

Highway 16 Study Anthony Henday Drive to Highway 779 Round 2 Engagement Summary

#### Introduction

As part of the national highway system, Highway 16 is a critical link within the Alberta Capital Region and a key part of the east-west inter provincial trade corridor. This study focuses on the 22.5-kilometre section of Highway 16 between Anthony Henday Drive and Highway 779.

A functional planning study is the first step in understanding and evaluating the future needs of the highway. To accommodate long term growth and operational requirements of the Highway 16 corridor west of Edmonton, Alberta Transportation and Economic Corridors is considering expanding the highway from 2 to 4 lanes in each direction and is examining the accesses and interchanges within the study area.

This study considers:

- Operational constraints and capacities, access control, interchange types and configurations and right-of-way requirements;
- Input from multiple stakeholders; and
- Accesses at Range Roads 261 and 270 for safety improvements in the near term and access closure in the long term.

The study is anticipated to be completed in 2024. Detailed design and construction timelines have not been established at this time.

The recommendations identified from this study will improve safety and efficiency along the corridor.

For detailed information about the improvement options and project, including a recording of the open house session, please visit the <u>project page</u>.

# **Engagement Process**

The study will consider input from area residents and stakeholders including the City of Edmonton, the City of Spruce Grove, the Town of Stony Plain and Parkland County, country residential areas and the Acheson Industrial area.

The second round of engagement was focused on sharing and gathering feedback on options proposed along the study area. A live virtual public open house was held on February 23, 2023 from 6:30-8:00 p.m. Approximately 50 participants attended the session where a presentation was made about the project and attendees could ask questions of the project team. The Information displays presented during the open house and an online survey were shared on the Government of Alberta website to share information and gather feedback. The survey was available from February 23 to March 6, 2023.

Round 2 engagement opportunities were advertised using:

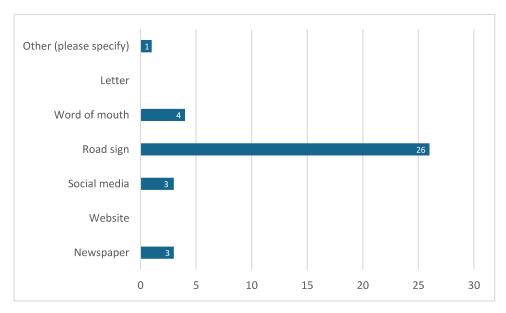
- The Government of Alberta website
- Road signs along Highway 16 between Anthony Henday Drive and Highway 779
- Advertisements in the Stony Plain Reporter and Spruce Grove Examiner on Friday, February 10 and February 17, 2023



- Letters sent to stakeholders in the study area
- Emails sent to Round 1 participants who requested email updates

Interested Albertans participated in the online public engagement between February 23 and March 6, 2023. A total of 27 participants responded to the survey. In addition, 3 emails from members of the public were received. Below is a summary of what we heard from participants who completed the online survey and who provided feedback at the virtual open house.

# Q1 How did you hear about this open house? Please select all that apply.



Other: Email notification

# **Key Themes**

Participants were asked to share any issues, concerns, or information they had about the widening Highway 16, at-grade accesses, and the proposed options for highway interchanges between Anthony Henday Drive and Highway 779. A summary of key themes by location are detailed below.

#### **Virtual Open House Comments and Questions:**

- Some participants had concerns about losing access to the Wagner Natural Area due to the closures proposed for Range Road 270. It is proposed that grade access at Range Road 270 and Highway 16 is removed as a long term recommendation. Alternate access will be provided. There is no timeline suggested for this long term change.
- Some participants had concerns about the negative impacts construction and proposed changes
  may have to local wetlands, plants and animals. This included concern about wildlife crossing the
  highway that are hit by cars. Wildlife crossing bridges were suggested.
- Some participants were concerned that the proposed interchange options that included additional traffic signal lights would increase congestion.
- Some participants were interested in the diverging diamond interchange options proposed and their potential advantages and disadvantages. As the model was unfamiliar to them, they appreciated the new approach being considered, wanted to know if it was an economical option,



and whether its prior use in Alberta demonstrated positive safety outcomes. There were concerns about it potentially creating congestion.

- Some participants were concerned about how noise will be mitigated with proposed changes.
- A participant suggested that the final project design should have sufficient and well spaced rest
  areas to accommodate new trucking rules that require drivers to take breaks at specified time
  intervals.

# Q3 Widening Highway 16 from Anthony Henday Drive to Highway 779.

- Participants were largely supportive of the project because it would address current congestion and safety issues.
- Many participants suggested improvements should be made urgently.
- Some participants had concerns and issues with the overall project. The top concerns and issues
  participants shared included:
  - o Impacts to the Wagner Natural Area, wildlife, and environment generally.
  - Congestion to and from interchanges along the highway.

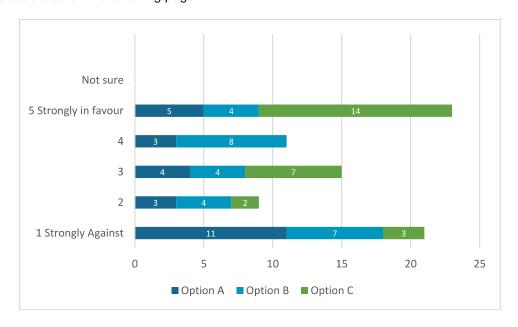
# Q4 Range Road 261 (between Highway 60 and Winterburn Road) and Range Road 270 (between Century Road and Highway 44) at-grade accesses

- Some participants said that both accesses to Highway 16 at Range Road 261 and 270 should be closed as they are unsafe and suggested that other accesses can be used/modified for local access.
- Some participants said that Range Road 261 and Range Road 270 were important connections to maintain access to local businesses and Highway 16.

# Q5 What is your level of support for the options proposed for the Highway 16/Highway 779 interchange?

Respondents were most supportive of Option C and least supportive of Option A.

Options described on the following page.







# Option A - Parclo B4

### Advantages

- Avoids impacts to the church and cemetery in the NW quadrant
- Loop ramps improve travel time for NB and SB left turns

- · Good operation levels in the long-term
- Ramp geometry updated to improve acceleration and deceleration
- · Minimal environmental impacts

#### Disadvantages

- Loop ramps accommodate low volume left turn movements, not high ones
- Requires significant additional land acquisition, impacting future industrial lands
- Requires the reconstruction of all ramps and most local service roads
- Free flow ramps are a safety concern for pedestrians and cyclists



# Option B - Upgraded Diamond

# Advantages

- · Generally fits within the existing required land
- Good operations levels in the long-term
- Safely accommodates pedestrians and cyclists
- Avoids impacts to the church and cemetery in the NW guadrant
- Ramp geometry updated to improve acceleration and deceleration
- Minimal environmental impacts

#### Disadvantages

Does not improve travel times as much as other options



# Option C - Diverging Diamond

### Advantages

- Good operations levels in the long-term
- Safely accommodates pedestrians and cyclists
- Avoids impacts to the church and cemetery in the NW quadrant
- Ramp geometry updated to improve acceleration and deceleration
- Minimal environmental impacts
- Does not require additional land to be acquired for new service roads

# Disadvantages

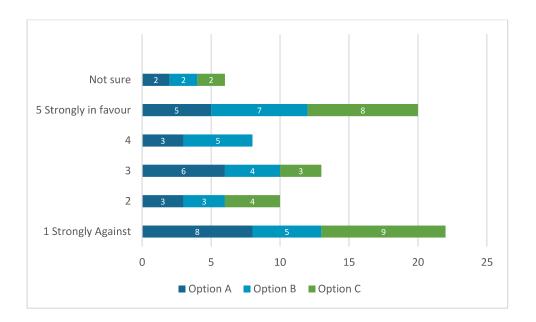
Configuration is uncommon in Alberta, will require driver education



# Q6 What is your level of support for the options proposed for the Highway 16/Jennifer Heil Way (Campsite Road) interchange?

Respondents were most supportive of Option B and least supportive of Option C.

Options described on the following page.







# Option A - Upgraded Diamond

#### Advantages

- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration

- Requires minimal new land acquisition
- Minimal environmental impacts

#### Disadvantages

 Reasonable operation levels in the long-term, does not improve travel times



# Option B - Half Diamond / Half Parclo

#### Advantages

- Good operations levels in the long-term, loop ramp improves travel time for high volume WB left turn
- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration

#### Disadvantages

- Requires significant new land acquisition. Impacts existing residence and business
- Requires the reconstruction of most ramps and most local service roads. May impact regional sanitary pipe
- Service road relocation will be in close proximity to the creek



# Option C - Diverging Diamond

# Advantages

- Good operations levels in the long-term
- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration
- · Requires minimal new land acquisition
- Minimal environmental impacts

### Disadvantages

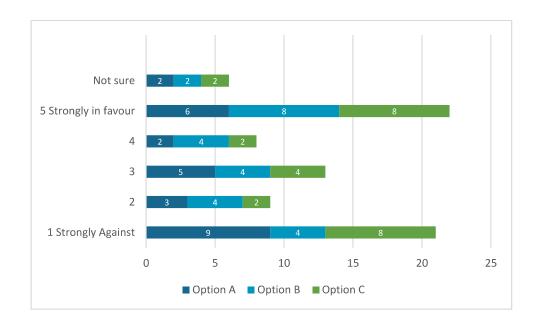
- Requires some new land acquisition, including an existing residence and business
- Configuration is uncommon in Alberta, will require driver education



# Q7 What is your level of support for the options proposed for the Highway 16/Century Road interchange?

Respondents were most supportive of Option B and least supportive of Option A.

Options described on the following page.







# Option A - Upgraded Diamond

#### Advantages

- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration

- Requires minimal new land acquisition
- Minimal environmental impacts

### Disadvantages

 Reasonable operation levels in the long-term, does not improve travel times



# Option B - Half Diamond / Half Parclo B4

# Advantages

- Good operations levels in the long-term, loop ramp improves travel time for high volume WB left turn
- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration
- Minimal environmental impacts

#### Disadvantages

- Requires significant new land acquisition. Impacts active development in NW quadrant
- Requires the reconstruction of most ramps and most local service roads. May impact regional sanitary pipe



# Option C - Diverging Diamond

### Advantages

- Good operations levels in the long-term
- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration
- Requires minimal new land acquisition
- · Minimal environmental impacts

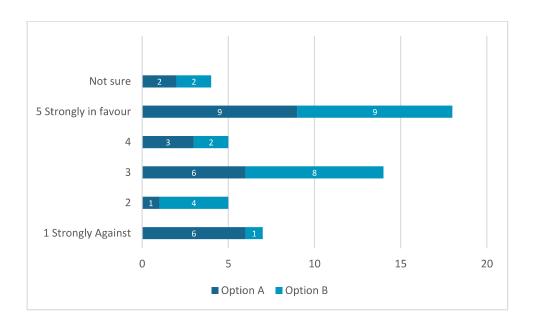
### Disadvantages

Configuration is uncommon in Alberta, will require driver education



# Q8 What is your level of support for the options proposed for the Highway 16/Highway 44 interchange?

Respondents were narrowly most in favour of Option A, but were generally split in how on which option they preferred.





Option A - Upgraded Diamond

# Advantages

- Advantages

  Good operations levels in the long-term

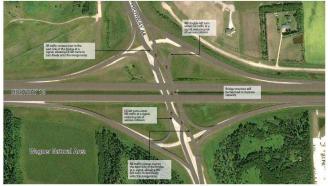
  Could safely accommodate pedestrians and cyclists

  Ramp geometry updated to improve acceleration and deceleration

  Minimal environmental impacts, does not encreach onto the Wagner Natural Area

#### Disadvantages

Does not improve travel times.



Option B - Diverging Diamond

- Advantages

  Good operations levels in the long-term

  Could safely accommodates pedestrians and cyclists

  Does not require additional land acquisition

  Ramp geometry updated to improve acceleration and deceleration

  Minimal environmental impacts, does not encroach onto the Wagner Natural Area

Disadvantages

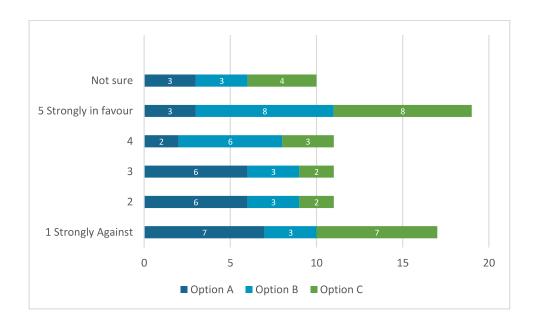
• Does not improve travel times



# Q9 What is your level of support for the options proposed for the Highway 16/Highway 60 interchange?

Respondents were most supportive of Option B and least supportive of Option A.

Options described on the following page.







#### Option A - Parclo B4 with a larger loop

#### Advantages

- Good operations levels in the long-term
- Loop ramps reduce conflict points and improve travel times
- Ramp geometry updated to improve acceleration and deceleration
- Requires minimal additional land acquisition

#### Disadvantages

- Does not improve intersection spacing issues on RR 263
- Pedestrians and cyclists cross free flow ramps
- Requires the reconstruction of some ramps and some local service roads
- Some environmental impacts



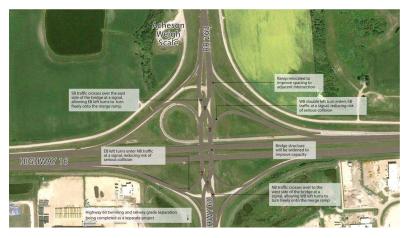
# Option B - Parclo AB

#### Advantages

- · Good operations levels in the long-term
- Loop ramps reduce conflict points and improve travel times
- Ramp geometry updated to improve acceleration and deceleration
- · Requires minimal right-of-way

# Disadvantages

- Does not improve intersection spacing issues on RR 263
- Pedestrians and cyclists cross free flow ramps
- Requires the reconstruction of some ramps and some local service roads
- Some environmental impacts



# Option C - Diverging Diamond

#### Advantages

- Good operations levels in the long-term
- Safely accommodates pedestrians and cyclists
- Ramp geometry updated to improve acceleration and deceleration
- Requires minimal new land acquisition
- Minimal environmental impacts

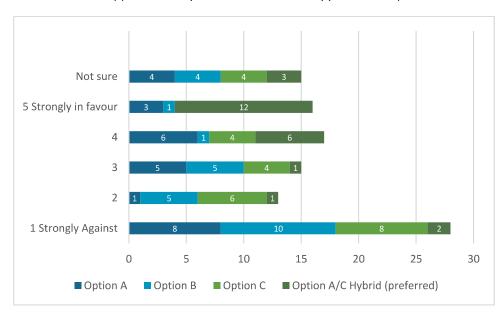
### Disadvantages

 Requires the reconstruction of some ramps and some local service roads

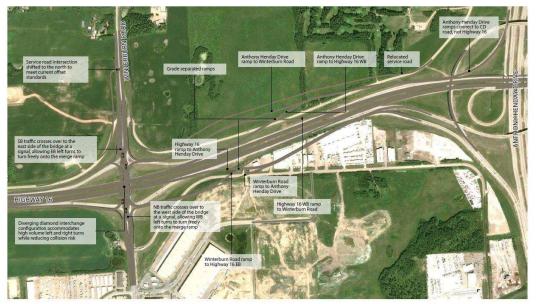


# Q10 What is your level of support for the option proposed for the Highway 16/Winterburn Road interchange?

Respondents were most supportive of Option A/C and least supportive of Option B.



# Winterburn Road Preferred Option: Hybrid A/C



- Removes negative weave conditions as cars enter and exit on Highway 16 between Winterburn Road and Anthony Henday Drive
- Superior operation levels in the long-term compared to other options
- Safety accommodates pedestrians and cyclists
- Ramp geometry upgraded to meet current standards

#### Disadvantages

- Significant new land acquisition
   High potential for impacts to wetlands and wildlife habitat
- · High construction costs





These options were REJECTED because they do not meet the long-term operational objectives for the project.

### Option A

#### Advantages

- Removes both weave conditions on Highway 16 between Winterburn Road and Anthony Henday Drive
- · Good operation levels in the long-term
- Safely accommodates pedestrians and cyclists
- Ramp geometry upgraded to meet current standards

#### Disadvantages

- Significant right-of-way impacts
- High potential for impacts to wetlands and wildlife habitat
- High construction costs



These options were REJECTED because they do not meet the long-term operational objectives for the project.

#### Option B

# Advantages

- Removes negative weave conditions created as cars enter/exit on Highway 16 mainline in the eastbound direction
- Smallest need for new land acquisition
- · Safely accommodates pedestrians and cyclists
- Ramp geometry upgraded to meet current standards
- · Lowest environmental impact option
- Lowest cost option

# Disadvantages

- Does not remove negative weave conditions created as cars enter/exit on Highway 16 mainline in the westbound direction
- · Poor operation levels in the long term



#### Option C

#### Advantages

- Removes negative weave conditions created as cars enter/exit on Highway 16 mainline in the eastbound direction
- Safely accommodates pedestrians and cyclists in the long term
- Ramp geometry upgraded to meet current standards

# Disadvantages

- Does not remove negative weave conditions created as cars enter/exit on Highway 16 mainline in the westbound direction
- Poor operation levels in the long term
- Significant new land acquisition
- High potential for impacts to wetlands and wildlife habitat
- High construction costs





# Q11 Other suggested considerations for the study.

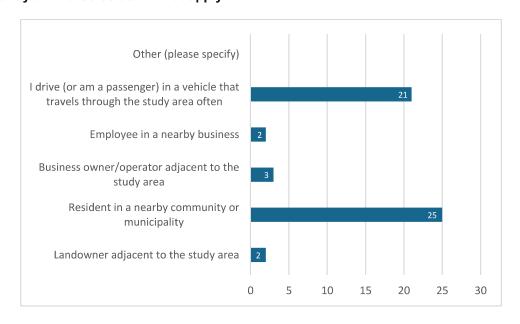
- A diverging diamond style interchange looks good, but concern was voiced about the ability for drivers to understand how to use it.
- Concerns were voiced about westbound semi tricks accessing Highway 16 from the Anthony Henday that slow traffic until Highway 60.
- Support was had for a higher-cost improvement option if it will best accommodate long-term traffic growth-related issues.
- Opposition was shared about the use of roundabouts.
- Concern was shared about a large highway joining a smaller 2-lane highway for fear it may cause accidents.

# Q12 Feedback related on participant experience of round 2 engagement opportunities.

- A participant felt it was challenging to fill out the survey while going back and forth to the interchange options presentation.
- A participant felt a question given during the open house was over edited and not answered accurately.
- A participant suggested that the interchange option presentation should include animations showing how the models would work.
- A participant was confused about why they were being asked to vote on failed options for Winterburn Road.
- A participant was frustrated that they had not been contacted directly to discuss the project as a directly impacted business.

# **Demographics**

### Q2 About you. Please select all that apply.





# **Next Steps**

Feedback received from stakeholders and the public will be used along with technical work and considerations to select and revise final options. The final recommended plan will be shared for feedback in the third and last round of engagement in Fall 2023.