial Dr. south to get access without flyover – loops or flyover from 10 Ave. to westbound and eastbound Memorial
- In a perfect world...need access from 10 Ave to Bow Tr. and north and south Crowchild Tr. plus Bow Tr. access to Crowchild Tr.
- Northbound and southbound Crowchild Tr. converge at Bow Tr. is a problem
- Depress Crowchild Tr. from 17 Ave. north
 - Room on westside to detour and restore park
- Weaving space between 17 Ave. and Bow Tr. could shift Crowchild Tr. west.

South Round 1 – Table 2

Overall Table Discussion

- Take it up to Memorial Dr.
 - Q: Lots of spring and geotech areas – any constraints?
- Half the volume of Deerfoot Tr. is on Crowchild Tr., what is the capacity of bridge – 80,000
- Mandate of study is 60 years – Q: step for capacity?
- Hypothesize that population will grow to 2 million people in 6 years
- Caters to cars
- Elevated expressway
 - Extension – trench 2 roads on top of each other.
 - **Impacts** – divides neighbourhood
- Tunnel for pedestrians/bikes, but might be safety issue
- Traffic going north vs downtown – issue
- Lineup of cars Richmond Rd./17 Ave. – people short cutting through neighbourhood
- Closing 17 Ave. access and separate through traffic
- Better interchange on 24 Ave. vs 17 Ave. (start at 24 Ave.)
 - Traffic is bad around 26 Ave. as well
- Build another bridge (take traffic out of downtown)
- Bikes and pedestrians – get to University of Calgary
 - If not direct line then it is not convenient
 - Improve access across river to University of Calgary
- Bike access and transit across the bridge between Mount Royal and University of Calgary
- A lot of development in West Village might get affected by work on Crowchild Tr.
- Maintain pedestrian connectivity no matter what
- Improve pedestrian access to downtown
- Tunnel until the river
 - **Constraints** – may not be technically feasible
- Bow Tr. to downtown and get on Crowchild Tr. is an issue
- Skeleton roads for traffic (ring roads don't address the traffic in and out of city)
- Future traffic volume being predicted correctly?
- Eliminate intersection – 17 Ave. as a suggestion (main issue)
- Separate bridge next to bridge for express (through) traffic
- Bow Tr. has no access to Crowchild Tr. southbound and access to northbound is tricky
- Separate downtown traffic to Memorial Dr. (don't take Crowchild)
- Tremendous increase in development at the University of Calgary and how will it affect traffic (uncontrolled development no relation with infrastructure)
- Limit development at Crowchild Tr. until further upgrades
- Express lanes across the bridge downtown (choice – cross bridge or go downtown)
 - Express lanes to be completely separate
- Dedicated through lane from 17 Ave. up to Central section (West Hillhurst)
- Volume increase (road structure that could decrease noise level maybe?)
 - Very minimum impact
- Increase capacity of merging lanes
- More dedicated bus lanes and HOV

Ideas Explored

- Tie density to traffic capacity and flow on Crowchild Tr.
 - **Benefits** – helps tie infrastructure capacity to development
 - **Impacts** – forces the city to deal with growth in a balanced manner
- HOV lanes

- **Benefits** – reduce number of cars
- Dedicated bus lanes in express lanes
 - **Benefits** – minimize car traffic; make transit more efficient than driving; less car trips; less emissions
 - **Impacts** – doesn't reduce problems with car traffic
- Expressway elevated through corridor (i.e. Los Angeles, Houston, etc.)
 - **Benefits** – develops 'up' rather than 'out'; Purely for traffic cutting through corridor, no exits in core
 - **Constraints** – how far back to begin elevation; is it considered a new bridge; current infrastructure may need to be rebuilt
 - **Trade-offs** – cost
- Toll road
 - **Benefits** – encourages 'non-use' of corridor; bus/LRT/ring road options need to be considered or else pay the toll; HOV lane
 - **Trade-offs** – motorists rejection
- Close 17 Ave. access/separate through lanes

Map Highlights

South Round 1 – Table 2 Map C

- Dedicated through lanes between Bow Tr. and Memorial Dr.
- New bridge over Bow River to eliminate traffic merging from the left
- At 17 Ave. require a need for drivers to make decision to enter downtown or through traffic
- Consider right turn access from eastbound Bow Tr. to southbound Crowchild Tr.
- Address merge / through traffic at Crowchild Tr. and 17 Ave.
- Limit development in Crowchild corridor until upgrading has occurred
- Consider high occupancy vehicle / bus only lanes
- Why does traffic slow down / merge (at Bow Tr.)?

South Round 1 – Table 2 Map D

- Elevate Crowchild Tr. through this whole section of the corridor
- Noise!
- Separate through and downtown dedicated traffic
- Potential to close 17 Ave. interchange

South Round 1 – Table 3

Overall Table Discussion

- Crowchild Tr./Bow Tr.
 - To go Memorial Dr. east very hard to get across – if Crowchild Tr. is wider, will need to get across even more lanes; very accident prone; needs to be straightened out; better signage for Memorial Dr. exits
- Remove lights will improve flow. It will make it harder though for people in surrounding communities (West Hillhurst) to get on/off Crowchild Tr.
- Traffic will increase so there's a need to protect surrounding communities with sound barriers
- More local traffic; no longer just a north-south
- How do we deal with this?
 - Like Vancouver, encourage people to take transit or bike. This would be a safety issue if we are expecting traffic numbers to grow
- Better access getting onto/off Bow Tr.
- Improve cycle access to Richmond Road Diagnostic Centre and 21. Ave to Bow Tr.
- How does this work with CalgaryNEXT?
- Transit – how many routes cross the river?
- Extend HOV lanes – force people onto buses
 - From north-south into downtown
- Cycle access along Crowchild Tr. – between University and Hospital

- Elevated roadway – one direction lower, other higher
 - Help clear Crowchild Tr./Bow Tr. interchange
 - **Constraints** – it would be ugly, construction, increased sound, icing, on/off is difficult
 - **Benefits** – increase capacity, wouldn't need to increase east/west footprint
- Tunnel – direct into downtown, lane reversal for rush hour
 - **Impacts** – machine, grade – would need to start south of 17 Ave. and extend past Memorial Dr.
 - Tunnel would be for north/south only
 - Tunnel under existing Crowchild Tr.; tunnel under 24 St. and create new bridge to reconnect with Crowchild Tr.
- Tunnel from Memorial Dr. to Bow Tr.; take north traffic to downtown out of interchange and directly into downtown
- Northbound traffic always backed up during both AM and PM rush
- Cyclists/pedestrians don't want to be forgotten. Don't have ideas for better access until they know what the road will look like.
 - Maybe not directly on Crowchild but close to; need alternatives that are safe connections; consider it now rather than forcing a bike lane in later when it won't really fit
- Is CP Railway through downtown really needed? Can it be moved? Could it be considered a safety issue as is now? Moving it would open up space in downtown
- 17 Ave. on/off ramps really tight – intersection would be fine if the problems further north were fixed
- Lights – need to be staged; would fix a lot of problems with flow; would not help with flow into downtown
- HOV – main need to get people into downtown; can't forget people travelling to the Hospital
 - **Impacts** – reduce space on road for cars
 - If lanes were added on bridge it wouldn't impact room for cars; would impact on/off ramps
- With southwest ring road going in, what impacts will be had on traffic density
- During peaks can we change lighting, restrict turning
- How is noise being addressed
 - Noise Barrier Policy needs to be reviewed; needs to be done in both front and back yard

Ideas Explored

- Need to consider accident statistics
- Impacts of CalgaryNEXT
- 7 day construction mandatory
- Re-conceptualize how it works on over Bow Tr.
- Another bridge crossing
- Express lane/collector lane system
 - Left hand merge needs to go; too many accidents; could be ok for straight through
 - **Benefits** – increased safety, decreased accidents; better way-finding; more intuitive
 - **Impacts** – noise increased; need sound barriers
 - **Constraints** – space; LRT; need another bridge; expensive; could add only 1 lane to existing bridge; clearance height; additional land requirement
- Build it out
- Do nothing – force transit and pedestrian as alternatives
- Access from both east/west Bow Tr., to both north/south Crowchild Tr.
- Improve cyclist access along Crowchild Tr.
 - University of Calgary and Foothills Hospital
- Memorial Dr. to Bow Tr. tunnel
 - **Constraints** – cost
- Elevated
 - **Benefits** – cheaper; same footprint; more capacity/increased volume
 - **Constraints** – icing worse; sound; ugly; construction issue
 - **Impacts** – getting on/off the elevated road is an issue; maintenance is higher
 - 8m height required for elevated road

- Tunnel with lane reversal
 - Bottleneck; crossing lanes is tough; accident prone; slowing everything down – how to keep speeds same
 - **Constraints** – on/off ramps, maybe it should be through only; complex on Bow Tr.
 - **Impacts** – most money; boring machine constraint on width; ½ at time box cut; box cut – cheapest
- Glenmore access to 37 St. with roundabout is difficult
- Will need more sound barriers with growth increase (i.e. Currie Barracks)
- Keep bridge from icing
- Straighten Crowchild Tr. alignment out
- Better signage
- Remove lights
 - Lights could be stage 1
- Review of sound barrier policy
 - Sound check was done in backyard, should be done in front yard
- HOV – reduce space for cars; move towards transit/cycle/pedestrian
- 17 Ave. stays as is

Map Highlights

South Round 1 – Table 3 Map E

- Eliminate the existing eastbound Bow Tr. to northbound Crowchild Tr.
- Change Bow Tr. interchange to bring all merges to the right
- Bring westbound Bow Tr. to southbound Crowchild Tr. merge to the right

South Round 1 – Table 3 Map F

- Remove lights at Kensington Rd.
- Hard to move on Crowchild Tr.
- Respect the adjacent community at Memorial Dr. and Crowchild Tr.
- If high occupancy vehicles, from north to downtown, not from south to across the river
- Lots of accidents
- Heat bridge due to icing
- Keep speeds between 60-70 over bridge
- Not enough space on bridge
- Lane issues approaching bridge
- Better signage approaching bridge from the south
- More path / bike facilities along Crowchild Tr., Bow Tr., and in adjacent neighbourhoods
- More access at Bow Tr. / Crowchild Tr. interchange: both ways Bow Tr., both ways Crowchild Tr.
- Crash attenuator on Bow Tr. at Crowchild Tr. interchange – often hit
- Why no sound barrier south of Bow Tr.? More traffic = more noise. Protect the communities
- HOV lanes for buses and for two plus (people in vehicles)
- Leave 24 St. S.W. exactly the same
- More local traffic with Currie Barracks (Crowchild will have more traffic)
- Sidewalks stop at 22 St. S.W., please connect to the north
 - Northbound sidewalks/paths along 23 St. S.W. to 22 Ave. S.W.

South Round 1 – Table 3 Map G

- Tunnel to/from downtown under Bow River through West Village connecting Bow Tr. and Crowchild Tr.
 - Are we capturing the correct north to downtown problem
 - Expensive
- Bikes / paths going north/south of the river (connectivity)
 - Make sure the paths are there for the future
 - Bikes decide with the road is, first the plan, great connectivity for bike/walk after
- Bike/walk paths off / away from Crowchild vs. making it along Crowchild Tr.

South Round 1 – Table 3 Map H

- Tunnel that is re-aligned to the west and follows 24 St. S.W. alignment south of Memorial Dr.
- Lane reversal from north and south to downtown and vice versa
- Don't do the cheapest

South Round 1 – Table 3 Map I

- Start incremental lights at Kensington Rd. (lots of concepts – do a traffic study)
 - **Impacts** – safety impacts of pushing traffic somewhere else
- Add lane for high occupancy vehicles to downtown verses across
- Reduce available room for drivers
- Double exit ramp northbound Crowchild Tr. To Bow Tr. East
- Additional high occupancy lane northbound Crowchild Tr. Approaching Bow Tr.
- Not confident in accuracy of sound studies
 - Sound walls all along Crowchild Tr.
 - City review Noise Policy (only completed in backyard)

South Round 1 – Table 4

Overall Table Discussion

- Crowchild Tr. to 10 Ave. is goofy; Crowchild Tr. serves people who live downtown; elevation disrupts community
- Tunnel
 - Pedestrian and bike over top; elevate travel with two layers - one local/one express
 - **Impacts** – overpowering
- HOV in middle of road
- Sound wall
- Green planting; salt resistant (e.g. Toronto)
- 17 Ave. to Bow Tr.
 - Extra lane and reduce to 50km/hr.; reduce lane width to 3.0m
- Replace Bow Tr. interchange with roundabout or just bring to ground level
- Add berms and landscape (Bow Tr. to 17 Ave.)
 - Both sides; add lane; maintain corridor or widen corridor
- Redirect traffic to Sarcee Tr.
- Tolls for peak periods
- Close intersections during peak hours
- Lane reversals like Memorial Dr.
- Divert buses
- Realign Bow Tr. interchange
- Buffer zones between Crowchild Tr., community, then widen
- No left turn at peak hours
- HOV lane
- Add access for bikes at pedestrian bridges
- Need to tie to West Village at 11 Ave. to remove spaghetti mess
- Adding lanes and maintaining corridor along corridor stretch



- **Benefits** – more vehicular capacity; slows traffic (lane's narrow); keeps moving; improve edge conditions; minimal construction; save money; maintains existing forms; realistic timeframe; achievable
- **Impacts** – many lane changes; may need to re-align bridge; bridge can't add more than one lane without major costs or lane disappears at bridge

Map Highlights

South Round 1 – Table 4 Map J

- Right in, right out, coupled with improvements at bridge crossing at Kensington Rd.
- Optimize exterior intersection for pedestrians at Kensington Rd.
- Minimize construction impacts and money
- Double-decker bridge over the river like Centre St. Bridge.
- Potential for traffic circle at Kensington Rd. impact commute, slows traffic, doesn't flow
- Keep turns at Kensington Rd. no left destinations
- Larger sidewalks
- Need to improve bridge as well
- Block access on 5 Ave.
- Underpass (keep one access 5 Ave.)
 - **Benefits** – flow, connects community, pedestrian/cycle connectivity
 - **Impacts** – grade changes, houses, access to Memorial Dr., limited access to community
- Light changes
 - **Benefits** – continuous flow, connects community, protects community, minimal construction, intersection more approachable
 - **Impacts** – need to change bridge
 - **Constraints** – restricted left turns

South Round 1 – Table 4 Map K

- Tolls during peak periods
- No left turns during peak periods
- Peak signal flow on Crowchild
- Lane reversals – similar to Memorial and 10 St.
- Green planted sound wall (easier maintenance, less graffiti, salt resistant)
- Consider at grade instead of interchange for access and connectivity at Bow Tr.
- Minor sound wall – prefer no wall along Bow Tr.
- Any elevated road to start around Bow Tr.
- Safety concerns under elevated roads
- Remove additional 10 Ave. loop to Crowchild from Bow Tr.
- Land bridge to connect community just south of Bow Tr.
- Slow traffic to 50 km/hr
- Narrow lanes
- Need sound attenuation
- More lanes = more traffic
- Feel Bow Tr. is over-designed
- Recent increase in speed of Bow Tr. From 60 to 70 km/h
- Like transit / road example on Bow Tr. (just west of Crowchild Tr.) for use on Crowchild Tr.
- Pedestrian access at 17 Ave.?
- Assess ring road impact of traffic distribution
- Sunalta is an example of why not to elevate
- Elevate Crowchild Tr. for through traffic only
 - **Impacts** – noise and visual concerns
- More inner city friendly
- Car pool

- Who does Crowchild serve?
 - Serves inner city
- Lane reversals
- Widen Crowchild west instead of east – some disagreement about buffer zones
- Tunnel Crowchild and convert ex-Crowchild lands to greenway
- Extra ramps to serve communities
- Tie communities together within
- Noise
- Elevate Crowchild within existing corridor
 - Bow Tr. across
- Tunnel along corridor with pedestrians and bike path over top
 - People that go downtown can use it
- Access
- Pedestrian bridges
- Lanes for carpooling
- Lights after Memorial
- Buffer zones
- Move Navel / dog park
- Protect people house
- Lane reversals changes through whole section
- Intersections
 - Close completely or during peak times
- Toll roads during peak periods
- Redirect traffic to Sarcee
- Ring road feed inner city
- New bridge west of Point McKay
- Landscaping / berming both sides
- Sound mitigation
- Extra lanes - stay within corridor
- 70 – 50 km/hr
- No extra lanes
- Make lanes narrower – slow down
- Remove interchange, place at grade
- No way to get from Bow Tr. to Crowchild Tr.
- Need to tie into West Village
- Replace pedestrian bridge – needs walking and bikes (at Sunalta School)
- Pedestrian bridge access bike path at 17 Ave.
- Crossing / lane change from Crowchild on bridge
- Remove access from 11 Ave. – go straight

South Round 1 – Table 4 Map L

- Solve Memorial Dr. / Kensington Rd. area for flow
- Add lanes within existing right of way
- Added lane – weave issue worsens
- Possible bridge impacts at Bow Tr.
- Re-align west with lower design speed
- Add space with widen west at Bow Tr.
- Narrow lanes
- Can reduce loop ramp footprint add land bridge for community connect
- Median bus lane instead?

- Adding lanes to existing corridor (Bow River bridge along to Currie Barracks)
 - **Benefits** – more capacity; slow traffic; less noise; keeps traffic moving; minimal capital / less cost; improve edge conditions; minimal construction impact; timeframe; achievable; keep moving
 - **Impacts** – slow traffic; bridge not new lane; four lane merge slower; high occupancy vehicle lane ends – where does it go; lanes end

South Round 2 – Table 1

Overall Table Discussion

- Summit St. clarification – housing area
- Kensington Rd. tunnel
- One more lane across bridge
- Reversal lane (exclusive peak lane)
- Third northbound lane – lane continuity northbound
- Flyover Bow Tr. to Memorial Dr.
- Take away 10 Ave. to northbound Crowchild Tr.
 - What would happen to flow?
 - Exclusive lane 10 Ave to Memorial Dr.
- Need coordination with West Village
- Preservation of cycle routes
- Improve cycle across bridge and connecting across Crowchild Tr.
- Switch ramps from 10 Ave/Bow Tr. to right hand side for continuity
- Add lane from before 17 Ave. for continuous traffic
 - Across bridge and Bow Tr. flyover ends at Memorial Dr.
- Under or overpass through Kensington Rd.
- Changing 10 Ave./Bow Tr. ramp to right and adding northbound lane reducing roads at ramp
 - **Benefits** – reduces weaving; provides northbound continuity; maintains speed/flow; reduces accidents; minimize construction; add bike with extra lane; relieves south problems; community connectivity; maintain pedestrian crossing (wildlife crossing)
 - **Impacts** – construction time adjusting ramps – slows traffic; costs
 - **Constraints** – vertical constraints
- Lane northbound to eastbound Memorial Dr.
- Diverting pedestrian bike path from Crowchild Tr. bridge over Bow Tr.
- Another ramp with lane and realignment across Bow River bridge
- Removing one access to community at 5 Ave.
 - Maybe only at peaks; maybe only restricting turn movements to right in / right out
 - **Benefits** – continuous flow; reduces flow through community; minimal construction costs
 - **Impacts** – how to cross Crowchild Tr.
- Lights changes or removed at peak times
 - **Impacts** – would not address non peak issues
- Underpass at Kensington Rd.
 - **Benefits** – gets rid of traffic lights; if wider allows for pedestrians/bikes
 - **Impacts** – maintaining turns requires more right-of-way for ramps; need space; loss of houses; loss of community access

Ideas Explored

- Tie communities
- Slow traffic and increase volume
- Add lane (s) but reduce speed limit
- Connect to east-west corridors and west downtown
- Impacts of ring road
 - Now has 100,000-130,000 vehicles per day



- Lane reversals
- Split traffic north of river
- Limit traffic movement across Crowchild Tr.

Map Highlights

South Round 2 – Table 1 Map M

- Remove left merge approaching bridge over Bow Tr.
- Road traffic first priority
- Pedestrians / cyclists second priority – extra infrastructure is good
- No extra community connectivity concerns
- Re-align Crowchild for two express lanes over Bow Tr. – keep extra flyover
- Major weave at 17 Ave.
- Make lanes northbound continuous
- Lane continuity
- Extend extra lane at Bow Tr. – don't use new lane as high occupancy / transit
- Pedestrians / cyclists – how to cross Bow Tr.? Good right now but consider long term
- Keep extra crossings
- Have 10 Ave. and Bow Tr. ramp entry on right
- Add lane to connect to westbound Memorial Dr.
- Keep bridge crossing at grade
- Phase 1 – additional lane
- Lane reversal over bridge
- Move people to pedestrian corridor to get into Scarboro
- Water taxi
- Need to get from West Village to LRT or Scarboro
- Underpass at Kensington Rd.
- Express lane across Bow
- Traffic number including cyclists to get off at Memorial
- Extra lane bridge northbound
- Another lane before 17 Ave. all the way through
- Move Bow and northeast side of Crowchild
- Cycling and Pedestrian access along Crowchild
- Preserve cycle routes
- Need to take West Village into consideration
- Give 10 Ave. own lane to Memorial
- Lane changes
- Third lane going north
- One bridge across
- Clarity and plan
- Summit street
- Add a lane and a bike lane / pedestrian
- Add a lane / widen from Bow Tr. to Memorial Dr.
 - **Benefits** – no interaction from north to south; slow inside lane; speed up traffic; reduce accidents; road rage; minimize construction
 - **Impacts** – school; construction; slow traffic; cost; connection to Memorial
 - **Constraints** – vertical change Bow Tr. to Crowchild Tr.; elevations

South Round 2 – Table 2

Overall Table Discussion

- Noise and pollution concerns

- Concerns about increases in congestion, accidents, sirens – constant increase
- Stop and go traffic is noisier than flowing traffic
- City needs to review noise levels for noise barrier policies (motorcycles are especially loud) – want better placement of barriers
- Encourage higher use of transit
 - Tolls – desired
- Diverting traffic – split traffic going to University and downtown
- Additional river crossings
 - **Impacts** – limited off leash parks in S.W.; Douglas fir trees in Edworthy park
- Memorial Dr. and Crowchild Tr. interchange is confusing
 - Entrance from Sunalta to northbound Crowchild Tr. does not conform to driver expectation – short weave distance to Memorial Dr.
- Flyover bridge over Bow River
 - Keep pedestrian bridge underneath
- Concerns about losing part of Sunalta school
 - **Impacts** – non-residential areas first; adding lanes south of bridge – get people to the bottleneck faster – focus on fixing the bridge
- Traffic signals also slow traffic – underpass at lights
 - **Benefits** – may enhance ability to cross Crowchild Tr.
- No viaducts from 17 Ave. to University Dr.
- Straddler buses (new proposed bus concept - Beijing), driverless cars and networked cars – potential to change traffic patterns; build keeping possibility in mind
- Work from home
- Spread out work places to spread out traffic
- Improve transit to destinations other than downtown
- Improve transit – consider creating dedicated Transit/HOV lanes (and increase enforcement of lanes); long commutes for people not going downtown via transit
- Bow River crossing
 - Signals to the north impact queues on bridge
 - Build a second structure next to existing for a flyover to Memorial Dr./Parkdale Blvd.
 - Bottleneck at University Dr. to 16 Ave. (2 lanes) affects queues too – merging into 2 lanes



Ideas Explored

- Improve bridge – fix entry/exits and merge issues
 - **Benefits** – improve traffic flow and safety
 - **Constraints** – Bow River
 - **Impacts** – environmental (Bow River); adjacent properties (potentially)
 - **Trade-offs** – improve traffic flow/safety vs. environmental impact of widening bridge
- Improve access, capacity and reliability for transit (east/west, south/north, buses, BRT, LRT)
 - **Benefits** – reduce traffic volumes on Crowchild; reduce noise and pollution
 - **Constraints** – encourage people to take transit vs drive; enforcement of HOV lanes; parking for LRT and BRT, etc.; Bow River (for adding HOV lane to bridge)
 - **Impacts** – impact of more buses on Crowchild; dedicated lane for transit – eliminates lane for other traffic

- **Trade-offs** – lane or parking for transit users
- Additional river crossing
 - **Benefits** – improve traffic flow by diverting traffic to other roads; reduce traffic volumes
 - **Constraints** – Bow River bridge; adjacent properties
 - **Impacts** – environmental (Bow River); property impacts; increased traffic on other roads
 - **Trade-offs** – property and environmental impacts vs. reduce traffic volumes and increase traffic flow
- Add another bridge beside Bow River bridge for local traffic
 - **Benefits** – improve safety; improve traffic flow on existing and new bridge
 - **Constraints** – Bow River; adjacent property
 - **Impacts** – environmental (Bow River); tying additional bridge into network; potential property impacts
 - **Trade-offs** – improve traffic flow vs. environmental and property impacts
- Minimize Kensington Rd. left lane and then it is ok to keep the lights if it solves the problems at University Dr. (other pinch point)
- Improve signage – it's very confusing
- Remove traffic signals – rush hour limitation at Kensington Rd. to 24 Ave.
- Underpasses at intersections with lights vs. traffic signals
- Standardized intersections to meet new practices
- Traffic signals need to go in areas further north
- Reduce turns at signals
- Deal with transit rings
- Better transit for more areas out of downtown and longer trips
- Reduce traffic on Crowchild Tr.
 - Toll; C-train use; distribute more on other places/roads; work from home
- Divert people headed to University vs downtown
 - Where would they be diverted to?
- Develop other employment centers not all focused density in downtown
- River crossing (decision) – Edworthy Park and Sarcee Tr.
- Straddler buses (new proposed bus concept - Beijing)
- Concern about widening Crowchild Tr. and impacting Sunalta School
- Prevent widening south of Bow River bridge or widen to west
- Maintain pedestrian bridge under Crowchild Tr.
- Noise pollution
- Less noise when traffic is flowing vs. stuck in traffic
- City to review noise bylaw and thresholds
- Monitor noise on Crowchild Tr. and enforcement for loud vehicles
- Better placement of noise walls to avoid noise transfer
- Noise policy review and 65db
 - Stop and go/rush hour
 - Free flow/white noise/background
- Emergency vehicles 5-6 times/day (or more) – increased from previous years
- Intensity of traffic has increased – volume and congestion
- Overall increase in volume and congestion of traffic throughout city
- Separate through traffic from local traffic
- Through vs local traffic – second bridge; second level on existing bridge
- Driverless cars and networking of cars – impact of technology on Crowchild Tr. Study

Map Highlights

South Round 2 – Table 2 Map N

- Queue from signal at Kensington Rd. impacts Bow River bridge
- Bridge for local traffic

- Problem with left entrance on bridge
- Two lanes from Crowchild Tr. on flyover local traffic bridge – one to westbound Memorial Dr., one to eastbound Memorial Dr. – frees up through traffic on Crowchild Tr.

South Round 2 – Table 2 Map O

- Separate bridge over river for Memorial Drive and for local traffic
- Get rid of left entrance on bridge
- Fix lanes on bridge
- Separate structure for local
- Second level on existing bridge
- No impact at school (Sunalta Elementary) is critical
- Viaduct from 17 Ave. to University
 - No access on/off to Crowchild Tr.
- If widening needed, go west and straighten out Currie to Military Museum

South Round 2 – Table 3

Overall Table Discussion

- Remove left hand merge at Bow Tr./10 Ave.
- Express lanes and separate outer lanes for getting on and off
- Second bridge or expansion, Crowchild Tr. to river – different flows
- Express lane/collector lanes system
- Fix Bow Tr. eastbound to Crowchild Tr. northbound
- Redirect traffic onto other roads (an alternative to Crowchild Tr.)
- New pedestrian bridge over river for pedestrians and cyclists – connect to Memorial Dr.
- Additional lane/flyover/eliminate weave to get to east/west pinch point
- Separate lane for emergency vehicles – one side at least
- Collector lane/express lane
 - **Constraints** – need another crossing (bridge), issue of height (train tracks)
 - **Benefits** – increased safety, decreased accidents, more interactive
 - **Impacts** – additional land noise – sound barriers required
- New bridge – connect Bow Tr. to Memorial Dr. and Crowchild Tr.
 - **Benefits** – land available, low impact on residential
 - **Constraints** – interference with bike paths
- Against policy of new bridge?
- Alternative routes – change connections – 19 St. to Memorial Dr.
 - **Impacts** – increased traffic in residential areas; doesn't connect to major roads
 - Provide divider for residents on 19 St.
- Parkdale Blvd. – remove/reduce traffic lights
 - There's no river access; access points to Parkdale and Memorial Dr. increase from additional river crossing
- Flyover Bow Tr. to Crowchild Tr. N.W.
 - **Benefits** – free flow of traffic from Bow Tr. east to Crowchild Tr. north
 - **Impacts** – weaving, lane changing still an issue, traffic jam
 - **Constraints** – already 3 level of roadways
- Easier access coming in and out of downtown – important issue
- Elimination of lights based on traffic volume and how much they are used
- Bow Tr. eastbound to Crowchild Tr. northbound – lowest movement continuity of roadway important (lessens lights)
- Crowchild Tr. northbound to Parkdale Blvd. and Memorial Dr. is appreciated
- Make Crowchild Tr. continuous (eliminate traffic lights)
 - **Impacts** – no cross traffic/turns, buses, bike ways can't be facilitated
- Underpasses/overpasses on Kensington Rd. /5 Ave interchange
 - Interchange (no ramps) – Crowchild Tr. going over Kensington Rd.

- **Impacts** – community

Ideas Explored

- Improve Bow River bridge./Crowchild Tr/Memorial Dr. interchanges
 - **Constraints** – don't interfere with bike paths
 - **Benefits** – have the land; low impacts on residential property (some in West Hillhurst); no impact on existing bridge
- Bow Tr. eastbound to Crowchild Tr. northbound needs to be fixed
- Bow Tr. eastbound to Crowchild Tr. northbound, low demand, so possibly leave as is and invest in higher demand
- New bridge – Bow Tr. connects to Memorial Dr. and Crowchild Tr. – collector bridge
 - Short term/intermediate opportunity, against city policy of new bridge?
 - Expanding or second bridge. Different flow going through – Crowchild Tr. over river
- Need to accommodate breakdown lanes; on at least one side; help emergency vehicles
- Going north more difficult from on/off than south
- Mindful of community impacts
- Overpasses/underpasses at Kensington Rd./5 Ave. or interchange – community impacts have to be considered
- Northbound Crowchild Tr. – eliminate weave to get to Bow Tr. east/west (pinch point)
 - **Constraints** – already 3 levels of roadways
- Flyover – Bow Tr. eastbound to Crowchild Tr. northbound or other solution – loop doesn't seem to be effective – stopping weaving
- Other alternatives to Crowchild Tr.? Redirecting to other roadways?
- Connection from 19 St. and Memorial Dr. improvements
 - **Benefits** – people off of Crowchild Tr.; quicker for residents
 - **Constraints** – increase neighborhood traffic; residential street
 - **Impacts** – doesn't connect to major roads
- Improve access points to Parkdale Blvd. and Memorial Dr.
- Additional river crossings
 - Parkdale an option?
 - Lights have to be considered
 - No river access
 - Not a great idea by the river
- Straighten out Crowchild Tr. as it goes over Memorial Dr. eliminating lights at Kensington Rd.
 - **Constraints** – community access
- Pedestrian bridge from West Village connecting to Memorial Dr. overpass
- More pedestrian/cycle pathway connections

Map Highlights

South Round 2 – Table 3 Map P

- New bridge over river between Bow Tr. and Memorial Dr.
- Interchange at Kensington Rd.
- Re-align northbound merge land from Bow Tr. to right hand side

South Round 2 – Table 3 Map Q

- Extend pedestrian bridge over river east of Crowchild Tr. and connect to pedestrian bridge over Memorial Dr.
- Eliminate the left entrance on the bridge and onto Crowchild Tr. from Bow Tr.
- Outside collector lanes and inside through lanes
- Eliminate the weave on bridge over the river

Additional Ideas Explored

- Close access for traffic cutting through neighbourhoods; free flowing Crowchild Tr.! no lights!
- Eliminate entire 5 Ave. intersection or at the most only have right turns



- **Benefits** – eliminating one light on Crowchild Tr.
 - **Trade-offs** – community access
- Eliminate traffic lights (3 of them)
 - **Benefits** – better flow
 - **Impacts** – communities where interchanges are built; speed of the road will increase
 - **Trade-offs** – noise (increased speeds)
- Expressway – elevated to reduce impact or widened but then it will impact communities
 - **Benefits** – expressway for non-downtown traffic
 - **Trade-offs** – cost



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- Eliminate lights at 24 Ave. and Crowchild Tr. should be a priority
- Make Crowchild 3 lanes that enforce route
- Becks intersection at Ovn – 16 Ave.
- Bridge over river should have more lanes – rebuild for future
- Expressway sections to end at 24 Ave. or farther north (expressway starts at 33 Ave. S.W.)
- Overpass at 24 Ave.
- Overpass – this should be built new – McMahon Stadium land will now be a high density community
- Incremental improvement to existing footprint for single people cars
- Focus on transit and pedestrian traffic for the long term
- Improvement of adjacent living space vs. destruction

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- Eliminating lights at Kensington Rd./Crowchild Tr. and 5 Ave./Crowchild Tr. should be a priority
- Eliminate lights
- Close east/west lanes
- Eliminate weave lane continuity
- Incremental improvement to existing footprint for single people cars
- Focus on transit and pedestrian traffic for the long term
- Improvement of adjacent living space vs. destruction

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- Have an elevated road from 17 Ave. S.W. to McMahon Stadium
- Address the weaving at Crowchild Tr./17 Ave. between those wanting to go downtown vs. those wanting to continue north over the Bow River
- Address/eliminate the rare weaving that occurs on the Bow River bridge deck (folks trying to access Memorial Dr. from Bow Tr.)
- Eliminate weave odd lane continuity
- Eliminate crossover to Memorial Dr. from exiting downtown, the so called California lane change to get over across all lanes to Memorial Dr.
- Incremental improvement to existing footprint for single people cars
- Focus on transit and pedestrian traffic for the long term
- Improvement of adjacent living space vs. destruction

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x12	x4		x1	
• Project team's response to my questions	x14	x3			
• Opportunity to provide my input	x16	x4			
• Opportunity to hear others' input	x16	x2		x1	
• Session location	x16	x5	x1		
• Session time	x17	x6			

2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

Engagement

- Small groups good
- Great discussion with community members
- Good engagement by facilitators, open discussion
- Paula was a great facilitator
- I have appreciated being involved in the 'Brain Storming' session. I just hope that the City will listen to some of the comments and ideas. I am somewhat dubious about this last point.

Noise

- Very noisy to start
- Area far too noisy to hear well
- Couldn't hear person on microphone

Other

- What about using separate school classrooms
- Start on time
- Cookies, Muffins & Coffee

Suggestions/Dislikes

- Basic questions (volumes, etc.) were not able to be answered by officials with certainty
- Dislike - People suggesting destruction of neighbourhoods – NIMBY to increase access for cars
- Provide traffic volumes and flow
- I believe people were focused on the how and not in the end results of what they wanted more or less of in their experiences in use of the roadway
- The workshop held for residents was poorly attended, which may be because a lot of people hadn't known about it. The open workshop had a large number of resident participants. Inner city residents who have a smaller footprint are the ones who suffer from those who choose to drive past our homes in order to go about their business in personal vehicles. Let's refocus and do the right thing.



3. Which section of the corridor is your organization located in?

- Scarboro – x3
- Edgemont – x2
- Lakeview – x2
- Shaganappi – x2
- Hounsfield Heights-Briar Hill – x1
- Killarney – x1
- Richmond-Knob Hill – x2
- Strathcona – x1
- University Heights – x1
- West Hillhurst – x1

4. What are the main reasons you use Crowchild Trail?

- To visit recreation facilities, shopping centres, or to visit friends and family – x10
- To commute to and from work or school – x9
- Travel to appointments, etc. – x1
- I don't use Crowchild Trail – x1

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x8
- Online discussion – x2
- In-person session – x9
- Idea board – x2
- Walking tour – x3
- Bus tour – x0
- I have not participated in the study prior to this session. – x2
- Other – x0

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x2
- Community newsletter – x4
- Community road signs – x4
- Project email – x7
- Social media – Facebook, Twitter – x1
- On TV – Report to Calgarians – x1
- Word of mouth – x2
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x3
- Other, please specify: Community Association – x2

Do you have any other comments about the project or the engagement process?

- No 'Band-Aid' fixes – build for the future
- Should allow talk on second river crossing
- Very happy with engagement so far



Crowchild Trail Study

Idea Boards November 10 to 25, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. Between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding the implications of those ideas.

From November 10 to 25, 2015, idea boards were placed in communities at key gathering places adjacent to the Crowchild Trail corridor. The idea boards provided the public with opportunities to learn about the project and study area and share ideas on possible changes to the Crowchild Trail corridor. The idea board format allowed the public to view ideas that others had raised, share their own and provide feedback on benefits, impacts, constraints and trade-offs of those ideas.

The idea boards were placed in the following locations:

- Banff Trail LRT Station
- West Hillhurst Community Association
- Bow River Pathway at Crowchild Tr. and Memorial Dr.
- Scarboro Community Association
- Oliver Quarry Dog Park

What we heard

The following is a high level summary of what we heard on the idea boards:

- One of the most common ideas raised on the idea boards was to provide a more direct cycling route along the Crowchild Tr. corridor to better connect from the north to the south.
- Improving access, capacity and frequency to transit, both BRT and LRT was also identified as a way to make using public transit more appealing and reduce single occupancy vehicle travel.
- Widening Crowchild Tr. and the Crowchild Tr. bridge were both suggested to help improve traffic flow and reduce collisions and congestion caused by merging across lanes on the bridge.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.



Verbatim Responses

Idea Board Located at Banff Tr. LRT Station

- More bike paths
- Widen Crowchild Tr.
 - **Impacts** – increased roads result in increased traffic – research
 - **Trade-offs** – expropriated lanes; exorbitant costs
- LRT arm from Lion's Park to Foothills Hospital and Children's Hospital
 - **Benefits** – thousands of employees and tens of thousands of patients/visitors would not commute to the hospital by car; substantially reduced car traffic around Crowchild Tr.
 - **Impacts** – high costs
 - **Trade-offs** – less traffic on Crowchild Tr. and 16 Ave.
- Make Crowchild Tr. more pedestrian friendly – this may mean making it more narrow
 - **Benefits** – walkable; a pedestrian friendly community is a good one
 - **Impacts** – enhanced walkability increased public transit use
- Travelling north to south and vice versa can be very time consuming. Anything that adds more direct routes with fewer transfers is welcome
- Remove the red lights at 24 Ave., 5 Ave. and Kensington Rd. to help the traffic
- BRT down Crowchild Tr. to reduce car lanes
 - **Benefits** – remove cars from Crowchild Tr.; faster transit between University of Calgary and Mount Royal University
 - **Impacts** – need to extend time on C-Train tickets; don't have enough time; make it equal to bus transfers
- 19 St. bike lane
- Add more parking at Crowfoot LRT Station
- Reduced parking between 16 Ave. and 5 Ave.
- Transit
 - **Comments** – make bigger train cars with more seats; turn heaters on earlier in the season; coffee vendor at McMahon Stadium, good business; train should run later
- No bikes
- Improve public transit options on Crowchild Tr.
 - **Benefits** – handle school traffic; more sustainable
 - **Impacts** – reduce single occupant traffic
- Improve 16 Ave. and Crowchild Tr. interchange
 - **Benefits** – reduce cut through traffic in residential areas; improve traffic flow on Crowchild Tr.; can be done now; opportunities for better pedestrian crossing to LRT
- Improve Calgary transit to reduce the need for personal transport (cars)
- Low transit

Idea Board Located at West Hillhurst Community Association

- Have Crowchild Tr. go over Kensington Rd.
 - **Benefits** – eliminates light at Crowchild Tr. and Kensington Rd.; better north/south traffic flow; supports development of pedestrian/bike friendly neighbourhood corridor along Kensington Rd.; connects to River Pathways
 - **Impacts** – I think this enhances the city; you may need land on east side to do this
 - **Trade-offs** – may need to do a light at 19 St. and Memorial Dr. to help people get into neighbourhood
- Tunnel
 - **Benefits** – through traffic stays out of neighbourhood
 - **Constraints** – river
 - **Impacts** – close Crowchild Tr. while constructed

Idea Board Located at Bow River Pathway at Crowchild Tr. and Memorial Dr.

- Widen Bow River bridge to improve lane continuity
 - **Comments** – transitioning from Bow Tr. /10 Ave. to Crowchild is confusing and dangerous even worse. 10 Ave. to Crowchild Tr. to Memorial Dr.; will just encourage more traffic and soon you'll be back at same state
- Traffic flow 24 Ave. north to 17 Ave. south. Congestion in this area confusing – collision ratio high
 - **Impacts** – collisions high, need to widen
- Double bike/walk path along Parkdale Blvd. to Crowchild Tr. on ramp
 - **Benefits** – safety; efficient pathway traffic; increase non-motorized transport
 - **Constraints/Trade-offs** – reconstruct Parkdale Blvd. on ramp
 - **Impacts** – increase safety
- Reduce traffic volume on Crowchild Tr. by changing development patterns in suburbs
 - **Benefits** – no need to continue to expand Crowchild; get more people out of their cars
 - **Constraints** – need more public transit to offer alternative
 - **Impacts** – no need expand at all
- Separated cycle track runs next to/parallel to Crowchild (including on bridge over Bow River)
 - **Benefits** – bike routes north/south become less confusing and more visible and easier gradient (my issue in S.W. Calgary)
 - **Constraints** – access ramps/routes to other pathways might be difficult due to vehicle traffic
 - **Impacts** – higher ridership – less vehicle traffic; more accessible routes; less pollution; surrounding communities more accessible by bike/walking; increase in safety
- Thanks City of Calgary for doing this huge community consultation!
- Suggestion: on your study area maps, please include the pedestrian/bike bridge/underpasses. Hard to know where based on your map here
- Build an elevated highway from 17 Ave. S.W. to 24 Ave. N.W. for all traffic that passes by (e.g. Houston, TX)
 - **Benefits** – creates more traffic
 - **Impacts** – creates more traffic in communities; noise/air pollution; sunlight blocked; home expropriations; park disruptions
- Limit concerts etc. on green space full of trees. Migratory birds will be nesting there in the spring, near Crowchild Tr. bridge
- On northbound bridge, prevent traffic in Memorial Dr. off ramp from cutting back into traffic jumping queue and causing accidents. Once they're on the off ramp, they should get off
- Leave as is. Increase transit and HOV lanes during rush hour
- Better north/south bike and pedestrian connectivity
- Signage at intersections
- More garbage containers
- Bike riders be nice. Been hit several times hard.
- Put more garbage cans along pathway. Also consider, like Okotoks, provide dog waste bags
 - **Benefits** – more enjoyable walkways; more attractive to residents and tourists; less harm (pollution) done to Bow River and surrounding parks/green spaces
 - **Impacts** – cleaner Calgary; more places to appropriately dump waste, i.e. dog poop bags, etc.
- Bikes back on road – they go way too fast!!
 - **Benefits** – safer walk or running for seniors and children
 - **Impacts** – we now have cycle lanes
 - **Trade-offs** – separate bikes from pedestrians (use them); like west of here works great
- Get rid of exit off Crowchild bridge onto Memorial Dr. People wanting Memorial can exit at Kensington Rd. westward
 - **Benefits** – less gridlock on the bridge
 - **Constraints** – cost; short term traffic issues during construction
 - **Impacts** – no need for aggressive lane changes on the bridge – the cause of gridlock and numerous accidents
 - **Trade-offs** – less choice on exits coming off the bridge
- Elevate the roadway for through traffic and install a lane below for locals and cycle/buses
 - **Benefits** – keeps things moving and provides access

- **Constraints** – need to provide off ramps (few)
 - **Impacts** – concern will be visual impact mitigate by design
- Widen the bridge and exits or build a twin bridge
 - **Benefits** – free traffic flow over bridge and exits
 - **Constraints** – lower traffic speeds across bridge. More noise barriers for residents
 - **Impacts** – buildings knocked down and replaced by roadways; more traffic noise for some residents
 - **Trade-offs** – cost to city for property acquisition. More flyovers/ramps near bridge
- Bike lane (x2)
 - **Benefits** – healthy alternative; less traffic; health benefits
 - **Impacts** – more commuting options; less pollution; healthier Calgarians
 - **Constraints** – cost; safety
 - **Trade-offs** – closing access during construction
- More pedestrian friendly
 - **Benefits** – know and say hello to, your neighbours on the street
 - **Constraints** – cost
 - **Impacts** – people walk, more healthier and happier
 - **Trade-offs** – this will have only benefits. I give cars way too much space in this city. Make cities for people, not cars please
- Remove Sunalta access to Crowchild Tr. from Bow Tr.
 - **Benefits** – safer streets in populated areas; build a proper interchange for Crowchild Tr./9 Ave./Bow Tr.
 - **Constraints** – river crossing; bridge work; CPR; impact during construction; cost for either access
 - **Impacts** – traffic will go elsewhere; likely needs a better Crowchild Tr./9 Ave./Bow Tr. access
 - **Trade-offs** – CPR; West Village impacts/ likely costly and longer commuting time
- Tunnel from 17 Ave S.W. to 26 Ave. N.W. – avoid decades of surface impact issues vs. none. Penny wise and pound foolish, don't be that guy! Spent the money now, they do it all over the world.
- Noticing the netting that holds the grass under the Bridge, my shoes got caught in it. Wondering what effect it has on the birds' feet/legs? Need to protect our wildlife.
- Don't remove overpass at University Dr. – pedestrian overpass (low use?)
 - **Benefits** – people use it
 - **Constraints** – extra lane; houses
 - **Impacts** – less travel by pedestrians and transit takers
- Encourage drivers to car pool. Big cars now transport mostly hot air!
- More pedestrian walkways like other relevant pedestrian/bike friendly cities
 - **Benefits** – enhancing quality of pedestrian safety; sense of community enhanced
 - **Constraints** – planning it/executing
 - **Impacts** – people connecting to their community; healthier lifestyle; a more enjoyable city
 - **Trade-offs** – less vehicle accessibility
- Need parallel safe streets to bike on (i.e. 19 St./29 St. N.W.); these suck currently

Idea Board Located at Scarboro Community Association

- **Comments**
 - Deal with Crowchild Tr. and West Village at same time or not at all;
 - Scarboro and Sunalta are historic communities. How can they be enhanced?
 - Worried about impact on Scarboro/Sunalta; noise is already a problem
 - All of Calgary should know about what Scarboro and Sunalta have already given to the city – e.g. Bow Tr. and Crowchild Tr.



Idea Board Located at Oliver Quarry Park at Pedestrian Bridge Across Crowchild Tr.

- Lower the speed limit. Greater police presence.
- Separated bike lanes not just downtown 12 Ave.; 14 Ave. S.W. on Bow Tr. is a good start
 - **Benefits** – too many bike accidents vs. cars noticed daily. Pedestrians use lanes as sidewalks
 - **Impacts** – if you build they will come
 - **Constraints** – there are more hills between Crowchild Tr. and Sarcee Tr.
 - **Trade-offs** – cars build lazy people. They trade it off and use some fat
 - **Comment** – time to live in the real world. More cars is not the answer
- Traffic circle and overpass similar to Glenmore and 37 St. S.W. at 5 Ave. N.W.; backs up quickly!
- Make one of the lanes on Crowchild Tr. continue onto Glenmore instead of a must exit onto 14 St.
 - **Benefits** – increase flow of traffic on Crowchild Tr. and Glenmore Tr. from Flanders up to 14 St.
 - **Constraints** – creating an extra lane on Glenmore Tr., moving the bridge post at the 14 St. flyover connector
 - **Impacts** – more lanes results in more cars; Calgarians spend money on their rides; also more pollution and more street cleaning
- New stadium ring around
- Make it a toll road
- Build the park up and over to join to Scarboro, try making a tunnel
- Put Crowchild Tr. under the river



Crowchild Trail Study

Public Idea Workshop Summary November 9, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held for community members and the public on Monday, Nov. 9, 2015 from 6 to 8:30 p.m. at the Best Western – Village Park Inn (1804 Crowchild Tr. N.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 70 participants attended the workshop, distributed across 10 table discussions in round one and 8 table discussions in round two.

The following members of the project team were also in attendance at the session:

Project Team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Andrea Sichewski, City of Calgary, Communications Advisor
- Kirsty Neill, City of Calgary, Engagement Advisor
- Asif Kurji, City of Calgary, Transit Advisor
- Misty Sklar, City of Calgary, Land Use Planning Advisor
- Chris Delanoy, ISL Engineering and Land Services, Consultant Project Manager
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Jana Sinclair, Russell Public Relations, Consultant Engagement Lead
- Erin Russell, Russell Public Relations, Consultant and Table Facilitator
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator
- Courtney Laurence, ISL Engineering and Land Services, Consultant and Table Facilitator

Table Facilitators

- Dominic Cheng, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jack Mason, ISL Engineering and Land Services, Consultant Technical Facilitator
- Mario Prezelj, ISL Engineering and Land Services, Consultant Technical Facilitators
- David Breu, ISL Engineering and Land Services, Consultant Technical Facilitator



- Mark Bagnall, Stantec, Consultant Technical Facilitator
- Andrew Vandertol, Stantec, Consultant Technical Facilitator
- Brad Tiedemann, Stantec, Consultant Technical Facilitator
- David Thatcher, Stantec, Consultant Technical Facilitator
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker
- Morgan McLeod, ISL Engineering and Land Services, Consultant Table Note-taker
- Lara Tierney, City of Calgary, Table Facilitator
- Lyndia Peters, City of Calgary, Table Facilitator
- Nathalie Tacail, City of Calgary, Table Note-taker
- Heather Chapple, City of Calgary, Table Note-taker
- Kyle Marr, City of Calgary, Table Note-taker
- Vickie Megrath, City of Calgary, Table Note-taker
- Adis Samardzic, City of Calgary, Table Facilitator
- Kirk Thurbide, City of Calgary, Table Facilitator
- Serena Shane, City of Calgary, Table Note-taker
- Katie Ritchie, Russell Public Relations, Consultant Table Note-taker
- Paula Hall, Consultant Table Facilitator
- Violet MacLeod, Russell Public Relations, Consultant Table Note-taker
- Jolene Ondrik, Russell Public Relations, Consultant Table Note-taker
- Jenelle Wohlberg, Russell Public Relations, Consultant Table Facilitator

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail study area that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - Several of the table discussions explored High Occupancy Vehicle (HOV) lanes and looked at ways that these lanes could also serve transit and EMS to help alleviate congestion associated with single occupant vehicle usage.
 - Both tunneling and elevating Crowchild Tr. were cited several times where northbound and southbound through traffic could avoid the bottlenecks, but the existing Crowchild Tr. could be maintained as a local



road. Some considerations for these ideas included the costs associated and major community and traffic impacts during construction.

- In the **North Section**, ideas suggested were related to improving the 16 Ave./University Dr./13 Ave./Crowchild Tr. intersections or ideas to combine them together into a full interchange as a way to simplify access and reduce issues associated with changing lanes and merging. Ideas for changing access at 24 Ave. were also explored. Right-in/right-out options, flyovers and full interchanges with Crowchild Tr. over 24 Ave. or vice versa were discussed.
- In the **Central Section**, the Kensington Rd. and 5 Ave. intersections were commonly discussed. Ideas raised included interchanges (over vs under) or limited access at Kensington Rd. and/or 5 Ave. (right-in/right-out only) during a.m. and p.m. rush hour were explored. Some considerations raised were impacts to access, increasing traffic through communities and property impacts.
- In the **South Section**, widening the Bow River bridge and improving the lane continuity on the bridge was one of the most popular ideas discussed at the workshop. Many participants felt that improving the bridge would help alleviate problems at other areas.

For a more detailed summary of the input that was provided, please see the Idea Workshop Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Add High Occupancy Vehicle (HOV)/bus lanes for transit / carpool
<ul style="list-style-type: none"> • Benefits – doesn't require widening; easy to implement; alleviates congestion; increases reliability of transit • Impacts – takes away lane for traffic • Constraints – often vacant; enforcement
Elevate Crowchild Trail from 17 Ave. to 24 Ave.
<ul style="list-style-type: none"> • Benefits – free flow traffic; maintains access across Crowchild Tr. on existing at-grade road • Impacts – visual; noise; separates community; property • Constraints – no access to downtown (only through traffic) • Trade-offs – improve traffic flow vs. impacts to adjacent residents especially noise/visual
Tunnel Crowchild Trail from 17 Ave. to 24 Ave.
<ul style="list-style-type: none"> • Benefits – free flow traffic; keeps communities whole • Impacts – construction; adjacent properties • Constraints – topography; Bow River • Trade-offs – give up access to have free flow traffic
Improving access at 16 Ave./13 Ave./University Dr./Crowchild Tr.
<ul style="list-style-type: none"> • Benefits – improves safety; improves traffic flow; land available to do it • Impacts – some access points may be eliminated; property impacts • Constraints – Suncourt Place
Interchange at 24 Ave. (Crowchild Tr. over 24 Ave. or vice versa)
<ul style="list-style-type: none"> • Benefits – improves flow along Crowchild Tr.; maintains access across • Impacts – remove houses/property impacts to accomplish; noise elevated; increased traffic cutting through neighbourhoods • Constraints – LRT tunnel • Trade-offs – improved traffic flow vs. property impacts
Overpass/underpass at Kensington Rd. and/or 5 Ave.
<ul style="list-style-type: none"> • Benefits – improved traffic flow along Crowchild Tr.; maintains access across • Impacts – home and business impacts; need to consider pedestrian and cyclist access across • Constraints – adjacent properties • Trade-offs – improved traffic flow vs. property/community impacts; limiting access at one increases traffic in community at the other access point
Widen existing bridge for more lanes / continuity
<ul style="list-style-type: none"> • Benefits – improves traffic flow; limited impact to community; reduces weaving; reduces accidents • Impacts – Bow River; natural landscape • Constraints – existing bridge structure • Trade-offs – improve traffic flow vs. potential impacts to environment and adjacent properties

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

Overall Table Discussion

- Transit Plan?
- Merge ramps too short
- More efficient uses of existing lanes
- Bottleneck south of 16 Ave. where Crowchild Tr. & University Dr. meet
- Lights at 5 Ave. and Kensington Rd.
- Access from 16 Ave. to Crowchild Tr.
- No traffic lights on Crowchild Tr. during a.m./p.m. peaks
- Changes cannot be done in isolation as they impact other roads
- Question for Calgary Transit: Is the intent to use Crowchild Tr. as a major thoroughfare for buses? Transit's primary plan is for transit LRT line and still using existing routes with regular stops
- No plans for a transit-way thoroughfare, but could be considered
- Important corridor because it's the only river crossing, connects routes at hospitals and the University
- Will use study to look at all the options
- We are challenged with cross-town routes, routes to downtown are good
- Shoulder lanes for buses south of Bow Tr. but none on north end, buses use the regular traffic lanes
- 4-car trains will help but what about staggered starts so they don't all start at the end of the line
- Starting new cross-town routes in next 3 years so that will alleviate some pressure and people won't have to go through downtown

Ideas Explored

- Bottleneck just south of 16 Ave. where Crowchild Tr. meets University Dr. results in people trying to sidestep, cut-through and take other routes. How can that be addressed?
- Move Crowchild Tr. to the west to give more room for merge lanes (through McMahon Stadium)
- Confusion over speeds because they vary along Crowchild Tr. depending on the location, could be 80 km/h through this area
- Merge ramps at interchanges like 16 Ave. are too short so traffic backs up, doesn't meet today's standards and traffic numbers
- Ramp from westbound 16 Ave. onto Crowchild Tr. north, needs 100 metres approximately
 - **Benefits** – reduce traffic in Motel Village, reduce traffic on small cutoffs from 16 Ave. to businesses onto frontage road; reduce pressure on intersections at 23 Ave. and at Nick's Steakhouse
 - **Impacts** – land needs for lanes
- Crowchild Tr. to 16 Ave. eastbound is very short and slanted so drivers have difficulty seeing and merge lane runs out
- Crowchild Tr. to 16 Ave. westbound is too short
- Redo the whole interchange to serve traffic onto both eastbound and westbound 16 Ave. from Crowchild Tr.
 - Could be yield conditions
 - **Impacts** – would cue traffic more so longer backups
 - **Benefits** – safer, cheap/affordable
- Lower speed limits
 - **Impacts** – traffic would back up more, cars queue up on the ramp to get onto 16 Ave.
- Dual signalized right turns
 - **Impacts** – would cue traffic but signal controlled
- Right turns only from 24 Ave. onto Crowchild Tr.
 - Replace the traffic lights with emergency lights only so traffic on Crowchild Tr. is free flowing
 - **Benefits** – considerably less cut through traffic on Banff Tr.

- **Impacts** – less all around access to and from Crowchild Tr.; need additional pedestrian access across Crowchild Tr.
- Grade separated interchange at Crowchild Tr. and 24 Ave. with Crowchild Tr. relocated to the west slightly
 - **Benefits** – allows free flowing traffic on Crowchild Tr.; reduces noise to the residential communities on the east
 - **Constraints** – cuts off access to businesses at 23 Ave.; noise; engineering requirements; cost
- If Crowchild Tr. is underground
 - **Constraints** – there is a cost to move underground LRT line
- If Crowchild Tr. goes over 24 Ave.
 - **Constraints** – the grade is an issue
 - **Impacts** – noisy for surrounding residential and business development
- Full interchange at 24 Ave.
 - **Impacts** – increase cut-through traffic
- Crowchild Tr. lanes need to be used more efficiently - need HOV lanes, HOV during rush hours, carpooling incentives
 - **Benefits** - not more lanes so not a bigger traffic footprint
- Lights at 5 Ave. and Kensington Rd. result in traffic line-ups so traffic backs up at both morning and evening rush hours
- Get rid of lights at Crowchild Tr. and 5 Ave.; get rid of lights at McMahon entrance; get rid of lights at Crowchild Tr. and 24 Ave. during rush hours
 - **Benefits** – free flow traffic in rush hours; cheap and inexpensive to implement
 - **Constraints** – cut-through traffic in residential communities; no cross traffic during the rush hours; push traffic to other major roads
- Close or modify the east entrances to McMahon Stadium
- Ramp on (south to east) Crowchild Tr. and 16 Ave. (east and west) – yield sign
 - **Benefits** – safer intersection, given the short ramp
 - **Constraints** – cars would queue up to the ramp to get to 16 Ave.
 - **Impacts** – queue up more vehicles
- Crowchild Tr. at 24 Ave. (remove lights and add right hand turn lanes)
 - **Benefits** – reverse set of lights; benefit to all users; considerable cut-through traffic
 - **Impacts** – traffic diverted to different access
 - **Trade-offs** – less allowed access to and from Crowchild Tr.
- Underpass at 24 Ave. – Crowchild over 24 Ave.
 - **Benefits** – free flow traffic; less lights
 - **Constraints** – LRT line; steep grade would need to get steeper
 - **Impacts** – none if you go over with Crowchild Tr.
 - **Trade-offs** – would need less land than 24 Ave. over Crowchild Tr.
- Ramp at 16 Ave. west to Crowchild Tr. north
 - **Benefits** – reduce traffic in Motel Village; less pressure on intersection at 23 Ave. and Nick's outlet; less business interruption; safety!; Cop at service road access
 - **Constraints** – limited space!; ensure limited business impact
 - **Impacts** – impact properties in S.W. corner of Motel Village if Crowchild Tr. doesn't move west
 - **Trade-offs** – requires land from McMahon Stadium (Crowchild Tr. would need to move west)
- Remove traffic lights at Crowchild Tr. & 24 Ave.; replace with emergency vehicle control lights; allow only free flow access to & from Crowchild Tr.
 - **Benefits** – free flow of Crowchild Tr. traffic from 5 Ave. to 12 Mile Coulee Rd.; cut through traffic in Banff Tr.
 - **Impacts** – no cross traffic access to and from Crowchild Tr.; no pedestrian/non-vehicle across Crowchild Tr. and 24 Ave.
- Shut off lights twice a day at rush hours
 - **Benefits** – least expensive; possible to try – trial in 4 seasons for 1 month
 - **Constraints** – neighbourhood resistance
 - **Impacts** – more cross traffic difficulties in accessing from neighbourhoods east to west

- **Trade-offs** – relieving congestion vs. neighbourhood convenience
- Maintain access to Motel Village from Crowchild Tr. (north-south)
 - Could mean new access points; maintain same or better access
 - **Benefits** – free flow of traffic; reduce noise; safety in and out of Motel Village; ensure local businesses are accessible
 - **Constraints** – either we keep exiting or find new access; don't reduce access!
 - **Impacts** – risk cutting off businesses
 - **Trade-offs** – different access is okay, but can't cut the businesses off
- Changes to Crowchild Tr. impact negatively to other major roads such as Shaganappi Tr.

Map Highlights

North Round 1 – Table 1 Map A

- Merge ramps are inadequate (do not meet today's standards)
- Efficient with the lanes it already has (no bigger footprint)
- HOV lanes - time specific lanes (peak hours)
- Improve access to Crowchild going south at Crowchild Tr. and University Dr.
- Get rid of lights at 24 Ave. and Crowchild Tr.
- Get rid of lights at McMahon Stadium and Crowchild Tr.
- Get rid of entrance to McMahon from Crowchild Tr.
- Get rid of access / modify access to businesses on the east side of Motel Village.
- Gain access north Crowchild Tr. from 16 Ave. westbound

North Round 1 – Table 1 Map B

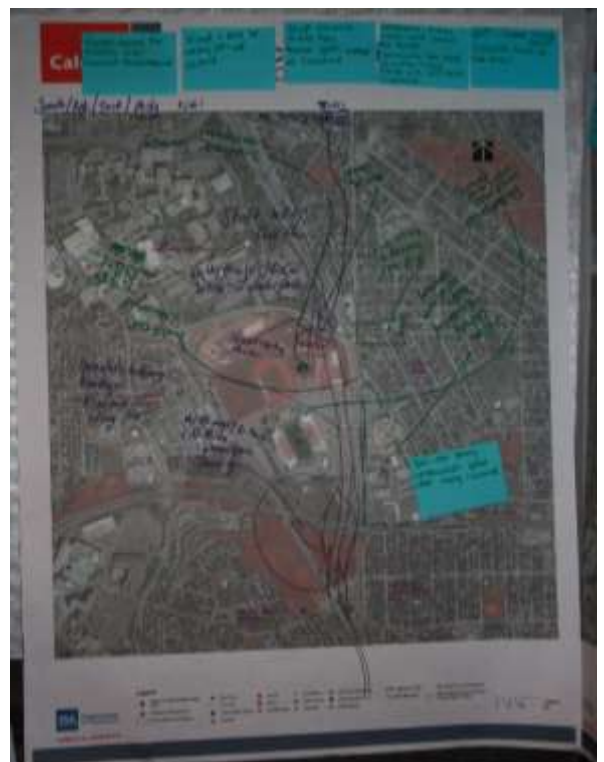
- 24 Ave. right-in/right-out
 - Emergency access lights only
 - Pedestrian crossing
- Inlets are unsafe along service road at Motel Village
- Shift Crowchild west through McMahon lands and build full access interchange with 16 Ave. and Crowchild Tr.
- Yield sign on 16 Ave. N.W. at the intersection of Crowchild Tr. and 16 Ave N.W.
- Lower the speed limit on Crowchild Tr.
- Ramp 16 Ave. to Crowchild Tr. north
- Short weave on 16 Ave. N.W. west of Crowchild Tr.

North Round 1 – Table 1 Map C

- Interchange at 24 Ave. N.W. (Crowchild over 24 Ave. or 24 Ave. over Crowchild Tr.)
 - Access impacts
 - Full versus half access
- Realign Crowchild Tr. and 24 Ave N.W. to minimize house impacts
 - Believe the Church of Jesus Christ of Latter Day Saints isn't active

North Round 1 – Table 1 Map D

- Remove lights on Crowchild
 - **Benefits** – a.m./p.m. efficiency; cheap
 - **Impacts** – cross traffic
 - **Trade-offs** – short term solution
- Shut down lights from 24 Ave. to the bridge from 6-9 a.m. and 3-6 p.m.
 - **Benefits** – free flow of traffic; cheap; short term option





- **Constraints** – no cross; east-west access

North Round 1 – Table 2

Overall Table Discussion

- What are the time frames?
 - Quick fix
 - Short-term
 - Long-term
- Choke point
 - Crowchild Tr. and 24 Ave.
 - Crowchild Tr. and 16 Ave.
- Diamond access south of 16 Ave.
- East side – so many houses
 - Shift 'everything' west – for 6 lanes
- Build more like Center St. – lane shifting/switching
- City rules – no new crossings over river; minimal impact on private residents
- Priority – noise attenuation
- Care about noise, emissions – not necessarily traffic
 - But less traffic equals less noise, emissions
- Need overpass or underpass at pinch points
- Crowchild needs to free flow across 24 Ave. without cutting access to university – all agree
- Live a block from Crowchild Tr. - noise is not bothersome
- 24 Ave. lights create backup
- Charleswood Dr. – now an overpass/underpass – was a light when I moved in
 - A tremendous improvement
- More restriction in and out of Motel Village – e.g. right turn only at peak times
- Improve merge lane out of Motel Village
- Motel Village – shut off 'minor' entry/exit – easy fix
- Motel Village – ban left turns
- People avoid Crowchild Tr., take Banff Tr.
- Pedestrian access at Motel Village is terrible
- Long term access to Motel Village has to be through 24 Ave.
- If widen Crowchild Tr. – respect access to Motel Village
- Sign change – short term light around Motel Village
- Look at tolls or price controls to shift traffic elsewhere
 - Adjustable tolls based on peak hours
- Three continuous lanes – better
- Controls at 24 Ave., 23 Ave., 16 Ave.
- Need to move traffic from 16 Ave. to Crowchild Tr. (HWY 1A) – improve intersection
- Need to know how Motel Village is going to be redeveloped
- Use berms to reduce noise
- At new football stadium? Does that mean commercial/residential redevelopment of area? 10,000+ more people; opportunity to realign road; whole new interchange
- Need to know traffic modeling
- Big interchange – 16 Ave. and University Dr.
 - Centers roadway away from community
- Can live with existing noise, not interested in anything that will increase it
- This idea (reconstruction of Crowchild Tr. west) is expensive but may not impact existing traffic as much as others
- Major intersection change at University Dr. with underpass
- Unlikely to rip out C-train tunnel

- Brand new mid-rise building right there [at Crowchild Tr. and 24 Ave.]
- Shift left [west] to increase free flow
- East of 24 St. raised interchange requires removal of homes - don't want to do that
- 24 Ave. can go under
- Noise is a huge issue
- Less major [improvements] at 24 Ave.; if major, at 16 Ave. [improvements]
- How much does construction of 24 Ave. cost?
- Opportunity for density, green space, new intersection – 16 Ave./Crowchild Tr./University Dr.
- Make Motel Village high density – have LRT there
- Build over Crowchild Tr. – noise attenuation
- If CalgaryNEXT is no go – can still build new Crowchild Tr.
 - Just need parking structure
- Cars idling – wasted in traffic on Crowchild Tr.

Ideas Explored

- Noise attention
- More traffic is not a big deal, emissions are important to control
- Lane switching would be a great option
- Light timing is important
- Pinch point Crowchild Tr. and 24 Ave. N.W. something needs to be done with an interchange
- Free flow traffic on 24 Ave. is important but not so important to ruin the quality of life for residents
- Shift Crowchild Tr. left (west) by 3 lanes in each direction 3 lanes either way
- Right turn only on Crowchild Tr. to Motel Village at peak times
- Improved merge lanes on to and off of Crowchild Tr. are bad
- High density development good idea
- Existing 16 Ave. interchange is dangerous
- Make sure 3 lanes all the way along
- Cochrane growth move traffic from 16 Ave. needs to move traffic to Crowchild Tr.
- Better access from Motel Village, redo Motel Village Rd., configuration is terrible
- Green space for public with Crowchild Tr. redevelopment
- Visual and noise for raising 24 Ave. over Crowchild Tr.
- Shift Crowchild Tr. to free flow
- Raise 24 Ave. instead of Crowchild Tr.
 - **Constraints** – C-train tunnel, can't rip out the tunnel
- Community too close to make major change with 24 St. N.W. and Crowchild Tr.
- 24 Ave. – need change
- Crowchild Tr. must be free flow
- 30-40 story construction great idea along Crowchild Tr.
- Option 1 – do nothing
 - **Benefits** – encourages train, bus
 - **Impacts** – LRT requires more parking
- Option 2 – upgraded solution at 16 Ave.
 - **Benefits** – improved overpass; is a 'funded improvement'
- Underpass – 16 Ave. and Crowchild Tr.
 - **Constraints** – a lot of slope under bridge; have to build a new bridge
- Shut down small access onto Crowchild Tr. – Motel Village is a mess
 - **Benefits** – smoother flow; quick fix; easy win
 - **Constraints** – long term access
 - **Impacts** – small businesses will be impacted; widen Crowchild Tr. in long term
 - **Trade-offs** – forces traffic to 16 Ave. and on to Banff Tr.
- Reconfigure and shift intersections to City owned land

- **Benefits** – better access, easy to construct, construction shouldn't hold up traffic
- **Constraints** – more residential development; it will take time; blow out stadium
- **Impacts** – keep in the middle of St. Andrews community; turn two roads into one
- **Trade-offs** – centers road away from community
- Upgrade to interchange at 24 Ave. – build overpass or underpass
 - **Benefits** – better flow and movements
 - **Constraints** – timing
 - **Impacts** – noise; property; ugly new stadium
 - **Trade-offs** – sound walls can echo sound or cause a noise shadow; earth berm, but they take up space
- Do nothing - no building of interchange, make sure 3 lanes but tolls to shift
 - **Benefits** – residents are ok; people will work to avoid 16 Ave.
 - **Constraints** – civil work to upgrade 16 Ave. would be difficult; slope under 16 Ave. N.W.; build new bridge on Crowchild Tr. and 16 Ave.
 - **Impacts** – spaces out traffic peaks, money
 - **Trade-offs** – more parking on LRT, light timing, lights

Map Highlights

North Round 1 – Table 2 Map E

- Realign Crowchild Tr. N.W. to University Dr. N.W.
 - **Benefits** – shifting west doesn't affect houses; doesn't hold up traffic during construction
- Opportunity for high density residential on McMahon lands south of McMahon Stadium
- Underpass at 24 Ave.

North Round 1 – Table 2 Map F

- Crowchild Tr. N.W. free flow
 - **Impacts** – additional noise
- 24 Ave. free flow is important but it shouldn't impact area residents.
- Motel Village
 - Short term – signal changes at 23 Ave.; right turns only at peak times; ban left turns
 - Long term – access for Motel Village through 24 Ave. interchange
 - Lane reversal on the service road around Motel Village
 - Improve right turn treatments (merge/driveways)
 - No sidewalks on the service road
 - Noisy on 16 Ave.
- Improve intersection from westbound 16 Ave. to northbound Crowchild Tr.
- Shift Crowchild Tr. west through McMahon Stadium lands and 16 Ave. on ramps

North Round 1 – Table 2 Map G

- Tolls to shift the peak hours
- Possible tolling
- Is it possible to do something totally different with the McMahon Stadium area?
- “Do nothing solution” at 16 Ave. overpass
- Upgraded overpass at 16 Ave.
 - **Impacts** – noise

North Round 1 – Table 2 Map H

- Free flow
- Shift Crowchild Tr. west through McMahon Stadium lands with major development at University Dr. (underpass)
 - With major development here would like to see density and green space
- High density residential helps noise with community
 - Fewer people driving

- Redevelopment would need underground parking
- Need to communicate changes (during construction)
- 24 Ave. interchange
 - **Constraints** – have to rip out homes to raise 24 Ave.; church
- Traffic circle for the turns at 24 Ave N.W. and Crowchild Tr.
- Important community infrastructure at Foothills Athletic Park area
- Build over Crowchild

North Round 2 – Table 1

Overall Table Discussion

- Q. Application for new condo complex in Motel Village?
 - A. To further development in Motel Village, there needs to be direct access from westbound 16 Ave. onto northbound Crowchild Tr.
- Q. LRT tunnel at 24 Ave. - can we go below the existing tunnel? Are we revisiting ideas generated in 2012?
 - A. Council has asked for broader scope to include Crowchild Tr. north and south of this central area
- Spent four years of my life on Go Plan and City has done nothing about people driving cars - quoted from the 1995 Calgary Transportation Plan

Ideas Explored

- Low intervention concept; minor changes already done like the new added lane at 24 Ave. may address issues at 24 Ave.; add direct access from westbound 16 Ave. to Crowchild Tr. northbound as per 16 Ave. study plan; improve pedestrian experience at 23 Ave.
 - Need to see what impact these current changes have
 - **Benefits** – fewer property impacts; low cost; improved pedestrian access over Crowchild Tr.; improved use of existing LRT infrastructure; slower moving traffic will result in lower volume traffic and improve modal split
 - **Trade-offs** – businesses can be encouraged to look at work options like staggered start times and travel habits but the options may or may not benefit or negatively impact people
 - **Constraints** – Crowchild Tr. remains congested; pollution and safety issues continue; model splits unlikely to happen; redevelopment in Motel Village will increase traffic volumes
- 2012 ideas - overpasses or bridges at 24 Ave., 23 Ave. and 16 Ave. to provide access; tight diamonds at the interchanges with Crowchild Tr. moved to the west a bit at 16 Ave. and at 24 Ave.
 - **Benefits** – save Briar Hill residences at 16 Ave. but hits at 7 Ave.; free flow traffic 3 lanes both direction until 5 Ave.; access across Crowchild Tr.; access to businesses; has to include pedestrian access across Crowchild Tr.
 - **Constraints** – lose sports facilities like soccer; lose Sun Court Place apartments; increased noise for businesses and residents at Banff Tr. and 24 Ave.; bottleneck moves to the south on Crowchild Tr.
- Build another freeway over Crowchild Tr. from 24 Ave. to 17 Ave. - expressway with no access except at 16 Ave. and 17 Ave. south
 - **Benefits** – keeps existing roadway for local traffic and builds a new roadway for express free flow traffic; minimal impact to land
 - **Constraints** – increased noise; visual impacts; cost; mental barrier for cross traffic
- More emphasis on public transit and alternative travel options, use central area as a transition from skeletal to arterial or parkway
 - not high speed or high volume but changes to inner city road that is more transit and pedestrian friendly
- 6 Lane highway (freeway)
 - **Benefits** – cheap; benefit local traffic; more cost effective; prefabricated; landscape at the underpass
 - **Constraints** – land impact?; minimal impact to land; how do you get two highways to connect?
 - **Impacts** – noise; visual appeal (not nice); mental barrier; [unintelligible] the lanes overpass
 - **Trade-offs** – crime rates underneath the freeway
- 2012 Plan
 - **Benefits** – minimal land impacts of Briar Hill; no lights except on 5 Ave.; Access to Crowchild Tr. at 16 Ave., 23 Ave., 24 Ave.; 80 km throughout; 3 lanes through; access is benefit

- **Constraints** – merging 2 lanes, University Dr. and Crowchild Tr.
- **Impacts** – lose the soccer dome, baseball; lose sport facility; impact for 3 lanes to 2 lanes; access to Motel Village; what is the pedestrian access?; impact to the Church of Jesus Christ of Latter-day Saints; noise in Banff Tr.
- **Trade-offs** – lose the Suncourt Place, impact at Briar Hill, merge between University Dr. and Crowchild Tr.; bottleneck moving somewhere else
- Low intervention at 23 Ave. (make it better cycling intersection)
 - **Benefits** – accessible to LRTs; accessible to people at Banff Tr.; visual aspects; few impacts; low cost; better use of existing infrastructure
 - **Constraints** – slower moving traffic
 - **Impacts** – no major impact to Crowchild Tr.; remains congested; will the 'modal split' happen? (more cars equals more congestion; problem wholly exists)
 - **Trade-offs** – staggered time entry to work, continually impacts peoples life

Map Highlights

North Round 2 – Table 1 Map I

- Shift Crowchild Tr. west starting north of 24 Ave. through McMahon Stadium lands with full interchanges at 24 Ave. and 16 Ave.
 - **Benefits** – missed Briar Hill at 16 Ave; access, Crowchild more efficient; reduce pollution
 - **Impacts** – baseball and soccer fields; Suncourt Place; impacts to Briar Hill at University Dr.; property impacts / noise at Banff Tr.; impact church; moving the problem if not continued through
- Look at something different at University Dr. exit from Crowchild Tr. to avoid property impacts

North Round 2 – Table 1 Map J

- Do improvements to 23 Ave. similar to those currently at 24 Ave.
 - Pedestrian influence and good facilities
 - **Benefits** – few property impacts; low cost; better use of LRT infrastructure; people change travel habits (e.g. staggered start times) and vehicle traffic not moving too efficiently (help modal split)
 - **Impacts** – Crowchild remains congested. Will the modal split actually happen?
 - **Trade-offs** – staggering start times – may or may not work for people

North Round 2 – Table 1 Map K

- Elevate Crowchild Tr. above existing road from 24 Ave. south with access at 16 Ave.

North Round 2 – Table 1 Map L

- 2012 Plans for this area
- Freeway over Crowchild from 24 Ave. to 17 Ave. – 6 lanes above
- Keep the community feel of Crowchild Tr.
 - Transition area into an arterial/parkway
- Do nothing concept – like the changes to 24 Ave.

North Round 2 – Table 2

Overall Table Discussion

- Interest in making this bike friendly
- Work at University
- Commute on Crowchild
- Work for company representing companies in Motel Village
- More mixed use along Crowchild
- Need to fix 24 Ave. – traffic reports always refer to it
- Thought a lot about 24 Ave.
- Should have done overpass when built LRT
- Proper overpass with exits in place

- Light only at 23 Ave. during high volume e.g. football game
- No left turn during peak times
- 16 Ave. north to Crowchild Tr. – City wants to build ramp – currently in the works
 - Great solution
- Adequate access to Motel Village needed could be different
- Incorporate southbound access Crowchild Tr. to Banff Tr. for access to Motel Village
- Make this area CalgaryNEXT, not down by river
- Issue at University Dr. and Crowchild Tr. – people creating own solution through residential area
- Need three lanes throughout Crowchild Tr.
- Merge 16 Ave. to northbound Crowchild Tr. too short, needs to be signed merge (not yield)
- 3 lanes to 2 – always backed up
- Divert traffic to use University Dr. more
- Options for 24 Ave. and Crowchild Tr. intersection
 - Roundabout access to Banff Tr. with access to Motel Village or;
 - Additional access to 23 Ave. with access to Motel Village
- Small intersection preferred
- Discussion of roundabout
 - Space between Nick's Steakhouse and LRT tracks also very tight
- Close access to Motel Village on Crowchild Tr., build overpass at 23 Ave., with access to Motel Village --- road through to Banff Tr.
- Leave exit onto service road
- No access down middle of Motel Village
 - Three roads surrounding Motel Village – challenging
- Three accesses to Motel Village now
 - 1 good access would be better than 3 ok accesses
 - 23 Ave. main access
 - Shift Crowchild Tr. a bit west
- Restrict left turns during rush hour – good short term idea
- Push access to Motel Village off 16 Ave. (remove all access from Crowchild Tr.)
- Merge lane on 16 Ave. – weak but it works
- World's worst bus stop – 16 Ave. just south of Crowchild Tr.
 - City will clean that up
 - Clean up bus stop south on Crowchild Tr. as well
- Why is there a service road south of Motel Village
 - Adds value – two way traffic
 - Can you get rid of service road? Can't go east.
- McDonald's – new renovations other businesses – not willing to change/move
- Need to figure out Banff Trail Area Redevelopment Plan
- Not assuming McMahon Stadium is leaving that space



Ideas Explored

- Raise 24 Ave. over, move Crowchild Tr. over Church to west
 - **Benefits** – moves traffic away from residential
 - **Constraints** – is ground soft there? Need to drill to test prior
 - Very dangerous to bike or pedestrian travel across
 - City will build interchange with pedestrian/bike in mind
- Interchange at 24 Ave. – tight diamond, smallest size
 - **Benefits** – free flow traffic; safer; moves traffic out of neighbourhoods
 - **Constraints** – LRT station possible constraint; heard the area around Mormon Church is soft
 - **Impacts** – need to build access for Motel Village – didn't come up with solution but sure one exists; any changes to access to Motel Village will impact businesses
 - **Trade-offs** – loss of church; inclusion of pedestrians

Map Highlights

North Round 2 – Table 2 Map M

- Two lane bottleneck after University Dr. exit
- World's worst bus stop - westbound 16 Ave. south of Motel Village
- Better pedestrian access to the LRT before / after sporting events at McMahon Stadium
- Don't assume McMahon Stadium is leaving.

North Round 2 – Table 2 Map N

- Option to shift Crowchild Tr. west at 24 Ave.
- Close access to Crowchild Tr. from westbound 24 Ave.
- Move northbound Crowchild Tr. ramp from westbound 16 Ave. to west side of Motel Village

North Round 2 – Table 2 Map O

- Need three lanes on Crowchild Tr. north of University Dr.
- Southbound Crowchild Tr. to eastbound 16 Ave. should be a merge not a yield
- Bad weave between 16 Ave. and University Dr. interchanges
- Access restrictions to and from Motel Village at 23 Ave., but maintain adequate access
- 24 Ave. intersection
 - Worst intersection – needs fixing in conjunction with others
 - Overpass
 - Incorporate southbound Crowchild access to Motel Village via 24 Ave.
- Possibly block lights at 23 Ave.
- More mixed use along Crowchild Tr.

Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- More access off of Memorial Dr. rather than using Crowchild Tr. into West Hillhurst (i.e. lights at Memorial Dr.)
- Have an LRT along Crowchild Tr. for alternative transportation route
- No matter how many lanes, the lights are what is slowing down traffic
- Access around 5 Ave. is very good right now - can that be maintained? (keep it as good as it is now)
- Expand intersection around Memorial Dr. and Crowchild Tr. bridge
 - Divert traffic to other routes
- Appearance - how it will look in the neighbourhood?
- Less dependent on automobiles
- Maintain good traffic flow with minimum interruptions
- Congestion from 5 Ave. to 24 Ave.

- Noise level is a concern
- Providing gateway from suburban to inner city
- Promote cycling, car pooling
- Kensington Rd. is not pedestrian friendly
 - Could be improved with a more community feel
- If bike lane removes a lane of traffic must be a bike lane that is often used
- Expanding 14 St.
- Consider an underpass at 5 Ave. or 6 Ave.
- Access around Crowchild Tr./5 Ave. for public transit. Bus shelter on corner of 5 Ave./Crowchild Tr. has been removed – especially because of cold weather

Ideas Explored

- Expanding 14 St. to increase capacity
- Retain access
- 19 St. bike lane
- Appearance
- Busing
- Access
- Active transportation
- Vibrant city - better neighbourhood
- Location or widening of Crowchild Tr.
- Local user
- Good traffic
- Noise
- Gateway high-speed to urban
- Promote transit, carpooling
- Bus shelters on 5 Ave.
- More access off Memorial Dr.
- LRT
- More frequent bus service at 5 Ave.
- Concern: Going north from Memorial Dr. onto Crowchild Tr.; lane also from bridge dangerous merge if going on to Kensington Rd. east
- More active transportation
- Less dependent on motor vehicles
- Better neighbourhoods (property values change depending on impact; depending on changes to Crowchild Tr.)
- Sooner the information is available the better they can make decisions
- Maintain good traffic from along Crowchild Tr., 14 St. and bridge
- Noise level of traffic
- Appearance, access and community
- If you raise Crowchild Tr. more houses are impacted. Greater cost to city.
- Elevated road over Crowchild Tr. to allow for access
 - **Impacts** – underneath would be no access
 - **Benefits** – free flow unimpeded traffic
 - **Constraints** – elevated road is visually unappealing



- One lane on Crowchild Tr. for buses only
 - **Benefits** – less traffic on Crowchild Tr.; encourages and allows alternative transportation; University Dr. to Crowchild Tr. would be the third lane on Crowchild Tr. – free flow
 - **Constraints** – bridge only has 2 lanes – bottleneck before the bridge
 - Opportunity for interchange at University Dr. and 14 Ave.
- More frequent bus service on Crowchild Tr.
 - **Benefits** – better connection to LRT; fewer cars
- Access at Crowchild Tr. and 5 Ave. – remaining access at 5 Ave.
 - **Benefits** – slower traffic - safety
 - **Constraints** – a lot of backed up traffic; more congestion on Crowchild Tr.; Crowchild Tr. is not pedestrian friendly
 - **Impacts** – access to the neighbourhood
 - **Trade-offs** – overpass is preferred because underpass seems less safe
 - Option Underpass – 2 residential blocks on either side of Crowchild Tr. would be affected and require construction
 - Option Overpass – pedestrians take longer to cross street so an overpass would allow for shorter lights. Less wait for cars
- More frequent bus services at Crowchild Tr. and 5 Ave.
 - **Benefits** – fewer cars; better connection to LRT
- Have an LRT down Crowchild
- More access off Memorial Dr. into West Hillhurst/Hillhurst
- Widen lanes north of 5 Ave. (for buses)
 - **Impacts** – better access for emergency vehicles
- Tunnel under Crowchild Tr.
 - **Impacts** – property values and compensation
- Promote transit, cycling, pedestrian and carpool transportation; e.g. bike lanes on Kensington Rd.
 - **Benefits** – Kensington Rd. area could be improved/community feels more vibrant
 - **Trade-offs** – consider how to maximize lanes
- Interchange at 16 Ave. and University Dr. south use the current University Dr. south lane as straight through lane
 - **Benefits** – three lanes south; no merging
 - **Constraints** – would need overpass for Memorial Dr. too
 - **Impacts** – more traffic
 - **Trade-offs** – eliminate Memorial Dr. exit
- Expand the LRT from Hillhurst to Crowchild Tr. & 5 Ave.
- Underpass for cars at 5 Ave.
 - **Impacts** – lots of blocks of 5 Ave. that are killed, no vibrancy
- How can we retain some access to/from and across Crowchild Tr. from 5/6 Ave.?
 - Will the community be split or can we have an underpass for example (at least pedestrian and cyclist)
 - Don't close access to 5 Ave.
 - **Benefits** – slower traffic; feels safer than underpass
 - **Constraints** – requires some switch backs
 - **Impacts** – underpass easier to walk for older pedestrians; expense; lots of backed up traffic; access the neighbourhood
 - **Trade-offs** – more traffic would have to use Kensington Rd.; congestion on Crowchild Tr.; tunnels can feel unsafe, fearful crime opportunity; would use if bus shelter; make it safer
- Take out the lights at 5 Ave. and Kensington Rd. – elevate Crowchild Tr. from Memorial Dr. past 5 Ave.
 - **Impacts** – increased noise (perception of); visual distraction
- Expand area around Memorial Dr. and Crowchild Tr. bridge
- Access around 5 Ave. to public transit. Movement in all directions very good right now – can that be maintained or rearranged (keep it as good as it is now)
- Underpass at Kensington Rd.
- Overpass at Kensington Rd.

- Add a 'gateway' that indicated a change from freeway to inner-city road
- Reduce noise (ticket for noise) muffler but motor bikes are very noisy (have and enforce it)
- More bus shelters (especially 5 Ave. near car wash)
 - **Benefits** – Protection from wind/weather; increase transit use
- University Dr. exit as overpass
- Less bike paths (none on Crowchild Tr.), I hardly see them used; bike path on 19 St. (restructure bike paths)
- Expand 14 St. and bridge for downtown goers
- Change designation of central section to arterial or parkway
- Improve pedestrian/cycle access at 5 Ave.

Map Highlights

Central Round 1 – Table 1 Map A

- Interchange with ramps at University Dr./13 Ave./Crowchild Tr.
- 5 Ave. underpass
 - With possible pedestrian overpass
 - Traffic light stalls to provide access to and from Crowchild Tr.
- Traffic light to remain at Kensington Rd. as access across Crowchild Tr. is critical

Central Round 1 – Table 2

Overall Table Discussion

- Q: Enough land already owned by City of Calgary for the 1978 interchanges?
 - A: No
- Interchange at Kensington Rd. and Crowchild Tr. lower frequency traffic goes over
- Diamond interchange requires less land/space
- Repeat diamond interchange at 5 Ave.
- Tunnel from 24 Ave. to 17 Ave.
- Tunnel from Kensington Rd. to 17 Ave.
 - Through traffic, in and out
 - Those who need to exit take bridge
 - Tunnel needs a detour
- Build a second story over Crowchild Tr.
- Sound wall is issue
 - Cover the roadway
 - Covered tunnel up high (wouldn't have to plow in winter)
- Let's spend the money and make real improvements
- No build (not do nothing, still have no access and signal changes at peak times)
- Restrict access onto Crowchild Tr.
- Block both 5 Ave. and Kensington Rd.
- How does this fit into the transportation plan (cyclists)
- Why no more bridges, why Crowchild Tr. the only major?
- Make easier for pedestrians and cyclists
- Pedestrian/cyclists lanes beside or separated
- Expand for bike lanes
- Smaller interchange (diamond) like Crowchild Tr. & 33 Ave. – benefit is less space
- Cloverleaf – tradeoff is space
- No build 5 Ave. and diamond interchange at Kensington Rd.
- No build 5 Ave. and clover leaf at Kensington Rd.
- 5 Ave. flyover
- Q: What about increased traffic volume?
 - A: We will forecast all traffic volumes and assign to the road options
- LRT line the entire corridor

- Subway line
- Buses, HOV lane?
- No build could calm traffic for 10 years
- Maintain transit routes
 - Some stops are dangerous (north at 9 Ave.)
 - Diamond lane does not work
 - Need enforcement for bus lane
- Do not increase speed of Crowchild Tr.
- Short amount of space to lane change
- 5 Ave. cyclist and pedestrian crossing
- No build option pared with a pedestrian/cyclist tunnel or bridge
- Upgrade north of 9 Ave. the pedestrian/cyclist bridge
- Kensington Rd. to 14 St. four lane
- No left turns east/westbound Kensington Rd. – at least not during rush hour

Ideas Explored

- How does this fit into CTP?
- Why no more bridges west?
- Why not Shaganappi Tr. expansion?
- Crowchild Tr. – pedestrian and cyclists
 - Beside Crowchild Tr. or on Crowchild Tr.
 - Wider to incorporate – could be both same side or other side of sound barrier
- Taking advantage of the opportunity – people losing houses issue
- Close off access at 5 Ave. during peak periods
- Add in overpass for pedestrians/cyclists
- Enhance current overpass
- Why not Sarcee Tr.? 16 Ave. would need enhancements if Crowchild Tr. was left alone
- Restrict access on 5 Ave. and Kensington Rd. at peak times
 - **Impacts** – tough for community members to get access to Crowchild Tr.; no left turns; strain on community/short cutting; community connectivity issue; lots of people move to 19 St.
 - **Benefits** – short term – easy to implement; not expensive
 - **Constraints** – how to deal with transit
- Tunnel 24 Ave. N.W. to 17 Ave. S.W. below water table
- Tunnel Kensington Rd. to 24 N.W.
 - **Benefits** – through traffic
 - **Impacts** – no on/offers
 - Bore and cut and cover
 - Take advantage of economic downturn
- Elevated above ground tunnel
 - **Impacts** – noise issues
 - Dome covered to address issue of noise
- Helpful if map is dated – what year is it from
- No left from Crowchild Tr. to Kensington Rd. or 5 Ave. during rush hour
- No build on 5 Ave. and interchange at Kensington Rd.
- No build at Kensington Rd. and interchange on 5 Ave.
- Interchange at Kensington Rd. – smallest is a diamond
- Kensington Rd. to 14 St. keep/turn it to 4 lanes
- LRT Line to accommodate?
- HOV lane?
- Lane reversal? Packed both ways
- Transit needs to be kept really important both along and across Crowchild Tr.

- Enforcement should be done on HOV lanes
- Paved shoulder for emergency vehicles
- Toll roads?
 - **Benefits** – effective to reduce congestion
 - **Impacts** – diverts traffic into community; pushes problem elsewhere
 - Falls under no build
- Put clover leaf between the bridge and Memorial Dr.
 - **Trade-offs** – space
- Paved shoulder for emergency vehicles
 - **Trade-offs** – space; shared bus and emergency lane
- Lane reversal
 - **Trade-offs** – both northbound and southbound are heavily used would impact one direction of traffic
- Bike lanes on the outside of the sound barriers – expanding Crowchild Tr.
 - **Trade-offs** – people lose homes (trade off)
- Make Sarcee Tr. bigger west 16 Ave to south Sarcee Tr. will get you around (pare with no build)
 - **Impacts** – 16 Ave. would need enhancements
- No left turns (right only during rush hour)
 - **Benefits** – low cost
 - **Constraints** – short term fix
- Block one access 5 Ave. or Kensington Rd.
 - **Trade-offs** – community access and community traffic
 - **Impacts** – transit; would back up 19 St.
- Removing east/west access
 - **Trade-offs** – community access - it will impact some east/west crossing but how many would it benefit
- Crowchild Tr. being a toll road
 - **Trade-offs** – reduced Crowchild Tr. traffic but increased short cutting (19 St. and 14 St.)

Map Highlights

Central Round 1 – Table 2 Map B

- Pedestrian overpass at 5 Ave.
- Option 1 – build a tunnel
- Option 2 – no build; restrict through and left turns at Kensington Rd. and 5 Ave.

Central Round 1 – Table 3

Overall Table Discussion

- Tie these items into communications for the study
 - Concerns with process
 - 24 Ave. construction during study
 - West Village Area Redevelopment Plan
 - 16 Ave. northbound ramp
- 5 Ave. flyover (sound concerns)
- Pedestrian overpass at 5 Ave.
- Underpass at 5 Ave. with access on and off Crowchild Tr. – harder to accomplish drainage
- Important to maintain 5 Ave. and Kensington Rd. access to Crowchild Tr.
- Grade separation at 5 Ave. and Kensington Rd. is preferred over lights
- Ramps requiring property acquisition is not desired
- 5 Ave. right-in/right out
- Desire to maintain heritage sites and carwash
- Underpass at 5 Ave. is preferred
- Do not want large walls on Crowchild Tr. (separates community)
- Extra lanes should not be built

- Desire High Occupancy Toll (HOT) lane with money put back into community
- Find way to allow safe left turn off southbound Crowchild Tr. onto 5 Ave.
- Formalize U-turn movement for southbound Crowchild Tr. off University Dr. to eastbound 5 Ave.
- Fix lane continuity at Memorial Dr. (southbound Crowchild Tr.)
- Need improvements to pedestrian crossing between 5 Ave./University Dr. or better locations
- Important to improve east to west access across to link communities
- Eliminate stopping/starting at lights to reduce noise
- Removing access at 5 Ave. would double the problem at Kensington Rd.
- Desire comfortable pedestrian crossing (not necessarily pedestrian only)
- Pedestrian overpass is needed at 5 Ave. before Kensington Rd.
- Main concern is mess at bridge versus 5 Ave. and Kensington Rd.
- Unique commercial areas on Crowchild Tr., would be a shame to lose
- Don't want Crowchild Tr. to become the new Deerfoot Tr.
- Keep direct access and visibility for businesses
- Consider overlapping sound walls
- Dislike concrete corridor
- Don't feel connection with the community across Crowchild Tr. (probably because of Crowchild Tr.)
- Look at depressing Crowchild Tr.
- Depress 5 Ave.
 - Only want 1 lane each direction; maintain right-in-right-out; challenges with addressing Kensington Rd. are greater; property impacts
- Desire for more green space

Ideas Explored

- Access at 5 Ave.
- Lane continuity
- Lengthen left turn/formalize U-turn
- Noise walls would separate community
- West Hillhurst Community Association, Abominable Sports, adjacent residents
- West Village Area Redevelopment Plan (ARP) links to projects; ramp to 16 Ave.; 24 Ave. construction; communication – a part of Crowchild Tr.
- High Occupancy Toll (HOT) lane - money back into community
- Remove signals
- Pedestrian overpass at 5 Ave. – wide enough for passing
- 5 Ave. under Crowchild Tr. – under is better
- If business access is lost off of Crowchild Tr. it will crush businesses
- Remove signals (bridges)
 - **Benefits** – improved traffic flow; improve noise
 - **Impacts** – loss of direct access to businesses; loss of visibility; noise walls would split community

Map Highlights

Central Round 1 – Table 3 Map C

- Pedestrian overpass at 5 Ave. – currently wide to cross
- Noise – overlapping sound wall without being a concrete corridor
- Keep direct business access and visibility off of Crowchild Tr.
- What is put back into the community?
- If adding another lane it will just fill up
- Clean the Crowchild Tr. bridge up and it will improve Kensington Rd. and 5 Ave.
- Lions Village – want to see this kept
- 5 Ave. under Crowchild Tr.



- U-Turn route westbound 5 Ave.
- 5 Ave. access right-in / right-out
- Pedestrian overpass at bus stop (near 9 Ave.) is too old and not accessible.
- Under covered tunnel at 5 Ave NW under Crowchild Tr.

Central Round 1 – Table 3 Map D

- Could you depress 5 Ave under Crowchild
- Could you depress Crowchild Tr.?
- Speed limit – reduced on Crowchild Tr.

Central Round 1 – Table 4

Overall Table Discussion

- Q: When are we designing for? 20-30 etc. years
 - A: Not limiting, could be tomorrow to the distant future or 2 years
- Don't over/build in case growth doesn't match
- Worry of division of neighbourhoods
- 75% of traffic is community north/south
- 100,000 cars today → 130,000 future
- What is the catalyst for this growth?
 - If oil sands don't do as projected, how will this affect growth
- Bus stop at 9 Ave. intersection is very tight against wall, stairs not shoveled, safety concern
 - Poor pedestrian crossing there too, stairs deadly steep
- New bridge – ride bike without stairs, accessible for bikes and wheelchairs; lighting; remove underbrush
- 5 Ave. pedestrian crossing too short
- Tunnel from 4 Ave. under river; walkways on top, restaurants, etc.; still a local road on top
- Accidents at Kensington Rd. and maneuvering to bridge and University
- Change to two lanes for through traffic on bridge at Memorial Dr.
- Crazy merge for bridge and on 12 Ave.
- Crossing traffic to exit poses safety risk
- Very slippery
- Possible to widen bridge – looking into it
- Not building new bridges but could build another maybe next to the existing to widen it
- Exit lane to Memorial Dr. east, seldom used, maintain 3 lanes on bridge both sides and have exit lanes added
- Concern at Memorial Dr. ramp heading west to Crowchild Tr. brought across park, need to preserve parks beauty, kids playing, greenery
- 13 Ave. overpass deadly stairs too – needs revamp
- Need to reduce accident numbers
- Improve neighbourhood connectivity
- Great paths along the river

Ideas Explored

- Bus only to turn lights at Kensington Rd. east/west; route number 1/305 every 5 minutes
 - **Benefits** – triggers synchronization like Bow Tr.; transfer bus at both sides Crowchild Tr.; reduces bottleneck
 - **Impacts** – riders won't like to see so close to destination and need to transfer; bus needs change
- Start tunnel at 5 Ave. or 24 Ave. to 17 Ave. – no exit, only straight through; link from University of Calgary to Mount Royal; tax businesses along top of tunnel/along corridor – like 17 Ave. – reduce speed
 - **Benefits** – reduce noise; community a whole; reduce pollution
 - **Constraints** – river, water flooding; is Elbow river less controllable? Can't comment as it is dependent
 - **Impacts** – flood mitigation (TransAlta dam); reduce lanes; bike traffic on bridge – connectivity; don't force to Kensington Rd.; tunneling machine under homes/bus – foundations; costs tunneling under river; time to clean it up; might do tunnel another at 33 Ave. south; bike volume across bridge is huge

- Underpasses at Kensington Rd. double lane and 5 Ave. single lane 200m; Kensington Rd. and 5 Ave. under Crowchild Tr. with roundabouts – right turn only on both west and east; similar to Glenmore Tr. and 37 St.
 - Eliminate lights
 - Would roundabout take the 100,000?
 - **Benefits** – flow on Crowchild Tr.; lower cost than tunnel; pedestrian traffic improvements; reduce accidents/severity of accidents
 - **Impacts** – houses and bus; raise Crowchild Tr.; hurt businesses; expropriation of homes; environmental; communities; need to build roads
- Marda Loop style interchange
 - **Benefits** – less invasive; less impact to bus as roundabouts
 - **Impacts** – still 200m impact; slower lanes
 - If need land, city might purchase it
 - If ramp from Kensington Rd., have to cut off access from 2 Ave.
 - Block bus access; make alternative near access?
- Short term – do nothing
 - **Benefits** – will find other ways to cross the city
 - **Impacts** – bottleneck – bridge and lights
- Peak hours all green lights – eliminate left turns
 - still needs new pedestrian overpass at 9 Ave. and overpass at 5 Ave. and Kensington Rd. to help with detours
 - **Benefits** – no cost; traffic flow; increased capacity (10-15%); reduces pollution and noise
 - **Impacts** – transit – currently gets stuck; needs to get left after 9 Ave. to University Dr.; want to make more reliable
 - **Trade-offs** – reduced bus access

Map Highlights

Central Round 1 – Table 4 Map E

- Through traffic in tunnel from 24 Ave. to 17 Ave. N.W.
- Convert Crowchild to 50 km/hr and build businesses
- Flood mitigation of tunnel
- Accessibility of transit stop at 9 Ave. on Crowchild Tr.
 - Tight against wall
 - Only stairs
 - Have to carry bikes
- Safety concerns with overgrowth on path on west side of pedestrian overpass from 9 Ave.
 - Isn't maintained for snow clearing/mowing
- Pedestrian crossing time is too short at 5 Ave N.W. and Crowchild Tr.
- Bottleneck at Kensington Rd.
 - Accidents



- Issue with traffic safety on bridge
- Keep bike connectivity
- Major road?
- Drive through
- Engage community
- Slow traffic
- Can traffic go another way?
- Pedestrian crossing needs repair
 - Ride bike up and down – accessible
 - Safety, tree removal and lighting
- Tunnel
- Underpass
- Under river tunnel
- Bus and walkways – fill Crowchild Tr
- 50 km/hr
- Mixed use
- Link to University of Calgary
- Tunnel (5 Ave. or 24 Ave. start to 17 Ave. end to end. No access)
 - **Benefits** – tax on business along corridor; noise reduced; pollution; community stays whole; mixed use; connection to U of C
 - **Constraints** – river flooding; construction staging; homes-underneath – business existing foundations
 - **Impacts** – reduce lanes; cost; deeper under river; soil?; other tunnel?; potential 33 Ave exit

Central Round 1 – Table 4 Map F

- Marda Loop style interchange
 - **Impacts** – community; grade; access to businesses
- Slower lanes
- Build off existing bridge
 - Three lanes both sides
 - Two lane underpass
 - Merge off of 12 Ave.
 - Across two lanes challenge
 - Exit through lane
- Underpasses with roundabouts
- Over or under Crowchild Tr.
- Roundabouts on either side of Crowchild Tr.; underpasses to access community
- 9 Ave. under Crowchild Tr.
- Shaganappi Bridge
 - **Impacts** – environment; communities; need to build roads
- Underpasses
 - **Impacts** – house and business – around/along; if we can keep at level; hurt businesses; pedestrian traffic; buying people out (expropriate)
 - **Benefits** – free flow on Crowchild Tr.; lower cost than tunnel; reduce accidents; severity of accidents
- Keep mixed use and small business and people

Central Round 1 – Table 4 Map G

- Short term solutions
 - Do nothing; people find other ways
 - Peak hour green lights / eliminate left turns
 - **Benefits** – no cost; traffic moves; increase capacity; reduce pollution – less stop and start; reduce noise; reduce bottleneck
 - **Impacts** – business access; business needs to change



- Keep bike and pedestrian lane on lower level of Crowchild Tr. Bridge. Love it!
- Keep active park south of Guide Scout Service Centre
 - Preserve surrounding area
 - Trail system
- Pedestrian overpass at Kensington Rd./5 Ave. with green lights would help with potential detours
- Need new pedestrian overpass at 9 Ave. with green lights
- Need to revamp pedestrian access across 16 Ave.
- Bus only through lanes (Routes 1 and 305)
- Transit reliability on Crowchild Tr.
 - High speeds off-peak hours
 - Gridlock during peak hours
- Transit weave moving from right hand lane northbound Crowchild Tr. to exit on University Dr.

Central Round 2 – Table 1

Overall Table Discussion

- 17 Ave. to 24 Ave. above grade, express lane exit at Bow Tr. and University Dr.
- Add lanes between 9 Ave. and University Dr.
- Demolish Suncourt Place
- Move access to University Dr.
- One combined interchange 16 Ave. and University Dr.
- Tunnel from bridge to past University Dr.
- East/west pedestrian and cyclist connections (improve and add) – not accessible for wheelchairs, strollers, etc.; pedestrian/cyclist tunnel
- South of Kensington Rd., if commercial there could be access issues
- Improve Crowchild Tr. and Parkdale Blvd.
- Sense there is a plan already

Ideas Explored

- Change access to University Dr.
- Blocking the Kensington Rd. and 5 Ave. access is negative
 - **Impacts** – lose sense of community
 - **Trade-offs** – demolish one of the existing pedestrian crossings
- No changes to Crowchild Tr. but add the above express lane
 - **Trade-offs** – lighting (bottom layer may be dark and dangerous)
- Combined interchange – University Dr./16 Ave.
 - **Benefits** – improved weaving; get rid of eyesore building; increase area of land in there
- Extra lanes added to solve pinch point when lanes reduce (pedestrian overpass to 24 Ave.)
 - **Benefits** – get rid of ugly building, bottleneck, and chokepoint at University Dr.; safer; new overpass needed; reduce congestion on bridge; better access to University of Calgary/McMahon Stadium
- Eliminate/time lights; no lefts during rush hour
 - Transit would be exception
 - **Benefits** – reduce noise because of less stop/go; can experiment with little cost
- Close off access to 5 Ave./Kensington Rd. during rush hour or shorten lights at 5 Ave./Kensington Rd. (95/5)
- Across Crowchild Tr. needs more or better connections for pedestrian and cyclists – maybe underground
- Another cyclist/pedestrian crossing is needed over the Bow River either north of 19 St. or at the pathway that connects to Brownsea Dr. N.W. (north of 21 St.)
- Blocking access on 5 Ave. or Kensington Rd. too much for communities
- Need to preserve access to river
- 3 levels of interchanges to keep in mind
- Interchanges for 5 Ave. and Kensington Rd.
 - **Impacts** – land loss; community impact
 - **Benefits** – more efficient traffic flow

- Add lane to bridge
 - **Impacts** – construction a pain
- 16 Ave. needs better access to Crowchild Tr.
- Commercial access needs to be considered
- No eastbound access from Kensington Rd. to Crowchild Tr.
 - Majority of traffic not doing that
- Tunnel 23 Ave. – 17 Ave., comes up past University Dr. – 50% of traffic comes off
 - **Benefits** – environmental; no noise issues; community has better access; green space
 - **Constraints** – no boring; cut and cover is needed; construction – detours would be issue; property issue; on/off issues
- 17 Ave. to 24 Ave. express lane above grade; Bow Tr. and University Dr. only on/off
 - **Benefits** – precast building; cost less; less obtrusive construction; keeps community together
 - **Impacts** – dark/crime possible; privacy, overlooking; noise, aesthetics – issue for community
- Cut off corner/straighten it out; bring Memorial sides closer together
 - **Benefits** – visible land/increased
 - **Impacts** – speed increasing and lots of on and off – dangerous; pedestrian access would need to be considered
- Above express lane
 - **Benefits** – cost (cheaper than tunnel); maintain east/west community access; flood proof; bridge is not a choke point; some use expressway the existing roadway could handle the traffic; could be completed quickly; tunnel or overpass would eliminate some Crowchild Tr. traffic
 - **Trade-offs** – darkness; privacy; noise; looks – eye sore; on and off access
- Tunnel 23 Ave. to 17 Ave.
 - **Benefits** – no noise
 - **Constraints** – can't bore because of soil conditions; open cut would be the only construction option
 - **Trade-offs** – close roadway for open cut, benefit – environment and air quality, on or off would need to build accesses
- More lanes – south of 9 Ave. to 24 Ave.
 - **Benefits** – demolish Suncourt Place; eliminate bottleneck; reduce neighbourhood cut through; safer; new pedestrian over pass south of 9 Ave.; reduce congestion at the bridge; improve access to the stadium and University; consider this area as a unit, 16 Ave., University Dr. and Crowchild Tr.
- Combine 16 Ave., University Dr., and Crowchild Tr.
 - **Benefits** – reduce weaving; improve visually; increase green space; this is an enhancement
 - **Constraints** – need access to Crowchild Tr. north/south from 16 Ave.
- Straighten out Crowchild Tr. and Memorial Dr.
 - **Benefits** – make more land usable; need to consider pedestrian crossings if more usable land; 19 St. across the river need pedestrian/cyclist bridge (there is a bike path down 19 St.) or the pathway at the base of 21 St.
 - **Trade-offs** – increased traffic speeds = dangerous
- No build
 - **Benefits** – eliminate/time lights; low cost to pilot; no left turns; left turns for buses only; reduce stop/go traffic noise; no cross traffic (east/west) during rush hour
 - **Trade-offs** – neighbourhood access; make 19 St. a major artery; the pedestrian/cyclist access – bridge at 5 Ave. & Kensington Rd.; would this move down the choke point?; no eastbound access Kensington Rd. to Crowchild Tr.
- Widen Bridge
 - One added lane
 - **Impacts** – reduced lane ways during construction increase traffic during construction
- 5 Ave. and Kensington Rd.
 - **Benefits** – maintain connections by having underpass or overpass
 - **Constraints** – breaking up the communities is a negative
- Shaganappi Tr. river crossing
- Remove access to/from Crowchild Tr. at Kensington Rd. to 24 Ave. during rush hour

- **Impacts** – no access for communities to turn left on/off Crowchild Tr. at Kensington Rd., 5 Ave., 23 Ave., 24 Ave., etc. during rush hour
- **Benefits** – Improved traffic flow along the corridor during rush hour; low cost; low physical impact
- **Trade-offs** – improved traffic flow vs. reduced access during rush hour
- **Constraints** – barriers, barricades, infrastructure required

Map Highlights

Central Round 2 – Table 1 Map H

- Combine University Dr. / 13 Ave. / Crowchild Tr. into one interchange
- Concept to eliminate bends and increase land by realigning Crowchild Tr and Memorial Dr. Bridge would be in a straight line and have no bend.
- Pedestrian bridge over the Bow River:
 - From 19 St. or from the 21 St. pedestrian bridge (over Memorial Dr.) to West Village

Central Round 2 – Table 2

Ideas Explored

- City growth may not be as aggressive
- Look at short term, low cost improvements
- Lane reversal
 - Low speed
 - 24 Ave. to south of bridge
- Toll lanes?
- HOV or reverse lane within existing Crowchild Tr.
- Maybe Crowchild Tr. to downtown – have to look at volume
- Widen lanes at turn-off to University Dr.
- Expand Crowchild Tr. bridge. Refine access and exit to improve volume and flow
- Urban tight diamond-overpass rather than large swooping merge lanes at Kensington Rd.
- Improve flow through more efficient use of existing lanes, e.g. HOV at rush hour
- More foot bridges over Crowchild Tr. and make existing footbridges more safe
- Toll lane
 - **Benefits** – alleviated congestion
 - **Impacts** – change (for the negative) the feeling of Calgary
- Lane reversal
 - **Benefits** – at rush hour traffic will improve; easy to install/cheap
 - **Constraints** – where vehicles can access the reverse lane/exit; is it possible up the hill?; how long would it need to be to see benefit?
 - **Impacts** – one less lane for traffic going opposite way; also consider solutions impact or be impacted by more than just one 'section'
 - **Trade-offs** – how/where to end a lane reversal; could it be used for HOV designation; with decreased speeds but it is already slow moving with current congestion
- Expand Crowchild Tr. bridge – refine access and exit to improve volume and flow
 - **Benefits** – avoid or reduce infringement on green space; lower cost, less disruption; avoid pathway disruption
 - **Impacts** – some traffic disruption
- Marda Loop style overpass at Kensington Rd.
 - **Benefits** – eliminate lights – improve flow of Crowchild Tr. and Kensington Rd.; moderate infringement on houses and businesses
 - **Constraints** – growth rate has flattened for Calgary
 - **Impacts** – one residential home and an office building
 - **Trade-offs** – don't need the ramp on S.W. corner; costs way less than tunnel; balance expense with growth
- Change lights at rush hour 5 Ave./24 Ave./Kensington Rd.

- **Benefits** – improved flow on Crowchild Tr.; easy to change; ease for emergency vehicles
- **Impacts** – east to west traffic; transit along 5 Ave.
- **Trade-offs** – lights cause the back up along 5 Ave.; access to areas serviced by these areas decreased; other streets need to accommodate with signs or other
- Improve flow through more efficient use of existing lanes – e.g. HOV at rush hours
 - **Benefits** – better flow; cheap to build; won't increase footprint of roadway
 - **Constraints** – 1 less lane for general traffic; consider where volume is highest/most used
 - **Impacts** – car pooling takes effort
 - **Trade-offs** – with lane reversal or on the bridge (for buses and HOV) need research to determine best use
- Safety issues – people texting (not looking); listening to road hazards – not music
- Access to 14 St. (north) from Memorial Dr. (east)
- Urban tight diamond at Kensington Rd. and Crowchild Tr.
 - **Benefits** – reduce the bottleneck
 - **Constraints** – remove houses at Kensington Rd.; visually impact neighbours due to height
 - Opportunity – Parkdale Blvd. could still be used to turn left off of bridge – reduce options at tight diamond
- At rush hour, change/eliminate lights at 5 Ave. and Crowchild Tr.
 - **Benefits** – control the flow of traffic better; flow on Crowchild Tr. is easy to change; ease for emergency vehicles
 - **Constraints** – if access is limited (at rush hour) residents have to change their travel routes at rush hour
 - **Impacts** – east and west traffic decreases
 - **Trade-offs** – access to the area vs. good flow at rush hour
 - Opportunity – shorter lights on Crowchild Tr.
- Memorial Dr. and 19 St. intersection is dangerous and prone to accidents
- Toll Roads
 - **Benefits** – reduce the amount of cars on the road; alternative transportation
 - **Constraints** – don't change Calgary, I like it the way it is
- Make footbridge over Crowchild Tr.; make existing footbridges safe
 - No disruption of pathway and under Crowchild Tr. bridge
 - Unsafe bridges because of overgrown vegetation physical safety a concern; additional footbridge
 - **Benefits** – minimal infringement on green space; low cost to reconstruct existing bridge in order to make them safer; more areas to cross Crowchild Tr. for new footbridges
- Tunnel
 - **Benefits** – free flow
 - **Constraints** – traffic jams; expensive
- HOV Lanes
 - **Benefits** – buses, carpool, taxis, Uber; alternative transit/transportation; major route should go downtown – reduce parking
 - **Constraints** – HOV lane is often vacant
 - **Impacts** – feel for people who live next to Crowchild Tr. and would lose their home due to new lane
- Better bike lanes
 - **Benefits** – in winter use lanes not for bikes but for an HOV lane
 - **Constraints** – winter months it is difficult to use
- Lane Reversal
 - **Benefits** – cater to busiest traffic time of the day; Memorial Dr. has a good lane reversal that works well; easy to install, relatively less expensive
 - **Constraints** – what is the actual speed of the road lane reversal works best at lower speeds; would the lane reversal make a difference on a small strip of road
 - **Impacts** – one lane of traffic changing going the other way

Map Highlights

Central Round 2 – Table 2 Map I

- Improve pedestrian overpass - physical safety is a concern for the bus stops at 24 St. N.W. near 9 Ave. N.W.

- No through road during rush hour with interchange at Kensington Rd.
- Pedestrian overpass across Crowchild Tr. south of 5 Ave. N.W.
- Keep green space (playground) between Broadview Rd. N.W. and Memorial Dr. between 23 St. N.W. and 22 St. N.W.
- Widen existing Crowchild Tr. Bridge.
- Merge lanes at the intersection of Kensington Rd. N.W. and Crowchild Tr. N.W.
- Access to northbound 14 St. from Memorial Dr.

Central Round 2 – Table 3

Overall Table Discussion

- Noise as a resident (especially at raised portion by University Dr.)
- Transit by 5 Ave. is well used
- Walking across Crowchild Tr. at 5 Ave. is unpleasant but desire ability to cross
- Overpasses north of 5 Ave. are handy but get icy and both need ramps
- Expect noise to increase
- Desire bus lanes along corridor (or HOV, toll, some combo)
- Toll will encourage use at non-peak time (congestion pricing)
- Fix lane drops over Bow River bridge or reduce accidents to improve flow
- Left turn off southbound Crowchild Tr. onto 5 Ave. is difficult
- Combined interchange at 16 Ave. and University Dr. (reduce noise)
- 5 Ave. to Kensington Rd. is not a freeway
- Not okay to separate east and West Hillhurst
- Accommodate pedestrians on 5 Ave. across Crowchild Tr.
- Overpass (flyover) at Kensington Rd. with right turns
- Resident nearby doesn't like this access restriction (wants left turns) – okay to restrict during peak hours
- At-grade pedestrian crossing should not be considered
- Desire to remove signals
- Issue over bridge is weaving (cause of accidents and congestion)
- Want corridor to be busy 50 km/h inner city road (don't expect to use as a freeway)
- Fix weave on the bridge
- More lanes that are continuous through corridor (increase to 3 all the way through) but not ok to take property – would rather not widen if property is affected
- Like the idea of bus lane but not okay if it affects property
- Look for ways to add infrastructure within existing city land to improve buses
- Okay to give up vehicle access across 5 Ave. during peak
 - Need to maintain access to all houses east of Crowchild Tr. by the way of 5 Ave. and Kensington Rd.
- Wait until ring road completion to test if it is even necessary to improve Crowchild Tr.
- Issue is accidents over the bridge – desire 50 km/hr consistent road
- Prepared to accept limits of access during peak if signals are maintained
- Pedestrian access across 5 Ave. and Kensington Rd. is needed
- Landscape around the bridge
- Noise is a bigger issue than visual
- Commuter could accept 50 km/hr with lights as long it flows
- Need continuity over University Dr.

Ideas Explored

- 16 Ave. N.W. cross-town LRT
- 6 lanes on 16 Ave. – 19 St. ramp from 16 Ave. to northbound Crowchild Tr.
- Tire noise
- Raised roads
- Truck traffic

- Aesthetics are important
- Don't want signals to match rest of road
- If 3 lanes each way make 1 lane for
 - Buses
 - HOV --- HOT lane
 - Toll
- Need N.W. and S.W. ring road connected to see how flow changes
- Interchange at 16 Ave. and Crowchild Tr.
 - **Benefits** – remove noise and bottleneck at University Dr.
- HOT lanes/HOV
 - **Benefits** – spread traffic over the day; revenue generation
 - **Impacts** – reduces traffic flow
- Consistent speed
 - **Benefits** – reduce noise; improve reliability
- Restricting traffic at 5 Ave. and Kensington Rd. at peak times
 - **Impacts** – pedestrian access via overpass during peak times; property acquisitions; visual impacts
 - **Trade-offs** – some access restriction during rush hours; longer distance to travel
- Improve weaving and create lane continuity
 - **Benefits** – predictable traffic flow (big accidents create major congestion); improve traffic flow
 - **Impacts** – more lanes would impact adjacent properties
- No signals on Crowchild Tr.
 - **Benefits** – improve safety (under icy conditions); improve traffic flow

Map Highlights

Central Round 2 – Table 3 Map J

- Keep transit on Crowchild Tr.
- Unpleasant pedestrian experience at 5 Ave. and Crowchild Tr.
- Restrict flow at peak times but accommodate pedestrians (run as an experiment) at 5 Ave./Kensington Rd.
- Maintain road space behind wall on Crowchild Tr.
- Flow at 50 km/hr on Crowchild Tr.
- Busy city road not freeway – context changes
- Flyover with right turn if possible at Kensington Rd.
- Dedicated bus lanes or bus/toll/HOT lane without impacts to houses
- Weave issue on the Crowchild Tr. bridge
- Time of the day toll – congestion pricing
- Add pieces of infrastructure (minor) to improve flow
- Short crossing time at 5 Ave. for pedestrians
- Maintaining pedestrian access at all times
- 9 Ave. and 13 Ave. pedestrian overpasses are old, icy and needs a ramp
- Crowchild Tr. is noisy
- Widen Crowchild at University Dr.
 - Would give 3 lanes in each direction, but would displace people
- 16 Ave and Crowchild Tr. interchange
- Remove University Dr. access

Central Round 2 – Table 4

Overall Table Discussion

- Short-term
 - Southbound on Crowchild Tr. at 5 Ave. – solid green light outside of rush hours
 - Lengthen exit lane onto 5 Ave.
 - Avoid elevating Crowchild Tr. – eyesore

- Like overpass at Memorial Dr. and 21 St. – make this at 5 Ave.
- 9 Ave. and Crowchild Tr. pedestrian cross is dangerous; needs to be rebuilt
 - Build a new one at 5 Ave. and Kensington Rd. – impact – take up bus stop space
- Bus stop going uphill at gas station is terrible
 - Overwhelming community says they want one there
 - Want to keep stop in general area; better space
 - Median bus stop
- Expand Crowchild Tr. to 3 lanes at University Dr.
- Long-term
 - Trench Crowchild Tr. – have cross streets go over at same current level (south of Kensington Rd. to north of 5 Ave.)
 - Elevate Crowchild Tr. (south of Kensington Rd. to north of 5 Ave.)
 - Remove lights at 5 Ave., lights only for emergency vehicles, right turn only
 - Need to maintain emergency access
 - Pedestrian overpass/underpass
 - Vehicular access
 - Integrate Kensington Rd. and Memorial Dr. intersections
 - Pedestrian/cyclist overpass at 5 Ave. – like Banff Tr. minimum of 2 bikes wide
 - Peak hour green lights on Crowchild Tr.
 - No lights long term
 - Fear – wider road = more volume = back to where we are
 - Large trucks – very noisy at lights, especially at night
 - HOV lanes = bus and for carpool vehicles with 2+ people – with 3 lane – maintained through corridor
 - Ensure reliability of transit
 - Reduces shortcutting – reduce side street access to reduce this; make it appealing the most
 - Backups – caused by accidents and lights
 - Remove lights at 5 Ave. – layby currently dangerous (bus stops along route)

Ideas Explored

- Trench
 - **Benefits** – maintains access; reduction in noise; better flow
 - **Constraints** – river; downpour flooding; disruptive; costly; ramps = loss of homes/businesses; flooding/closed relying on sub pumps
- Green lights at peak times maybe only at 5 Ave. maintain access (right turns only) and pedestrian overpasses, and combine Kensington Rd. and Memorial Dr.; install ramp at Memorial Dr. and 19 St. north for community access or traffic circle
 - **Benefits** – inexpensive; free flow Crowchild Tr.; easy to implement; reduces cut through traffic
 - **Impacts** – residential around; slows traffic; more traffic on 19 St.; community connectivity; eliminates local cross Crowchild Tr. traffic – this will move elsewhere, moves to Memorial Dr.; bus/emergency traffic – light triggers, every 5 minutes creates bottleneck; transit - create two buses – 1 on east and 1 on west; added congestion on other roads, including Memorial Dr. and residential
- Tunneling Kensington Rd. and 5 Ave. only under Crowchild Tr. (all down or 50 down at 5 Ave. and 50 up at Crowchild Tr.)
 - **Benefits** – not as much closure with flooding; maintains Crowchild Tr. flow; ensures smooth wide pedestrian/cycling access
 - **Constraints** – some flooding still
 - **Impacts** – 200m access, less if 50/50; home and business impacts on both Crowchild Tr. and Kensington Rd./5 Ave. (50/50 raise/down); community connectivity

Map Highlights

Central Round 2 – Table 4 Map K

- Keep the pedestrian overpass at 21 St. and Memorial Dr. (we love it!)

- Remove the lights 5 Ave.; bus layby needed
- Bus stop at 9 Ave. is an issue
 - Rebuilt
 - Needs better access
 - Bus stop removal/keep
 - Need space for bus
- Community impact
- Split community
- Maintain access
- Avoid elevated road
 - **Impacts** – noise; changes the community; lengthen turn lane on 5 Ave.; turn light at 5 Ave. solid green outside of rush direction
- Tunnel/Trench (lower)
 - **Constraints** – water; costs; disruption to businesses and homes; pumps; flooding and down pour flooding
 - **Benefits** – noise control; flow
- People using 19 St.
- HOV lane
 - Bus lane plus 2 additional lanes
 - Make it most appealing
- Similar to Glenmore lower Crowchild Tr.
- Elevate Crowchild over 5 Ave./Kensington Rd. N.W.
 - **Impacts** – noisy; eyesore
- Remove lights on 5 Ave.
 - Only for emergency vehicles
 - Right hand turns only
- Pedestrian over/underpasses
 - Visible, icy, safety
- Integrate Kensington into Memorial and Crowchild Tr.
- 5 Ave. pedestrian/cyclist overpass (wide)
 - Similar to Banff Tr. into McMahon Stadium
- Lights only allow right turns
 - Green during peak
- Long term – remove lights
- Noise/sound of trucks during middle of night
- Jughandle (using right hand access to make left hand turn) ramp access to turn left from eastbound 5 Ave.?
- Permissive southbound left turn at 5 Ave.
- Previously had asked customers if 9 Ave. bus stop could be removed
 - Customers want to keep it for access
- Non-motorised access across Crowchild Tr. would improve community connectivity
- Expand to three lanes north of University Dr.
- Tough bus weave from 9 Ave. bus stop over to University Dr. exit

Central Round 2 – Table 4 Map L

- Need to change lights at Kensington Rd. to improve to northbound Crowchild Tr. unless ramp is built to go east on Memorial Dr.
- Green lights at 5 Ave.
- More focus on pedestrian crossing access at 5 Ave.
 - Need pedestrian overpass for crossing
 - Bus access across Crowchild Tr.
 - Transit priority
 - EMS activation
- With green lights on Crowchild Tr. at 5 Ave. and Kensington Rd. would need access on 19 St.

- Roundabout at 19 St.
 - Like it a lot!; total win!; thumbs up!
- Greenlights peak (Kensington Rd. to 5 Ave.)
 - Only right turns and pedestrian overpasses
 - **Benefits** – free flow; less expensive; quick; implement; reduces cut through; cars can use Memorial Dr.
 - **Impacts** – can't go across; need to move through traffic; emergency access; transit across (light trigger); need access northbound and to Memorial Dr.; add congestion to residential; separate community
- Bus on each side – no need to go across
 - **Impacts** – pedestrians having to cross Crowchild

South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

Overall Table Discussion

- Northbound in p.m. peak is worse than southbound a.m. peak
- Remove access to Crowchild Tr. from 10 Ave.
- Yield sign for Bow Tr. to Crowchild Tr. currently treated as merge
- U-turn configuration at 10 Ave. is strange – causes confusion but seems to function
- Focus traffic on roads that have the capacity – requires fixing the bridge
- 2 lanes from Bow Tr. to northbound Crowchild Tr. and close access at 10 Ave. – have 4 northbound lanes on bridge
- Frustrating that side streets (e.g. 14 St.) is faster than Crowchild Tr.
- Flyover connecting Bow Tr./10 Ave. to westbound Memorial Dr.
- Not enough room underneath Memorial Dr. to add lane with existing bridge
- Memorial Dr./Crowchild Tr. interchange very large – takes up a lot of space
- Improve merge lane from southbound Crowchild Tr. to eastbound Bow Tr.
- Dynamic speed limits to slow drivers down when congested
- No connection from eastbound Bow Tr. to southbound Crowchild Tr.
 - Causes people to cut through community; could stack exit and entrance ramps to make space without infringing on parks/houses
 - Trees next to ramp from southbound Crowchild Tr. to eastbound Bow Tr. are a hazard
- Northbound Crowchild Tr. to eastbound Bow Tr.
 - Weave problems between 17 Ave. and Bow Tr.
 - Merge lane onto Bow Tr. needs improvement and better signage
- Duplicate turns from 17 Ave. (eastbound) to northbound Crowchild Tr. (2 ways to turn)
- Transit/HOV lanes need to be enforced if they are going to exist
- Pedestrian access to bus stop on northbound Crowchild Tr. by 17 Ave. – safety concerns
- Grade separation at lights
- Flyover Crowchild Tr. over 5 Ave. and Kensington Rd.
- Keep Crowchild Tr. green during rush hour
- Grade separation/flyover creates noise concerns for residents
- Grade separation – lower Crowchild Tr. and raise cross streets
- Transit – stops on Crowchild Tr. need improvements as it is exposed, noisy, poor pedestrian access to get to stops
- Keep bikes separate from road traffic on Crowchild Tr.
- Better pedestrian/bike access from Bow River pathway across Memorial Dr. – more direct
- Separate bikes and pedestrians
- If CalgaryNEXT is built another pedestrian/bike river crossing would probably be justified
- Would like another pedestrian/bike bridge across Bow River west of Crowchild Tr. (near 27 St.)
- No access from northbound Crowchild Tr. to westbound Bow Tr. - is it warranted?
- Can Memorial Dr. and Crowchild Tr. interchange be condensed to create more park space?
 - Maybe develop some of it and use money to pay for bridge; could push roads south and extend West Hillhurst

- 24 St. right-in/right-out access – almost backed up onto Crowchild Tr. – merge lane onto Crowchild Tr. conflicts with bus lane – tight geometry on turns

Ideas Explored

- Need to separate the pedestrians from the cyclists
- Bike path access from Crowchild Tr. to St. Andrews area is not easy
- From 17 Ave. westbound, it's awkward to get onto northbound Crowchild Tr.
- Transit only lane is just another lane to get downtown
- Finding northbound is worse – bottleneck
- Q: The turn around on 10 Ave. is that permanent? It can be confusing, some people don't know what to do
- Trees by the Oliver Quarry Park at the ramp need pruning – they can be a hazard in the winter
- It's faster to take 14 St. than Crowchild Tr.
- Tunnel from bridge to 13 Ave. to get through that zone
 - **Benefits** – great long term solution
 - **Impacts** – costly; water table; larger impacts on residents during construction
- Viaduct over from the bridge through 5 Ave./Kensington Rd. to 13 Ave.
 - **Benefits** – makes it flow easy (no turns) for through traffic
 - **Constraints** – could we slightly lower Crowchild Tr.?
 - **Impacts** – elevated expressway at second storey windows; costly; unsightly
 - **Trade-offs** – could we start with light modification
- Transit or HOV (lanes need to be properly enforced to work effectively – e.g. the Crowchild Tr. northbound – Richmond Rd./17 Ave.
- Signage upgrade at eastbound Glenmore Tr. to indicate the lanes (quick fix)
- Northbound Crowchild Tr. onto eastbound Bow Tr. currently backs up to 17 Ave. ramp - the merge needs to be communicated so it's understood that you don't need to get over a lane right away - signage
 - **Benefits** – help with flow; quick fix
- Giant flyover from Bow Tr./Crowchild Tr. to go over river to go west
 - **Benefits** – much improved flow
 - **Impacts** – bike paths, park space impeded
- Build a ramp from Bow Tr. east onto Crowchild Tr. south – missing movements; rebuild
 - **Benefits** – keep traffic from taking 24 A St. and through community to get over
 - **Constraints** – there is residential that would be impacted
 - **Impacts** – it's over Oliver Quarry Park, but possible to miss?
- Cut off access at 24 Ave.
- Need to fix some alternates, so not all of the traffic is on Crowchild Tr. – e.g. 14 St.
- Going north over bridge
 - Close 10 Ave. flyover but add a lane on the Bow Tr. (2 lanes) onto Crowchild Tr. - then the third lane needs to be a real exit to Memorial Dr.
- Bow Tr. onto Crowchild Tr. yield damage to controllable intersection
- Add another lane coming down Bow Tr. – close 10 Ave. and force the traffic there
 - **Benefits** – help the flow
 - **Impacts** – there is some residential in there
- Part of improved transit needs to be improved stops and pedestrian ways on Crowchild Tr.
 - **Benefits** – quick win; pedestrians; promote transit use
 - **Constraints** – safety; noise
 - **Trade-offs** – put flashing lights on signs for crossings
- Slow traffic at rush hour to allow the merge from Bow Tr. to Crowchild Tr. safer
- Address the merge from southbound Crowchild Tr. onto 24 St. takes people aback, can also back up
- Use the unused open spaces at lanes going over bridge onto Memorial Dr. and reconfigure the park area
 - **Benefits** – could re-use the land and put maybe high density housing, retail, etc.; could extend West Hillhurst; recreational site

- Possible missing movement: northbound Crowchild Tr. cuts westbound Bow Tr.
 - does not exist; nothing currently exists, just wondering
- Pedestrian river crossing west of Crowchild Tr. around 27 St. to the Islands
 - **Benefits** – benefits to pedestrian/bikes, leisure to citizens
 - **Impacts** – environments considerations

Map Highlights

South Round 1 – Table 1 Map A

- Cut off access at 2 Ave.
- Residential side streets are currently faster than Crowchild Tr.
- Traffic demand from Bow Tr. westbound and to Memorial Dr. westbound.
- Crowchild Tr. bridge needs to be bigger
- Metered by the lights at 5 Ave and Kensington Rd.
- Light control for the merge onto Crowchild Tr. from 10 Ave./Bow Tr.
- 2 lanes from westbound Bow Tr. to northbound Crowchild Tr. and close 10 Ave. access
- Rebuild loop ramp to stack it with a new eastbound Bow Tr. to southbound Crowchild Tr. (direct ramp)
- Better, larger merge from southbound Crowchild Tr. to eastbound Bow Tr.
- Trees in poor condition branches on loop ramp after a storm – Bow Tr. and Crowchild Tr.
- No lights, northbound backup is bad

South Round 1 – Table 1 Map B

- Roads (City) use West Village area as snow dump
- 5 Ave. connector from northbound Crowchild Tr./Bow Tr. exit
 - Lane add traffic better overhead signage on Crowchild Tr.
- Single lane back up in a.m. makes 17 Ave. ramp dysfunctional
- Short merge distance from 17 Ave. to must exit Bow Tr.
- Missing movements at Crowchild Tr. and Bow Tr. Interchange
- Rectangular rapid flashing lights for pedestrians to get across Crowchild Tr. ramp from 17 Ave. to access Crowchild Tr. bus stop
 - Crossing the ramp is unsafe
- Tight geometry at those exit and entrance ramps
- Transit waiting environment at 17 Ave./Crowchild Tr. and 26 Ave. bus stops is poor
- People avoiding congestion on Crowchild by exiting on 17 Ave and going through
- Backups at 17 Ave. and 24 St. S.W. causes a backup onto the Crowchild on-ramp
- Green lights fulltime during morning and afternoon – rush hour
 - On Crowchild at 5 Ave. Kensington, 23 Ave. and 24 Ave.
- Rope tow for bikes – steep grade on 24 St. from Bow River pathways
- Ramp metering for the merge onto Crowchild Tr.
- Squeeze the eastbound and westbound lanes on Memorial Dr. and get use of the unused open space or opportunities to sell the land
- Support pedestrians and cyclists with more direct connection across the Bow River (20 St. or 18 St. into West Village)
- Separate pedestrian and bike connections
- Water pooled at Memorial Dr./Crowchild Tr. interchange during the flood
- Merge and weave issue cause by lights at Kensington Rd. and 5 Ave.
- Eliminate (or remove) lights at Kensington Rd.
- Crowchild Tr. overpass over Kensington Rd.
- Pedestrian Bridge west of Crowchild Tr.

South Round 1 – Table 2

Overall Table Discussion

- Last proposal did not meet needs
- 17 Ave. northbound split express lane above (elevated) using park space for ramps
 - Only exits at Bow Tr. and 16 Ave./ University Dr.
 - Local at grade
 - Eliminate traffic that causes congestion
 - Pre-cast (elevated)
 - Where would traffic northbound from 17 Ave. go?
 - Need access to through lane also
- Traffic gets blocked at 17 Ave.
- Between 17 Ave./Bow Tr. – heavily congested (bottleneck); lights at 5 Ave. and Kensington Rd. add to bottleneck
- Lane weaving a problem
- Add level to bridge – how difficult?
 - Access points
 - Lose park space – how often used?
 - West side park steep
- Go plan built outwards (highlights)
 - Optimizing roads that exist; not addressing inner city road infrastructure; stop building roads – resort to transit
- Priorities of transit vs. infrastructure mixed up compared to actual users
- Constructability aspect (homes may be needed during construction)
 - Where does traffic go in order to build
- Elevation is expensive option
 - Where do cars/transit go
- White noise – living next to Crowchild Tr.
- Taking out lights (they cause bottleneck); lights start problem (help with congestion); still need access somehow
- Eastbound Bow Tr. to northbound Crowchild Tr. – confusing – easier to go southbound
- 14 St. and 5 Ave. leads to more congestion on Crowchild Tr. – only 1 lane
- 17 Ave. right turn to northbound (local); left run to elevated northbound (through)
- Create merge lane to northbound Crowchild Tr. turning left from eastbound 17 Ave. through park
- 17 Ave. and 24 St. S.W. – left turn to 24 St. too narrow for traffic; short merge lane; unsafe/confusing; cul-de-sac; people end up there unknowingly
- Start elevated further south – use military land (also use for new on/off ramps)
- Take dog parks and move to remaining land at Military
- Multiple speeds along Crowchild Tr. add to bottleneck problem
- Straighten out Crowchild Tr. at Memorial Dr. to add extra lane
- No direct cycling route from N.W. to Mount Royal (especially south of river); separate from cars
- Removing lights at 5 Ave./Kensington Rd.
 - Where does traffic go when you start changing access?
 - Addressing timing of lights
 - Lose bicycle access across
- Kensington Rd. over Crowchild Tr.
 - Access to Crowchild Tr. via Memorial Dr.
 - Would need third lane for merging
 - Need to maintain access across for adjacent residents
 - Through traffic bunches up against local traffic

Ideas Explored

- Don't tear town houses
 - **Impacts** – loss of high value property paying houses
- More direct cycling path from north, over bridge to south (Mount Royal) – separated from cars

- Intersection of 24 St. and 17 Ave. is dangerous; accidents are increasing; left hand turns from 17 Ave. east to 24 Ave. south
- Get rid of traffic lights at 5 Ave. and Kensington Rd.
- Cut off traffic
- Elevated roadway from 17 Ave. to University Dr. for express traffic – use precast
- Local traffic at Bow Tr. and University Dr./16 Ave. using existing
- Eliminate loop from 17 Ave. to Crowchild Tr. northbound
- Cyclist access north to south
 - **Benefits** – helps cyclists get north across river to the south; once at the south cyclists need to move to different areas
- Split roadway like 401 (inside 2 express, outside 2 local) *see elevated*
- Elevated Roadway
 - **Benefits** – potential to displace Military base not houses; keep existing Crowchild Tr. for local traffic; enables free flow traffic, avoids the lights; eliminates current lane switching
 - **Constraints** – access points; restrictions on height; where does traffic go while you get it built; cost
 - **Impacts** – need access point at 17 Ave.; adjacent residents would have view of an elevated roadway and would have more noise
 - **Trade-offs** – lose park at Scarboro/Sunalta west for roadway; cost vs. disruption of traffic
- Overpass at Kensington Rd. and Crowchild Tr.
 - **Benefits** – cyclists and pedestrian access across Crowchild Tr.; community spirit
 - **Constraints** – taking houses
 - **Impacts** – impacts to adjacent communities
 - **Trade-offs** – would need a third lane to help with merges and access points
- Get rid of lights at McMahon (23 Ave.), 5 Ave. and Kensington Rd.
 - **Benefits** – help congestion northbound at rush hour, going all south
 - **Constraints** – peak hours limit access to turns
 - **Impacts** – impact to adjacent communities and their access to Crowchild Tr.
- Add on additional lane to the Crowchild Tr. bridge
 - **Constraints** – grade to access the bridge

Map Highlights

South Round 1 – Table 2 Map C

- Cars going into cul-de-sac by accident and occasional crashes with parked cars along 24 St. S.W.
- This should be a dog park, it is fenced on three sides already –19 Ave S.W. and 25A St. S.W.
- Short merge from 17 Ave. to southbound Crowchild Tr. causes accidents
- 24 St. and 17 Ave. – eliminate the need to go through intersection for access to Crowchild Tr.
- Straighten out curves of Crowchild Tr.
- Use military property (The Military Museums) for access to 17 Ave to Crowchild Tr.
- Access at 17 Ave. to local or Crowchild Tr. through traffic (both may be needed)
 - 17 Ave. loop to lower level
 - Left diamond interchange eastbound 17 Ave. to Crowchild Tr. through
- Eastbound left turn to upper level at 17 Ave. or westbound right turn
- Relocate dog park from Oliver Quarry Park to Military lands
- Separate cycle route from river to Mount Royal University
- Keep pedestrian access to local parks (Oliver Quarry and Scarboro)
- Eliminate loop ramp at 17 Ave SW
- Elevated roadway for through traffic – express lanes
 - Keep existing Crowchild Tr. for local traffic
 - Look at outside versus inside lanes for local traffic versus through traffic
- Local access at Bow Tr. (and 16 Ave./University Dr.)
- 9 Ave S.W. and 14 St. – number of lanes on bridge and where road ties to causes backup to Crowchild Tr.

- Fix access from eastbound Bow Tr. to northbound Crowchild Tr.
- Fix lane changing on bridge
- Crowchild Tr. bridge should be above grade
- Can fit an additional lane northbound Crowchild Tr. at Memorial Dr. interchange if the abutment/pillars are changed
- Right turn from Kensington Rd. to Crowchild Tr. southbound
 - Need to change the speed, angle, and acceleration lane.
- Overpass at Kensington Rd. over Crowchild Tr.
- Cycle connection across Crowchild Tr. at Kensington Rd.

South Round 1 – Table 3

Overall Table Discussion

- Are you planning to improve all of Crowchild Tr. at the same time?
- What is the traffic flow throughout the area?
- Need to maintain/retain river valley – it's already so taken up by roads, high-speed traffic, etc.
- History along river is important
- Improve access to and from commercial area at Kensington Rd./Crowchild Tr.
- Concern about congestion on Bow River bridge
- What are travel times along Crowchild Tr.?
- No cycling on Crowchild Tr.
- Q. Can another lane be added to the bridge?
 - A. Yes as part of 2016 rehab will be looking at possibility of adding a lane
- Dual Crowchild Tr. – one south/one north
- Tunnel Crowchild Tr.
- Stacked bridges
- Will more lanes increase traffic volumes and create more traffic issues?
- Will downtown continue to grow as employment center or be dispersed to other areas like Quarry Park?

Ideas Explored

- Short Term
 - No left turn Kensington Rd. to Crowchild Tr. make them go 19 St. – Memorial Dr. – Kensington Rd.; all right hand turns
- Bring in rideshare apps; reduce single passenger cars
- Toll bridge? 7 to 8:30 a.m. and 4 to 6 p.m.
- 70 km/h 100,000 today cars/day line with growth of city
- More express buses – priority traffic
- More LRT/bus parking – can it/should it be free?
- Bow Tr. northbound to 5 Ave. flyover
- Lane reversal
- Expand lanes from 5 Ave. to 24 Ave.
- Express lane
- HOV lanes
- Add another lane on bridge – would need to limit access to some other roads to reduce weaving
- Reduce urban sprawl to lesson traffic on Crowchild Tr. – make Crowchild Tr. and area more appealing (prettier) so developers would want to build in brownfields around river. Reduce noise.
- Crowchild Tr. and Bow Tr. merge on bridge – public education on differences between yield and merge; better signage; road rate/people need to take turns
- Reduce number of people on Crowchild Tr.
 - Improve transit access
 - Limit free parking provided by companies
 - Improved bike lanes (cleaned in winter)
 - Encourage motor biking with increased parking

- Can't exit from 14 St. to Memorial Dr. heading north; need to go to Crowchild Tr. – forces more traffic to Crowchild Tr. - alternate routes
- Improve transit
- Alternate routes
- Parking restrictions – force to take transit
- Transit access is too circuitous (travels in and around communities)
 - Backwards to LRT stations; better parking at LRT
- Bike routes, better connectivity across rivers – also too circuitous – not direct
- Carpooling – needs a program and encouragement
- Make transit routes more direct along Crowchild Tr. to serve north to south not just downtown
- What is happening in other municipalities? It would be nice to have this information available in the research library online?
- Bike lane on Crowchild Tr. – adjacent to Crowchild Tr.; encourage as far north as possible; need to support alternate transportation options (biking, transit, motorcycles)
- No exit from Bow Tr. To Crowchild Tr. From the west headed east – this pushes traffic into communities
- Need to stop with the language around 'Calgary's love affair with cars' – it's not necessarily truth
- Issues on Glenmore Tr. create backups on Crowchild Tr. – needs better signage for eastbound on Glenmore Tr. so decisions can be made about going on Crowchild Tr. or Glenmore Tr.
- Basket weave or graded ramp at Crowchild Tr. and Glenmore Tr.
- 17 Ave. onto Crowchild Tr., you hold traffic on 17 Ave. getting onto Crowchild Tr. – should be a loop to exit onto Crowchild Tr.
- Lane changes/weaving causes a lot of traffic issues
- Improving access/exits to bridge and burying Crowchild Tr. under Kensington Rd. could solve a lot of traffic flow issues
- Important to retain residential properties adjacent Crowchild Tr.
- Noise is an issue on Crowchild Tr. – slower traffic creates less noise and doesn't impact travel speeds much; also acceleration at lights causes noise
- Explore removing turning movement at Kensington Rd. and 5 Ave. during rush hour
- Weaving issue at Memorial Dr. and 12/10 Ave. exit southbound on bridge
- Concerned about Bow Tr. movements – confusing
- Tunnel Crowchild Tr. from 17 Ave. S.W. to 24 Ave. N.W.
- Concern that transit parking lots are at capacity and wonder why more people don't take transit
- Parking at LRT stations may cause people to park downtown and drive
- Tunnel from Bow Tr./Pumphouse Rd. north under river to Crowchild Tr.
- Need to improve transit so people will use it – express/limited stops
- Transit to get priority of existing lanes vs. adding another lane
- Close left turn Kensington Rd. to Crowchild Tr., force them to go east on Kensington Rd. to 19 St. to Memorial Dr. then to southbound Crowchild Tr. at Kensington Rd.
- Concern there is no southbound access from Bow Tr. to Crowchild Tr. – but also concerned that grounding all access at each intersection takes up more space and causes more roads and lane changing, etc.; plus impacts to residents adjacent to Bow Tr./Crowchild Tr.
- More aesthetically pleasing pedestrian overpasses – e.g. Bow River pathway east of Crowchild Tr. and Memorial Dr.
- Big tunnel 17 Ave. S.W. – 24 Ave. N.W.
 - **Benefits** – better flow; better commercial in central section; split traffic; better connectivity east/west across Crowchild Tr.; keep Crowchild Tr. moving during construction
 - **Constraints** – cost; flood proofing
 - **Impacts** – flood implications; wide entry/exit points impacts land; construction; takes time; may take away from businesses
 - **Trade-offs** – access; where entry/exit points
- Roundabout
 - **Benefits** – keeps traffic flow going

- **Constraints** – have a maximum capacity; tougher to control traffic; what is jurisdiction flow?
- **Impacts** – do people know how to drive them?
- Open up Crowchild Tr. going north by adding a new lane so two lanes on Bow Tr.
 - **Benefits** – clear back log on northbound traffic in the a.m.
 - **Impacts** – create a graded ramp
- Remove lights/overpass over Kensington Rd.
 - **Benefits** – overpass with no exits
 - **Impacts** – may have to lose homes; would need to increase capacity on Memorial Dr.
 - **Option** – no left/no right straight through – loop exit to get back onto Kensington Rd.
- Tunnel 24 Ave. to 17 Ave.
 - **Benefits** – improve traffic flow to downtown and cross connections on at grade road; improve traffic flow in tunnel for through traffic; boulevard environment/commercial area on Crowchild Tr./Kensington Rd.; keep at grade Crowchild Tr. open during tunnel construction; nice park/landscaping above tunnel
 - **Constraints** – cost; Bow River; environmental
 - **Impacts** – wide footprint for construction/detour road and entry/exit points; flooding?
 - **Trade-offs** – people using tunnel have reduced access to areas/businesses/insinuations along Crowchild Tr.

Map Highlights

South Round 1 – Table 3 Map D

- Limit left turns on Crowchild Tr. turning onto Kensington Rd.
 - Lights are an issue
 - What could be done with the intersection to remove a turn like at 24 Ave (in rush hour) at Kensington Rd. and 5 Ave. N.W.?
- Added lane versus speed limits on Crowchild Tr.
- Stacked bridges
- Twin pavement (bridge)
- Reclaim the riverbank area (Memorial Dr.)
- Big tunnel on Crowchild Tr.
- Slower traffic on Crowchild Tr.
- Downtown traffic
 - Tunnel? Bridge? With lane reversals?
- Simplify interchange configuration at Bow Tr. and Crowchild Tr.

South Round 1 – Table 4

Overall Table Discussion

- Q. Where are the worst bottlenecks?
 - A. Hotspots are at the intersections and bridge. Bridge is where most of the traffic volume is. Everyone is converging here. Everybody has to cross here. Next major crossing is Stoney Tr. intersections are causing delays.
- There are not enough places to go if there is an accident or breakdown, just south of McMahon Stadium. If one person breaks down, you just have one lane.
- Q. What is with that exit south of the stadium?
 - A. Exit from original design
- Memorial Dr. to 14 St. coming from the south, you can't exit from 14 St. onto Memorial Dr. You have to go to Crowchild Tr. Live in Bankview now and when trying to visit my parents, it is tough accessing Crowchild Tr. Hold up traffic on 17 Ave. because there is no advance light to get onto Crowchild Tr. exit. 17 Ave. becomes one lane because everyone trying to get on Crowchild Tr.
- Q. What is most efficient way of reducing turbulence – traffic circles or traffic lights?
 - A. Roundabouts do a good job of maintaining a constant flow. But constantly feeding traffic into the system
- Q. Have experts looked at roundabouts and ruled them out?
 - A. We have looked at them but haven't ruled them out.
- Q. Will no traffic circle work if you have a certain volume of traffic?

- A. It depends on the jurisdiction's parameters on how they want traffic to flow and safety. In Europe they are everywhere because everyone knows how to use them. If you introduce them here, would people know how to use them? Would it be counterproductive to the benefits if no one knows how to use them?
- If wanting to get to Bridgeland, have to come all the way to Crowchild Tr. and then Memorial Tr. and adding to the traffic. I have no other option because you can't get to Memorial east from 14 St. Limits interconnectivity between communities. Have to depend on big arteries to get anywhere.
- What happens if we don't do anything to Crowchild Tr.? Do you do something to the other parallel routes, like 14 St.? What can we do with the other routes?
- There is no exit from Bow Tr. on Crowchild Tr. You start using communities
- It makes more sense to look at little roads. 14 St. was not designed for high traffic. Doesn't have bike lanes. Not designed for anything. There are no shops
- There is an exit to Crowchild Tr. north (under bridge coming from Sunalta) that is very awkward
- Q. have you done any international studies? A lot of stuff happening in other parts of the world. How do we find out about that? A lot of people spend time thinking about these things. It would be good to tap into it
 - A. I'm not sure, will take it back to my project team
- Can we talk about people being discouraged from taking Crowchild Tr.?
 - Yes, how can we improve transit to get people off Crowchild Tr.?
- Ride my motorbike in the summer. Pay \$90 as opposed to \$400 for parking. If you had more parking for motorcycles downtown, more people would ride downtown in summer
- Culturally – we should stop language that Calgarians have a love affair with cars. We need something to discourage us. We are actively trying to use our cars less. We need more incentives not to drive and make it easier
- Q. Are there buses going from Crowfoot to end of Crowchild Tr.?
 - A. There is a bus that goes from Market Mall south to Anderson.
- There is no bike lane that goes from north to south currently
 - We do have strategy to reduce cars as downtown parking is some of the most expensive in the world. If an employer gives it, that is huge. It was to encourage people to take transit, but transit didn't keep up
 - Do a good job getting people downtown but crosstown needs to be improved. We need to make more direct connections to make it easier and make it more intuitive

Ideas Explored

- Remove the lights at Kensington Rd. intersection
- Make Crowchild Tr. have two lanes going all the way through, without having to merge in or out
 - Merging is craziness here just south of bridge going Crowchild Tr. south
- Public education on how to yield and merge
- Better signage/wayfinding for visitors coming to the city
 - Have seen 3 vehicles in a convoy that want to stay together and just merge in altogether, creating chaos and road rage
 - Adding another lane won't solve weaving issue. To do something about quick access onto Crowchild, you would have to limit access
 - If you are in right lane coming up Crowchild Tr., that lane is the one that exits and people are also merging into it, one from each side
- Instead of turning left to loop around, just turn right and merge onto Crowchild Tr. from 17 Ave. If you did this, you would open up the bike route for people accessing from the south going north. No connection right now for cyclists to get from 17 Ave. to Crowchild Tr.
- Lane merging onto Bow Tr. gets blocked because people need to merge onto Crowchild Tr. Would be nice to have two lanes merging onto Bow Tr.
 - **Benefits** – would clear the backlog of people needing to get onto Crowchild Tr. instead of going down Bow Tr.
 - Could do a basket weave, braided ramps to get rid of weaving. It is turbulence created by people jockeying for their lanes from 17 Ave. going north creating a problem
- Solve some tributaries. You would take some percentage off of traffic flow
- Needs better signage and education on where to go

- Lane dedicated for high occupancy vehicles
- A through lane from 17 Ave. to McMahon Stadium where you don't exit or merge onto
- You could put a barrier around the lanes/barricade that you can flip up if there is an emergency. In Europe there are cameras to detect high occupancy vehicles
- Mess on Glenmore Tr. creates backup all the way to Crowchild and 17 Ave. You have to know where they have to exit and people come to a stop because they don't know what to do
 - Coming off Crowchild Tr. and going straight eastbound Glenmore Tr. you have to merge across all these lanes
 - Basket weave or braided lanes.
- Urban sprawl – limit the communities dumping onto Crowchild Tr. You are just adding ore volume onto Crowchild Tr.
 - If you were a developer and made Crowchild Tr. more appealing, sound, etc. the money you would get from selling land under the bridge would offset any costs of improvements. If we made it pretty, they could become marshland/wetlands. Whatever is decided will determine what developers will do. In Chicago and Vancouver they will build next to major arteries and trains because they are beautiful. You make worthless land more profitable
- Remove lights at Kensington Rd. and build an overpass with no exits to access Kensington
 - **Impacts** – under the bridge would have to be modified and people would come access 5 Ave. from the west
- Q. You are building an overpass no matter what, right?
 - A. No, not necessarily
- Q. What is the timing of the lights at Kensington Road/Crowchild currently?
 - A. Lights timed out to the max to handle the cycles. City is constantly reevaluating timings as traffic flows change
- Get better connectivity to overpasses that already exist
- Change intersection from Parkdale Blvd. and Kensington Rd.
- Companies should not give parking for free. Need to rethink this as an incentive for employees
- Q. Are paid parking spots a taxable benefit?
 - A. Yes, I think so.
- Tax on gas. Need a disincentive
- Give me an alternative that is much nicer - like a bike lane that is clean and direct – that costs a lot less than a road to maintain it, I would use it
 - We wanted a bike lane put on Crowchild Tr. as part of Imagine Calgary. However, there was someone there from the home building industry would shut the idea down at every table. Idea never picked up on Crowchild Tr. and given a whole bunch reasons – bad for your health, who would maintain, etc.
- Transit routes need to be more effective. If you aren't going downtown, you are weaving all over the place. Interconnectivity between communities is bad
- Encourage fitness rooms in companies and people can take showers if they ride their bikes. No facilities discourages people and women in particular from riding their bikes.
- Parking at LRT stations could be greatly improved. Many incentives to get you driving but no disincentives to get you off the road
- All the south side of Crowchild Tr. is prime cultural land. To use it was shut down because it was unhealthy to be on that road from all the pollution.
- We need to explore carpooling option. We need some information and some education to help people set up car pools
- Tunnel under bridge
 - **Benefits** – opening up real estate/land
 - **Constraints** – some land is contaminated. \$2 billion to clean up.
 - Are they looking at housing for West Village?

South Round 1 – Table 4 Map E

- Overpass at Kensington Rd.
- Intersection changes at Parkdale Blvd. and Kensington Rd.?
- Weave issues on Crowchild Tr. bridge

- Better signage needed
- Two lanes on Bow Tr. eastbound exit
- Signal issues at 17 Ave. to northbound Crowchild Tr.
 - Advanced left
 - Get rid of left turn lane and provide a right turn to northbound Crowchild Tr. (through green space)
- Bike routes from Sunalta to Bow River pathways

South Round 2 – Table 1

Overall Table Discussion

- Ramps and accesses are confusing
- Better communication on corridor improvements
- Try to find an option that separates traffic going downtown from through traffic
 - Add 4 lanes above existing Crowchild Tr. for through traffic – high level
 - Traffic analysis to determine through movement and what relief it would provide
 - Noise issues created by height
 - Doesn't impact access to businesses
 - Large cost to build but investment in better road
 - Can be built without disrupting existing traffic
 - Toll road?
- Alternately, twin the bridge, but may not connect to network as well
- West Village Area Redevelopment Plan – mobility plan for development
 - Impact to Crowchild Tr.?
- Cross section of what bypass would look like
- Alternate to overpass – can build tunnel underneath – may be better than going over
 - Requires staging area to build
- HOV lanes – if expanding Crowchild Tr. – use HOV lanes to compensate communities for added traffic density
 - Users pay for the infrastructure
 - All the way through the corridor
 - Build improvements in small steps
- Consider reversible lanes
- Investigate turn restrictions at signals
- A.m. peak eastbound/westbound left turns no longer have advanced/protected green – still have it p.m. peak
- Have tow trucks on standby to help clear collisions faster
- Make drivers who cause collisions more responsible for the societal cost of collisions
- Reduce speed limits – people expect to drive faster than traffic allows
- Public ad campaign to promote road safety and reducing collisions
- Do nothing – encourages public transit
- Transit
 - More underground tunnels
 - Increase difficulty for single occupancy vehicles (SOV) to commute downtown
 - 6 car trains
 - Make transit a more/most desirable option
 - Park n' Alternate mode (transit/walk/bike)
 - Extend free fare zone and have parking at the end of zone
 - Have free/nominal cost for taking transit
- Bow Tr./Crowchild Tr. interchange is a nightmare
- Bridge has drivers crossing 2-3 lanes both directions to get where they want
- Can condense Memorial Dr./Crowchild Tr. interchange to increase green space
- Restrict access to some of the ramps parts of the day – cuts down on cars crossing 3 lanes in a short distance

Ideas Explored

- West Village Development?

- Impact on Crowchild Tr.?
- Comment: 24 Ave. construction, 16 Ave. ramp to Crowchild Tr. - surprised that these things did not come up. Residents should be better informed and increased communications
- Huge issues at the bridge where 10 Ave. merges onto Crowchild Tr. and the subsequent exits
- Find an option that separates travel to downtown and travel to north/south
 - Add a top bridge for flow through traffic, above existing road from bank to bank;
 - Toll road?
- Twin the bridge, then create upper flyover
 - **Benefits** – remove the turns for through traffic; won't restrict access for businesses; would eliminate the band-aid solutions; get it done!; could be built without interrupting traffic too much
 - **Constraints** – need a really good traffic analysis to understand numbers of flow; need to expand the roadway; continuous noise
 - **Impacts** – costly but perhaps not as bad as you may think; adjacent houses (higher up), noise issues; area to the river
 - **Trade-offs** – noise barriers are unsightly
- Restrict access to certain exits at rush hours
 - **Benefits** – keeps people from forcing their ways in; eliminates collisions, especially at the higher speeds; safer
 - **Impacts** – restricts some access
 - **Trade-offs** – keeps traffic flowing, will cause some people to take alternate routes
- Transit – LRT tunneled underground, turn one lane into HOV/bus only lanes, make trains 6 cars, not 4 cars - expand free fair zone, keep it low cost, changes our mindset, make it make sense to take transit!
- Stand-by tow trucks along Crowchild Tr. to help move along collisions
 - **Benefits** – cleans away vehicles
 - **Impacts** – tow trucks can get clogged up in the traffic
- Reducing the speed limit to help reduce road rage! Aggressive drivers; collisions; other small things like yield to bus reminders
 - **Benefits** – try to eliminate the need to go faster
- Do nothing
 - **Benefits** – perhaps lead to increase in public transit
 - **Impacts** – other roads will get used more; force people to take transit - make transit free; extend free fair zone
- HOV Lanes - toll roads; give toll fees back to impacted communities
 - user pays northbound and southbound when an additional lane is added
 - **Benefits** – smaller scale to help improve light signals, right in, right out, lane reversal
 - **Impacts** – less construction impact
- 5 Ave. no advanced green to turn left; now goes to solid red, need to revisit the 5 Ave. lane flow
 - **Benefits** – improve the flow; smaller steps to improve
- Dig a tunnel essentially same route, under the river (toll)
 - **Benefits** – eliminates noise, visual impact; a once and for all solution
 - **Constraints** – need proper staging area
 - **Impacts** – large-scale construction impacts on residents; huge environmental impacts

Map Highlights

South Round 2 – Table 1 Map F

- High occupancy toll lanes (northbound and southbound) use tolls to compensate or improve communities that are impacted by the new high occupancy travel facilities – use pay system for roadways
- Stand by tow trucks to clear backup to clear collisions
- Public Ad campaign for motorists to be more courteous to reduce conflicts
- Reduction in speed limits for a more predictable travel time.
- Noise issues with a road in the air

- Traffic analysis to show what changes that would highlight
- Options to separate the north south function as well as the down town traffic function
- High level bridge about existing Crowchild Tr.
- Better communication above the changes to Crowchild Tr.
- High level bridge has the advantage of minimal disruption to existing traffic → possible toll road?
- Invest in the high level bridge once rather than a band-aid solution going forward
- Investigate turn restrictions at Kensington Rd., 5 Ave., 23 Ave. and 24 Ave.
- High-level bridge above Crowchild Tr. or tunnel under the river (other cities have tunnelled)
- Through Crowchild traffic elevated
 - Continuous noise rather than the stop and go traffic
 - Sound walls both at grade and on elevated sections

South Round 2 – Table 1 Map G

- Map is intended to highlight the “Do Nothing”. This will shift traffic to other routes which will get closer to capacity which will shift behavior to higher transit usage
 - Increase capacity on high volume transit demand routes.
 - Move to 6 car trains rather than 4 car trains
- If you build bigger roads you will get more traffic

South Round 2 – Table 1 Map H

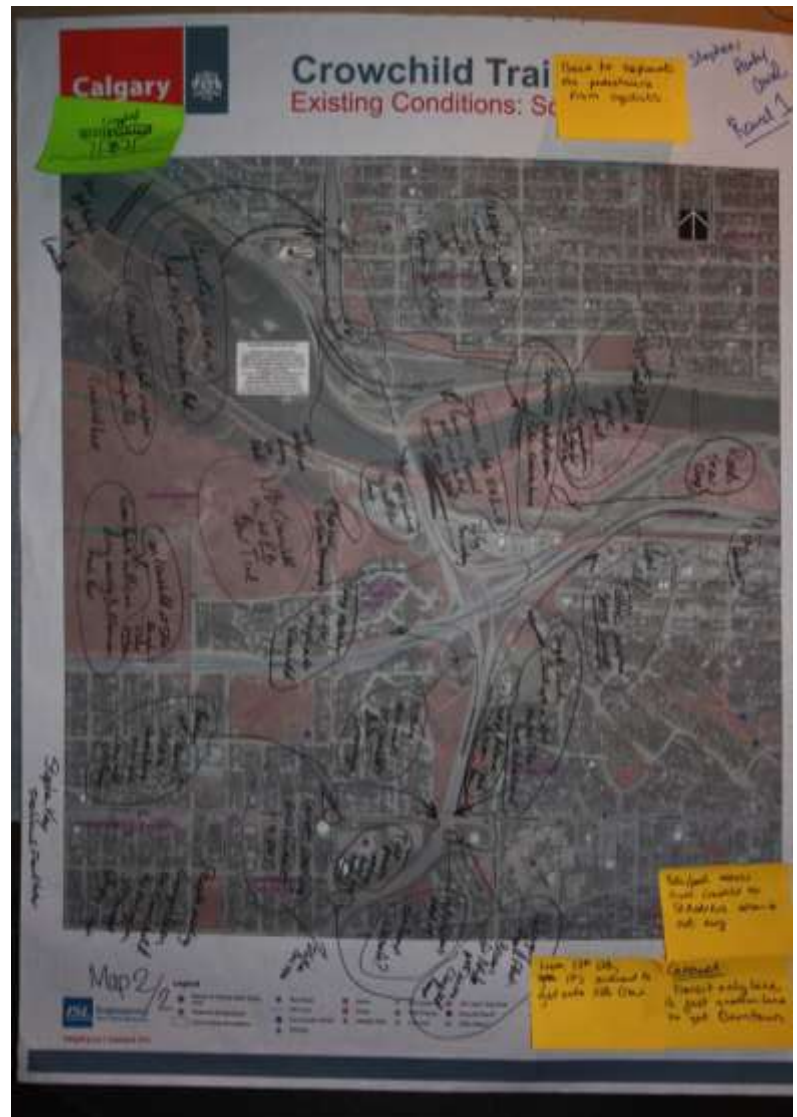
- Restrict access during morning and afternoon rush hour
- Crowchild Tr. bridge – merge followed by the weave to the eastbound Memorial Dr.
- Detailed traffic analysis to show where vehicles are coming from and going to in order to highlight where traffic ramps would improve traffic flow

South Round 2 – Table 2

Overall Table Discussion

- Does bridge have strength to place second level on top?
- Problem begins at 17 Ave. going northbound on Crowchild Tr.
- Memorial Dr. exits add to problem – only 1 through lane
- Stacked bridge may not be way to go
- Expand bridge increases number of through lanes
- Give option for split to choose direction – e.g. Crowchild Tr. and Stoney Tr.
- Need free flow
 - Remove traffic lights
 - Adding traffic lights on overpass doesn't necessarily help
- 24 Ave. light – big bottleneck
- Curve from northbound – sightlines – can't see stopped traffic
 - Notification of stopped traffic
 - Is there room to straighten out
- 11 Ave. westbound can merge lane come to Crowchild Tr. earlier
- Big grade change
- Left hand entrances more traditional
- Sort out lanes sooner for northbound (11 Ave./Bow Tr.)
- Add another northbound lane through
 - Right lane is must exit (people jump the queue)
- Less expensive short term solution to help ease problem
- Road needs to be parallel to give best view for drivers merging
- Short term solution – keep those merging from Bow Tr. on through lane
- Easier to make lane change side by side

- Two dedicated lanes going northbound and southbound (short term?)
 - 3 lanes (long term)
- Free flow both directions – other problems will exist, but less of impact
 - Crowchild Tr. under
 - Crowchild Tr. over
 - Remove some access points
- Free flow impacts (no lights)
 - Access
 - Noise
 - Property
 - Traffic impacts with community
- Some access can be eliminated without major impacts
 - Increased traffic in community
- How to tie additional lane off bridge to rest of network
- Lights at Kensington Rd. first point of bottleneck
- Will 5 Ave. have capacity for redirected traffic from Kensington Rd.?
- Elevate Crowchild Tr. over Kensington Rd.
 - Improve flow
 - Visual impacts/adjacent properties
- 16 Ave. northbound access to Crowchild Tr. is a mess
- Extra lane might help, but lights big issue
- Drivers have no control over behaviour
- Design to minimize momentary driver distraction
- Yellow flashing lights help to slow drivers
- Congestion is generated once a critical mass is reached (when there are lights – especially)
- Pedestrian crossing at 24 Ave. not safe
- Southbound Crowchild Tr. after 13 Ave. – dead space (grade difference) could fit in with another lane/shoulder (help EMS)
 - EMS will use other lane (other directive if needed)
- Additional lanes and access need to consider weather conditions
- Signs that flash speed (i-stop)
 - Reduces speed
- Flashing signs for time – gets drivers attention/reduces speed
- Driver education
- More collision on sunny day vs. poor condition
 - Paying attention more
- Bow Tr./bridge crucial component for corridor
- Stacked bridge – add more lanes for though traffic
- Elevated – less property impacts
- With free flow achieved might only need four lanes
- Overusing pedestrian button crossings takes away green time from Crowchild Tr. – the lights become off synced – mostly panhandlers (Kensington Rd./24 Ave.)



- Redirect flow away from Crowchild Tr.
 - Other streets could take bigger roles
 - Lane reversal (Memorial Dr./10 St./14 St.)
 - Improve capacity
- Keep bike lanes off main thoroughfares/better maintenance – staged differently
- Pedestrian/cyclist bridge – straightforward
- HOV lanes not on Crowchild Tr.

Ideas Explored

- No HOV lanes on Crowchild Tr.
- Crowchild Tr. width at 13 Ave. north
 - Make use of dead space to get 3 lanes each direction and accommodate (don't restrict) emergency vehicles
- Close off access at Kensington Rd., 5 Ave., isn't good idea because traffic has to somewhere
- Comes down to person behind the wheel – advanced warning flashers (AWF) are helpful but doesn't address the congestion
- Look at snow and ice control (SNIC) features for road conditions/weather at curves and at river
- Reminder/info flashed – may result in more courteous driving
- Stop signs that flash posted speed – more of these to help speed and safety
- Add Variable Message Signs (VMS) to corridor similar to Deerfoot Tr./Hwy 2 – notify of queues and accidents
- Other corridors to take load of Crowchild Tr. – similar to 14 St. and Memorial Dr.
- 20 Ave. and 10 St. north/south → traffic operation changes needed
- Elevate Crowchild Tr. over Kensington Rd.
 - **Benefits** – improve traffic flow
 - **Constraints** – adjacent properties
 - **Impacts** – visual impact and increased noise of elevated Crowchild Tr.
 - **Trade-offs** – improved traffic flow/maintain access vs. noise, visual and property impacts
- Remove signals from Kensington Rd. to 24 Ave. – Crowchild Tr. over/under at intersection
 - **Benefits** – improve traffic flow; maintain connections across Crowchild Tr.
 - **Constraints** – adjacent properties
 - **Impacts** – adjacent properties; noise; visual
 - **Trade-offs** – improved traffic flow and maintain traffic across Crowchild Tr. vs. property, noise and visual impacts
- Elevate Crowchild Tr. from Memorial Dr. to 16 Ave.
 - **Benefits** – improve traffic flow; maintain access across Crowchild Tr.; reduce traffic on existing at-grade Crowchild Tr.
 - **Constraints** – adjacent properties; cost
 - **Impacts** – visual, noise increase
 - **Trade-offs** – improve traffic flow vs. impacts to adjacent residents especially noise/visual
- Additional lane on bridge 2-3 through lanes – southbound/northbound and 3 lanes north & south of bridge
 - **Benefits** – improve traffic flow; improve traffic weaving and entry/exits issues
 - **Constraints** – existing bridge structure; Bow River
 - **Impacts** – how additional lanes are tied into road – south/north; adjacent properties; need to accommodate EMS vehicles
 - **Trade-offs** – improve traffic flow/expand bridge vs. potential impacts to environment and adjacent properties
- Divert traffic to other roads e.g. Memorial Dr., 10 St.
 - **Benefits** – decrease traffic volume on Crowchild Tr.
 - **Constraints** – existing road capacities and infrastructure adjacent to Crowchild Tr.
 - **Impacts** – increase traffic on other roads – possibly need widening/improvements
 - **Trade-offs** – decrease traffic volumes on Crowchild Tr. vs. adding traffic on other roads



Map Highlights

South Round 2 – Table 2 Map I

- Get 3 lanes northbound Crowchild Tr., as soon as possible
 - Look at bridge for another lane underneath
- Can westbound Memorial Dr. to northbound Crowchild Tr. to swing back south to connect?
- One through lane on bridge is a problem
- Come onto Crowchild Tr. on right hand side and parallel lane changes
- Bring 2 lanes to northbound Crowchild Tr. from westbound 10 Ave./Bow Tr. sooner on left entrance
 - Help shoulder check and view
 - Improve lane parallel to move over
 - Come onto Crowchild Tr. to right hand side (parallel for lane changes)
- No traffic changes from 10 Ave to Memorial on Crowchild Tr.
- One additional through northbound lane
- Expand at bridge so through lanes are by themselves – two dedicated through lanes
- Need 3 lanes whole way along Crowchild Tr. – long term
- Stacked bridges and elevated road to Memorial to University Dr./16 Ave.
- Elevate Crowchild Tr. over Kensington Rd.
- Remove traffic signals from Kensington Rd. to 24 Ave.
- Use of 17 Ave transit only shoulders is a problem for queue jumping
- Northbound Crowchild Tr. 70-80 km/hr around curve → cannot see if there are red lights and cars stopped
 - Advanced notification of queue ahead
 - Get rid of problem at bridge



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- 24 Ave. access
- Minimize business interruption in motel village
- Must have good traffic model for current traffic plus estimates from future and present redevelopments
- Crowchild Tr. MUST be free flow: No traffic signals
- More LRT parking
- More buses

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- Really need to get rid of lights. Either lower Crowchild Tr. (like Glenmore Tr. at Elbow Dr./McLeod Tr.) or lower Kensington Rd and 5 Ave. to go underneath
- Crowchild Tr. MUST be free flow: No traffic signals

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- Crowchild Tr. MUST be free flow: No traffic signals
- Better signage at merge is yield
- Public education
- Provided to organizer

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x16	x1			x1
• Project team's response to my questions	x16	x2			
• Opportunity to provide my input	x15	x3			
• Opportunity to hear others' input	x14	x4		x1	
• Session location	x10	x4	x1	x1	x1
• Session time	x13	x4			



2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

Engagement

- Lots of time to talk
- Very engaging
- Good discussions
- It was great to be able to share and brainstorm as well as to be enlightened by other's points of views.
- I like speaking with the technical staff
- Open discussion was good, more information on current stats/plans required
- Project team very informed or able to bring people who knew about the issue/answering questions

Noise

- South Section – well facilitated
- North Section – 2 very dominant participants but facilitator did very well controlling them
- Great facilitators
- Some facilitators were better than others at not letting some people take control

Process/Format

- Great format
- Resource people/team approach
- Viewing the areas on a large scale map
- Liked changing tables
- Would have liked more time to talk with city workers
- Perhaps it would have been worthwhile to allow for involvement with all three sections
- Liked the format but wasn't prepared for it. Thought it would be drop-in like many presenters and solutions. Would have appreciated the [unintelligible] ahead of time – not realizing format I had to leave early. I looked at my email but there was no detailed format info it may have been other places – could it be included in email/tickets

Suggestions/Dislikes

- Basic questions (volumes, etc.) were not able to be answered by officials with certainty
- Dislike - people suggesting destruction of neighbourhoods – NIMBY to increase access for cars
- Provide traffic volumes and flow
- I believe people were focused on the how and not in the end results of what they wasted more or less of in their experiences in use of the road

Other

- Session location had diesel and tar fumes

3. Which community do you live in?

- Varsity – x4
- West Hillhurst – x4
- Banff Trail – x1
- Hounsfield Heights/Briar Hill – x2
- Charleswood – x1
- Hawkwood – x1
- Ranchland Estates – x1
- Riverbend – x1
- Rocky Ridge – x1



- St. Andrew's Heights – x1
- Motel Village (work) – x1

4. What are the main reasons you use Crowchild Trail?

- To commute to and from work or school – x15
- To visit recreation facilities, shopping centers, or to visit friends and family. – x12
- Other:
 - Cross Crowchild via pedestrian bridges – x1
 - Drop off kids at school near Mt. Royal – x1
 - Medical appointments – x1
 - Other main areas e.g. UC, malls, hospitals – x1
- I don't use Crowchild Trail – x0

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x8
- Online discussion – x2
- In-person session – x12
- Idea board – x2
- Walking tour – x3
- Bus tour – x0
- I have not participated in the study prior to this session – x2
- Other – x0

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x1
- Community newsletter – x4
- Community road signs – x5
- Project email – x12
- Social media – Facebook, Twitter – x3
- On TV – Report to Calgarians – x3
- Word of mouth – x1
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x4
- Community Association – x6
- Other:
 - Another event – x1
 - 99.1/CBC Radio – x1
 - Don't remember – x1

Do you have any other comments about the project or the engagement process?

- Excellent
- The loudest voice isn't the top issue, need to understand all issues
- Love this – transparency, collaboration, innovation, and citizen participation - great!
- Great process and design
- Great, skilled facilitators
- There are many incentives to drive and many barriers to not driving – transit not easy, no LRT parking, no cross town efficient route, etc.
- Ultimately we are moving away from always wanting to drive – build on this



Crowchild Trail Study

Drop-In Sessions Summary November 16 to 19, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. Between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

Four drop-in sessions were held from November 16 to 19, 2015 at the following locations:

- Brentwood Village Shopping Centre
- University of Calgary, MacEwan Hall, Food Court
- Richmond Road Treatment & Diagnostic Centre, Cafeteria
- Foothills Medical Centre, Main Building, Timberline Café (for staff, patients and visitors)

The purpose of the drop-in sessions were to identify ideas from Calgarians on possible changes to the Crowchild Tr. Corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

What we heard

The following is a high level summary of what we heard at the drop-in sessions:

- Across the entire study area:
 - Some participants discussed ideas to widen Crowchild Tr. to increase traffic flow and safety, reduce commuter stress and bottlenecks and increase capacity along the corridor.
 - Widening the bridge and removing the lights along the corridor was also discussed to enhance lane continuity while maintaining community access across Crowchild Tr. within the communities.
- In the **North Section**, removing lights at 24 Ave. and 23 Ave. (plus removing lights at Kensington Rd. and 5 Ave.) along the corridor was discussed to create an expressway throughout the entire area and reduce the environmental impact by eliminating idling vehicles. Participants suggest this would also increase the speed of traffic and ease of movement along Crowchild Tr. Other ideas involved improving access across Crowchild Tr. for the communities and pedestrian and bike users by replacing lights with interchanges.
- In the **Central Section**, it was also discussed to remove lights to improve access, increase flow of traffic and alleviate safety concerns. Ideas were discussed about improving air quality with continuous traffic flow through the area.
- In the **South Section**, improving merge lanes around the 17 Ave., Bow Tr. and 10 Ave. ramps was suggested to improve flow across the river, address safety concerns associated with merging across lanes, and reduce backup on Crowchild Tr. One possible option discussed was to double-up or stack the bridge over the river to accommodate future traffic, access and construction with the potential development in West Village.



For a more detailed summary of the input that was provided, please see the Drop-in Session Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Drop-in Session Summary of Input

Common Ideas Raised

Widen Crowchild Trail (6-8 through lanes) <ul style="list-style-type: none"> Benefits – improve traffic flow, improve safety, reduce quick lane change from exit lane back onto Crowchild Tr.; life/work balance; kids would make it to after school activities; reduce congestion; reduce stress, increase vehicle capacity; create green space for areas not used for road Impacts – adjacent residents and businesses, Bow Tr. to Memorial Dr. exit; property impacts Constraints – not enough land; cost Trade-offs – loss of homes and businesses
Widen existing bridge for more lanes/continuity <ul style="list-style-type: none"> Benefits – improves traffic flow and reduces bottleneck; more vehicle capacity; least impact on residents; fewer lane drop offs; reduce weaving; reduce road rage; improve exit ramps safety Impacts – Bow River; natural landscape; construction; environmental; Bow Tr. merge to Memorial Dr.; Memorial Dr. overpass Constraints – adjacent communities Trade-offs – if fixing the bridge fixes everything, can live with painful construction; community access closure
Remove lights (maintain access across Crowchild (within communities)) (Kensington Rd., 5 or 24 Ave.) <ul style="list-style-type: none"> Benefits – improve traffic flow and air quality; traffic moves faster; reduce bottlenecks; transit only exits/movements; pedestrian/bike overpasses, decrease idle, increase safety Impacts – environmental impacts to river; adjacent businesses; access to communities will be difficult; traffic increase on Memorial Dr.; no cycling access; little land for overpass; noise Constraints – cost to purchase land; political will; bridge needs to be widened; consideration of the travel needs of the many (i.e.: north and southbound commuters) Trade-offs – access; need property; adjacent businesses and homes; short-cutting/cut through traffic; decreased emissions; less wasted time; improved transit; more efficient
Remove lights and replace with interchanges <ul style="list-style-type: none"> Benefits – Crowchild Tr. expressway from Glenmore Tr. to north of the city, with removal of lights between Kensington Rd. and 24 Ave.; improves traffic flow, environment and crossing Crowchild Tr.; reduce access issues Impacts – property; visually unpleasant; community access; homes and businesses Constraints – property for interchanges and elevated roadways; lack of cycling and pedestrian routes; current right-of-way; environmental requirements; cost Trade-offs – shadowing by the elevated roadway; loss of homes and businesses; costs
Improve merge lanes/off-ramps (longer and safer) southbound Crowchild Tr. to 17 Ave., Bow Tr. to northbound Crowchild Tr., 10 Ave.) <ul style="list-style-type: none"> Benefits – improve traffic flow and safety merging; no backups Impacts – housing; property values; students take route 72 all the time Constraints – existing houses Trade-offs – aesthetics
Double deck/stacked bridges over river or add new bridge next to existing (1 NB / 1 SB) <ul style="list-style-type: none"> Benefits – accommodate West Village construction and traffic; connect to Memorial Dr.; reduce impact to adjacent properties; additional merge room; improve traffic flow; use of existing space; easier emergency access; two levels take less space (width); less accidents (turn movements on separate level) Impacts – school; footprint; adjacent residents; view; access; construction; traffic during construction; increased travel time during construction; increased transit users; noise; cost, access ramps to bridge level Constraints – 17 Ave. entry lane – have to cross two lanes to stay on Crowchild Tr.; another river crossing; existing CPR railway crossing Trade-offs – removal of homes and businesses; close access during construction, closure of Sunalta dog park

Verbatim Responses

Brentwood Village Shopping Centre – November 16, 2015

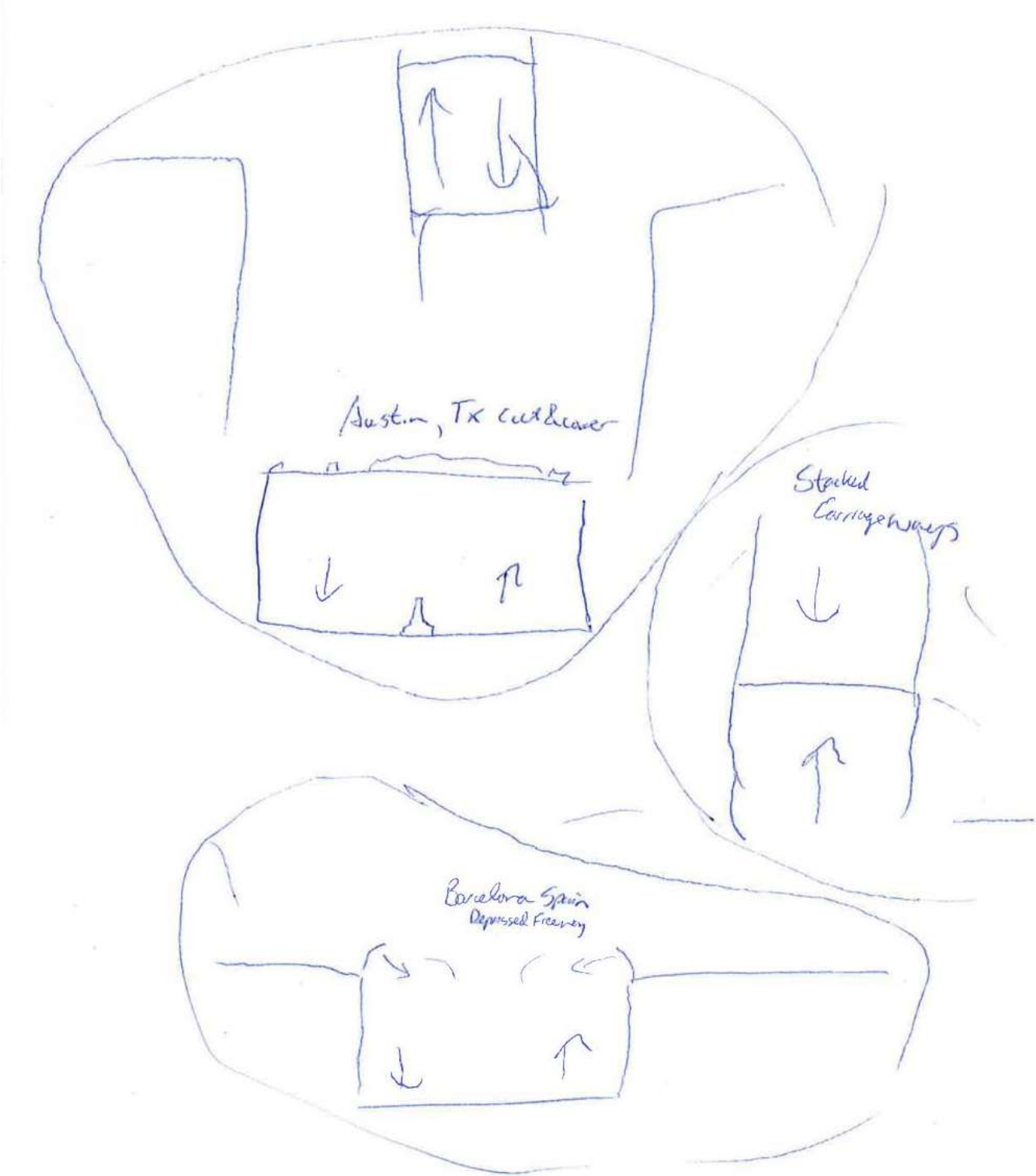
Ideas Explored

- Fix Bridge
- Three continuous through lanes north/south
- Longer green time at lights for north/south traffic
- Burry and stack – 16 Ave. to 5 Ave.
 - **Benefits** – less impact – doubles traffic
 - **Impacts** – cost increases
 - **Constraints** – also restrict traffic turns/lights on 5 Ave. and Kensington Rd.
- Tunnel Crowchild Tr. for through traffic from Bow River to north of 24 Ave.
 - **Benefits** – improve traffic flow along and across Crowchild Tr.
- 3 lanes south and northbound on Crowchild Tr.
 - **Benefits** – improve traffic flow
 - **Impacts** – property
- Double Decker Bridge
 - **Benefits** – improve traffic flow; reduce impact to adjacent properties
- Stale green lights; rush/hour; right in/right out
 - **Benefits** – free flow; low cost
- Congestion toll through study area peak times (rush hour)
 - **Benefits** – free flow; decrease traffic; generate revenue (infrastructure improvement fund – alternative transportation – green infrastructure)
 - **Constraints** – technical feasibility
 - **Impacts** – administration of tolls
 - **Trade-offs** – social aspect; paying for toll; will feel singled out
- 5 Ave. flyover/over/under; Kensington Rd. and Crowchild Tr. over/under
 - **Benefits** – maintain access across Crowchild Tr.; free flow
 - **Impacts** – #9 route; increase traffic on adjacent street; business impacts
 - **Trade-offs** – access to West Hillhurst/across Crowchild Tr. vs. access to Crowchild Tr.
- If widened take a bigger buffer to accommodate future
- Don't want to be house left behind
- Limited access at 5 Ave. right in/right out; allow transit, cycling and pedestrian access across via overpass
 - **Benefits** – maintain cycling/walking access across Crowchild Tr.; implement transit only lane on overpass – maintain transit access
 - **Impacts** – remove access across Crowchild Tr., left in/out for vehicles; divert traffic to Kensington Rd. e.g. interchange
- Close access to Crowchild Tr. at University Dr. northbound/southbound; divert to 24 Ave.; 3 lanes each direction
 - **Benefits** – improve traffic flow on Crowchild Tr.
 - **Impacts** – additional traffic on 24 Ave.
- Close Kensington Rd., divert to Memorial Dr. or 5 Ave.
 - **Benefits** – improve traffic flow on Crowchild Tr. and from traffic from Memorial Dr. northbound
 - **Impacts** – Remove access at Kensington Rd. to/from Crowchild Tr. and divert to 5 Ave. or Memorial Dr.
- Add an additional bridge at Bow River crossing
- Make double-decker roadway like San Francisco
 - **Impacts** – I'm sorry about people that live a block away but something has to be done
 - **Trade-offs** – we will have to take out homes and businesses
- Fear of decreased property value (live one block from Crowchild Tr. in West Hillhurst)
- Interchanges at 5 Ave. and Kensington Rd. over Crowchild Tr.; right in ramps
 - **Benefits** – free flow traffic
 - **Impacts** – bus routes adjusted; property/business impacts

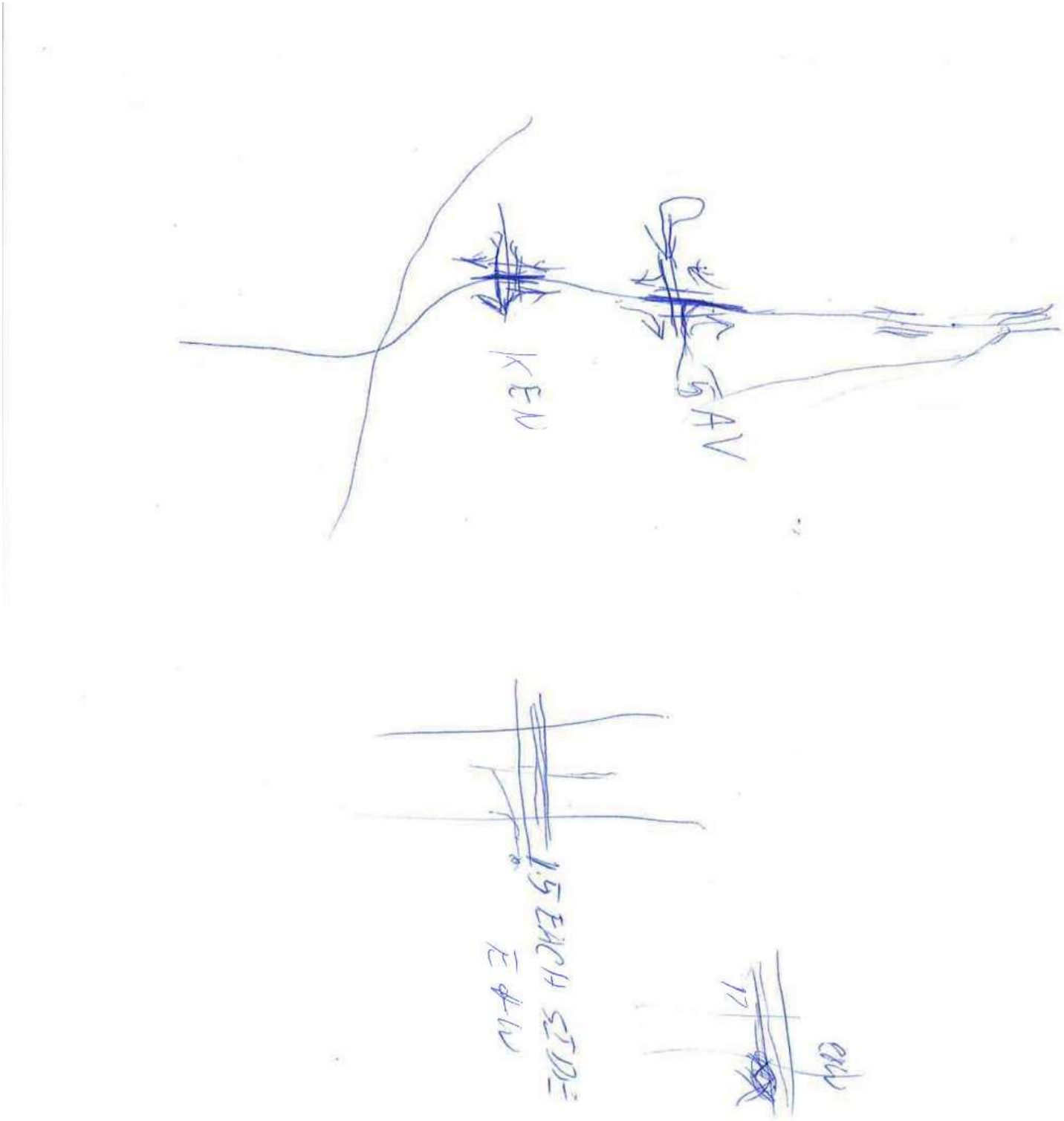
- Bury it; revise it; depress it; fix bridge
 - **Impacts** – don't want to widen it and increase traffic necessarily
 - **Trade-offs** – still want pedestrian access in Kensington
- Eliminate the lights on Crowchild Tr. (Elevate Crowchild Tr. or an expressway)
 - **Benefits** – Crowchild Tr. is an expressway from Glenmore Tr. to north of the city except for the lights between Kensington Rd. and 24 Ave.
 - **Constraints** – property for interchanges and elevated roadways
 - **Impacts** – property impacts with interchanges and an elevated Crowchild Tr.; elevated expressways are ugly
 - **Trade-offs** – shadowing by the elevated roadway
- Double-deck roadway from 17 Ave. to 24 Ave.
 - **Benefits** – improve traffic; maintain access
 - **Impacts** – land for ramps; noise/visual; cost
- Instead of the westbound 16 Ave. to northbound Crowchild Tr. merge lane, why not a flyover to connect through this movement
 - **Benefits** – service road in Motel Village is retained
 - **Constraints** – structures are longer than a merge lane
 - **Impacts** – higher cost structures are needed to accommodate this movement
 - **Trade-offs** – less impact to properties in Motel Village in terms of changes to access
- Get rid of that blue building
 - **Impacts** – people living there
- Remove light at 5 Ave. but maintain access to neighborhood
 - **Benefits** – traffic flow, no 5 minute light
 - **Constraints** – access into neighborhood
- Interchange at McMahon Stadium; revised freeway
 - **Benefits** – free flowing traffic
 - **Impacts** – neighborhoods and nearby businesses
- Right-in/right-out on Crowchild Tr. on 5 Ave./Kensington Rd.
 - **Benefits** – improve traffic flow on Crowchild Tr.
- Overpass at 24 Ave.
 - **Benefits** – free flowing traffic
 - **Constraints** – expropriated land/church
 - **Trade-offs** – don't let people turn or cross over Crowchild Tr. during rush hour
- Cloverleaf south of Kensington Rd. to tie in Memorial Dr. to Crowchild Tr.
- South section priority
- Discontinuous lanes
- Remove lights
- Close Kensington Rd. to Crowchild Tr., reroute to other routes
- Close 23 Ave., reroute to 24 Ave. or Banff Tr. to 16 Ave.
- Improve 16 Ave. interchange and add westbound to northbound movement
- Bridge, discontinuous lanes, bottleneck
- Bow Tr./10 Ave. under bridge, poor signage
- Causeway between 16 Ave./24 Ave.
 - **Benefits** – improved flow; maintain access
 - **Constraints** – development at Motel Village will want access
- Elevated through fare separating through and local traffic
 - **Benefits** – improved flow
- HOV (northbound worse than southbound in a.m.)
 - **Benefits** – reduce some congestion
- Increased parking at LRT stations
 - **Benefits** – alleviate congestion
 - **Impacts** – space at LRT for more parking

- Limit left turns at rush hour at Kensington Rd./5 Ave.
 - **Benefits** – lost cost; most immediate (quick implementation)
 - **Impacts** – access to/from communities
- Double deck 24 Ave. to Bow Tr. – one-way each direction, on/off ramps for local traffic
 - **Benefits** – free flow
 - **Impacts** – West Hillhurst resident; visual; blocking sun/shade (afternoons); noise
- Get rid of traffic flow free; 24 Ave. – Kensington Rd.(all lights)
 - **Benefits** – free flow
 - **Constraints** – cost
 - **Impacts** – local resident access
- Lane reversal
 - **Benefits** – improve traffic flow
 - **Constraints** – current lane situation not a lot of through lanes
- More overpass vs. at grade for pedestrians – 5 Ave. and Kensington Rd.
 - **Benefits** – safety; pedestrian/cyclist access across
- You want to get people off of Banff Tr. and onto Crowchild Tr.
 - **Benefits** – increase safety for traffic and pedestrians on Banff Tr. by directing volume to Crowchild Tr.
- Bow River bridge – ramp onto east side northbound
 - **Benefits** – improve flow; safety; environmental impact of reduced traffic
 - **Impacts** – property acquisition
 - **Trade-offs** – city should help relocate businesses
- Interchange at 24 Ave.
 - **Benefits** – improved traffic
 - **Impacts** – property impacts
- Make it legal to turn left off of Memorial Dr. eastbound to 19 St. N.W.
 - **Benefits** – provides an alternate route than Crowchild Tr. reducing congestion on Crowchild Tr.
- Keep traffic lights green at 5 Ave. N.W. during rush hour
 - **Benefits** – keeps traffic moving during rush hour; keep through traffic in non-rush hour

Drawing 1



Drawing 2



University of Calgary, MacEwan Hall – November 17, 2015

Ideas Explored

- Double deck bridge like Centre St. lane level to get to Memorial Dr.
- Turning left onto Crowchild Tr. from Kensington, 5 Ave. people are short cutting because it is hard to get on
- Improve Kensington Rd. and 5 Ave. intersection
- Sink Crowchild Tr. (not tunnel just sink)
 - **Benefits** – noise pollution; dust/dirt pollution
- Transit connections for pedestrians who need to cross Crowchild Tr. to catch transit
 - **Benefit** – less space intrusive than pedestrian bridge
- Implement a bus call button to indicate a pedestrian is crossing to catch bus
- Better community connections and amenities
 - Kensington Rd., Memorial Dr., Crowchild Tr.
 - Lion's lottery retirement homes
 - Not accessible for food shopping, they are shopping at the 7/11
- Widen Crowchild Tr. over the bridge – lane continuity issues – clear signs and carpool lane, will be faster (south and central)
 - **Benefits** – people will change lanes sooner than later
 - **Constraints** – communities on both sides
 - **Impacts** – construction
 - **Trade-offs** – closing access to community
- Improve cyclist access/path south of Bow River to under bridge to north
- Stack roads like center street
 - **Benefits** – bottom bridge less snow clearing
- Bridge from Parkdale Blvd. eastbound across river west of Crowchild Tr. to eastbound Bow Tr. a.m. peak
 - **Benefits** – impacts a non-residential area; spur redevelopment on south side of the river
- Bow Tr. westbound connect to westbound Parkdale Blvd. on new bridge (p.m. peak)
- 24 Ave. – short term, cut off access, more green time; long term, interchange
 - **Benefits** – smooth's flowing traffic; transportation infrastructure key to getting around the city
 - **Constraints** – LRT underneath; bridge and height (not truck traffic, so lower bridge clearance)
- 23 Ave. light only of Stampeder game; lots of design issues at existing intersection
- 5 Ave. light okay, Kensington Rd. okay, more green time; interchanges/flyovers maybe
- Bridge northbound is only one lane
- Fix service road at Motel Village
- Short term solution – make existing lights more efficient; make the bridge two lanes northbound
- Cyclist improvements; across 5 Ave. behind sound wall there is a pathway, why not extend it onto University Dr.
 - **Constraints** – need lights at the south side river crossing
- Add cycle lanes on Crowchild Tr. e.g. Vancouver Burrad Bridge
 - **Benefits** – at corner of Kensington Rd. and Crowchild Tr. is dangerous for cyclists, motorists exiting memorial to northbound Crowchild Tr. are the quickly transitioning to westbound Kensington Rd. without pedestrians or cyclists
 - **Constraints** – 19 St. is not a direct connection for University cyclists, Crowchild Tr. is better
- Improve all user connections east to west – long lights when crossing east/west; upgrade the pedestrian/cyclist connections; stairs on the overpass useless for cyclists and reduce mobility; east side Crowchild Tr. near Kensington Rd. bus stop needs improvements, smoother pavement, curb cut outs
- Under/overpass at 5 Ave./Kensington Rd, one with access
 - **Benefits** – greater flow of traffic; decrease transit time; increase transit reliability; decrease congestion
 - **Impacts** – noise; move traffic to other streets; limits access to community
- Better signage – exits easy to miss – and easier exit to Memorial Dr., not enough space to get into it
- Add a lane south between 17 Ave. and 24 Ave., and north – cut-through traffic is moving to neighborhood streets
 - **Impacts** – properties, residences and businesses

- Add a cycle path along Crowchild Tr. – like Memorial Dr. paths
 - **Benefits** – promote cycling to downtown; safety for cyclists and drivers; remove some congestion on Crowchild Tr.
 - **Impacts** – residences, businesses
- Access changes (less access)
 - **Benefits** – improves traffic flow
 - **Impacts** – may affect the economic viability of businesses
 - **Trade-offs** – businesses do not have as good of access
- 12 Ave./Bow Tr. switch here to outside on Crowchild Tr. northbound not inside
 - **Benefits** – no weave for Memorial Dr.; improves Crowchild Tr. northbound
 - **Constraints** – elevation changing, bridge; maybe 12 Ave. businesses
 - **Impacts** – minimal cost impacts
 - **Trade-offs** – reduce northbound congestion, make people happy; driving easier; safer
- Elevated freeway along Crowchild Tr. from Bow River to 24 Ave. for through traffic
- Add lanes to Shaganappi Tr. between Crowchild Tr. and Bowness Rd.
 - **Benefits** – improve safety and traffic flow along Shaganappi Tr.
- Remove intersection (lights) at Kensington Rd. or 5 Ave. N.W. and 24 Ave. N.W.
 - **Benefits** – no lights causing back-ups; free flow; transit only exits/movements; pedestrian/bike overpasses
 - **Constraints** – need to purchase land; need to widen bridge across river
 - **Impacts** – environmental impacts to river; number of businesses on corridor (not the best place for business due to accessibility); access to communities would be affected/more difficult; traffic on Memorial Dr. increased to access communities because other access is closed
 - **Trade-offs** – need property; maybe business and homes; cut through traffic/short cutting
- 17 Ave. southbound Crowchild Tr. lengthen merge lane to give more time
 - **Benefits** – improve safety merging
 - **Constraints** – existing houses
- Improve access from eastbound Bow Tr. to northbound Crowchild Tr.
 - **Benefits** – less confusing, more direct; improve traffic flow/movements
- Add third lane southbound near Enmax substation on Crowchild Tr.
 - **Benefits** – improve safety and traffic safety
 - **Impacts** – property impacts
- Bow Tr. to northbound Crowchild, improve on ramp – continuous (no stops)
 - **Benefits** – improve safety for drivers
- Do not increase the number of lanes – more lanes = more traffic, use lanes for bus instead
 - **Benefits** – promotes more people onto transit
 - **Impacts** – needs to add lane to bridge
 - **Trade-offs** – transit improved
- Dedicate bus lane over the bridge – do not increase amount of lanes for cars (if you build it they will come)
 - **Benefits** – less cars on roadway
- Improve transit from S.W. to University of Calgary, reliability and timing – possibly HOV lane?
 - **Benefits** – improve ability for transit to be on-time and not stuck in traffic which will improve reliability and usage
 - **Constraints** – where to put additional lane for transit?
 - **Impacts** – additional lanes on Crowchild Tr.? Maybe HOV lane? Property impacts
- 33 Ave. have to merge across multiple lanes. Untangle the spaghetti
 - **Benefits** – lane continuity; better traffic flow
- Tunneling
- All one direction at peak times
- Improve transit – to airport too – build green line right away
- Cycling closer to Crowchild Tr. for north/southbound
 - **Benefits** – improve cycling access and use; reduce reliance on vehicles
 - **Impacts** – property impacts

- Traffic lights in central portion cause bottleneck – overpass
 - **Benefits** – improve traffic flow through center portion
 - **Constraints** – Do not have bike route near Crowchild Tr. Alternate route – same comment for pedestrians and infrastructure
- Lane reversal north of bridge to 24 Ave. (southbound at a.m. peak, northbound at p.m. peak)
 - **Benefits** – less money, less congestion
- Bow Tr./10 Ave. Crowchild interchange/bridge improve intersection
 - **Benefits** – reduce weaving
- Improve intersection at 16 Ave. and Crowchild Tr.
 - **Benefits** – improve pedestrian safety; improve vehicle safety
 - **Impacts** – land required
- Short cutting through university heights to Foothills Hospital (traffic calming)
 - **Benefits** – improve safety; slow down traffic
- 24 Ave. eastbound, southbound Crowchild Tr. access to 23 Ave. improve 23 Ave. access
 - **Benefits** – safer to merge across lanes
- No lights no through traffic
- Eliminate left hand lane (where turn onto Glenmore Tr.) eliminate the get ahead
- Crowchild Tr. wider or have two levels (across river)
 - **Benefits** – two levels takes less space; traffic improvement; users north-south on higher level (less conflicts); turn movements on separate level (less conflicts) – less accidents; build another level with traffic impacts
 - **Constraints** – budget – cost – can afford; construction waste in river – contamination into water source
 - **Impacts** – construction – where to put traffic; increased transit users; travel will take longer during construction; noise complaints
 - **Trade-offs** – close access during construction; closure of dog park at Sunalta
- Overpass at 24 Ave. – the traffic volume on 24 Ave. doesn't justify the amount of back-up on Crowchild Tr.
 - **Benefits** – eliminate back-up at lights
 - **Impacts** – pedestrians for football games need a way across
 - **Trade-offs** – ideal to remove all lights, but 5 Ave. and Kensington Rd. have a lot of east/west traffic so if I could only lose one light 24 Ave. and 23 Ave. is most important
- Better/easier access from Crowchild Tr. into LRT stations (Banff Tr. and Brentwood especially)
 - **Benefits** – easier for people who don't use it often
- Heading west on 17 Ave. to northbound Crowchild Tr. Easier or direct access, has been improved with ramp
- Synchronize lights on peak periods, in north direction in evening, south in a.m.
- 3 lanes all the way through bridge, make exit ramps just exits not take the lane between bridge and Kensington Rd.
 - **Benefits** – dangerous intersection
 - **Impacts** – Memorial Dr. overpass
- Difficult to cross Crowchild Tr. for pedestrians and cyclists. Big walled sections, no direct connections to the river pathway system. Need separate connections for bikes and pedestrians. Wide enough for cyclists and vulnerable pedestrians
- Transit only lanes or HOV lanes on the bridge and along Crowchild Tr.
 - **Benefits** – gets traffic moving
 - **Trade-offs** – if we don't widen the bridge, you are taking away vehicle lanes
- No lights
 - **Benefits** – improve traffic flow
 - **Constraints** – could maintain one community access at either Kensington Rd. or 5 Ave. but need to consider the travel needs of the many (north and southbound commuters)
 - **Impacts** – community access
- Bow River additional lanes for northbound and southbound. Need at least two new lanes – if this means a new bridge, then do it regardless of cost in order to make lasting improvements
 - **Benefits** – improve traffic flow
 - **Impacts** – closed crossing for construction

- The exit onto Crowchild Tr. from Bow Tr. needs to be fixed (eastbound Bow Tr. to northbound Crowchild Tr.)
 - **Benefits** – smoother traffic; better transit
 - **Constraints** – build more/another road
 - **Impacts** – students take route 72 all the time
 - **Trade-offs** – make the loop under to handle more traffic
- Better transit service – make it easier to get to transit, park and rides, better shelters, time convenience
 - **Benefits** – gas savings for people; should be quicker; miss traffic; provides time for different things to do; attracting people to public transit; less crowds at major stations; less congestion
 - **Constraints** – cost; accessibility
 - **Impacts** – disruption to flows and paths people are used to
- Different access to University Dr.
 - **Benefits** – less congestion; fewer accidents; free flow; better access to University
 - **Constraints** – cost; accessibility; site/space
 - **Impacts** – geographical, residential impacts; site/space impacts;
 - **Trade-offs** – short-term pain for long term gain; probably not a high priority; making it similar for drivers but impacting community
- Crowchild Tr./Memorial Dr. overpass improvements
 - **Benefits** – improve traffic; less costly than Bow River bridge
 - **Constraints** – cost; space might be challenging
 - **Impacts** – existing roads; construction traffic
 - **Trade-offs** – better flow vs. more space taken; two lanes through on Crowchild Tr.; can improve westbound Memorial ramp
- Exit ramp for 17 Ave., change of signage to more clearly denote which lane goes where
 - **Benefits** – exit ramp for 17 Ave. appears to be telling people to use the bus lane causing confusion. Clearer lane signage could improve traffic flow by reducing confusion
- Rail line over Crowchild Tr. – two lines, raised LRT, no need for platforms, walk-ups, one to downtown, one continuing down Crowchild Tr.
 - **Impacts** – Memorial Dr.
- Get rid of the lights on Crowchild Tr. There is always a backup
- Area connecting to Crowchild Tr. to and from downtown is confusing. Make this easier to navigate
- Increase speed, remove lights, or overpass but keep access using 5 Ave. and Kensington Rd.
 - **Benefits** – decrease idle, environment friendly ; decrease time; less accidents
 - **Constraints** – political will – cost; faster roads not public [unintelligible]
 - **Impacts** – no cyclists; little land for overpass; noise is the same; access from Kensington Rd,
 - **Trade-off** – decrease emissions; less wasted time; improved transit, more efficient
- From Kensington Rd. to bridge, add a southbound lane, so two lanes, one going over the bridge, one exiting to Memorial Dr.
 - **Benefits** – easier to not exit to Memorial Dr.
- Better signage leading up to required lane change over bridge
- More lanes
- High Occupancy Toll (HOT) lanes
- Variable speed limits along the corridor, along with green lights during the a.m. and p.m. peak periods
 - **Benefits** – gets traffic moving on Crowchild Tr.
 - **Constraints** – access
 - **Impacts** – no access across Crowchild Tr. between the communities in the morning and afternoon rush hours
 - **Trade-offs** – access during the a.m. and p.m. rush hour
- Remove traffic signals at 24 Ave., 5 Ave., Kensington Rd.; over or underpass at intersections
 - **Benefits** – better traffic flow
- Addition lane to reduce quick lane change to stay on Crowchild Tr. over the bridge
- Bow Tr. interchange from north on Crowchild Tr., slow exiting traffic for easier merge to 10 Ave.
- Fix access/loop on 10 Ave. between 20 St. and 19 St., safety precaution

- Dedicated expressway with no lights (with bike/walk path under the overpass) – two lanes; overpass with connections at Memorial Dr.
 - **Benefits** – identifying two different interests; helping downtown; opening downtown core; people in the communities are not losing their business; less accidents; less air pollution; better access; downtown walkers and visitors
 - **Constraints** – money; cost involved; disruption during construction; environmental; bridge; space
 - **Impacts** – sight; noise; construction; environmental
 - **Trade-offs** – during construction phase there will be some hardships; communities will lose some people; end of the project there will be better community
- Take the off/traffic circle at Kensington Rd.
 - **Benefits** – less cost; less invasion of visual; simple; quick fix
 - **Constraints** – area; less space; conjunction with memorial
 - **Impacts** – inconvenience during construction; detours
 - **Trade-offs** – a quick fix; will move the problem from Kensington Rd. to 5 Ave.; takes off the tie off the bridge
- Dedicated lane across the bridge where people do not have to cross
 - **Benefits** – frees up downtown traffic coming out of downtown will flow better; less accidents
 - **Constraints** – money; land; access for different routes
 - **Impacts** – construction period bottlenecks (barriers might help); people have to reconfigure their way; inconvenience
 - **Trade-offs** – reconfiguring; might take land; reduced speed
- No lights at 24 Ave. (if no overpass) and 23 Ave. (north)
 - **Benefits** – more appealing for the area; easy access; safer for students to cross; potential redevelopment opportunity for high density
 - **Constraints** – space; churches, residential; flames – uncertainty on what happens; cost
 - **Impacts** – to community
 - **Trade-offs** – land; connections to Motel Village though the community
- More continuous lanes across bridge and spread out access/exits along bridge-redesign
 - **Benefits** – improve traffic flow/access; improve transit ability to set through traffic – improve reliability
- More express transit routes to University south to north
 - **Benefits** – improve usage and reliability of transit; improve access to University and business
 - **Impacts** – Close access along Crowchild Tr. to improve traffic flow – near Kensington Rd./5 Ave.
- Kensington Rd. and Crowchild Tr. intersection overpass (diamond)
 - **Benefits** – maintain community access
 - **Constraints** – space
 - **Impacts** – space; possible land acquisition (10 Thousand Village)
- Close the Kensington Rd. east to west connection
 - **Benefits** – improve traffic flow
 - **Impacts** – community access
- Train or bus between University of Calgary and Mount Royal University
 - **Benefits** – improve transit use for students; more direct/faster
- Widen to 3 lanes northbound at University Dr.
 - **Benefits** – reduce bottleneck
 - **Impacts** – Suncourt place
- Direct bike route from N.W. (project) to downtown side of Crowchild Tr.
 - **Benefits** – direct route; safer for bikes
 - **Constraints** – walls; house
 - **Impacts** – off street widening of Crowchild Tr., farther side
- Cycling infrastructure and pedestrian, widen and privilege over cars. Kensington Rd. to Crowchild Tr./Memorial Dr. interchange, commuters
 - **Benefits** – encourage bikes and walkers
- Volume at Crowchild Tr. and Memorial Dr. interchange. Congestion is high on northbound between 3 to 6 p.m. Reduce curvature on northeast corner
 - **Constraints** – homes and businesses at corner will need to be removed

- Better signage for Kensington Rd. to Memorial Dr. heading northbound on Crowchild Tr.
- Direct bus line from University of Calgary to S.W. (BRT)
 - **Benefits** – improved frequency/capacity
- Make autobahn underneath local traffic with access to grade
 - **Benefits** – less people would use it
- West LRT both lines, so don't have to change line
- Improve transit – bus 9 shortened time 8:30 p.m.; connectivity to train; train times extended
- Use wind for trains/houses/city; solar/net zero transit garages
 - **Benefits** – self sustaining
 - **Constraints** – convincing people to see the light
 - **Impacts** – use of solar/wind to reduce carbon footprints, and reduce dependence on external (foreign) fuel import
 - **Trade-offs** – initial costs
- Add more lanes on bridge and maintain cycling path under bridge
 - **Benefits** – improve traffic flow; maintain cycling access; reduce bottlenecks
- Remove lights between University Dr. and Memorial Dr. – or remove one set either 5 Ave. or Kensington Rd. – or have overpass only at one intersection and full access at other intersection
 - **Benefits** – improve traffic flow; reduce bottlenecks
- Improve northbound to westbound access in morning to University of Calgary
- Kensington Rd. intersection traffic light timing, peak time green light only
 - **Benefits** – short-term improvement can happen quickly

Richmond Road Diagnostic and Treatment Centre – November 18, 2015

Ideas Explored

- Add another river crossing at Shaganappi Tr.
 - **Benefits** – divert traffic to other roadway to west; reduce traffic volumes on Crowchild Tr.; more north/south options for people in west of city
 - **Impacts** – environment impacts; impact park
- Improve noise abatement/attenuation; more or better barriers; just south of 26 Ave.
 - **Benefits** – reduce noise impact
- Better way to set up transit passes – monthly fee is too high
 - **Benefits** – more transit users
- Get rid of idling vehicles on Crowchild Tr. (air quality issues)
 - **Benefits** – improve air quality
 - **Impacts** – cost and footprint to get free flow
- Add two lane bridge on east side of Bow Tr. bridge
 - **Benefits** – connects to Memorial Dr.
 - **Constraints** – can we have another crossing?
- Overpass at Kensington Rd./5 Ave. (not 24 Ave.)
- Add other routes (37 St.? Shaganappi Tr.?)
 - **Benefits** – keeps Crowchild Tr. moving
 - **Impacts** – lose homes
- Northbound over on top from the bridge – off ramps at 5 Ave. and Kensington Rd., tie into existing ramp, group instead of going wide
 - **Benefits** – amount of lanes reduction in widening, using existing space, easier access to emergency
 - **Constraints** – cost
 - **Impacts** – view for people
- Another bridge – interchange at 24 Ave., speed limit at 70km/h; reduce speed limit, too many rear-end
- Remove lights at Kensington Rd. and 5 Ave.
 - **Benefits** – improve traffic flow along Crowchild Tr. north and south
- Enforcement for vehicles using HOV lane

- **Benefits** – improve traffic flow and safety
- Improve access from 17 Ave. to Crowchild Tr. northbound – need to change lanes x3
 - **Benefits** – Improve traffic flow/safety; improve access from 17 Ave. to northbound Crowchild Tr.
- Improve lane continuity along bridge as well as exits/accesses on bridge
 - **Benefits** – improve traffic flow and safety
- Maintain/improve EMS access to/from Richmond Road Diagnostic and Treatment Center at 17 Ave.
 - **Benefits** – improve EMS access/response times
- More lanes that go north over the bridge – have enough volume to widen the bridge
 - **Benefits** – less lane drop off
- Fix lights at Kensington Rd. and 5 Ave.; north section of Crowchild Tr. – keep same number of lanes (3) through that section
- Add third lane over bridge (consistency)
 - **Benefits** – keeps things moving
 - **Trade-offs** – space for dog park or school
- Build a bigger bridge or widen the existing bridge tying in to the existing lanes with a bigger bridge becomes the challenge
- Left turn restrictions similar to what happened at Crowchild Tr. and 24 Ave. that has helped in the morning rush
- A solution in one area only pushes the problem to another location, need to look at the solving the entire corridor
- Add another lane south and northbound along Crowchild Tr.
 - **Benefits** – improve traffic flow
- Improve lanes – no drop offs (no more weaving) – accidents cause by crossing over (especially Bow Tr. to Memorial Dr.) having to cross over multiple lanes, higher speeds make it more unsafe; remove lights; improve lanes dropping off on the bridge
- 10 Ave. access to Crowchild Tr. to get to Memorial Dr. is bad
- Get rid of transit dedicated lane on Crowchild Tr. at 17 Ave.
 - **Benefits** – not needed; will help traffic flow
- Make it easier to get from Bow Tr. to Memorial Dr.; and Bow Tr. to southbound Crowchild Tr. ; Bow Tr. to Crowchild Tr. access (to go northbound)
- Too many off ramps that are confusing and require lane changes to make an exit; create another bridge or double it; hang lanes off the sides – expand without creating another structure
 - **Benefits** – need more dedicated lanes – lane balance (don't make lanes exit)
 - **Constraint** – topography – the fox hill going up to northbound Crowchild Tr. gets slippery – from 10 Ave., people get stuck
 - **Trade-offs** – take lights out at Kensington Rd. – create overpass across, like the interchange at 33 Ave.
- No lane reversal
- Merge from 24 St. S.W. to Crowchild Tr. south, curve, remove the retaining wall, add a small shoulder
 - **Benefits** – safety increase! For merging vehicles and through vehicles
 - **Impacts** – lose some home protection
- Extend merge lane at 17 Ave. entry/Bow Tr. exit – have better signage to far lane through lane
 - **Benefits** – increase safety!
 - **Impacts** – shorter time to merge left; land adjacent to road
- Lights at Memorial Dr. and 19 St. N.W.
- Stacked carriageways, look at other cities as an example, New York
- Fix the “chaos” on Crowchild Tr. northbound at 17 Ave. merge/entrance
 - **Benefits** – split Bow Tr. from Crowchild Tr. traffic?; lanes on bridge to be fixed
- Change weave outside of Richmond Road Treatment and Diagnostic Center (transit, Bow Tr., Memorial Dr.)
 - **Benefits** – separate all users
- At 17 Ave. to northbound Crowchild Dr., very short entry ramp with blind spot
- Slow down traffic, except at peak hours, and enforce 70 km/h. when it changes by 17 Ave.
- Have emergency exits off Crowchild Tr. for accidents for people to get off
- Add another bridge at 29 St.
- BRT from where majority of drivers are coming from – connect buses at Crowchild Tr./Bow Tr.

- **Benefits** – moves more people with less congestion
- Traffic slower on Crowchild Tr. to help with merging and comfort while waiting for bus
 - **Benefits** – waiting is better for bus; can merge safer
 - **Constraints** – can't just change signs, need design too
- Turn all lights northbound/southbound green during rush hour
 - **Benefits** – keep things moving at low cost
 - **Impacts** – low cost pilot; low risk
- Improve access from Crowchild Tr. southbound to Glenmore Tr. on right side
- Drivers merge too soon from 50 Ave. interchange to southbound Crowchild Tr. and impact traffic flow on Crowchild Tr. – encourage drivers to stay in merge lane longer
 - **Benefits** – improve traffic flow
- Through lanes without changing lanes to travel straight; facilitate travel northbound/southbound; dedicated lanes
 - **Benefits** – improve traffic flow; increase safety; reduce lane changing
 - **Constraints** – current lane and exits/entrance structure
 - **Impacts** – don't want to impact Sunalta School; adjacent properties; don't want to impact residents
- Lengthen/improve merge lane from 17 Ave. to Crowchild Tr. southbound
 - **Benefits** – improve traffic/safety
- Double deck bridge northbound/southbound on each level for traffic
 - **Benefits** – improve traffic flow
 - **Constraints** – access ramps to bridge level
 - **Impacts** – adjacent properties; visual; access
- Change name of 24 St. (GPS can't find Taoist Society) on Crowchild Tr. but not, and can see from Crowchild Tr.; improve access/maintain access
 - **Benefits** – bus stop is in front – bus access important; people come for recovery classes from all over the city; pedestrian access on overpasses important as is connectivity between communities
 - **Constraints** – Rundle College is next door
 - **Impacts** – don't want to take parking spaces away; impacts to Rundle College (next door)
 - **Trade-offs** – space on Blvd. is wide, maybe could use some of this space
- Better transit; transit we have takes too long; more buses; more timely buses (like Toronto)
 - **Benefits** – less cars on the road; people drive get places quicker; less emissions; easier to get around for buses
 - **Constraints** – revenue/cost; may increase lanes
 - **Impacts** – none
 - **Trade-offs** – people need to prepare to take transit
- Bridge – merge situation can be better and going up the hill at University Dr.; going over (overpass)
 - **Benefits** – no backups; better ways to merge in
 - **Constraints** – how do you get
 - **Impacts** – housing; property values
 - **Trade-offs** – aesthetics
- Fix weave at Crowchild Tr./Kensington Rd./Memorial Dr. (southbound)
 - **Benefits** – reduce potential collisions
 - **Constraints** – space
- Overpass from Bow Tr. northbound entry to Crowchild Tr. to Memorial Dr. exit – example see Montreal auto route; Memorial Dr. exit to Bow Tr. (Option1: overpass also exits to Crowchild Tr.; Option 2: add a lane for overpass)
 - **Benefits** – avoids dangerous merge; better flowing traffic
 - **Impacts** – drivers need to relearn road
- Add lanes on Crowchild Tr. near University Dr. to south of Bow River bridge, eliminate access at either 5 Ave. or Kensington Rd. and have an interchange at one, remove 23 Ave. intersection or add overpass, remove lights at 24 Ave. and replace with interchange; remove all traffic lights
 - **Benefits** – Improve traffic flow
 - **Impacts** – reduced access along Crowchild Tr.; property impacts
- Pedestrian connection between foothills athletic park and McMahon Stadium and tie into Stadium Shopping
 - **Benefits** – provide connection to hospital from LRT and Motel Village

- Safe access to Foothills Hospital – cars and pedestrians
 - **Benefits** – clean up traffic loops at University Dr. and Crowchild Tr.; add lights at diamond interchange better?; loop safety is a concern for sightline views of cars and pedestrians
- Restrict rush hour turns at Kensington Rd. and 5 Ave. (like Lake Fraser Gate in south Calgary)
 - **Benefits** – improve through traffic flow; safety improvement and reduce collisions
 - **Impacts** – turns around block; longer route through adjacent community; transit routes?
- Solid data on existing weaving and origin-destination – not based on model (validate model data with existing data – use vehicle plates; Bluetooth?; manual; video/camera's)
 - **Benefits** – which movements are large/small; which can be eliminated from Crowchild Tr. across bridge; which movements need to be free flow at Bow River and Memorial Dr.; prep of options; public perception
 - **Impacts** – cost for data collection
- Turning system east of Crowchild Tr. at Memorial Dr. (21 St. or 19 St.)
 - **Benefits** – split movements from Crowchild Tr. to parallel system further east; space available
 - **Impacts** – minor irritation to drivers along Memorial Dr. (if had to stop or slow down a bit)
- Bow Tr. to Crowchild Tr.; create better access from eastbound Bow Tr.
 - **Benefits** – would improve traffic flow; better navigation for people from out of town
 - **Trade-offs** – space required to create ramps
- Ramp metering (saw it in Phoenix)
 - **Benefits** – control cars entering Crowchild Tr.
 - **Impacts** – sit on side streets
- At Kensington Rd. look at the idea of three right turns to make a left turn to get to Kensington Rd. or to Memorial Dr. This could be a short term solution
 - **Benefits** – keeps traffic moving on Crowchild Tr.
 - **Impacts** – potentially more traffic using residential streets from Crowchild Tr.
- Possible data collection to look at origin and destination to get the existing demand
- Possibly use barriers to restrict the weave from 10 Ave./Bow Tr. to get to eastbound or westbound Memorial Dr.
 - **Benefits** – eliminates the ability for people to weave over and cause backups on the bridge
- Lengthen 24 Ave. westbound-northbound Crowchild Tr. merge lane
 - **Benefits** – northbound Crowchild Tr. through would not have to stop and let people in (don't see problems at Kensington Rd. and 5 Ave. lights – only at 24 Ave. lights – short term)
 - **Impacts** – property might be close
- Add another bridge beside existing to separate through/local traffic
- Remove all the lights (long term)
 - **Benefits** – reduce travel time (Panorama to Richmond Road Treatment and Diagnostic Centre)
- Crowchild through traffic additional bridge local – interchange at Kensington Rd.
 - **Benefits** – improve traffic flow; reduce impact to adjacent property; additional room to merge
 - **Constraints** – train crossing – topography
- Widen the bridge across river
 - **Benefits** – room for more vehicles all times of day; reduce weaving on bridge; reduce angry drivers and road rage
 - **Impacts** – up/down Crowchild Tr. both sides of bridge
- 17 Ave. to 24 Ave. overpass over existing bridge/road; in line with Crowchild Tr.; with exits at 5 Ave./Kensington Rd. down to existing Crowchild Tr. with three continuous lanes
 - **Benefits** - Only hit one light at 24 Ave.; flowing traffic; lessen congestion on both roads; less impact as existing road in full use; make a toll road (new) help pay front
 - **Constraints** – cost
 - **Impacts** – construction
- One bridge for through traffic, 1 for local exiting traffic with longer ramps for entry/exit on local bridge
 - **Benefits** – better flow
 - **Constraints** – connections at Memorial Dr. and Bow Tr.
 - **Impacts** – residences
- Look outside of Canada for examples for Crowchild Tr.; use engineers who have done similar work around the world

- Ongoing user benefit for new infrastructure (e.g. cycling lanes, pedestrian, transit, road users pay for infrastructure and maintenance)
 - **Benefits** – revenue generated by users to pay for infrastructure and maintenance – transit, pedestrians, road users, cyclists
- Whole design and features need to work together vs. as separate parts; form follows; should be beautiful; have the best for the best results
- Make sure 2012 plans are shelved
- Improve access from Bow Tr. west to Crowchild Tr. to Memorial Dr. west. E.g. separate bridge or lane separate from Crowchild Tr. through traffic
 - **Benefits** – make access more direct; safer access; fewer lane changes; separate from through traffic on Crowchild Tr.
- Remove traffic lights at Kensington Rd. and 5 Ave., 23 Ave., 24 Ave. – reduce access at some intersections vs. interchanges
 - **Benefits** – improve traffic flow and safety
- Add more lanes to Bow river bridge
 - **Benefits** – improve traffic flow and safety
- Remove lights
- Northbound Crowchild Tr. to northbound University Dr. to westbound 16 Ave. angle to enter onto westbound 16 Ave. is not good it is difficult to see 16 Ave. traffic to enter on to westbound 16 Ave.
- Future study work; Glenmore Tr. and Crowchild Tr. interchange causes backups – note The City will be undertaking a study at this location in future
- Collision problems at the northbound Crowchild Tr. to University Dr. exit. Better signage needed to indicate that you can turn from the left lane and the middle lane to complete that movement.
- Lane ballooning on the bridge one lane takes you from south of the river to north of the river. Need minimum of two lanes to get you across the river, four lanes.
- First and foremost:
 - Remove 75% of the 116 signs between 33 Ave. and the Glenmore Tr. flyover. Leave only traffic sign. Re-examine redundancy of signs facilitating exits. Re-examine size of signs on importance
 - Install signs before the turn off on the Fly Over in 100 meter increments; Beware-High Collision Area, Do Not Follow Too Close. Slow Down to 30 Km/h before and on ramp
 - Immediately reduce speed limit to 30 Km/h on interchange and approach to and after the top of the intersection lights
 - Put in a legal U Turn at entrance to North Glenmore Park
 - Install legal U Turn Ahead route signs on interchange – don't force them to break the law
 - Especially install No U Turn sign at midway of the block of shopping center entrance and exit on Crowchild Tr.
 - Post \$250 fine for illegal U Turns. (alternatively, whatever is the highest price for an illegal U Turn in the city)
 - Install traffic light at the Longridge/Crowchild Tr. T intersection. There are now 250,000 vehicles entering and exiting that intersection. They are from the Calgary Girls School (buses and cars), Earl Grey Golf and Country Club (100 Stalls at 15 min) and users of the North Glenmore Park Community Association Hall. All traffic entering and exiting that intersection are on a study done by the NGPCA traffic committee 2013.

Drawing 3



Foothills Medical Centre, Main Building – Timberline Café – November 19, 2015

Ideas Explored

- Idea we've heard today: extend rush hour bus service level before and after
 - **Benefits** – services more people
 - **Constraints** – cost
- Idea we've heard today: remove lights for through traffic and access to/from Crowchild at 24 Ave.
 - **Benefits** – reduce back-ups on 24 Ave.
- Overpass at 5 Ave. or Kensington Rd. – lights are too long; if need to lose 5 Ave. or Kensington Rd. – enhance the other one
 - **Benefits** – better access onto Crowchild – less wait time
 - **Impacts** – redirecting traffic to the other intersections would increase congestion at the other
- Remove lights at 24 Ave. – tunnel or overpass 24 Ave. with ramps, Kensington Rd. too
- Additional bridge heading to Memorial Dr. heading northbound, lane starts between 17 Ave. and Bow Tr. – go over Bow Tr.
 - **Constraints** – 17 Ave. entry lane switch two lanes to stay on Crowchild Tr.; accidents on the one lane
 - **Impacts** – school; footprint
- Remove lights at Kensington Rd. east-west make north-south Crowchild Tr. a through fare
- Complete ring road to reduce traffic on Crowchild Tr. to Glenmore Tr.
 - **Benefits** – reduce traffic volumes; improve traffic flow
- Enforcement of driver crossing solid lines on Crowchild Tr. south to Glenmore Tr. – e.g. ad campaign/signage
 - **Benefits** – improve traffic flow
- Add another bridge next to existing
 - **Benefits** – West Village construction and traffic will be accommodated
- Overpass from Bow Tr. to Memorial Dr. northbound
- Provide more options/signage on Crowchild Tr. for people turning onto Memorial Dr. or alternatively at Kensington Rd.
 - **Benefits** – reduce bottlenecks; improve traffic flow
- Lane reversal during peak hours
- Improve cyclist access in Sunalta area by CPR train tracks to cross Bow River at bridge
 - **Benefits** – wider access to allow more cyclist and for safety; should have both side walk and pathway for cyclists
- Improve pedestrian access along 17 Ave. and for transit user
 - **Benefits** – improve pedestrian and transit access and usage
- Improve access from 17 Ave. westbound to Crowchild Tr. northbound – need to cross three lanes to go northbound
 - **Benefits** – improve traffic flow and safety
- Overpasses at Kensington Rd. and 5 Ave. with ramps add a pedestrian walkway on 5 Ave. overpass/Kensington Rd. too
 - **Benefits** – free flow of traffic wouldn't impact as many people as widening; reduce noise for local residents; keep neighborhood connectivity; increase pedestrian safety
 - **Impacts** – women's clinic; parks on corner
- Widen the bridge starting just south of Kensington Rd. to where it goes to two lanes northbound
 - **Benefits** – improved traffic flow
 - **Impacts** – Bow merge to Memorial Dr. northbound; environmental impact (osprey); Memorial Dr. overpass
- Crowchild Tr. go through (expressway) off ramps at Memorial Dr. – through a roundabout; roundabouts (with three lanes) do not take lights
- Center lane on Crowchild Tr. towards Glenmore Tr. – widen the bridge and widen at University Dr. (one more lane) and get rid of lights at 24 Ave. Get some tight time lines and finish the work faster
 - **Benefits** – ease the traffic flow especially north
 - **Constraints** – property
 - **Impacts** – businesses if access is limited; people around University Dr.; apartment complex
 - **Trade-offs** – people never give up anything; we should all be prepared to give up some land

- Increase posted speed on Crowchild Tr., north of 24 Ave. to at least 90 km/h; remove lights on Crowchild Tr. at least 24 Ave. and 23 Ave.; improve 16 Ave. interchange ramps/access
- Connect LRT to Foothills Hospital (bus connection is so bad now – would rather drive)
 - **Benefits** – free parking spaces; less traffic
- Get rid of traffic lights – or coordinate lights as all green
 - **Benefits** – improve air quality (no idling); improve traffic flow
- Implement light and signage system for alternating right of way to encourage drivers to use far left lane southbound south of 17 Ave. to Glenmore Tr.
 - **Benefits** – improve traffic flow by drivers using all three existing lanes vs. only using center and right lane
- Issues – 17 Ave. to Crowchild Tr. northbound; Bow Tr. to Crowchild Tr. – improve Bow Tr.; Crowchild Tr. overpass through Kensington Rd./5 Ave. with access road on side
- Take the lights off – make it free flow, another lane, expand it, EMS – deal with congestion
 - **Benefits** – free flowing, traffic moves faster
 - **Constraints** – cost
 - **Impacts** – communities
 - **Trade-offs** – access
- Expansion; fast lane bus (during peak hours) (bus only lanes), more service – more buses
 - **Benefits** – encourage people to leave cars at home; economical; beneficial for the city; save money on gas and parking
 - **Constraints** – space; costly short term
 - **Impacts** – the whole city; drivers – one lane less during peak hours
 - **Trade-offs** – more lanes (ok to increase if properly used) longer travel time (will take 30 or 40 minutes on bus if reliable) as it saves money
- If communities see the benefits of lanes then you get no complaints. You can't make an omelet without breaking an egg
- New Banff Tr. in alley in between Motel Village, to access Crowchild Tr. north – pedestrian friendly existing Banff Tr.
 - **Benefits** – more pedestrian friendly; more direct access from 16 Ave. to Crowchild Tr. northbound
 - **Impacts** – Motel Village frontages
- 24 Ave. to go under in underpass at Crowchild Tr. with exit/entry ramps – maybe canons baseball stadium
 - **Benefits** – maintains access to Children's Hospital
 - **Impacts** – baseball stadium; footprint
- Over or underpasses at both Kensington Rd. and 5 Ave.
 - **Impacts** – residences and businesses
- Close 5 Ave. access, under or overpass at Kensington Rd. or vice versa depending on traffic volumes
 - **Benefits** – better traffic flow; could drive business to open street
 - **Impacts** – increase congestion at one left open; residents need to go further; 14 St. intersection
- Add more lanes – two in each direction ideal, one in each ok too. One lane south of 17 Ave., two lanes 17 Ave. to 5 Ave. – if can't expand Crowchild Tr. look at same for 14 St. bridge
 - **Benefits** – life/work balance; kids would make after school activities; less congestion; less stress
 - **Impacts** – CO₂, environmental impacts; more noise; residences and businesses
- LRT in Center of Crowchild Tr. – direct it to the hospital, branch off from West LRT at Bow Tr./Crowchild Tr. and head north, join the lines together
 - **Benefits** – people out of their cars; reducing traffic
- Need to keep lights to keep speed safe; right turn from westbound 5 Ave. to northbound Crowchild Tr. is hard/awkward to get into traffic
 - **Impacts** – if you take out the lights, speed will increase; don't want a freeway
- Don't close 5 Ave. access! Can't close off the community
 - **Benefits** – need pedestrian access across – current access is not safe (stopped walking to work because crossing is so unsafe)
- Turn either 5 Ave. or Kensington Rd. signals off during rush hour
 - **Benefits** – need one for access/egress during rush; not realistic to expect people to use 16 Ave. all the time
- Add at least one lane in each direction; lane continuity

- Forced exits across Bow Tr.; people in lane to exit to Memorial Dr. must exit – remove the weave
- More lanes both directions; High Occupancy Vehicle (HOV) lane
 - More flow; higher capacity
 - Impacts – loss of homes and businesses, but that's ok
- Coming from Woodbine is hell up to 1 hour and 15 minutes to 2 hours and 15 minutes
- Glenmore Tr. at Crowchild Tr. needs improvement
- No changes to Crowchild Tr.
 - **Impacts** – increasing traffic on side-streets common routes are: from 53 Ave. – by pass by using 40 Ave. to Shaganappi Tr. or 40 Ave. through community past congestion back on to Crowchild Tr. further south
- Add lanes on existing Bow River bridge or build parallel bridge
 - **Benefits** – Improve traffic flow and reduce bottlenecks
- Add pedestrian countdown at intersections for pedestrians and allow traffic to know when light is about to change
 - **Benefits** – improve traffic flow and safety
- No turns or access across at 5 Ave. and Kensington Rd. during morning and afternoon rush
 - **Benefits** – improve traffic flow
- LRT extension from N.E. Calgary to Cross Iron Mills mall e.g. side of Hwy 2
 - **Benefits** – provide transit access to the mall for people that cannot get there by vehicle
- Widen between 5 Ave. and 24 Ave.
 - **Benefits** - Traffic flow
 - **Trade-offs** – have to buy a lot of houses
- Overpasses
 - **Benefits** – can make them look nice now, improves local environment but improves flow
 - **Constraints** – expensive
- Transit for 405/4074 bus service, Bowness to Sunnyside, take bus off 10 St. and move onto 5 Ave. and block over
 - **Benefits** – improves transit time reduces transit delay in traffic
 - **Impacts** – bus runs through communities
 - **Trade-offs** – might change drivers route or pick up location
- C-Train to Foothills Hospital
 - **Benefits** – reduce car usage
 - **Constraints** – land
- Widen Crowchild Tr. – make it fast; take out homes
 - **Benefits** – higher capacity
 - **Impacts** – loss of homes
- Limit peak access 6 to 9 a.m. to 24 Ave.
 - **Benefits** – stops short cutting of traffic trying to jump queue on Crowchild Tr. southbound
 - **Impacts** – would impact people who have to drive
- Improve pedestrian overpass at 14 St. by providing ramps
 - **Benefits** – improves cross community for kids going to schools otherwise have to drive
 - **Impacts** – need more space for ramps
- Increase speed from 24 Ave. north to 90 km/h (from 80 km/h)
 - **Benefits** – improve safety; everyone is doing 90 km/h anyway; all interchanges north of 24 Ave.
 - **Constraints** – ok to keep lights south of 24 Ave.
 - **Impacts** – safety of other users
 - Person also cycles from Charleswood Dr. to Foothills Hospital, crosses at 32 Ave. through University, down University Dr., thinks the route is good
- New bridge at Bow River; remove lights/put in interchanges
 - **Benefits** – traffic clears west of 24 Ave.; similar to Northland Dr. – smaller footprint; supports transit and cyclists/pedestrians on new interchange; improves crossing Crowchild Tr.; improves flow; ok with short term “green on Crowchild Tr. during peak hours”
 - **Constraints** – constrained right-of-way now; community access; environmental requirements
 - **Impacts** – community access; buy-out of homes
 - **Trade-offs** – loss of homes/businesses; environmental impacts

- Widen and/or elevate Crowchild Tr. from south of Bow River to 24 Ave.
 - **Benefits** – improved flow; higher capacity; recognizes the high use of road; create green space in taken areas not used for road
 - **Constraints** – not enough land; costs
 - **Impacts** – homes and businesses lost; noise/visual
 - **Trade-offs** – loss of homes/businesses; costs
 - Commutes from Hawkwood to Foothills Hospital to downtown; bottlenecks between Bow River and 24 Ave.
- Grade-separate/flyovers on Crowchild Tr.; widen Crowchild Tr. to three lanes each direction
 - **Benefits** – improve flow; reduce access issues
 - **Constraints** – land and cost
 - **Impacts** – homes lost; businesses lost
- Cloverleaf or continuous lights at 16 Ave. and Crowchild Tr.
 - **Benefits** – better access
 - **Impacts** – community noise and space; businesses McMahon Stadium
- More public transit C-Train to hospital or bus from existing rail
 - **Benefits** – decrease road density/congestion; better access to Foothills Hospital for people with no vehicle
- People should live near where they work
- High Occupancy Vehicle (HOV) lane going northbound – get more people out of their cars
 - **Benefits** – get people out of their cars
 - **Constraints** – there is no space to widen Crowchild Tr.
 - **Trade-offs** – people may not use it – often travel is single occupants because of destinations or schedules
- Look at the whole network – backups southbound Crowchild Tr. often caused by delays on Glenmore Tr.
- Widen Crowchild Tr.
 - **Benefits** – improve traffic flow
- Tunnel or elevated freeway along Crowchild Tr. from 17 Ave. S.W. to 24 N.W. to separate through from local traffic
 - **Benefits** – improve traffic flow and access to/from communities by separating through and local traffic
- Remove traffic lights and add/reduce access points to divert traffic
 - **Benefits** – improve traffic flow and access along the corridor
- Longer signals at light for through traffic
 - **Benefits** – improve traffic flow north/south
- Improve signal timing for north and south traffic during peak times, and east/west during other times
 - **Benefits** – Improve traffic flow and access
- Improve access across 5 Ave.
 - **Benefits** – improve traffic flow
- Better (more advanced) signage for exits north of Memorial Dr. for southbound traffic
 - **Benefits** – improve traffic flow and reduce last minute lane weaving/lane changes
- Widen Crowchild Tr. north of 5 Ave.
 - **Benefits** – improve traffic flow
- Remove lights at Kensington Rd. and build overpass
 - **Benefits** – improved traffic flow
 - **Constraints** – houses and businesses
 - **Impacts** – limits access to communities
 - **Trade-offs** – expensive
- 4 lanes, ideal need over river
 - **Impacts** – residential
- Raised additional lanes from McMahon Stadium to Memorial Dr. east, increase speed on Memorial Dr.
- Bow Tr. flyover on left to downtown
 - **Constraints** – river crossing
- Widen in both directions
 - **Benefits** – less congestion
 - **Impacts** – residences and businesses
- Build overpasses at 5 Ave. and Kensington Rd. with ramps

- More lanes in northbound direction before Memorial Dr. exits to 24 Ave.
 - **Benefits** – better traffic flow; relieve congestion on Crowchild Tr. and possibly other river crossings
 - **Constraints** – cost
 - **Impacts** – move businesses; Bow Tr. to Memorial Dr. exit
- Extra buses during rush hour. Extend rush hour peaks before and after
 - **Benefits** – services more people
 - **Constraints** – cost
 - **Impacts** – minimal
 - **Trade-offs** – encourage more transit
- Widen Crowchild Tr.
 - **Benefits** – improve traffic flow
- Fix the bridge – make more than one lane and two lane exits onto Bow Tr. into downtown from the south
 - **Benefits** – improves traffic south of the bridge
 - **Impacts** – not considered
- Widen bridge – add lanes
 - **Benefits** – improve traffic flow
- Improve 24 Ave. with removal of lights for through traffic and access to/from 24 Ave. to Crowchild Tr.
 - **Benefits** – improve access and reduce back-ups on 24 Ave. to northbound Crowchild Tr.; improve access and reduce backups from southbound Crowchild Tr. to westbound 24 Ave.; improve traffic flow along Crowchild Tr.
- Widen road from 17 Ave. south to 24 Ave. north
 - **Benefits** – alleviate congestion
 - **Constraints** – cost
- Bridge over existing one - upper one direction, lower the other
- LRT/along Crowchild Tr. BRT – few stops along Crowchild Tr., include Rockyview Hospital, Children's Hospital, Foothills Hospital
- Flyover from Bow Tr. entry to Memorial Dr. exit – is not a good idea
- Another street like Crowchild Tr. long-term planning get it broader (will be too narrow for future) – dangerous in the winter if transit is better, would take it
 - **Benefits** – not as dangerous
 - **Constraints** – houses and building
 - **Impacts** – all the communities
 - **Trade-offs** – comfort
- Add lanes in parts of Crowchild Tr. e.g. between 23 Ave. and 5 Ave. N.W.
- Remove lights at 5 Ave., Kensington Rd., 23 Ave., 24 Ave. – reduced access at Kensington Rd. and 5 Ave., Kensington Rd. interchange/lights and overpass only at 5 Ave.
 - **Benefits** – Improve traffic flow along and across Crowchild Tr.
 - **Constraints** – space limitations due to adjacent properties
 - **Impacts** – property impacts
- Improve access from Bow Tr. eastbound to north Crowchild Tr.
 - **Benefits** – improve access and traffic flow
 - **Impacts** – property impacts
- Improve cyclist access and environment near train tracks south side of Bow River and under bridge
 - **Benefits** – better access; improve safety; encourage more cycling
- No raised Crowchild Tr. – remove access at Kensington Rd., improve Crowchild Tr. /Memorial Dr. for all access
 - **Benefits** – better sight lines for community; lower noise
 - **Constraints** – land, proximity of Bow River
 - **Impacts** – access; congestion
- Need ramp from eastbound 24 St. and northbound Crowchild Tr.
 - **Benefits** – better flow
 - **Trade-offs** – use green space (church)



- Southbound Crowchild Tr. – eastbound Banff Tr. – block it off (take out access) and create new ramp from 16 Ave. (westbound) to northbound Crowchild Tr.
- Make two lanes on the bridge continuous
- Interchange at 24 Ave.
 - **Benefits** – improve traffic flow along Crowchild Tr. and onto/off 24 Ave. to Crowchild Tr.
 - **Impacts** – cost
- Widen Crowchild Tr.
 - **Impacts** – expense



Crowchild Trail Study

Public Idea Workshop Summary November 14, 2015

Project overview

The City of Calgary is conducting a transportation study to identify short-, medium- and long-term upgrades for Crowchild Tr. between 24 Ave. N.W. and 17 Ave. S.W.

Crowchild Tr. is an important roadway within Calgary's overall transportation network. Its function is critical to both the land use and transportation needs of Calgary as it continues to grow and redevelop in the coming decades.

The study consists of a six-phase process that provides multiple opportunities for Calgarians to provide feedback through each phase of the study.

Ideas and feedback received from stakeholders and the public will help The City make better decisions for the future of Crowchild Tr.

Engagement overview

Phase 3: Concept identification is about identifying ideas on possible changes to the Crowchild Trail corridor and understanding various implications of those ideas.

An idea workshop was held for community members and the public on Saturday, Nov. 14, 2015 from 9:30 a.m. to noon at the Queen Elizabeth High School (512 18 St. N.W.).

The purpose of the workshop was to identify ideas from participants on possible changes to the Crowchild Tr. corridor and explore the benefits, impacts, constraints and trade-offs associated with those ideas.

Approximately 70 participants attended the workshop distributed across 9 table discussions each round.

The following members of the project team were also in attendance at the session:

Project Team

- Feisal Lakha, City of Calgary, Project Manager
- Madhuri Seera, City of Calgary, Deputy Project Manager
- Stephen Kay, City of Calgary, Technical Lead
- Andrea Sichewski, City of Calgary, Communications Advisor
- Kirsty Neill, City of Calgary, Engagement Advisor
- Asif Kurji, City of Calgary, Transit Advisor
- Misty Sklar, City of Calgary, Land Use Planning Advisor
- Chris Delanoy, ISL Engineering and Land Services, Consultant Project Manager
- Alana Getty Somers, ISL Engineering and Land Services, Consultant Technical Lead
- Amanda Kaiser, ISL Engineering and Land Services, Consultant and Table Facilitator
- Courtney Laurence, ISL Engineering and Land Services, Consultant and Table Facilitator
- Erin Russell, Russell Public Relations, Lead Facilitator

Table Facilitators

- Bradley Linn, City of Calgary, Table Facilitator
- Cassie Brannagan, City of Calgary, Table Facilitator
- Michele McDonald, City of Calgary, Table Facilitator
- Lara Tierney, City of Calgary, Table Facilitator
- Dave Pascut, City of Calgary, Table Facilitator
- Adis Samardzic, City of Calgary, Table Facilitator



- Lara Tierney, City of Calgary, Table Facilitator
- Mike Waters, City of Calgary, Table Facilitator
- Gale Simpson, Consultant Table Facilitator
- Katie Ritchie, Russell Public Relations, Table Facilitator
- Jolene Ondrik, Russell Public Relations, Table Facilitator
- Tamille Beyon, Russell Public Relations, Consultant Note-taker
- Violet MacLeod, Russell Public Relations, Consultant Facilitator
- DJ Wickham, ISL Engineering and Land Services, Consultant Note-taker
- Dave Breu, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jordan Quick, ISL Engineering and Land Services, Consultant Note-taker
- Krista Kruschel, ISL Engineering and Land Services, Consultant Note-Taker
- Mario Prezelj, ISL Engineering and Land Services, Consultant Technical Facilitator
- Dominic Cheng, ISL Engineering and Land Services, Consultant Technical Facilitator
- Jack Mason, ISL Engineering and Land Services, Consultant Technical Facilitator
- David Thatcher, Stantec, Consultant Technical Facilitator
- Andrew Vandertol, Stantec, Consultant Technical Facilitator
- Ariel McCance, ISL Engineering and Land Services, Consultant Table Note-taker
- Andrew Monson, ISL Engineering and Land Services, Consultant Table Note-taker

What we asked

The workshop was conducted in two rounds. The format of both of the rounds of the workshop involved participants choosing to sit at table that represented one of three sections of the Crowchild Trail study area that they were most interested in discussing:

- North Section – north of University Dr. N.W. to 24 Ave. N.W. (near McMahon Stadium)
- Central Section – north of Memorial Dr. N.W. to University Dr. (the West Hillhurst area)
- South Section – 17 Ave. S.W. to Memorial Dr. N.W. (including the Bow River Bridge)

Participants then shared and explored ideas and associated benefits, impacts, constraints and trade-offs with other participants and table facilitators at the table. A technical facilitator provided subject matter expertise as to the technical implications of ideas; discussion facilitators and note-takers guided the small-group conversation and recorded participant discussion. After the first round of discussions, participants either remained at the same table to discuss the same section of the corridor or moved to another table to explore ideas for one of the other two sections of the Crowchild Trail corridor in the study area.

What we heard

The following is a high level summary of what we heard at the idea workshop:

- Across the entire study area:
 - It is important to increase traffic flow while also considering safety for all users, with minimal impact to surrounding communities.
 - Some ideas cited ways to address capacity issues such as widening Crowchild Tr. and encouraging the use of public transit by adding high occupancy vehicle (HOV) and dedicated transit and carpool lanes.
 - Some participants explored ways to encourage the use of alternate routes and modes of transportation.
- In the **North Section**, improving the interchange at 16 Ave./13 Ave./University Dr./Crowchild Tr. was discussed as a way to further improve traffic flow and safety along the corridor while providing for access to, from and across Crowchild Tr. Considerations related to these ideas included modifying traffic direction along University Dr. and Crowchild Tr. (e.g. northbound traffic along Crowchild Tr. and southbound traffic along University Dr.) and changing ramps at 16 Ave. for more direct access. Participant discussion of the North Section also covered ideas



for improving the 24 Ave. intersection (e.g. go over/under Crowchild Tr. or utilizing right-in and right-out access), enhancing the visual appearance of the corridor by incorporating and enhancing green spaces, and improving/building pedestrian and bike overpasses along this section of the corridor.

- In the **Central Section**, multiple forms of interchanges/intersections, removing access at 5 Ave. and/or Kensington Rd., and changes to the grade of the roadway (e.g. tunnel or raised expressway) were also explored as ways to improve traffic flow along the corridor and maintain access across Crowchild Tr. Considerations related to these ideas included safety of the users on Crowchild Tr., maintaining community connectivity and potential physical, noise and environmental impacts to adjacent properties.
- In the **South Section**, widening the bridge over the Bow River to enhance lane continuity received a considerable amount of discussion, as did re-aligning access from 10 Ave./Bow Tr. to the right side of the Bow River bridge to improve northbound continuity across the river. Considerations related to these ideas include making the Bow Tr./10 Ave./Memorial Dr./Crowchild Tr. interchange all access. The potential for an additional bridge over the river and improving pedestrian and bicycle aesthetics in order to enhance the flow and safety of the traffic along the corridor were also explored.

For a more detailed summary of the input that was provided, please see the Idea Workshop Summary of Input section. For a verbatim listing of all the input received, please see the Verbatim Responses section.

Next steps

Following the October and November engagement opportunities, the project team will conduct a qualitative review and consolidate the ideas we heard from participants. The results will be shared with the public in the first quarter of 2016 for further evaluation before being used to help inform the development of preliminary concepts for the Crowchild Trail corridor.

Idea Workshop Summary of Input

Common Ideas Raised

Widen Crowchild Tr. (variations: 4-8 through lanes, extra lane northbound/southbound)
<ul style="list-style-type: none"> • Benefits – improves traffic flow and access; improves safety; removes need for immediate lane changes; improves pedestrian access; reduces short-cutting through communities • Impacts – access; adjacent properties • Constraints – potential property impacts at intersections; potential access and parking access impacts; increased traffic volumes • Trade-offs – improved access and traffic flow vs. potential property impacts
Widen existing bridge for more lanes/continuity
<ul style="list-style-type: none"> • Benefits – free flow traffic; more money short-term but saves in long-term • Impacts – north of river – expand lanes to east – primarily city owned properties; south of Bow Tr. – Scarboro park space; military museum; private property • Constraints – fewer exits/less access – that was seen as positive by participants; need to revise ramps • Trade-offs – could try 4 lane expansion and impact fewer properties
Add High Occupancy Vehicle (HOV) / bus lanes for transit and carpool
<ul style="list-style-type: none"> • Benefits – encourages drivers to use other modes of transportation • Impacts – enforcement; would need to increase/improve transit • Constraints – risk; lane isn't used much; remaining lanes get busier; cut-through traffic increases • Trade-offs – could open it up at off-peak hours; could incorporate timed lane reversals
Re-align 10 Ave. and Bow Tr. access to right side on bridge.
<ul style="list-style-type: none"> • Benefits – more through lanes on Crowchild Tr.; improve/remove weaving; reduce backup to Glenmore Tr. • Impacts – Crowchild Tr. will become a bigger parking lot if improvements are only focused at the bridge • Constraints – up and down stream impacts/improvements are needed (not just to the bridge); sequenced with other work properly • Trade-offs – City should help relocate businesses; reduce northbound congestion; make people happy; driving easier; safer
Improve 16 Ave./13 Ave./University Dr./Crowchild Tr. interchange (full access interchange/cloverleaf)
<ul style="list-style-type: none"> • Benefits – improve traffic flow and access on 16 Ave. and Crowchild Tr.; improve safety at University Dr. area by removing need for immediate lane changes; improve pedestrian access to/from McMahon Stadium area/hospital • Impacts – potential property impacts at intersection and along 16 Ave.; potential access and parking access impacts at Motel Village; increase traffic volumes on 16 Ave. • Constraints – adjacent properties and businesses • Trade-offs – improved access and traffic flow vs. potential property impacts
Remove access at Kensington Rd.
<ul style="list-style-type: none"> • Benefits – flow of traffic; community access and connectivity; improve traffic flow on Crowchild Tr. and traffic from northbound Memorial Dr. • Impacts – would have to build pedestrian overpass; removal of access at Kensington Road • Constraints – removes through traffic
24 Ave. over Crowchild Tr. (or vice versa)
<ul style="list-style-type: none"> • Benefits – improve traffic flow on Crowchild Tr.; maintain access at 24 Ave.; improve pedestrian/cyclist access across Crowchild Tr. and 24 Ave. • Impacts – additional traffic on 24 Ave.; property adjacent to Crowchild Tr.; parking (on street) removal on one side of 24 Ave. • Constraints – traffic calming especially east of Crowchild Tr. along 24 Ave. • Trade-offs – improved traffic flow and access vs. property impacts

Verbatim Responses

North Section (north of University Dr. to 24 Ave. N.W.)

North Round 1 – Table 1

Overall Table Discussion

- Q. Plans for another bridge?
- A. Rehab work in 2016 could add new lane (potential)
- Approximately 80,000 vehicles per day along Crowchild Tr.
- 24 Ave. improvement
 - Dual left turn; unable to turn left on solid green; change signals made bottleneck worse (westbound to Crowchild Tr. southbound)
- Surface lights don't work at 24 Ave.
- Explore interchanges at 24 Ave.
 - Cloverleaf interchanges take up a lot of room
 - Constraint – LRT is underground
- Depress Crowchild Tr. from 16 Ave. to 24 Ave. (similar to Glenmore Tr.)
 - Greenways to connect communities (pedestrians/bikes); share amenities; short ramps to access communities; pedestrian traffic across; success from Crowchild Tr. to other streets is limited
- 16 Ave.
 - Room to add another lane westbound (3 lanes)
- 3 lanes northbound Crowchild Tr. at University Dr. interchange
 - Bottleneck northbound ends once third lane is reached (past University Dr.)
- Right hand lane for slower traffic accessing local streets/services is nice
- Lane reversal – similar to Memorial Dr. – use Shaganappi Tr. northbound vs. Crowchild Tr.
- Poor pedestrian infrastructure for University LRT and Banff Trail LRT
 - Only one sidewalk on residential side – use road to walk on; green space with trees between LRT and road, but not used – not pleasant
- Noise impacts
 - Interface should soften noise; sound walls reflect noise vs. absorb – use trees to help absorb noise; make top priority; noise impacts mostly 2x/day – rush hour
- Car emission
 - Less idling less fumes to some extent
- Bury Crowchild Tr. around University Dr. – elevate as you get close to Kensington Rd.
- 16 Ave. traffic higher than 24 Ave.
- Lower Crowchild Tr.
 - Improve traffic flow; better pedestrian/bike access across; maintain access at 16 Ave. and 24 Ave.
 - **Constraints** – interchanges are close together (overlapping)
 - Combine access with University Dr./16 Ave./Crowchild Tr.; consider roundabouts at 16 Ave. and 24 Ave.
- 24 Ave. Interchange
- Upper southbound/lower northbound Crowchild Tr. – stacking – elevate – start at 5 Ave.
 - 3 lanes wide; maintain University Dr. access to 16 Ave.; restrict access to Motel Village – safety issues making left hand turn into Motel Village
- Too much access to Crowchild Tr. between 16 Ave. to 24 Ave
- Redirect access at McMahon Stadium to University Dr.
 - **Trade-offs** – inconvenient to McMahon Stadium users vs. improved Crowchild Tr. flow; keep service roads at Motel Village; access to Motel Village through Banff Tr./16 Ave.
- 16 Ave. westbound to northbound Crowchild Tr. access ramp west side of Denny's
- Crowchild Tr. at University Dr. bridge is above noise wall
- Need to consider CalgaryNEXT
- Facilities at foothills athletic park bridge
- 24 Ave. interchange

- Impacts adjacent residents – ramp access; traffic calming required if providing easier access to Crowchild Tr.; parking on 24 Ave. should be restricted to one side only; consider stacking to reduce footprint of interchange; consider reducing access to decrease footprint; impacts adjacent churches; improve pedestrian access across Crowchild Tr.
- Bus access linked to adjacent communities and University of Calgary
 - Better connection to south; access and usage increased; more buses less cars on Crowchild Tr.; improve capacity and connections; property impacts if need room for bus stops
- 16 Ave. direct access to Crowchild Tr. (ramps) Crowchild Tr. northbound to 16 Ave. eastbound, 16 Ave. westbound to Crowchild Tr. northbound
 - 3 lanes (extend to 3 lanes 20 St. to seniors home; difficult to access 16 Ave. from Crowchild Tr. (safety issues); overpass for pedestrian across Crowchild Tr. – better connection from 16 Ave. community (Hounsfield Heights to Briar Hill) to McMahon Stadium (greenway) better accessibility; Hounsfield Heights to Briar Hill not permit parking – SAIT/Football green park in community; if service road is removed can add additional lane on 16 Ave.; improve traffic flow/increase safety

Ideas Explored

- Lower Crowchild Tr. from south of 16 Ave. to north of 24 Ave.
 - **Benefits** – improve traffic flow along Crowchild Tr.; Maintain access at 16 Ave., 24 Ave., 23 Ave., by lowering those access points; enhance greenways for pedestrians and cycling along/across Crowchild Tr.
 - **Constraints** – properties; access points along Crowchild Tr.
 - **Impacts** – impacts to traffic and properties during construction
 - **Trade-offs** – impacts to adjacent properties vs. improved traffic flow
- Interchange at 24 Ave.
 - **Benefits** – improve traffic flow on Crowchild Tr.; maintain access at 24 Ave.; improve pedestrian/cyclist access across Crowchild Tr. and 24 Ave.
 - **Constraints** – traffic calming especially east of Crowchild Tr. along 24 Ave.
 - **Impacts** – additional traffic on 24 Ave.; property adjacent to Crowchild Tr.; parking (on street) removal on one side of 24 Ave.
 - **Trade-offs** – improved traffic flow and access vs. property impacts
- Widen 16 Ave. add westbound to northbound ramp, add ramp from northbound Crowchild Tr. to eastbound 16 Ave.; add pedestrian trail on west side of Crowchild Tr. and pedestrian under/overpass across 16 Ave.
 - **Benefits** – improve traffic flow and access on 16 Ave. and Crowchild Tr.; improve safety at University Dr. area by removing need for immediate lane changes; improve pedestrian access to/from McMahon Stadium area/hospital
 - **Constraints** – adjacent properties and businesses
 - **Impacts** – potential property impacts at intersection and along 16 Ave.; potential access and parking access impacts at Motel Village; increase traffic volumes on 16 Ave.
 - **Trade-offs** – improved access and traffic flow vs. potential property impacts
- Improve transit access from east of Crowchild Tr. at 24 Ave. to south of river (e.g. Like at University)
 - **Benefits** – improve transit access and usage; more buses/less cars on Crowchild Tr. – improve traffic flow; better connections from north to south Calgary
 - **Constraints** – encourage people to use transit vs. drive
 - **Impacts** – need to improve transit capacity and routes connecting to University; additional lane for transit; potential property impacts due to additional lanes or bus stops etc.
 - **Trade-offs** – potential property impacts due to transit infrastructure vs. improved transit access
- Stack Crowchild Tr. south raised/north at grade from 5 Ave. to 16 Ave.
 - **Benefits** – improve traffic flow on Crowchild Tr.; maintain access at 16 Ave., 23 Ave. and 24 Ave.
 - **Constraints** – adjacent properties
 - **Impacts** – property impacts due to additional raised roadway and intersection ramps/interchanges; noise; aesthetics; pedestrian access?
 - **Trade-Offs** – improved traffic flow and access vs. property and noise impacts



Map Highlights

North Round 1 – Table 1 Map A

- Crowchild resumes at grade north of LRT
- Improve pedestrian access – wide path
- Bottleneck northbound until after 24 Ave.
- Interchange at 24 Ave.
- Improve 24 St. N.W. / 24 Ave. crossing, jaywalking is an issue here
- Traffic backs up west to south because you can't turn on solid green anymore (at 24 Ave.)
- Improve pedestrian access at 24 Ave. – add pathway along green space
- Lane reversal between 24 Ave. and 16 Ave.
- Lower Crowchild Tr.
- Ramps
- Greenway connections
- Congestion along 16 Ave.
- One lane to University Dr.
- Three lanes both ways on Crowchild Tr.
- “Noise” issue! – absorptive walls / mitigation

North Round 1 – Table 1 Map B

- Lowered Crowchild Tr. returns to at-grade at Capitol Hill Cres. N.W.
- Interchange and improved pedestrian access at 24 Ave.
- Road is higher than the noise barrier approaching 16 Ave.
- Lower Crowchild Tr. to 24 Ave.
- Improve access at existing pedestrian crossing (north of Suncourt Place)
- Pedestrian under / overpass at 16 Ave.
- Stack Crowchild Tr. from 5 Ave. to 16 Ave.
- Football parking and SAIT – permit parking or restricted parking during certain hours?
- Land swap church (Church of Jesus Christ of Latter Day Saints) to the south side of 24 Ave.

North Round 1 – Table 2

Overall Table Discussion

- Impact to Morley Tr. and 24 Ave. due to Crowchild Tr. expansion – reduce short cutting
- Lights do not encourage traffic flow
- A way to have 6 lanes through without demolishing houses
 - Can go anywhere at 16 Ave. (interchange at 16 Ave.); get through without lane change; diamond interchange; re-align Crowchild Tr.
- Get rid of lights at McMahon Stadium and 24 Ave. (overpass)
- Art work incorporated Motel Village plans – how does this affect plans?
- Is stadium being moved?
- Advance greens vs. extended greens
- Reduce left turns off Crowchild Tr.
- Keep lights at McMahon Stadium but only operate during events
- Lane reversals?
- High Occupancy Vehicle (HOV) lane?
- Lane dedicated to emergency to reduce congestion when there are accidents
- Educate the public
- Long term
 - 14 Ave. reconnected to 13 Ave. – help with transit users trying to get to hospital (#19 bus); pedestrian bridge here not being used. It's frightening; good location for transit development?
- Compact interchanges important – minimize impact

- Improve pedestrian crossings across Crowchild Tr. at 24 Ave.
- Focus on people/not cars
- Cycle route across 24 Ave. needs to improve
- Make efforts to reduce volume on 24 Ave.
- Will university district create more traffic on 24 Ave.?
- Take away access to 24 Ave. during peak hours
- Eliminate access to 24 Ave. during peak hours
- Public education
 - Cyclists, pedestrians, right of way?
- Changing the language. It's about people
 - People who drive, cycle, walk



Map Highlights

North Round 1 – Table 2 Map C

- Improve 24 Ave. intersection:
 - Make crossing easier
 - More crossable for the traffic lane
 - Changing the way the lights work
 - Improve the cycling rate by changing the bike path
 - Encourage improving the cycling rate
 - Focus on people
 - Crowchild Tr. over 24 Ave. to improve pedestrian access across Crowchild Tr.
 - Create a safe way over for pedestrians
 - No impact to houses
 - Have pedestrian on the “light” side
 - Pedestrian / bike connection important
 - Intersection is currently not pedestrian friendly due to timing of signal / lights
 - See 53 Ave. for an example
 - Go over for pedestrians
 - At-grade right turns
 - Eliminate all turns during peak hours
 - Music in underground crossing may help reduce discomfort
 - **Benefits** – gives us what we need; Crowchild Tr. and exits to 24 Ave., high occupancy vehicle (HOV) lane and emergency
 - **Impacts** – Banff Tr. noise etc., wall studies? It may look ugly!
 - **Constraints** – do we have space, building walls up; budget – is it expensive, would columns fit on the streets between the lanes.
- How do you decide on “stop” signals / how do you decide on “lights”? Don’t put lights where stop signs are adequate
- Is the traffic bad at 24 Ave. because of 23 Ave. etc.???
- Bike path rules!? Do the engineers think about them??
- Education of people??
- Keep access at motel village – people happy
- Replace north-south



- Improve pedestrian access
- Goal should be to eliminate at-grade intersection at 24 Ave.
- Cyclist doesn't want to slow / stop / dismount for road crossings
- Licensing bikes
- Educate drivers / cyclists on rules of road
- Do not use lights if not necessary
- Elephant's feet design for bike / pedestrian paths
- Education on new bike intersections

North Round 1 – Table 2 Map D

- Good flow for Crowchild Tr. to help reduce shortcutting
- Match line type to legend
- Current situation with traffic using 24 St. N.W.
- Will the City ask people to cut down Morley Tr.? Cars flow.

North Round 1 – Table 2 Map E

- Reconnect 14 Ave. Why? Bus #19 change traffic connection to Foothills and go to University, 14 Ave. go under Crowchild Tr., over street. Benefit: connecting Hounsfield and St. Andrew Heights and foothills and University pedestrians, cyclists and transit (local cars) direct line across Crowchild Tr., connect LRT to Foothills and University
- Emergency lane on Crowchild Tr.; human transit best walkers
- Six lanes
- No lights
- No homes lost
- Incorporate lane reversal?
- One lane for High Occupancy Vehicle (HOV) / High Occupancy Toll (HOT) / EMS only
- Improve transit service / reliability
- Helps during times of emergency or collision clearing
- Reduce capacity of road
- Perception by users as "empty" lanes (dedicated) – education is important
- Eliminate lights at 24 Ave. (Crowchild Tr. over or 24 Ave. over)
- Lights not coordinated now between 24 Ave. and 23 Ave.
- Traffic lights are bad at 23 Ave. – maybe keep for events only or eliminate altogether
- Grade separate at 24 Ave., re-align Crowchild Tr.
- Compact interchange at 16 Ave. – all access, speed slow and no lane changes along Crowchild Tr.
- Tax-payers don't want to pay for new stadium/arena
- Transit Oriented Development (TOD) area at University Dr. and 13 Ave.? Re-route?

North Round 2 – Table 1


Overall Table Discussion

- Divert Crowchild Tr. through McMahon Stadium lands
- Provide bus links/pedestrian/cycle links
- No signal lights
- No proper interchange at 16 Ave. and Crowchild Tr.
- If Crowchild Tr. shifts west, need to combine University Dr./16 Ave./Crowchild Tr.
- If free flow could be higher speed
- Verbal speed messages to notify drivers of congestion
- Need to consider east-west connectivity
- What are plans for Motel Village?
- High density close to LRT – Transit Oriented Development (TOD)
- Use existing Crowchild Tr. for northbound – add southbound through McMahon Stadium lands (west)
- 24 Ave. under Crowchild Tr.

- **Constraints** – LRT under Crowchild Tr.
- Impacts adjacent churches/condo
- Remove lights to create free flow
 - Eliminate access; add interchange at 24 Ave.; divert to 24 Ave. or 16 Ave.; close 23 Ave. access right-in/right-out
- Consider alternate forms of transport – bus/bike/pedestrian
- No direct bike route north/south need better connections
- Vehicles/pedestrians/bikes – same priority
- Bike path parallel to Crowchild Tr. (cycling infrastructure)
 - May need to expropriate
- If expanding Crowchild Tr. will need to expropriate
- Bus lanes/HOV – integrate bus lane with LRT
 - Need parking with carpooling; BRT planned for 16 Ave.; could also accommodate EMS
- Difficult to go to 16 Ave. from University Dr. – short ramps
- How much traffic is being pummeled into downtown core
- Alleviate some traffic going from Crowchild to 16 Ave.
- University Dr./Crowchild Tr. adds to congestion
- Remove access to University Dr. northbound from Crowchild Tr.
 - Improve 24 Ave./16 Ave. interchanges; improve traffic flow; remove last minute weaving
- McMahon Stadium – traffic flow during games
 - Is it going to expand or move; could have alternate access
- Raised roundabout at 24 Ave.
 - Accommodates all turning movements; ramps would impact adjacent properties; visual; noise; access
- How to accommodate EMS
- Maintain capacity
- Divert traffic elsewhere
- Add bridge from Shaganappi Tr. across Bow River

Ideas Explored

- Variable speed limits based upon traffic
 - **Benefits** – improve traffic flow by lowering speed limit
 - **Constraints** – infrastructure to monitor speed limits; enforcement
 - **Trade-offs** – improved traffic flow at slower speed vs. higher speed/stop and start traffic
- Interchange at 16 Ave./Crowchild Tr. between Crowchild Tr. and University Dr. – connected
 - **Benefits** – improved traffic flow on Crowchild Tr.; maintain/improve access at 16 Ave.
 - **Constraints** – properties
 - **Impacts** – more traffic as desirability of Crowchild Tr. improves; property impacts
 - **Trade-offs** – improved traffic flow and access vs. property impacts
- Elevated roundabout for local traffic at 24 Ave. and through traffic north/south on Crowchild Tr.
 - **Benefits** – improved traffic flow; maintain access at 24 Ave.
 - **Constraints** – adjacent properties
 - **Impacts** – property impacts (ramps); traffic connectivity to/from 24 Ave.; noise; view
 - **Trade-offs** – improved traffic flow and maintain access vs. property impacts
- Remove access from University Dr. to/from Crowchild Tr.
 - **Benefits** – improve traffic flow; remove traffic weaving issue; improve safety
 - **Constraints** – adjacent properties; access to University and residential area
 - **Impacts** – more traffic diverted to 16 Ave. and 24 Ave.; may need improved interchanges and lanes for 16 Ave. and 24 Ave. traffic; reduced access to university and residential area on west
 - **Trade-offs** – improved traffic flow and safety vs. property impacts and more traffic on 16 Ave. and 24 Ave.
- Additional lanes between 16 Ave. and south of University Dr.
 - **Benefits** – improve traffic flow
 - **Constraints** – University Dr./16 Ave. access; adjacent properties
 - **Impacts** – adjacent properties

- **Trade-offs** – improved traffic flow vs. property impacts
 - Free flow; remove all signals and replace with interchanges at 16 Ave. and 24 Ave. and reduce access at 23 Ave. and traffic to Motel Village via Banff Tr.
 - **Benefits** – improve traffic flow
 - **Constraints** – adjacent properties; access to Motel Village
 - **Impacts** – access impacts at 23 Ave.; property impacts at intersections
 - **Trade-offs** – improved traffic flow vs property impacts
- 
- Cycling lane separate from but adjacent to Crowchild Tr., pedestrian route and transit/carpool lane
 - **Benefits** – Improved traffic flow along Crowchild Tr.; improve cycling and pedestrian access along (separated from) Crowchild Tr.; reduce traffic volumes by encouraging transit, carpooling and cycling; EMS access in carpool/transit lane
 - **Constraints** – adjacent properties; connecting to/access to all intersections/crossings for traffic, pedestrians and cyclists
 - **Impacts** – parking for carpooling and transit stations; property impacts for cycling lane, pedestrian path and transit/HOV lane along Crowchild Tr.
 - **Trade-offs** – improved traffic flow and pedestrian/cyclist access vs. property impacts
 - Divert Crowchild through McMahon Stadium – no signals
 - **Benefits** – free flow; reduce congestion at 16 Ave./24 Ave.; keep existing Crowchild Tr. as one way and new roadway to west as other way
 - **Constraints** – adjacent property at McMahon Stadium, Church
 - **Impacts** – costs, construction; property impacts – church/McMahon Stadium; parking impacts at McMahon Stadium
 - **Trade-offs** – improve traffic flow and access vs. property impacts
 - River Crossing at Shaganappi Tr.
 - **Benefits** – divert traffic to Shaganappi Tr.; reduce traffic volumes on Crowchild Tr.; improve traffic flow
 - **Constraints** – Bow river; property/park impacts
 - **Impacts** – property impacts; environmental – Edworthy Park/Bow River

Map Highlights

North Round 2 – Table 1 Map F

- Combined interchange (University Dr. and 16 Ave.) close University Dr. south of 16 Ave.
- Variable speed limits based upon traffic
- Relocate 24 Ave interchange west with no signals
- Add: bus lanes, bicycle lanes, EMS access, etc. (wider footprint)
- Raised roundabout at 24 Ave.

North Round 2 – Table 2

Overall Table Discussion

- Eliminate bunch of interchanges around 16 Ave. into 1 interchange
- Too many access points
- Promote transit as opposed to expanding Crowchild Tr. (leave lights)



- Interchange at 24 Ave. – bigger and better, in conjunction with removal at intersections at 5 Ave. and Kensington Rd.
- Free flow (4 lanes only) to reduce impact
- Extend Banff Tr. onto Crowchild Tr. for better access from 16 Ave. westbound
- More traffic lights
 - Change fabric of community; reduce access to promote transit
- Eliminate all lights
- Sidewalks at Motel Village
- Creating a “wider/straighter” streets and having them well-lit in and the area of the hotels and c-train station
- Pedestrian bridge between Brentwood and University
- Divert traffic Crowchild Tr. to 16 Ave. to Shaganappi Tr. to Memorial Dr. to Crowchild Tr. by creating better access to 16 Ave. from Crowchild Tr.

Map Highlights

North Round 2 – Table 2 Map G

- Pedestrian bridge between University and Brentwood LRT
- Sidewalk on west side of University Dr.?
- Tunnel at 24 Ave. (24 Ave. over)
- Park & Ride in northeast corner of McMahon Stadium parking lot
- 16 Ave. to Shaganappi Tr. to Memorial Dr. and Crowchild Tr. to bridge (second bridge)
- Bottlenecks: lights, two lanes, less capacity - chokepoint, bypass the whole area
- Pedestrian bridge over 16 Ave. and Banff Tr. sucks for cyclists
- No sidewalk
 - **Benefits** – sidewalk for people at hotel
 - **Impacts** – hard for pedestrians
 - **Constraints** – is there land for pedestrians?
- What is the number for commercial traffic of Crowchild Tr.? What do they need?
- Bike Connections – important needed
- North Crosstown – turn BRT into LRT
- Sub-surface constraints:
 - LRT
 - Utility
 - Drains
- Tunneling is expensive
- Straighten street/access to buildings

North Round 2 – Table 2 Map H

- Combine University Dr. and 16 Ave. Benefit is two interchanges combined into one interchange
- Fix interchange at 16 Ave. but not make it a huge footprint – remain the same.
- Like free flow road, take signals
- Leave lights on Crowchild: constraints – traffic. Benefits: gets people using other streets/connectors
- Add lanes / three lanes continuous
- On / off side on right hand lane
- Take the lights out
- Main access to Crowchild Tr. interchanges shall be 60 km/h – make a huge intersection closing the 5 Ave. and Kensington Rd.
- Merge Banff Tr. with Crowchild Tr.
- More traffic lights = better and two lanes on each side. Constraint – bigger urban planning
- Encourage alternate routes
- Better connections to bike path at 24 Ave.
- Need lane continuity on Crowchild Tr.
- Good to have signals on Crowchild Tr. to help mode share

- Accessibility may affect options people can use

Central Section (north of Memorial Dr. to University Dr. N.W.)

Central Round 1 – Table 1

Overall Table Discussion

- Lion's village residents concerned – noise
- Concerns about previous 'project' (2012) – this is new and fresh engagement and no decisions have been made

Ideas Explored

- Cycle
 - Getting across Crowchild Tr. is difficult; connection point from Sumac Dr. to University Dr. put in bike lane; 5 Ave. not friendly. In turn lane, nice to have dedicated lane
- Need to improve pedestrian crossing (Crowchild Tr./16 Ave.); dedicated cycling infrastructure
- Any thoughts about increasing volume on Crowchild Tr. pushing more people towards taking public transit?
 - Bus stops are in the wrong place; how is transit being integrated into this plan; is there opportunity to shift stops based on customer demands; can more stops be added along Crowchild Tr.; needs improved stopping area (safer).
- Improve transit – drive users to C-Train - #1 bus is too full
- Bridge – maintain path under for bike connectivity; make pathways wider
- Noise (around Crowchild Tr. and Memorial Dr.) needs to be taken into consideration when doing designs
- Integrate Dutch intersection
- Create Crowchild Tr. tunnel' green on top; help with noise
- Disperse traffic by creating more of a grid rather than funneling all traffic to one road
- Access – don't want to see increased traffic on smaller roads because Crowchild Tr. can't handle volume; don't want one way in/out from community
- Avoid Crowchild Tr. during rush; like access from community to Crowchild Tr.; concern about noise around Lions Village; decrease volume on Kensington Rd. area; drawback: noise, not visually appealing
- Increase Memorial Dr. traffic and Crowchild Tr. while maintaining access from community and limiting through traffic
- Education on traffic laws – we are adding in new types of lanes, zones etc. (e.g. motorists don't understand bike signals, round-a-bouts, school zone laws)
- Build freeway west of Crowchild Tr. to alleviate traffic
- Crowchild Tr. lowered with greenway across/on top – improves access for pedestrians/cycle between communities on either side of Crowchild Tr.; decrease dead space under Crowchild Tr.



- Biggest northbound back up is due to the bridge
- High Occupancy Vehicle (HOV) lane on Crowchild Tr.; High Occupancy Toll (HOT) lane – multi-pass vehicle or pay toll to use lane if single pass vehicle – this will cut off access – add another movement into light cycle
- Add another north-south route to the west
 - Drawbacks – this will run into Sarcee Tr. which is already clogged; this will create negative impacts for additional communities
- Maintain 5 Ave. and Kensington Rd. access but don't increase
- At university, 3 interchanges combined into one
- 24 Ave. to across river; create higher lane for those going straight through and don't need access into communities
- Create raise expressway from 24 Ave. to bridge – one lane for those driving through
- Free flow north of 24 Ave. works fine. Extend that same concept south
- 24 Ave. to south
 - 3 continuous lanes all the way; leave signals; will decrease bottleneck

Map Highlights

Central Round 1 – Table 1 Map A

- Combine three interchanges with Crowchild Tr. into one
- Pedestrian/Cycle connection north of 9 Ave.
- Green crossing of Crowchild Tr. at 5 Ave.
- Better cycling accommodation on 5 Ave.
- Access important to businesses at 5 Ave. intersection
- Need to mitigate sound and visual impact
- Vehicle through movement at a higher level
- Another major north-south route to the west of Crowchild Tr.
- U-turns at the liquor store on Kensington Rd. west of Crowchild Tr.
- Hard for cyclist to get into the area where Kensington Rd. joins Parkdale Blvd.
- A lot of noise in the communities surrounding the Memorial Dr. intersection
- Traveling northbound is the biggest issue
- Push Memorial Dr. eastbound – westbound together at interchange with Crowchild Tr.
- Extend high speed (70km/h) along Memorial Dr.
- Give back to community along Memorial Dr.
- Three lanes continue through on Crowchild over the river and through Memorial interchange but leave signals – currently only one lane through (from south of the river)
- Access / egress right hand lane only (over river)
- High occupancy vehicle lane starting at Kensington Rd.
- Maintain bike connection under bridge

Central Round 1 – Table 2

Overall Table Discussion

- Crowchild Tr. = one step down from a freeway
- Improve mobility for cars, transit, pedestrians
- Northbound far right lane
- Adding a lane for alternative modes Bus Rapid Transit/High Occupancy Vehicle (HOV)
- Lane usage not used to full capacity
- Align exits more consistently (lane continuity)
- Definitive lane continuity (e.g. exiting/crossing lanes to get onto University Dr.)
- Great flow until Charleswood Dr. – backup because have to stop at 24 Ave.
- Remove lights (danger is the start and stop)
- Need safe exits/entrances into adjacent communities
 - How do we have free flow while connecting communities on either side of Crowchild Tr.?
- Need to worry about 29 St.

- Glenmore Tr. basket weave technique a possibility
 - Very big and wipes out part of communities
- Retaining walls (e.g. John Laurier Blvd. and 14 St.)
- Land development (off-leash park)
 - Connect to 29 St. and by-pass entire stretch; very steep grade; force whole freeway through off leash and connect to 29 St.; make Crowchild Tr. more of a community; but freeway may just fill up
- Bridge is only river crossing in transportation plan
- Add Shaganappi Tr. north/south route and bridge
- 2 free flow lane traffic
- Traffic speed - stay level – must remain 60km/h
- Make more freeways = they will fill up
- European style roadway
 - Traffic will go somewhere else
- North/south connection important to maintain
- Develop lane for HOV/BRT
 - Consistency across city; not necessarily adding a lane
- Never going to see more than 3 lanes each direction on Crowchild Tr.
- Tunnel and maintain road above and BRT lane
 - Can't go steeper than 60% grade; would have to start at 17 Ave. to 24 Ave. logistically; tunnel for through traffic or downtown traffic, one or the other
- Impassable barrier
 - Right turn access onto Crowchild Tr. only at 5 Ave; leave Kensington Rd. with left turns
- Signal at Memorial Dr. and 19 St. to provide community access
- Can't shut off 5 Ave. and Kensington Rd. intersections without looking at intersections along Memorial Dr.; "desperate escape" traffic/short-cutting
- Shaganappi Tr. Bridge
 - Splitting traffic volume; minimize need to change intersections on Crowchild Tr.
- More roads you build, the more traffic
 - Restrain road expansion, traffic will go elsewhere; European style roadways "for humans" not just cars
 - Impact – would change the community (homes- businesses)
 - Rest of city is not aligned with this concept; would need High Occupancy Vehicle (HOV)/Bus Rapid Transit (BRT) into this concept
- Drivers like feeling of moving – would take alternative routes instead of sitting in traffic
- Need to consider behavioral changes we'd like to see in 50 years
- Knock down wall and take advantage of 24 St. for European style Blvd.
 - Impact – noise barrier removed
- Short cutting through St. Andrews Heights
 - Add a third lane
- No build option
 - Message boards/signage; people know how long to expect to wait
- Impact of businesses downtown moving into campus style
- West Hillhurst west of Crowchild Tr. change into Parkdale
 - **Benefits** – remove barriers when dealing with community association; gives people proper representation and express concern as separate entities



Ideas Explored

- Develop dog park and connect to the road way to re-route traffic
 - **Trade-offs** – removal of community greenspace; cost
 - **Benefits** – connect West Hillhurst communities by removing Crowchild Tr.
- Add lane
 - **Benefits** – reduce short cutting through St. Andrews Heights
- Align exits more efficiently (lane continuity; lane weaving); provide defined lanes through area (lane continuity)
- No build
 - Visual messaging systems (VMS) and displaying travel times to manage commuter expectations
 - **Benefits** – less short cutting
- Part of West Hillhurst west of Crowchild Tr. be Parkdale
 - **Benefits** – communities don't straddle the roadway. If it becomes a freeway, we might as well formally divide the communities
- Add a bridge at Shaganappi Tr.
 - **Benefits** – another route option would reduce Crowchild Tr. traffic; more options if construction/accident
- Eliminate lights
 - **Trade-offs** – community connections
 - **Benefits** – free flow traffic – stop start causes back-up. How do we connect and have free flow?
- Encourage zipper merging eastbound 5 Ave. onto northbound Crowchild Tr. is an example where vehicles should more gradually change lanes, but they quickly move to the furthest lane.
- European style Blvd. two north/south free flow lanes, one north/south slow traffic roads (free flow in middle; slower lanes outside)
 - **Benefits** – community would like the non-freeway option; cost is less because no interchange; conflict zones could be traffic calming; it is minimal build option; brings community together
 - **Constraints** – traffic, but creates an improved urban development
 - **Trade-offs** – change land usage beside roadway, may be more businesses – this concept is used in Vancouver and works well; more conflict zones with free flow moving right into slow; sound increase when wall removed
 - Supplement with light rail; combine with HOV
 - Could use 24 St. as the slow lane knock down sound barrier
 - Behaviour changes in driving patterns, force to ring road or use transit
 - Where does the traffic go? (this idea does not improve Crowchild Tr. for commuters)
 - Long term changes not immediate
 - Could have cycle lane on slow road (e.g. Kensington Rd., Bow Tr.)
- Tunnel 9 Ave. to Memorial Dr. systems interchange
 - **Trade-offs** – logistically 17 Ave. to 24 Ave. (would need to be the tunnel distance)
 - **Benefits** – maintain community access by keeping Crowchild Tr. above; free flow traffic in tunnel
- Impassable median from Memorial Dr. to 9 Ave. except for one intersection either Kensington Rd. or 5 Ave.
 - **Trade-offs** – causes short cutting
 - **Benefits** – improve commuter traffic
- Interchange at 5 Ave.
 - Develop tight interchange. 29 St. is a busy connection. Chicago downtown has tight narrow ramps, is there an option that is smaller than diamond interchange on retaining walls
- Additional northbound right lane for alternative users (HOV or Transit)
- Bus rapid transit
 - **Trade-offs** – no more than 6-lanes without land acquisition

Map Highlights

Central Round 1 – Table 2 Map B

- Bottle neck north of 5 Ave.
- Transit station at 5 Ave. is dangerous because of lane weaving
- Concepts: lane continuity

- Remove signals
- Develop tight interchanges
- Develop a 'ring road' around Hillhurst - leave Crowchild Tr. as is
- New river crossing at Shaganappi Tr.
- Signal at 19 St. and Memorial Dr. to provide community access with the right through only (impossible median)

Central Round 1 – Table 3

Overall Table Discussion

- Land bridge (e.g. Barcelona, Texas)
- Add lane over river
- Light at Kensington Rd. and 5 Ave., at University Dr. as southbound and Crowchild Tr. as northbound, at park and Kensington Rd. change entrance into Crowchild Tr. – causes congestion, change to free flow
 - Lane reversal; no turns at times
- Memorial Dr. westbound to southbound direct connection
- Eliminating left turns at 5 Ave., pedestrian crossing issues
- Forced left turn, change configuration
- Moving interchange at Crowchild Tr. and Memorial Dr., more south add partial clovers
- Northbound Crowchild Tr. to Memorial Dr. westbound, increase awareness of free flow lane maybe bollards to increase diffusion
- No large structures, visual concern. Under preferred, maintain bridge elevation
- Better 16 Ave. connection
- Bus stop at pedestrian bridge, problem north of 5 Ave.
- Simplify from 5 Ave. to 16 Ave.
- Bridge congestion, fixing connection to increase flow (biggest problem)
- Increase safety across Crowchild Tr. at Kensington Rd. for pedestrians
- Stopping the lights
- Bridge another lane
- Entrance from 24 Ave. to Crowchild Tr.
 - We have 24 Ave., 16 Ave. all nightmare; long light cycles; better way to facilitate movements
- Direct ramp from east or west
- Slowing down traffic and free flow 60 km/h
- Short term working with long term
- Interchange reconfiguration benefit
 - Improve that situation (Intersection Memorial Dr. to 19 St. is dangerous; add lights, impact, reduce flow, only use in morning); reduce traffic, lane remove park and Kensington Rd.; combine into one intersection; maintain community connection; better access
 - **Impacts** – ramps take footprint – mitigated by removing entrance/exit onto 5 Ave.; access changes; transit
- Crowchild Tr. under; if over make green land bridge
- Interchange at 24 Ave.
- Changing University Dr. to southbound Crowchild Tr. Existing Crowchild Tr. northbound may use parking lot
 - **Benefits** – no bottleneck
 - **Impacts** – access point moved and causes issues at other places; pedestrian crossing
- Worried of changes and seasoned drivers not adapting
- Mostly Crowchild Tr. stops due to accidents on bridge
- Reconstruct configuration Bow Tr. to Crowchild Tr. to Memorial Dr.
 - **Impacts** – construction; cost
- Bridge solutions
 - Westbound Bow Tr. merge from right onto Crowchild Tr. northbound – reduce weaving
- Extra lane on northbound; maintain elevation
 - **Benefits** – when there is an accident, still flows
- Southbound commute add lane for considerable distance - still enough room
- Just widening with constrains makes parking lot bigger

- Therefore must be done in conjunction with light changes
- Lane continuity
 - **Impacts** – elevation changes may be needed

Ideas Explored

- 14 St. and John Laurie Blvd. example of good interchange
- North Crowchild Tr. to west Memorial Dr., not clear they have their own lane
- Across Crowchild Tr. before split to Memorial Dr. removes light system
- University Dr. southbound, existing northbound
- Getting on Crowchild Tr. from 14 St. is problematic – fixes on 24 Ave. and 16 Ave.
- Principle sequencing needs to be thought out and build once we know full plan – lose the after thoughts (exits; weaving, etc.)
- Bridge – add lane
 - South doesn't help; without changing anything else it won't help
- Improve Crowchild Tr. and Memorial Dr. (within current roadway footprint)
 - **Benefits** – reduce cut through traffic in neighborhood; better access; more movements
 - **Constraints** – land use; smaller loops for less space (60km/h); exit heights of bridge; only 2 levels not 3 level
 - **Impacts** – keep elevated and grade similar heights as today – don't go higher than today
- 5 Ave. at grade Crowchild Tr. under
 - **Benefits** – remove lights; maintain community connection; free flow benefit on Crowchild Tr.
 - **Constraints** – where do people access Crowchild Tr.; do not need access at 5 Ave.
 - **Impacts** – access elsewhere for bus and cars; transit routes moved
 - **Trade-offs** – Kensington Rd. and 5 Ave. fine for local access; ok to drive further from neighborhood to other options
- Change 4 lane University Dr. to southbound only
 - **Benefits** – eliminate bottleneck going northbound; get 3 through lanes northbound and southbound on Crowchild Tr.
 - **Impacts** – University Dr. access goes somewhere else; McMahon Stadium parking lot; land where southbound Crowchild Tr. join exit; pedestrian crossings?
 - **Trade-offs** – access change
- Widen bridge, get rid of left entrance northbound
 - **Benefits** - more through lanes on Crowchild Tr.; improve/remove weaving; reduce backup to Glenmore Tr.
 - **Constraints** – up and down stream impacts/improvements are needed (not only bridge); sequenced with other work properly
 - **Impacts** – bigger parking lot if only focus at bridge

Map Highlights

Central Round 1 – Table 3 Map C

- Need a better way to get to 16 Ave.
- Is there a way to make University Dr. southbound Crowchild Tr. and use existing Crowchild Tr. as northbound
- Need three lanes through at University Dr.
- Transit stops on Crowchild Tr. are a problem – need a bus lane
- Do not put bike lanes on Crowchild Tr.
- Make signal at 5 Ave. free flow
- There is a lot of stuff going on between 5 Ave. and University Dr. two lanes at University Dr. and access to 16 Ave., bus stop on Crowchild Tr., lights.
- 14 St. access to Crowchild Tr. is not easy. Make this movement better (options now 24 St., 16 Ave., 5 Ave. and Kensington Rd.)
- Make signal at Kensington Rd. free flow
- Walking across Crowchild Tr. at Kensington Rd is difficult to cross with kids as light is not long enough
- Northbound Crowchild Tr. to westbound Memorial Dr. – better flow and definition of lanes

- Direct connection from westbound Memorial Dr. to southbound Crowchild Tr.
- Split Kensington Rd. and Memorial Dr. and get Kensington to Crowchild on east side – free flow Memorial Dr.
- Get rid of 2 lane constriction going north – lack of flow on bridge
- Move Memorial (east of Crowchild Tr.) closer to river – away from Neighbourhood, more room for additional movements

Central Round 1 – Table 3 Map D

- All lanes on University Dr. made into southbound Crowchild Tr. and all lanes on Crowchild made into northbound lanes
- Crowchild Tr. under 5 Ave. Leave 5 Ave. at grade – no access at 5 Ave. needed if 24 Ave., Memorial Dr., and 16 Ave. are ‘fixed’; or 5 Ave. and Kensington Rd. go under Crowchild Tr. (leave at grade) – go steeper grades, access change on 5 Ave. to business, less footprint on Crowchild Tr.
- John Laurier Blvd. is a good example of over/under
- Get some of Kensington Rd. movements at Memorial Dr.
- Southbound 19 St. and eastbound Memorial Dr. is difficult – can we put lights here? Reduce cut through traffic? Morning commute only?
- Better access at Memorial Dr. and Crowchild Tr. intersection
- More through lanes over the river
- Westbound Bow Tr. to northbound Crowchild Tr. on the ride hand side – remove left hand entrance, reduce weaving – cannot look in isolation

Central Round 1 – Table 4

Overall Table Discussion

- No build, leave as is
- 4 lane freeway
- Moderate change to increase safety
- Bridge – role? Need a longer lifecycle term vision rather 30 years
- Long term vision
- Underpass at 2 Ave.
- Interchange at 5 Ave. with roundabouts
- Flyover at Kensington Rd., roundabout at Memorial Dr. and Kensington Rd.
- Redirect traffic Memorial Dr. westbound
- Larger systems interchange at Memorial Dr.
- Expand pedestrian and cycle options
- Bus lanes - designate
- Increase lanes each way = 6-8 total
- Roundabouts at intersections

Ideas Explored

- Idea 1 and 3 – no change (no build) and moderate change (to increase safety)
 - **Benefits** – low capital costs (revenue); doesn’t disturb existing communities; reworking existing infrastructure; promote walking, cycling, LRT
 - **Constraints** – no change – no constraints; moderate change – smaller constraints – improvements; working with what is existing; connecting ends will be affected; constrain to 16 Ave.; bridge only add one lane
 - **Impacts** – traffic will go somewhere else; impacting communities; no improvement to traffic flow, not safer; safety not improved, safety is somewhat improved with moderate change
- Modify existing to improve safety/convenience management, therefore traffic flow
 - Manage maintenance disruption much better; breakaways; more detour options; safer therefore fewer accidents; fewer merge problems; more efficient accident response and assessment and removal with investment in keeping traffic moving
- No build with moderate changes/safety improvements

- **Benefits** – limited increase in City revenue requirement; learn traffic patterns (e.g. 5 Ave. S.W. lane changes); educate drivers/change mindsets; no expropriation; no community impact; move vehicles where we want them to be; no costs; reworking the existing infrastructure
- **Constraints** – expropriation for a new freeway through mature communities is wrong
- **Impacts** – increase/support Calgary Transportation Plan for The City; traffic would continue
- **Trade-offs** – no destruction/separation of communities (etc., what happened 36 St. N.E.); none – limited improvements; pilots to change driving routes/mindsets/habits/methods
- Roundabouts (with and without lights)
 - **Benefits** – roundabouts can work at traffic lights, eliminate 5 Ave. and Kensington Rd.; traffic lights; improve flow
 - **Constraints** – speed constraints; property requirements
 - **Impacts** – high cost – expropriate properties; traffic disruption during construction 2-3 years (short term); less cost than flyovers e.g. north/south traffic worse than existing
 - **Trade-offs** – speed reduced; don't improve other modes of transportation
- Use Sarcee Tr., model two lanes north and south off ramps/interchanges. Traffic circles at Kensington Rd., 5 Ave., 16 Ave., and 24 Ave.
 - **Benefits** – the Sarcee Tr. model has proven a success. Cost are moderate, minimal expropriation
 - **Constraints** – expropriation; noise issues
 - **Impacts** – extra road right of way required
 - **Trade-offs** – some additional routes out of the downtown to Crowchild Tr. may need to be considered

Map Highlights

Central Round 1 – Table 4 Map E

- Three lanes both north and south with one outside lane in each direction for additional access on and off Crowchild Tr.
 - **Impacts** – four lanes is quite wide

Central Round 1 – Table 4 Map F

- No build
 - **Benefits** – low revenue requirement; doesn't disturb existing community; get most out of existing infrastructure; promote walking / biking / LTR
 - **Impacts** – no improvements to traffic; safety is not improved
 - **Trade-offs** – traffic goes somewhere else
 - **Constraints** – University Dr. and Memorial Dr.; problems caused in other areas; bridge needs one more lane

Central Round 1 – Table 4 Map G

- No build / no change
- Four lanes proper freeway
- Moderate changes, safety improvements
- Bridge (life cycle / enhancements)
- Long term vision
- Underpass at 2 Ave.
- Interchange at 5 Ave. with roundabouts
- Flyover at Kensington, roundabout at Memorial Dr. / Kensington Rd.
- Redirect traffic to Memorial Dr. westbound
- Larger systems interchange at Memorial Dr.
- Expand pedestrian and cycle options
- Bus lanes designate

Central Round 1 – Table 4 Map H

- Roundabouts at grade: with lights, without lights
 - **Benefits** – similar to locations in Edmonton, works in Paris



- **Impacts** – north / south traffic could be worse than existing, speed on Crowchild Tr. to be reduced
- **Constraints** – property required

Central Round 2 – Table 1

Ideas Explored

- 3 key needs for West Hillhurst
 - Keep community connected; keep access in and out; prevent as much damage as possible
- Bike/pedestrian – create bike path. Current pedestrian bridge needs to be rehabilitated – shouldn't only have one pedestrian bridge over Crowchild Tr. No pedestrian access by bridge, forced to jay-walk – only access 27 St. or way east
- Pedestrian to west of Crowchild Tr. is not a good system; 5 Ave. is not a safe crossing point (not safe for vehicles either)
- Enhance flow and connect to community
 - Tight ramps over/under – turns are tight so not to go/impact surrounding – doesn't need to be a big structure
 - Crowchild Tr. at grade or slight decrease with 5 Ave. going up – use retaining walls to make it compact
- No pedestrian access between Boy Scouts and 27 St. N.W. over Memorial Dr. (not near Crowchild Tr.)
- A lot of problems are overstated. Yes, need to improve flow, but it's not that bad. Need to be realistic about expectations of Crowchild Tr.
- Preserve integrity of inner city neighborhoods!
 - Keep community connected; improve flow
- LRT set up as spoke system. Need connection points between destination without having to go back through downtown to get another connection
- European Blvd. Model – does not improve flow; Tr. allows access to community
- Want tight turns from community onto Crowchild Tr.; increase traffic, minimize community impact
- Don't need access at 'every' point from neighborhood; left turn restrictions ok?
- Stack Crowchild Tr. and roundabouts above for community interest
- Traffic circles on 5 Ave. and Kensington Rd.? Wouldn't stop flow, but calms traffic and allows for connectivity into communities
- Build freeway and property access so people aren't forced to cut into communities
- To minimize impact to community, ok with not having access at every point. Need at least one point for left turns, but maybe not at both 5 Ave. and Kensington Rd.? This will however increase volume at the one intersection; only have these restrictions during peak periods; if changing 5 Ave./Kensington Rd., need better access to West Hillhurst from Memorial Dr. and improve access off Parkdale Blvd.
- Access to Crowchild Tr. from community
 - Memorial Dr. used as a better access point into/off Hillhurst/West Hillhurst; memorial to Crowchild Tr. south access point needs to be improved
- Maintain current footprint
- Create better freeway system
- Improve flow while still allowing access to surrounding communities
- Take out lights, put in over/under. What can we put in without taking down houses
- Shaganappi Tr. – bridge to connect to Bow Tr. – that way if accident etc. on Crowchild Tr., there is another link to the west
- Must re-envision Memorial Dr. access to Crowchild Tr. and Crowchild Tr. to Memorial Dr.
- 5 Ave. is bad for cars, pedestrians and the neighborhood
- Bridge/Memorial Dr. side
 - Straighten out roadway; improve on/off ramps (re. build bridge 50m east); bridge ramps moved away from neighborhood; hard to merge over on bridge for Memorial Dr. exit; double diamond interchange
- Remove Kensington Rd. interchange (on/off) and make major interchange/access at south complex (Memorial Dr.) with access into/connectivity



Map Highlights

Central Round 2 – Table 1 Map I

- Replace pedestrian bridge north of 5 Ave.
- Could be both freeway and community boulevard
- Access is important
- Tight interchange design – sink Crowchild a bit, raise 5 Ave. a bit
- Difficult pedestrian crossing at 5 Ave. cars are rushing on short cycle
- Over / under at Kensington Rd. and 5 Ave with same access (could live with some restrictions to access – need to be important better access to Memorial Dr.)
- Bike path along north side of Memorial Dr., operate with current footprint of roadway
- Connect Shaganappi Tr. with Bow Tr. (over the river)
- Right lane access at Memorial, create new bridge for eastbound access to Memorial Dr. from Crowchild Tr. north, build partial clovers on east side of interchange for access to westbound Memorial Dr., flyover for Memorial Dr. westbound to Crowchild Tr. southbound.
- Pedestrian access through Memorial Dr. interchange
- Community connected
- Some access
- Prevent as much destruction as possible

Central Round 2 – Table 2

Overall Table Discussion

- Using existing lane as HOV during peak with bus pullover with enforcement
 - **Benefits** – encourage car pooling
 - **Impacts** – increased through lane; more traffic in communities; will need improve traffic
- Decrease with lane reversal
- All buses with bike rack
- Increase transit options
 - **Benefits** – encourages people to take transit
 - **Impacts** – diverts traffic to communities
- Traffic calming
 - **Benefits** – more pleasurable
- Streetscaping in communities
- HOV with lane reversal (middle lane that reverses)
- Closing access at 5 Ave. and Kensington Rd. (maintaining community connectivity) or only at peak
- High visible bike or HOV access
- Tunnel from Memorial Dr. to 16 Ave.
- Remove interchange, bring to ground level
- Increase HOV
- Cycle pedestrian bridge east of main bridge
- Improving non vehicle transport (pedestrian, bike, LRT)
- Bridge – extra lane for transit
- Increase north/south bike connectivity
- Increase awareness to bike routes
- Increase safety
- Physical barrier
- 19 St. for bike
- Raised bike lane down median at river to pedestrian bridge to 16 Ave.
- Include pedestrian access or upgrade side bike routes
- Reduce speed on Crowchild Tr. for bike
- More transit HOV Continue past 17 Ave.

Ideas Explored

- More transit options – travel time advantage for transit; cars go slower; transit options improved
- Keep Calgary transit in mind – change modalities, switch focus away from vehicles
- Bike routes are not well marked; no separation; doesn't feel safe; north/south connections
- Connectivity between transit and bikes – all buses with bike racks on front
 - Too risky on back, someone could remove bike
- Bridge extra lane – BRT?
- Bikeway under bridge can't go south/north without going a kilometer out of the way – no direct north/south route
- Bikeway elevated median of Crowchild Tr.
 - **Benefits** – safer north/south cycle route
 - **Constraints** – aesthetics
 - **Impacts** – access to it may be challenging; construction
- Tunnel from Memorial Dr. to 24 Ave. for through traffic
 - **Benefits** – better flow of traffic
 - **Constraints** – water table expense
 - **Impacts** – keep community access
 - **Trade-offs** – construction
- Close access to 5 Ave. and Kensington Rd.
 - **Benefits** – flow of traffic; community access and connectivity
- Traffic calming
 - **Benefits** – reduce cut-through; more pleasant; better sidewalks/cycle lanes
 - **Constraints** – cost; speed of travel
 - **Impacts** – emergency vehicles; just moves traffic over
 - **Trade-offs** – narrow roads
- HOV and bus lane all the way through
 - **Benefits** – encourage drivers to use other modalities
 - **Constraints** – enforcement; would need to increase/improve transit
 - **Impacts** – risk, lane isn't used much, remaining lanes get busier, cut-through traffic increases
 - **Trade-offs** – could open it up at off peak hours; could incorporate timed lane reversals
- Change Crowchild Tr. to slower speed – different road type to accommodate other modalities
 - **Benefits** – community connectivity
 - **Constraints** – Calgary Transportation Plan
 - **Impacts** – need more transit
 - **Trade-offs** – number of vehicles moving on this road

Map Highlights

Central Round 2 – Table 2 Map J

- Lanes for High Occupancy Vehicles (HOV) including transit:
 - Dedicated lane on Crowchild Tr. both north and south
 - Take through lane space for HOV
 - Could be time of day specific
 - Could look at reversals
- Transit (bus and LRT) interaction with cyclists – need bike racks on transit on all vehicles in the fleet and need to know rack is there to rely on it.
- Traffic calming in neighbourhoods to reduce cut through (curb bump-outs, narrower, bumps for speed, traffic circles, boulevards for trees)

Central Round 2 – Table 2 Map K

- High Occupancy Vehicle or transit lanes – obvious / visible to motorists, better alternate mode options
- Stairs limit cyclists at 9 Ave. pedestrian overpass
- Space to cycle two-way behind noise wall
- Raised bike lane on median of Crowchild Tr. from Kensington Rd. over 9 Ave. pedestrian bridge and meet up at 16 Ave.

- Close Crowchild Tr. access to 5 Ave. and Kensington Rd. – Crowchild Tr. is barrier for crossing.
- Tunnel for through traffic (express lanes and maybe collector lanes are provided elsewhere) starting south of Kensington Rd.
- Slow cars down – add lights at Memorial Dr. interchange
- 19 St. marked for cyclists but 'better' if physical barrier between cars and bikes (cycletrack curb is good example of barrier)
- Need to provide alternate modes
- Reduce speed on Crowchild Tr. to 60 km/h or less
- Need north-south cycle connection at Kensington Rd. across road
- Bridge accommodations north-south for cyclists only * one kilometer out of way to continue north-south beyond bridge
- BRT / HOV with additional lane on bridge (over river)
- Pedestrian bridge over river east of Crowchild Tr. connecting to pedestrian bridge over Memorial Dr.
- Memorial Dr. speed 50 – 70 km/hr (at Crowchild Tr.) then back down to 50 km/h at Parkdale Blvd. helps community access to Memorial Dr.

Central Round 2 – Table 3

Overall Table Discussion

- Kensington Rd. intersection (fix)
- Left hand exit at north University Dr. (better signage)
- Straight through traffic (no left turns)
- Roundabouts on Crowchild Tr.
- Crowchild Tr. flyover (no exits) – 1 lane for emergency/public transit
- Close Kensington Rd. at 5 Ave.
- Under road pedestrian passes (cycle) transit?
- Interchanges at Kensington Rd. and 5 Ave.

Ideas Explored

- Interchanges at Kensington Rd. at 5 Ave. (diamonds), plus others need 100 meters for diamond and 300 meters for exits
 - **Benefits** – better flow; diamond shape – 100 meters required, little land; pedestrians need to be protected
 - **Constraints** – 2 diamonds (Kensington Rd. and 5 Ave.), too much land used
 - **Impacts** – cloverleaf – big land take; roundabout – big land (still have to stop for pedestrians; all requires more room than there is today; noise, materials
 - **Trade-offs** – what kind of road services?
- Interchange at 5 Ave., Crowchild Tr. overtop of 5 Ave. gives up all retaining walls slopes
 - **Benefits** – close Kensington Rd.; improve traffic flow with one solution; ambient noise





- better up high?; remember beautification elements – local artists
- **Constraints** – Kensington Rd. bigger; roadway used by community, can't block it off
- **Impacts** – interchange instead of 2 intersections, less property taken; build high lessens property impact; added lanes just add traffic; impact of closing Kensington Rd. to access for pedestrians and bus southbound
- **Trade-offs** – how to get onto Crowchild Tr. from westbound Memorial Dr.; requires some property; community impact to 5 Ave.

Map Highlights

Central Round 2 – Table 3 Map L

- Kensington Rd. is the problem
- Left hand exit at University Dr. (better signage)
- No left turns on Crowchild Tr.
- Roundabouts on Crowchild Tr.
- Crowchild fly-over everything (one car, one transit) and / or emergency services
- Right turns only at Kensington Rd. and 5 Ave.
- Across Crowchild Tr. solution (Pedestrian / Cycles / Transit only)
- Full access interchanges at Kensington Rd. and 5 Ave.
- Status quo / wait five years and evaluate

Central Round 2 – Table 3 Map M

- Two interchanges (5 Ave. and Kensington Rd.) – more property impacts with two interchanges
- One interchange (at 5 Ave. close Kensington Rd.)
 - Benefits: less impact than two interchanges, Crowchild Tr. over 5 Ave. could be less property impact, spaces out the traffic, eliminates most crossing issues.
 - Impacts: eliminates access (would like pedestrian and bus crossing), westbound Memorial Dr. to southbound Crowchild Tr. movement would be blocked

Central Round 2 – Table 4

Overall Table Discussion

- No build option
- Peak time/off peak time options
- Lane reversal option (a.m. vs. p.m. volumes, north/southbound)
- Elevated roadway from bridge to Sunalta
 - Free-flow traffic above; impact-destroys community accessibility (36 St. as example); visual impact, dirt, noise; elevated road would not provide access to communities
- Interchanges
 - **Impacts** – cross roads and communities
- Education options (no build)
 - To inform people of their options how to get downtown
- River crossing at Edworthy Park (city owned)
- Bridge/interchange area will worsen with next development
- Encourage alternative modes (public transit) – change traffic patterns/re-route people
- Shut Crowchild Tr. off and become residential
- Should not build sports buildings downtown – outside of flood plains, traffic impacts
- Completely bypass Crowchild Tr./make 16 Ave. to 24 Ave. local - utilize existing facilities and utilize lane reversals
- Local traffic only on Crowchild Tr. and 19 St. – use Shaganappi Tr. = new bridge crossing needed
- Tunnel
- Double-decker
 - **Impacts** – environmental; residential communities

Ideas Explored

- No build, better signage

- **Benefits** – low cost
- Peak hours – 6:30-9:30 a.m. and 3:30-6:30 p.m.
- Signage early to indicate what lane vehicles need to be into access different place e.g. – downtown
- Educate
- 5 year no build plan
- If you build infrastructure, you will get more traffic because people will choose to take it who don't currently
- Friendly for all users
 - Changing traffic patterns; educate so that people use alternate modes of transportation
- Lane reversal at peak times
- Elevated roadway
 - Free flow on elevated, local on all at grade road
 - **Trade-offs** – community access reduced; noise and dirt
 - Maintain community access with at grade road; ramp connections
- 16 Ave. to 24 Ave. close Crowchild Tr. make a local road only.
 - **Trade-offs** – re-routing will congest other roadways like 19 St. N.W. – make 19 St. N.W. a local road, but it is a developing area
 - Similar to 4 St. S.W.
 - **Benefits** – maintain community access
- Edworthy Park river crossing
 - City owned
 - Need to develop alternate routes. Use Shaganappi Tr.
 - **Benefits** – no build on Crowchild Tr.
- LRT along the marked area in the drawing
 - **Impacts** – soil conditions don't allow tunnel, would need to cut and cover; home acquisition
 - **Benefits** – community impact if not tunnel
- Interchanges at Kensington Rd. and 5 Ave.

Map Highlights

Central Round 2 – Table 4 Map N

- Interchanges at 5 Ave. and Kensington Rd.
- Additional river crossing from Shaganappi with tunnel along the Bow River

South Section (17 Ave S.W. to Memorial Dr. N.W.)

South Round 1 – Table 1

Overall Table Discussion

- Congestion on bridge over river
- Straighten road (snaking is a problem); adding a new bridge to maintain existing during construction
 - Concern that this only solves the problem in short term – pedestrian and cycling in the area; get people out of their cars
- Objective shouldn't be to simply increase capacity
- LRT connectivity at Crowchild Tr./Bow Tr.
 - Needing to go downtown to go north; same/similar issues with bus routes (going west)
- Thought to introduction of pathways and bike lanes
 - Not simply a path along Crowchild Tr.; promote alternate modes of transportation
- Connection to cycle track on 8 Ave.
- Keep car traffic out of neighborhoods
- Freeway style roads are causing traffic problems
- Remove Crowchild Tr. entirely
 - Decrease freeways; add train lines
- Promoting walkability to river for Sunalta area

- Pedestrian connection under bridge
 - Problems accessing Crowchild Tr. (McMahon Stadium)
- Connect the communities that have been out in half by Crowchild Tr.
 - Pedestrian bridge
- Additional access over the river
 - Reduce congestion
- Need for roadway capacity = cultural
 - Teach people to live without Crowchild Tr.
- Additional movement at Crowchild Tr./Bow Tr.
 - Access to Pumphouse Theatre
 - Public transit
- Rejoining Scarboro and Richmond communities where divided by Crowchild Tr.
 - Tunneling; covering – park connection between communities
- Access to Crowchild Tr. from downtown via Bow Tr.
 - Remove infrastructure; introduce lights; decrease capacity; minimize number of freeways (like Vancouver); safer access to Crowchild Tr.; easier to impact pedestrian/cycling infrastructure
- Increasing parking at LRT stations
 - People from Cochrane need access to downtown; promote LRT access; impact traffic flow in the city even though population is from outside
- Move away from car throughput priority to people throughput
 - Bus access from Richmond/Knobhill to downtown is poor; decrease capacity on Crowchild Tr. – bus only/HOV lane; infrastructure to prioritize transportation triangle; slow traffic on Crowchild Tr.; reducing space to promote transit; remove on-ramp and off-ramp
- Bus-lane vs. car-lane at Richmond Rd. off-ramp
 - Pedestrian access to bus stops on Crowchild Tr.
- Construction along the corridor
 - Promote walkability; businesses fronting roadway; higher density residential, etc. (24 St. S.W.)
- Need to provide transit alternatives prior to impacting Crowchild Tr. capacity
 - Access to Mount Royal; 60 km/h. – two lanes/direction (14 St.)
- Getting people between Bow Tr. and Kensington Rd.
 - Safely; quickly
- Increase density in Sunalta
 - Promote LRT usage at Sunalta LRT Station; river access still an issue
- Utilization of River Pathway
- Move Crowchild Tr. over – away from Scarboro/West Sunalta
 - Straighten roadway; new bridge; train easement for future – BRT in present; pedestrian access across river; decrease creosote remediation; twinning Crowchild Tr. with new bridge; improved clover leaf vs. removal of all ramp infrastructure – poor use of space; impact to community; cyclist access vs. pedestrian safety
- Double diamond interchange at Bow Tr./Crowchild Tr.
- Phased design
 - Decreased accommodation for traffic
 - Improved transit – network rather than hubs and spokes mentality; pathway system; pedestrian network; connectivity without needing to go downtown
 - Remove lanes
- For lane Crowchild Tr. option



Ideas Explored

- Remove Crowchild Tr.
 - Train line instead and add residential
 - **Benefits** – removes Bow Tr./access to river - important
- Better pedestrian/cycle/bus in area instead of infrastructure changes
 - Slow traffic to 50km/h; reduce car lanes – allocate to transit; scary for pedestrians currently
 - **Impacts** – reduces car traffic throughput – take longer for commute
 - **Benefits** – moves drivers to other modes – reduces congestion
- Covering – tunneling – south of Bow Tr. to 33 Ave.; park on top
 - **Benefits** – connecting communities; desire train line at 17 Ave. to 33 Ave.; might get fewer people using it; wouldn't need to take out much for tunneling if we covered at cement level
 - **Constraints** – need to move road to tunnel if tunneling
- Remove interchanges, put in lights
 - Put in BRT, one lane each direction taken from existing lanes
 - **Impacts** – slows traffic on Crowchild Tr. outside of Calgary traffic, people throughput not car throughput
 - **Constraints** – how to reduce capacity?
 - **Benefits** – safer entry/exit at Bow Tr.; allows room for other modes more pleasant
- Smooth bridge from Bow Tr. to Memorial Dr./new bridge
 - At this point, get people through as quickly and safely as possible with ramps at Bow Tr. – double diamond interchange
 - **Constraints** – cost
 - **Impacts** – ramps at Bow Tr., residents by Kensington Rd./Memorial Dr.
 - **Benefits** – reduce noise; reduces congested ramps at Bow Tr.; wide enough for pedestrian/train in 20 years for LRT; cover east of existing; rezone area on west of Crowchild Tr. riverfront
- Add on/off ramps to Crowchild Tr./Bow Tr.
 - Bike lanes on ramps; double diamond on over, one under, with lights
 - **Benefits** – better access
 - **Impacts** – residential; take up a lot of space; not pleasant for cyclists/pedestrians; reduces community as taking out homes
- Staged infrastructure
 - Build in transit ways with connections and network; remove lanes as user switch to other modes
- Path under Crowchild Tr. needs to access upper Crowchild Tr. pedestrian
- Lots of park and rides means many people drive
- Improve all transit options
- Major transit hub at Bow Tr./Crowchild Tr.
- Freeways are very congested
- Sunalta access to Pumphouse Theatre
- At Bow Tr. hook cycle track on overpass to LRT area - cycle track behind sound wall
- Freeway mentality
 - Widening might not solve problem; induce demand; fix LRT connectivity; quicker route downtown, need other routes; pleasant experience, sound wall

Map Highlights

South Round 1 – Table 1 Map A

- Pedestrian access on the west side of Crowchild Tr. between Kensington Rd. and the river.
- Additional Bridge across the river to the east of existing bridge, straighten road alignment approaching this new bridge from the south.
- BRT access
- Improve access to river pathways (similar to East Village)
- Desire for access north from LRT line on Crowchild Tr.
- Eastbound Bow Tr. to southbound Crowchild Tr. movement improvement
- Improvements to pedestrian access at Sunalta Elementary School



- Cycle track connecting Crowchild Tr. and Bow Tr. with access around 17 Ave.
- Remove road train line
- No sidewalk access on 17 Ave by the military museum
- Tunnel south portion of Crowchild Tr.

South Round 1 – Table 1 Map B

- BRT – take one lane each direction
- Remove Bow Tr. / Crowchild Tr. intersection and replace with lights (provide transit options first)
- Tunnel or cover – build park over top
- Unsafe on ramp (17Ave. to northbound Crowchild Tr.)
- Phased Plan:
 - Increase in transit
 - Improve (minor) roads – don't increase
 - Capacity
 - Remove freeway style infrastructure
- Lower speed south of 17 Ave.

South Round 1 – Table 2

Overall Table Discussion

- Bike flyover (raised bikeway) over Crowchild Tr.
 - Have bike box at Kensington Rd. to allow bikes to exit to community; start at 17 Ave. bridge and connect with pedestrian bridge to north and then under Memorial Dr. to at grade at Kensington Rd.; have more ramps for bikes – Richmond Rd. (parallel) has curbs – missing wheelchair ramps
 - Impacts – cost; moving streetlights from median; will it fit into existing medians/affect geometry/lane widths for road users?; how to tie into existing bridge; going under Memorial Dr. – enough clearance for vehicles still?
- Making a more direct bike/pedestrian connection parallel to Crowchild Tr.
 - Sunalta area to bridge (pedestrian bike under Crowchild Tr.) – somehow crosses Bow Tr.; along Bow Tr. then crosses
 - Work with existing infrastructure – some kind of connection on the west side of Crowchild Tr.; steep hills are slippery during winter – path on west side of Crowchild Tr. is very steep
- Bike/pedestrian from 24 St. S.W. to Bow River Pathway on north side of river – extend to regional path next to Crowchild Tr.
 - Showing pedestrian/bikes commuting faster than congestion – close enough to see to influence drivers to bike instead
 - Tracking commuter origin/destinations more – App option; automated counter
- Add another 1 or 2 continuous northbound lanes north of the bridge – improves lane continuity
- Have 10 Ave. enter onto Crowchild Tr. on the right instead of the left
- Elevated express lane for through vehicles (not exchanging around Bow Tr. or Memorial Dr.)
- Express lane for HOV/Transit
 - **Impacts** – lose pedestrian bridge by Sunalta; redoing Memorial Dr. interchange; can use shoulder for adding volume capacity during peak hour
- Transit – very few stops around Bow River bridge
 - **Benefits** – means it is an express bus; no options for stops because no infrastructure
- Buses currently get stuck in same traffic – have bus lane added so it can get through for northbound buses – use as regular lane during off peak hours
 - **Benefits** – bus lane cheaper than elevated road; can be used by regular vehicles
 - **Impacts** – doesn't solve lane changing issues; how to exit these lanes?; expensive to add lanes, but less expensive than stacking roads
- Turns on either side of Bow River bridge under Crowchild Tr. are very tight – T-intersections with limited visibility. Create more of a merge lane
- Rust on underside of Crowchild Tr. Bow River bridge
- Right-in/right-out at Kensington Rd.

- Problems for existing transit routes; have vehicles use 19 St. as alternate access – put in a roundabout at Memorial and 19 St. – displaces traffic very close to river; will require rebuilding of Memorial Dr.
- Roundabout at Crowchild Tr. and Kensington Rd.
 - **Benefits** – no stopping vehicles; better flow of vehicles; less impacts to infrastructure?; less expensive than a major infrastructure project; educating public on using roundabouts; have pedestrian/bike bridge across Crowchild at Kensington Rd. with roundabout; additional bike/pedestrian bridge

Map Highlights

South Round 1 – Table 2 Map C

- Track commuters, automated counter, lane change challenge, elevated express lane
 - **Benefits** – less expensive; more people can use it; off peak regular lane; existing corridor; combine with idea for extra lanes for cars; straight forward construction; rehab bridge
 - **Impacts** – lane changes; taking lane away; how they exit; construction; cost to widen bridge;
- Raise Bridge
 - **Benefits** – flow of traffic
 - **Impacts** – lose pedestrian bridge; Memorial Dr. – raise it; more people will use roadway if there is more space
- Two additional lanes through from 17 Ave. and before Memorial Dr.
- Use shoulder as extra lane at certain hours of the day
- Ramp entering on left side of the bridge is a challenge
- Add lane for bus over the river
- Turns (at bridge) are tight
- Bridge is good
- Zero visibility to turn on and off bridge
- Come in on the right over the bridge
- Express lane for transit
- Lack of lane continuity over river
- Lack of bus stops close to the river
- Rust/maintenance issue on pedestrian/bike bridge
- Express lanes with bike aqueduct
- Elevated express lane

South Round 1 – Table 2 Map D

- Ramp needed on 17 Ave. and Richmond Rd.
- Pedestrian bridge south of Bow Tr. needs to be repaired/wider and needs taller railings
- Bikeway along eastside of Crowchild connecting existing pedestrian/cycling bridges over Crowchild Tr. and Bow Tr.
- 'Bikeduct' parallel with Crowchild Tr. (refer to visual of cross-section on Map)
- Bike path south of the river towards 17 Ave. is steep and icy
- Bike raised way, ramps for bikes, strollers, etc., working with existing infrastructure
 - **Benefits** – north-south bike traffic; access to bike paths; fit in median
 - **Impacts** – concrete barrier; street lights; cost; close of lanes; wider than barrier; crossing along overpasses; height to accommodate

South Round 1 – Table 2 Map E

- Additional Pedestrian/bike bridge across the river west of existing Crowchild Tr. bridge and over rail
 - **Benefits** – with road changes; away from traffic
 - **Constraints** – rail crossing; grade; tie into path north side
- Motorists able to see faster-moving cyclists will encourage modal shift

South Round 1 – Table 2 Map F

- Close Kensington Rd. to left turns and change 19 St. to have left turn access
 - **Impacts** – bus, rebuild Memorial Dr.; river
 - **Benefits** – traffic flow; left onto 19 St.

- Potential two lane traffic circle at Kensington Rd.
 - **Impacts** – education; flood?
 - **Benefits** – not stopping people; better flow; no light for bus # 1; less impact from infrastructure/construction; less expense than major infrastructure
 - **Constraints** – pedestrian/bike overpass; people catching the bus – how?; river; no underpass
- Bike bridge over river (east of Crowchild Tr.) to connect with existing pathways
- Traffic circle at Memorial Dr. and 19 St.

South Round 1 – Table 3

Overall Table Discussion

- Expand for traffic going north
- Reduce traffic lights along Crowchild Tr. between 16 Ave. N.W. and Memorial Dr.
- Reverse the lane reversal on Memorial Dr./10 Ave. to improve eastbound traffic flow off of Crowchild Tr.
- Add an eastbound lane to move traffic from Crowchild Tr. to downtown
- More lanes on Crowchild Tr. bridge over Bow River – rehab vs. re-construction
- On/off ramps need to be more consistent to reduce crossover of multiple lanes – keep traffic flowing
- Crowchild Tr. improvements will cost money, need to be able/willing to spend it
- Bridge and tunnel option idea provided by citizen
 - See South Map G; challenges with getting the boring machine strategy vibration issues to adjacent communities; short-term impact to neighboring communities; long-term fix; insurance premiums increase for infrastructure above; preserve greenspace; major cost now vs. even more major cost in the future
- Double-decker bridge for Crowchild Tr.
- Expand Crowchild Tr. bridge over the Bow River and do a double decker (build up on existing bridge)
- Too many off ramps (exits) off of Crowchild Tr.
- Add lanes along Crowchild Tr. (five both directions) Bow River bridge
 - Expand Crowchild Tr. to east to accommodate (primarily city owned property); south of Bow Tr. has property acquisition issues; property impacts
- New structure over Bow Tr. to revise on/off ramps
- People avoid Crowchild Tr. because of major congestion
 - Routes through communities impacted
- Memorial Dr.
 - Reverse lane reversal (not effective) and add a new eastbound lane extend to 10 St.; minimal land acquisition issues.

Ideas Explored

- Bridge and tunnel 24 St./Crowchild Tr. – double-decker portion of Crowchild Tr. as a trade-off
 - **Benefits** – absolute solves problem of downtown; allows us to leave Crowchild Tr. as it is; once built out of sight and mind; preserves green space; decreases strain on other city roads – Deerfoot Tr.
 - **Constraints** – need staging in area of certain size for tunnel coring; vibrational impacts adjacent properties; sloping issue
 - **Impacts** – cost very expensive (consider cheaper to do now than to wait); short term impact through construction; challenge of having tunnel under properties insurance premiums
 - **Trade-offs** – 2 to 5 or 10 yr. build; could segment tunnel if sections preclude; need to start tunnel soon enough to go deep enough to go under the river
- Additional bridge lanes (2 in each direction), additional lanes across Crowchild Tr., five lanes in each direction
 - **Benefits** – free flow traffic; more money short-term but saves in long-term
 - **Constraints** – north of river – expand lanes to east – primarily city owned properties; south of Bow Tr. – Scarboro park space; military museum; private property
 - **Impacts** – less exits/access – that was seen as positive by participants; need to revise ramps
 - **Trade-offs** – could you go to 4 lane expansion and impact less properties? Yes but table discussion felt this was wrong approach even though participants live in potential corridor
- Real solution – add another east bound lane on Memorial Dr. extending back to lost and get rid of lane reversal



- **Benefits** – current solution didn't work, but is a need for solution. Solved for one group, creating problems for another; no land acquisition issues
- More consistent on and off ramps
 - Don't want to cross over 2 or 3 lanes

Map Highlights

South Round 1 – Table 3 Map G

- Cross the river at Shaganappi Tr.
- Steep slope running along the south side of the river
- Short term improvements on Crowchild Tr. to improve traffic flow while a bypass is constructed
- Look at doing major work now – costs are only going to increase over time.
- Look at the cost of the improvements and balance against the benefit to The City.
- Double-decker portion of Crowchild Tr. to bypass congestions (southbound lanes along top portion and northbound along bottom)
- Tunnel and bridge combination to get across the river
- Impacts to property as the tunnel is constructed
- Traffic lane continuity to separate the bypass lanes of traffic – expand Crowchild Tr.?
- Tunnel working area – tunnel costs money
- Refer to cross sections on map

South Round 1 – Table 3 Map H

- Major roadways less exits – 33 Ave. and Flanders works against that idea
- Expand Crowchild Tr. to the east (into City owned property)
- Expand the bridge over the river (is one lane enough?)
- Need property acquisition to expand Crowchild Tr. – expand to 5 lanes in each direction (less impact with four lanes)
- People avoiding Crowchild Tr. because of congestion – routes through communities are being used as a result of this
- Add two more lanes in each direction (five lanes in each direction) over the Bow River Bridge to help with congestion
- Right lane access to the bridge over the river to reduce having to get over multiple lanes from downtown (westbound Bow Tr. to northbound Crowchild Tr.)
- To accommodate additional lanes on Crowchild Tr. shift northbound lanes on Crowchild Tr. to a new structure over top of Bow Tr. and raise the on ramps from 10 Ave and Bow Tr. to enter onto Crowchild Tr. northbound on the right hand side of Crowchild Tr. This eliminates the left hand entrance on to Crowchild Tr. and drivers causing problems trying to get to Memorial Dr.
- Reduced access means that you don't need on and off Crowchild Tr. at all of the current junctions

South Round 1 – Table 3 Map I

- More lanes on Crowchild Tr. Bridge – is one more lane enough? The City is already going to work on Crowchild Tr., why not do more?
- Add another eastbound lane on Memorial Dr. to improve traffic flow eastbound Memorial Dr.
- More consistent on and off ramps so you don't have to cross over two or three lanes to keep traffic moving.
- Bridge and tunnel combination (see idea provided by Citizen)
- Reverse the lane reversal at Memorial Dr. / 10 St. to improve eastbound traffic flow from Crowchild Tr.
- Crowchild Tr. improvements will cost money, need to be able to spend the money to build something that will solve traffic problems

South Round 2 – Table 1

Overall Table Discussion

- Additional lanes on bridge over the river
- Additional bridge
- Modify interchange at Bow Tr. (12 Ave.) - modify 14 St. to Memorial Dr. to help

- Modify access from Sunalta to Bow Tr.
- Fix one through lane on northbound Crowchild Tr. bridge
 - Greater turn lane at Kensington Rd; change Memorial Dr. to Crowchild Tr. interchange; no right turn at Kensington Rd. – route Memorial Dr. around to Kensington Rd.
- Access to 17 Ave. from southbound Crowchild Tr. (and from) – acceleration and deceleration lanes
- Cloverleaf at Crowchild Tr./Memorial Dr.
- Desire to keep moving vs. get to destination quicker
- Additional lane over the bridge
 - Through lanes (two); maintain Memorial Dr. exits; through lane aside from merge-in from Bow Tr.; yield from Memorial Dr. westbound on to Crowchild Tr.; extend Memorial Dr. switch over lane to 14 St.; no left turns from 19 St. to Memorial Dr.; modify Memorial Dr. bridge over Crowchild Tr.
- Lane reversal on Crowchild Tr. bridge
 - Between Kensington Rd. and Bow Tr.; minimize additional lanes to be added to bridge; bottleneck backwards – impacts to University Dr. traffic
- Minimizing traffic lights north
 - 5 Ave. and 24 Ave. – during rush hours at least
- New interchange at Memorial Dr.
 - Cut off Kensington Rd. access
 - Modify Parkdale Blvd./Kensington Rd. intersection
- Separate right lane over bridge
 - Maintain right lane – barrier so people have to stay on Crowchild Tr. until Kensington Rd.; no access to Memorial Dr.; signage; impact to Crowchild Tr. southbound by increased left capacity at Kensington Rd.
- New bridge to west
 - Modified interchange at Bow Tr. – twinning bridges once the new one has been built
- Impacts of West Village development

Ideas Explored

- No right turn at rush hour at Kensington Rd.
- Signage reduces access east
- Long term – new bridge – south keep existing as north
 - **Benefits** – more lanes not clear with traffic; better safety during construction
 - **Impacts** – land footprint; tight corner at 24 St.; Bow Tr. exits redesigned
- Entry from Bow Tr., held in left lane until after Memorial Dr.
 - Physical barrier; also improve lights at Kensington Rd. for left turn; southbound timeline
 - **Benefits** – safety; removes tight exit
 - **Impacts** – increases signage required; restrict left turn for southbound
- Revamp with cloverleaf at Crowchild Tr. and Memorial Dr.
 - Build Kensington Rd. as overpass over Crowchild Tr.; lane changes Memorial Dr. to Crowchild Tr. is unsafe due to immediate lane changes
 - Large footprint; free land
- Rush hour lane reversal over bridge. Start south of Kensington Rd., end south of river before bridge split
 - **Impacts** – might not make too big an impact for straight through; maybe extend to north of both lights
 - **Benefits** – reduces traffic that's exiting; don't need huge infrastructure changes
- Improve connection from Sunalta to Bow Tr.
- Improve Bow Tr. to Memorial Dr. through 14 St.
 - Gives 1 more lane to Crowchild Tr. north
- Mitigate – extend switch over lanes from 14 St. to Crowchild Tr.
- Short Term – add lane north
 - **Benefits** – 2 lanes straight through, doubling capacity
 - **Impacts** – Memorial Dr. has to yield; slows Memorial Dr.; might force traffic to 14 St./backup entry for Memorial Dr.; cut-through traffic on 19 St.; Memorial Dr. bridge needs to be removed

Map Highlights

South Round 2 – Table 1 Map J

- Improved interchange at Memorial Dr. and at Kensington Rd.
- Improve left turn onto west bound Kensington Rd.
- No right turns at peak
- Memorial Dr. / Crowchild Tr. interchange slows traffic on Memorial Dr.
- May need to alter bridge structure under Memorial Dr.
- Fix lane configuration over the river
- Remove tight lane change zone. Remove access to Memorial Dr.
- Extra lane northbound over the river
- Additional bridge on the west side of the bridge going over the river
- Tight corner connecting Memorial Dr. eastbound to Crowchild Tr. south causes slow traffic
- Guide signage for exiting downtown needs improvement
- Not enough room to accelerate onto southbound Crowchild Tr. from 24 St.
- Increased cut through at 19 St. caused by added lane
- Prohibit left turn at 19 St. and Memorial Dr.
- Extend Memorial Dr. lane reversal

South Round 2 – Table 1 Map K

- Lane reversal
- Improve interchange at Memorial Dr.
- Barrier preventing weave to Memorial Dr. on bridge improves safety / flow
- Improve signage approaching Crowchild Tr. from downtown
- Impacts of West Village or Calgary Next need to be considered

South Round 2 – Table 2

Overall Table Discussion

- What is needed to add one or two more lanes in each direction on Crowchild Tr. bridge over Bow River?
- Use a new lane to accommodate movement from northbound Crowchild Tr. to westbound Memorial Dr. – improve safety
- Accidents cause major delays along the corridor
- Improve traffic management along the corridor
 - Turn restrictions at key times; speed reductions; more efficient emergency response access – bigger shoulders, emergency access routes; maintenance disruptions need to improve – nighttime work; also consider storm water/toxic spills containment
- Pedestrian bridge under Crowchild Tr. over Bow River needs to be wider, have look out points, better lines of sight getting on/off bridge
- Alternative traffic along corridor
 - Bicycle traffic (dedicated path); transit (more buses); add a dedicated HOV transit lane along entire corridor (at least along more of it)
- What are the options with rehabilitating Crowchild Tr./Bow River bridge in terms of reducing impacts to river corridor – don't want a secondary bridge
- Merge lanes and weave patterns from Bow Tr., Memorial Dr.
- CalgaryNEXT project should be kept in mind – don't want tax dollars used to pay for it



- Two collector roads merging from downtown onto northbound Crowchild Tr.
 - Carry through the road to Kensington Rd.; need a better option to crossover to Macleod Tr.; turn restrictions, can't accommodate everyone; traffic efficiency and flow – 3 hours a day vs all day everyday
- Major through-fares should have limited traffic
- Improve river corridor for pedestrian traffic
 - Useable park space; line of sight on pedestrian path is poor under Bow Tr.; make it more of a gateway for pedestrians and bikes

Ideas Explored

- Traffic efficiency – more restrictive access; don't need to accommodate all routes. Can't get there from here, take another route!
 - **Benefits** – about traffic management delay work on bridge
- Merge lanes 10 Ave. S.W. to Crowchild Tr.; cross 3 lanes to Memorial Dr. solution
 - **Benefits** – currently relies on courtesy of drivers; backs up traffic
- Less bridge crossings; maximize current bridge in terms of lane crossing; if need to do a secondary structure, make it better than current bridge; fix pathway crossings under bridge; getting free flow traffic important as it might mean bridge doesn't need replacement
 - **Benefits** – minimize impact/disruptions to river; do it once, do it well; extra lane northbound carry traffic through to Memorial Dr. and merging currently relies on driver courtesy; build into concept – viewpoints – people like to stop and look at river
 - **Constraints** – look at ways to make underpass friendly for urban – animal crossings
 - **Impacts** – river edge and how its treated there is a better way to do it than it is

Map Highlights

South Round 2 – Table 2 Map L

- Traffic management along the corridor
 - More breakaways
 - Traffic incidents
 - Merge changes off Bow Tr. – faster / better flow, safer
 - Emergency vehicle facilitation
 - Maintenance work to minimize disruption to traffic
 - Flex work hours
 - Lane reversals
 - Turn restrictions
 - Lower or faster speed limits
 - Emergency vehicles on standby on Crowchild Tr.
- What is needed to add one or two more lanes in each direction on Crowchild Tr. over the river – not just general traffic lanes, look at high occupancy vehicles and transit lanes as part of the two new lanes
- Shift the weave over the river to the right hand lane
- Consider stormwater management (in river) – toxic spill containment
- Improve pedestrian and bike underneath bridge – places to stop overtop of the river like balconies (bridge underneath existing bridge for pedestrians and bikes)
- Shift the merge from 10 Ave. / 17 Ave. / 12 Ave. to the right hand side of the northbound lanes of Crowchild Tr.
- Alternate transportation (pedestrian and bike) on Crowchild Tr. – more direct connection rather than going way out of their way
- Backups on Crowchild Tr. from 24 Ave. to Glenmore Tr. if there is a collision

South Round 2 – Table 2 Map M

- Make the underside of the bridge over the river more of a gateway for pedestrians/bikes
- Desire to improve the banks of the Bow River – useable park space around the Memorial Dr. interchange
- What is the opportunity with the rehabilitation of the Bow River Bridge to expand by more than one lane therefore avoiding the need for another bridge? – less disruption to the river this way
- Provide roadways that accommodate traffic flow on Crowchild Tr.

- Poor line of site on pathway on the north bank of the river under Crowchild Tr. Bridge.
- Two major traffic movements coming from downtown merging onto Crowchild Tr. (on the left) then needing to cross over lanes to get to Memorial Dr. – safety concerns with this movement
- Turn restrictions at intersections, drivers will need to find (or be provided with) an alternate route – traffic needs to move on Crowchild Tr.
- Less access points – not all access points need to provide all turns everywhere

South Round 2 – Table 3

Overall Table Discussion

- Roundabout at Richmond Rd. and Crowchild Tr. and 17 Ave.
- 3 lanes going through on the bridge and no entrances/exit on the left – better lane continuity
- Close ramp southbound Crowchild Tr. to eastbound 11 Ave.
 - Bow Tr. merges onto northbound Crowchild Tr. on right side
- Shift northbound Crowchild Tr. west and eliminate left entrances
- Underpass for Kensington Rd. under Crowchild Tr.
 - Build on existing road right-of-way
- Memorial Dr./Crowchild Tr. – rotary interchange
 - Uses existing available land instead of requiring additions
- Keep bikes separate from traffic where there are high speed limits
- BRT – more along Crowchild Tr. – have a dedicated lane, widen bridge to accommodate
- Reversible lanes
- Does Bow Tr. and Crowchild Tr. interchange have to be a free flow interchange? For downtown commuters yes
- Ideas to look at further
 - Close access for southbound Crowchild Tr. to eastbound 11 Ave./Bow Tr. Crowchild Tr. interchange improvements
 - Roundabout at 17 Ave.
 - Rotary interchange
- Roundabouts at 17 Ave. and Richmond Rd. and Crowchild Tr. signals
 - Doesn't work very well for pedestrians; stops flow when pedestrians do cross; tunnel under helipad – for access (takes lots of space); traffic calming for 17 Ave.; construction would create congestion; could do both or just at Richmond Rd. and Crowchild Tr. – but both would be better
- Bow Tr./Crowchild Tr. interchange
 - Close 11 Ave. access; have 3 through lanes each direction; move merge lane from eastbound Bow Tr. to northbound Crowchild Tr. to outside; difficult to merge across Crowchild Tr. to exit onto westbound Memorial Dr.; add delineators to prevent last minute lane changes
- Rotary interchange at Memorial Dr. and Crowchild Tr.
 - Bad access from westbound Memorial Dr. to southbound Crowchild Tr.; doesn't require twinning bridge – less cost and environmental impact; add delineators at on ramp from westbound Memorial Dr. to northbound Crowchild Tr.

Map Highlights

South Round 2 – Table 3 Map N

- 17 Ave. traffic circle
- Richmond Rd. traffic circle
- 3 lanes on bridge, remove on/off ramps, dumbbell
- Ramp to 11 Ave. close south to north, use Bow Tr.
- Move exit to Bow Tr. to move to right side
- Dedicate right lane to downtown or Memorial Dr. access
- Bow Tr. to Memorial Dr./Bow Tr. to Crowchild Tr. – not rebuild bridge, build through to bridge
- Six lanes through memorial Dr.
- Interchange at Memorial Dr. up to merge
- Build with existing corridor – keep houses

- Large traffic circle over Memorial Dr./Crowchild Tr.
- Bikes other route
- Interchange – no flow on Bow Tr. – can stop traffic during peak?
- BRT/High Occupancy Vehicle (HOV) lane
 - Start at Kensington; dedicate lane space; both directions; use if efficient; widen bridge; one lane already
- Bow Tr./11 Ave. – lane continuity
- Roundabout at Memorial Dr./Crowchild Tr.
- 17 Ave./Richmond Rd access roundabouts to the east of Crowchild Tr.
- Bus lanes extended north of 17 Ave. in both directions
- Remove left accesses around Bow Tr. interchange
- Add through lanes bridge
- Bike/pedestrian underneath and around across the river
- Large rotary interchange at Memorial Dr. and Crowchild Tr. – compliments Flanders Rd. pattern

South Round 2 – Table 3 Map O

- Candlesticks barrier to prevent northbound traffic from using the Bow Tr. exit lane as a through lane and cutting in at last minute, also to prevent immediate cross over traffic from Bow Tr. to southbound Crowchild Tr.
- Roundabout Rotary Interchange at Memorial Dr./Crowchild Tr.
 - **Benefits** – community connection; no “crazy” Memorial Dr. to Crowchild Tr. access; less cost than bridge; pathways stay
 - **Impacts** – construction; speed 60 km/hr
- Bow Tr. to Crowchild Tr.
 - Bow Tr. direct to Crowchild Tr. north (mid-term)
 - Bow Tr. to south Crowchild Tr. structure (long term)
 - need to have the lane blocked with permanent pylons
 - **Impacts** – park
- 17 Ave./Richmond Dr. Roundabouts build under
 - **Benefits** – traffic is flowing; traffic is slower on 17 Ave.; less people backed up; maintenance (under); operations (under); take traffic off of Crowchild Tr.; go under
 - **Impacts** – pedestrians and roundabouts; stops traffic; raise roundabout for pedestrians; construction time; space
 - **Constraints** – digging down; where you come out
- Bow Tr./Crowchild Tr. – Close 17 Ave.
 - **Benefits** – no weave; through lane; capacity; people on 11 Ave. reduced traffic; takes away transition
 - **Impacts** – more traffic onto Bow Tr.; have to go through core
- Third through northbound lane



Comment Form Summary

Concept Identification

Do you have any additional ideas for possible changes for each of the following sections of the study area?

1. North Section (north of University Dr. N.W. to 24 Ave. N.W.)

- Please consider how to mitigate short-cutting down Morley Tr., 19 St. and 24 Ave.
- Crowchild Tr. underground S of 24 Ave. – 5 Ave.
- Move the freeway to east – better flow for traffic accommodation for bike lanes, pedestrian & bus/emergency lanes
- Bike lanes & sidewalk west side Motel Village

2. Central Section (north of Memorial Dr. N.W. to University Dr. N.W.)

- How will future increased traffic from Memorial Dr. eastbound contribute to Crowchild Tr. traffic?
- Enhance community connectivity & pleasant streetscape along corridor
- Shut through roads to cross traffic – use 14 Ave. for local traffic & Crowchild Tr. for straight through traffic

3. South Section (17 Ave S.W. to Memorial Dr. N.W.)

- No increase capacity for SOV travel!!
- Dismantle 'freeway style' road elements. Slow traffic down, provide significant alternative travel options.
- Out further south to 33 Ave.; lower and cover to reunite the two halves of our community
- Expropriate property to the east between 16 Ave. N.W. & Memorial Dr.
- Three lanes through traffic, access/egress right hand lane only, leave stop lights
- Improve transit to downtown

4. Other Comments

- Raised bikeway along median encourages north/south cycle commuting and connects with all existing over – Crowchild Tr. infrastructure
- Bike lanes up to 17 Ave. on east side of Crowchild Tr.
- Overall – work towards transition Crowchild from a 'vehicle sewer' to a 'people way'
- Expand bridge to accommodate traffic to/from downtown core

About the Session

1. How satisfied are you with today's session?

	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Not Applicable
• Clarity of information provided	x7	x3			
• Project team's response to my questions	x8	x3			
• Opportunity to provide my input	x10				
• Opportunity to hear others' input	x8	x2			
• Session location	x10				
• Session time	x9	x1			



2. What did you like about the session format and activities today? What did you dislike? What could we do differently to make it better?

- More information about what the City is considering would be helpful. Also how this project interrelates to the University district, Motel Village and McMahon developments would be helpful
- Tough to know how ideas will be aggregated & prioritized
- Second session shorter, two sessions should be the same length as it felt rushed
- Discussion on petty points – moderator should cover all points
- Excellent – very open & collaborative
- Opportunity to put ideas right on map
- Liked working with large, draw-on-able maps

3. Which community do you live in?

- Banff Tr. – x2
- Brentwood – x1
- Point McKay – x1
- Richmond – x1
- Richmond/Knob Hill – x1
- Sunalta – x1
- University Heights – x1
- West Hillhurst – x1

4. What are the main reasons you use Crowchild Trail?

- To commute to and from work or school. – x3
- To visit recreation facilities, shopping centres, or to visit friends and family. – x7
- I don't use Crowchild Trail. – x0
- Other:
 - To get across it to the other half of our community – x1
 - Unable to turn left on 24 Ave. N.W. so detour on Crowchild to 16 Ave. – x1
 - I try not to use Crowchild – x1

5. How have you participated in the Crowchild Study to date (check all that apply)?

- Online survey – x5
- Online discussion – x2
- In-person session – x5
- Idea board – x1
- Walking tour – x0
- Bus tour – x0
- Other: community event – x0
- I have not participated in the study prior to this session. – x1

6. How did you hear about this session (check all that apply)?

- Letter/notice in the mail – x2
- Community Association – x2
- Community newsletter – x3
- Community road signs – x2
- Project email – x5
- Social media – Facebook, Twitter – x1
- On TV – Report to Calgarians – x1
- Word of mouth – x1
- Signs along Crowchild Tr. (e.g. message boards, pedestrian banners) – x2



- Other – x0

Do you have any other comments about the project or the engagement process?

- I only became engaged as a result of poor project communication (other). It was nice to have access online to lots of information and timelines