# Phase 2 - Develop & Refine Options Input Summary

#### **Project Background**

The City of Calgary is conducting a transportation planning study for McKnight Boulevard from Deerfoot Trail to Stoney Trail NE to develop a plan for the corridor that aligns with the Calgary Transportation Plan and improves safety and traffic operations for all users.

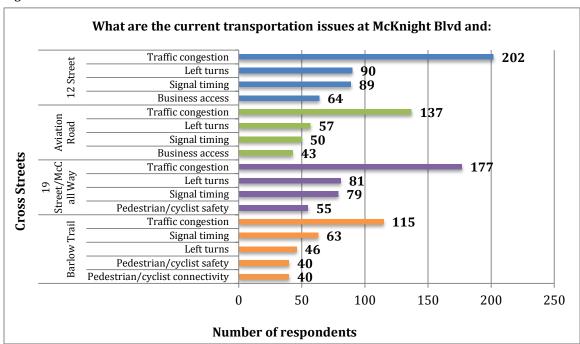
The City understands proposed transportation solutions for McKnight Boulevard will be improved if they incorporate the knowledge of frequent road users. In an effort to align with Council's direction to collaborate with citizens on corridor studies and develop options that reflect citizens' needs, the public consultation process for the McKnight Boulevard Transportation Study includes a Citizen Advisory Group (Advisory Group), in addition to public open houses and online feedback opportunities.

## Stakeholder Workshop

During the *Information Gathering & Assessment* phase of the public engagement process from November 2013 - April 2014, stakeholders and the community identified the issues and concerns with the corridor shown in *Figure 1*.

During the *Develop & Refine Options* phase of the public engagement process, the project team used that feedback to develop five conceptual options for the 12 Street NE intersection, two for 19 Street and three for Barlow Trail to address the transportation issues identified by Calgarians.

Figure 1:



CALGARY

The Advisory Group and interested stakeholders were invited to a workshop to discuss preliminary improvement options for the optimization portion of the study (between Deerfoot Trail and Barlow Trail). The workshop was held on Tuesday, June 10, 2014 from 6 to 9p.m. at the Best Western Port O'Call Hotel – Concorde Ballroom (1935 McKnight Blvd Blvd NE). A total of 221 stakeholders and 20 Advisory Group members were invited; of that, four stakeholders and 13 Advisory Group members attended.

The purpose of the workshop was to gather input from participants to be used to refine and select concepts for further development. Following a presentation, participants divided into four groups to discuss the options and identify strengths, weaknesses and proposed changes for each option. Each group had a facilitator and a technical expert to record the discussion and answer questions.



#### **Option Evaluation**

The following paragraphs summarize the comments provided for each option during the small group conversations, as well as from the feedback forms distributed at the event and online. The feedback forms asked participants for comments about the workshop itself, as well as any additional suggestions they wanted to provide about the options. A total of five feedback forms were received at the workshop and two were completed online.

During the workshop, participants were asked to rank each option using electronic keypads. Each option was given a score between 1 and 7, with 1 being "don't support" and 7 being "strongly support". The audience polling results were displayed in real time.

The following sections summarize the comments and evaluations received from workshop participants.

THE CITY OF CALGARY

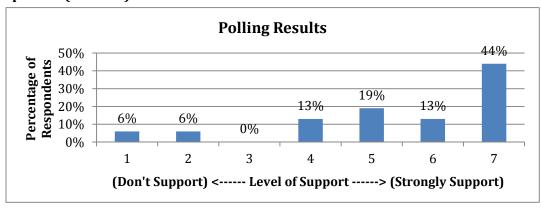




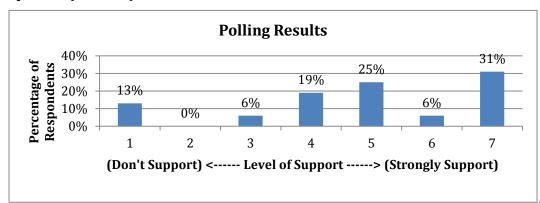
## **Hybrid Options**

At the workshop, two hybrid options for the 19 Street NE intersection were created by participants. Option A suggested adding a dual left turn on the westbound approach of the McCall Way and Pegasus Road intersection with an extension to the southbound right-turn lane approaching McKnight Boulevard. Option B suggested eliminating the left turn lane from southbound McCall Way to eastbound McKnight Boulevard. A dual left-turn would be provided from northbound 19 Street NE to westbound McKnight Boulevard since there would be no opposing southbound left-turn.

#### Option A (19 St NE):



#### Option B (19 St NE):

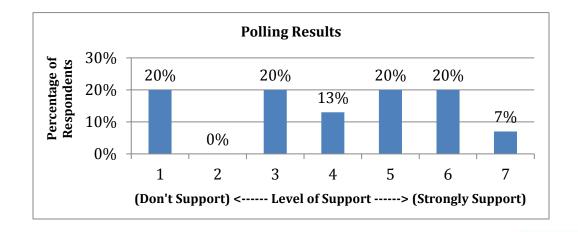




# 12 St NE Intersection Option 1C



Strengths	Weaknesses	Changes/Improvements
<ul> <li>Intuitive (4)</li> <li>Dual turn lanes (3)</li> <li>Widening McKnight Blvd</li> <li>Improves through traffic in the AM peak</li> <li>Increases merge distance</li> <li>Roundabout has flexibility</li> <li>Easy to implement</li> <li>New ramp by Deerfoot Trail</li> <li>Tightening off ramps</li> </ul>	<ul> <li>Left turns are difficult and dangerous (3)</li> <li>Roundabout may cause congestion (2)</li> <li>Doesn't work for trucks</li> <li>Short-term solution</li> <li>Will not help operations</li> <li>Eastbound right traffic at 12 St has too short of a weaving distance for vehicles going northbound to 64 St</li> <li>Signals on new ramp from Deerfoot Trail</li> </ul>	Start northbound Deerfoot Trail ramp earlier     Lengthen left turn lane from eastbound McKnight Blvd to 12 St

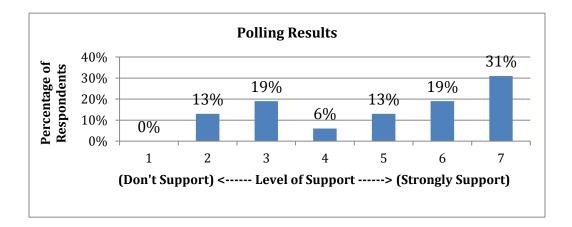




## Option 2A



1 1000			
Strengths	Weaknesses	Changes/Improvements	
- Improves eastbound and	- Confusing/not intuitive (3)	- Increase space for motorists merging onto	
westbound commute/delay	- The merge onto McKnight	McKnight Blvd	
times (3)	Blvd has limited space (2)	<ul> <li>Aviation Rd and 52 Ave needs additional green</li> </ul>	
- No left turns (2)	- Signing would be important	time on westbound	
- Increases safety since it reduces	for businesses (2)	- Remove right turn at 49 Ave & 12 St and use a	
weaving from Deerfoot Trail to	- No redundancy in route if	roundabout like in 1C (big enough for 53ft	
12 St (2)	there is an accident	trailers)	
- Cost effective (2)	<ul> <li>Acceleration and deceleration</li> </ul>	- Add roundabout from 4B on Aviation Rd and	
<ul> <li>Works with future interchange</li> </ul>	problems for cyclists	Aviation Blvd	
plan		<ul> <li>Roundabouts are better for trucks as there is no</li> </ul>	
- Does not require the provincial		stopping	
government		- Tighten northbound Deerfoot Trail to eastbound	
<ul> <li>Has additional access</li> </ul>		McKnight Blvd ramp to improve weave,	
- Low impact for both		particularly for traffic west of Deerfoot Trail	
construction and property		- Add an acceleration lane on eastbound McKnight	
- 15 St can be closed		Blvd for right turns off northbound 14 St	

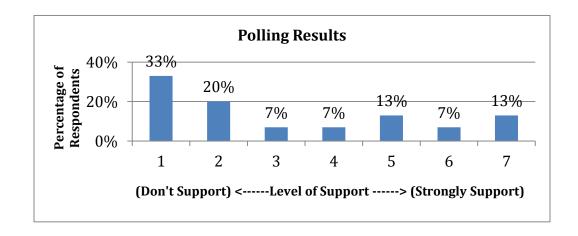


CALGARY

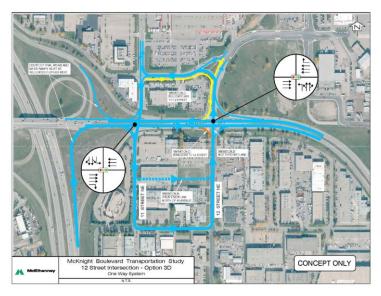
## **Option 3B**



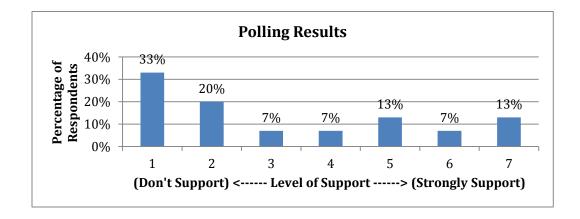
Strengths	Weaknesses	Changes/Improvements
- Improves safety - Removes the eastbound weaving Deerfoot Trail to McKnight Blvd	<ul> <li>Additional traffic light at 11         St will cause delays (6)     </li> <li>Short weaving distances will         cause problems between         Deerfoot Trail and 12 St (3)     </li> <li>Complex/confusing         intersection     </li> <li>Negative for long term         infrastructure plans     </li> </ul>	- Grade separation - Make the option to turn right available



## **Option 3D**

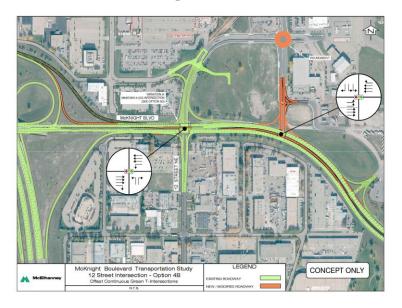


Weaknesses	Changes/Improvements
- Unfamiliar movements (4)	- Make eastbound left onto McKnight
<ul> <li>Completely removes access to Cornerstone</li> </ul>	Blvd into a cloverleaf
Church	
- High property impacts	
- Way-finding issues	
- Limits future interchange options at Deerfoot	
Trail	
- Expensive	
- Not good for turns	
- Not easy for trucks to deliver	
- One way streets limit access	
	<ul> <li>Unfamiliar movements (4)</li> <li>Completely removes access to Cornerstone Church</li> <li>High property impacts</li> <li>Way-finding issues</li> <li>Limits future interchange options at Deerfoot Trail</li> <li>Expensive</li> <li>Not good for turns</li> <li>Not easy for trucks to deliver</li> </ul>

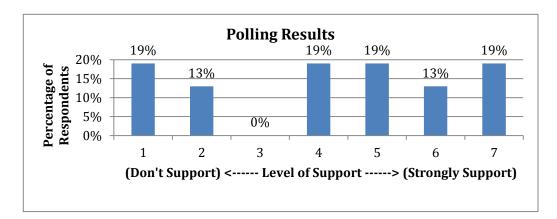


CALGARY

## **Option 4B**



Strengths	Weaknesses	Changes/Improvements
<ul> <li>Intuitive (2)</li> <li>Longer weaving distances</li> <li>Left turns on McKnight Blvd</li> </ul>	<ul> <li>No access to businesses, especially in the north end (2)</li> <li>Adds another intersection, the traffic light will impede traffic and weaving (2)</li> <li>Don't like southbound movement as there will be a negative affect on north roads in terms of traffic volumes</li> <li>Not forgiving</li> <li>Would need a pedestrian overpass to cross McKnight Blvd</li> <li>Delays on westbound 12 St during AM peak</li> </ul>	<ul> <li>Add off ramp onto 45 Ave</li> <li>Add pedestrian and bike overpass</li> <li>Variation with T-intersection permitting southbound movements at 12 St</li> <li>Allow right-in right-out at 12 St (north leg)</li> </ul>



#### **Option 1F**



#### Strengths

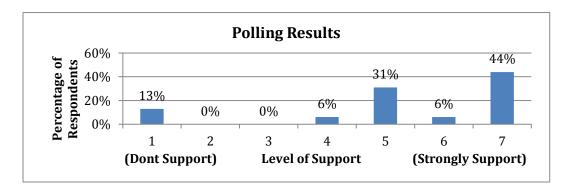
- Three lanes on McKnight Blvd solve a lot of problems
- Link to Barlow Trail from Pegasus Rd will help with delays
- Lights eliminated at Pegasus Rd, eastbound McKnight Blvd to northbound 19 St
- Roundabout makes improvements in all directions
- No property impacts
- Use Barlow Trail as a result of right turn only from Pegasus Rd
- Helps westbound traffic in the PM peak

#### Weaknesses

- Eastbound McKnight Blvd left onto 19 St is too short
   (2)
- Traffic circle may not be big enough for trucks (2)
- In cumbersome of the traffic and it impedes northbound flow (2)
- Not favored for businesses because of the right turn only
- Motorists will still make southbound left turn from Pegasus Rd
- Does not improve the access to Airport Trail in the AM peak

#### **Changes/Improvements**

- Consider a roundabout at Pegasus Rd (but it conflicts with the left turn on 19 St from Pegasus Rd)
- For northbound between Pegasus Rd and George Craig Blvd, prefer 2 lanes continuous through intersections
- Cul-de-sac off of George Craig Blvd to go through to McKnight Blvd for southwest bound turn
- Add better paint marking and a dual left turn lane on Pegasus Rd
- Look at Barlow Trail and 19 St together to work with T-intersection
- Make dual left turns from 19 St to McKnight Blvd
- Have longer merge lanes
- Possible link between roundabout and Pegasus Rd
- Add a right-in right-out to Pegasus Rd



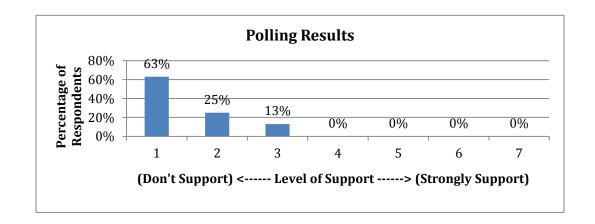
**\*\*\*** 



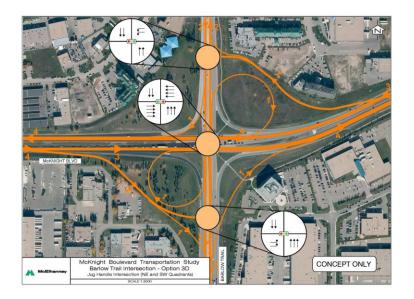
## Option 1G



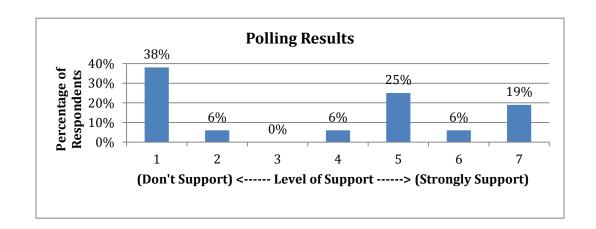
Strengths	Weaknesses	Changes/Improvements
<ul> <li>Feeds commuter traffic</li> <li>No additional impediments</li> <li>Intuitive</li> <li>Improves traffic congestion at Pegasus Rd</li> <li>Property impacts will help future changes</li> </ul>	<ul> <li>Doesn't provide enough benefits         <ul> <li>(3)</li> </ul> </li> <li>Property acquisition (2)</li> <li>Left turn lane on eastbound         <ul> <li>McKnight Blvd is too short</li> </ul> </li> <li>Parking issues for Aero Space         <ul> <li>Museum and business issues for</li> <li>Esso</li> </ul> </li> </ul>	Add third lane northbound on 19 St     More signage for eastbound     McKnight Blvd



# Barlow Trail Intersection Option 3D



Strengths	Weaknesses	Changes/Improvements
<ul> <li>Works for future consideration of an interchange (3)</li> <li>Intuitive and conventional (3)</li> <li>Through-puts are good (northbound Barlow Trail to eastbound McKnight Blvd and eastbound McKnight Blvd to southbound Barlow Trail)</li> <li>Cost effective</li> </ul>	<ul> <li>The left turn has a tight weave from eastbound McKnight Blvd to southbound Barlow Trail (2)</li> <li>Challenge to coordinate signals (2)</li> <li>Lights will frustrate drivers and cause delays</li> <li>Concern that motorists will make illegal left turns because it is at grade</li> <li>Motorists travelling from westbound McKnight Blvd to northbound Barlow Trail will have two traffic lights</li> </ul>	<ul> <li>Confusing and will cause accidents (2)</li> <li>Build the interchange (2)</li> <li>Consider rerouting onto Pegasus Rd</li> <li>Will increase traffic on 36 St</li> <li>Could have ramp traffic come to a signal</li> </ul>



THE CITY OF CALGARY

# Barlow Trail Intersection Option 4A

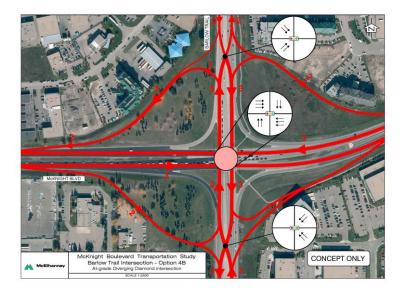


Strengths	Weaknesses	Changes/Improvements
<ul> <li>Could work with future interchange</li> <li>Works in the US</li> <li>Left turns are easy as there is no opposition</li> </ul>	<ul> <li>Safety Concerns because it is confusing/counter-intuitive (5)</li> <li>Extra traffic lights are redundant as they are two stops motorists already have (2)</li> </ul>	

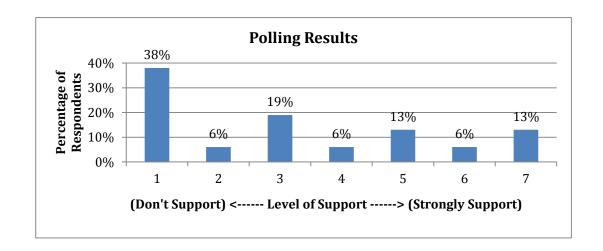
The electronic polling tool did not work for this option.

THE CITY OF CALGARY

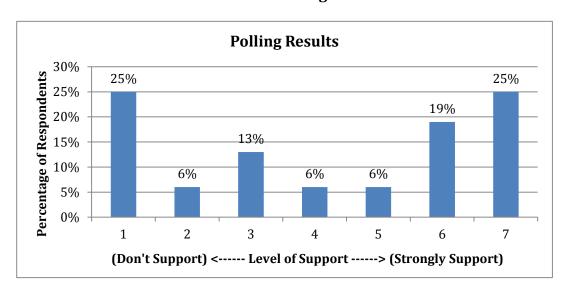
# Barlow Trail Intersection Option 4B



Strengths	Weaknesses	Changes/Improvements
- Allows for a U-turn	- Safety problems with left turn	- Grade separation is needed for safety
- Innovative	lanes (2)	(2)
<ul> <li>Free-flow traffic</li> </ul>	- Initially counter intuitive	- Needs good signage
- Stronger than 4A if counter-flow	- Central light is a problem	- Takes months for drivers to become
is implemented		familiar



# Barlow Trail Intersection Do Nothing



#### **Workshop Evaluation**

The feedback forms provided at the workshop and online asked participants to evaluate the event. Five attendees provided comments about the workshop.

#### What did you like about tonight's workshop?

Respondents said it was facilitated well and provided a thorough, open discussion and examination of all issues. They expressed the value of the opportunity to contribute their ideas and options.

#### Do you have any suggestions about how we can improve future workshops?

Participants suggested compressing the content in order to have more discussion and evaluation time, as many of the attendees felt rushed.

#### Additional comments about tonight's workshop:

- The presentation was was well done
- Too much information a short time
- The workshop ran long



## **Conclusions and Next Steps**

- 12 Street NE intersection:
  - o Options 2A and 4B had the most support
  - o Options 3B and 3D had the least support
- 19 Street NE intersection:
  - o Option 1F and the hybrid Option A had the most support
  - o Option 1G had the least support
- Barlow Trail intersection:
  - Taking into consideration the polling tool did not work for Option 4A, doing nothing got the most support
  - o Options 3D and 4B had the least support

The project team will review and analyze the feedback received at the workshop and refine the options accordingly. The Advisory Group will meet in September to discuss the progress and developments made on the options since June, and determine which options will be presented at a Public Open House for input from the larger public.