

**Yellowhead Trail and 149 Street Interchange Planning Study
Public and Stakeholder Involvement Final Report
December 2013**



**Submitted by
Jacqueline Schimpf Communications**

Table Of Contents

A. Project Overview.....	3
B. Public Involvement Process	3
B.1 What We Heard: Key Themes	4
C. Public Consultation Details	
C.1 Stakeholder Interviews	5
C.2 Public Meeting #1.....	6
C.3 Stakeholder Input Group Workshops.....	7
C.4 Project Bulletin.....	13
C.5 Public Meeting #2.....	13
D. Next Steps.....	15
E. Public Engagement Evaluation.....	15

APPENDIX

- A. Public Involvement Plan
- B. Interview Questionnaire
- C. Public Meeting #1 – Communication Materials
- D. Public Meeting #1 – Summary Report
- E. Purpose Statement and Principles
- F. Workshop Presentations
- G. Final Weighting and Criteria
- H. Interchange Options – Workshop 3
- I. Evaluation Data Summarized
- J. Options – Workshop 4
- K. Project Bulletin
- L. Public Meeting #2 – Communication Materials
- M. Public Meeting #2 – Comment Form Verbatim

A. PROJECT OVERVIEW

The City of Edmonton's Yellowhead Trail Strategic Plan, as accepted by City Council in November 2011, recommends that Yellowhead Trail become a freeway. An interchange at 149 Street and Yellowhead Trail is part of that vision.

In the spring of 2012, the City initiated a planning study to develop a concept plan for an interchange at Yellowhead Trail and 149 Street that would balance the needs of area businesses and residents with the long-term transportation needs of the city. Planning considered accesses to businesses and properties, the crossing of CN Rail's mainline and the overall performance of Edmonton's transportation network to support the City's vision of a Yellowhead Trail Freeway.

The City sought input from impacted and interested stakeholders and the public to inform the concept plan. This report includes an overview of the public involvement process, an overview of the input received, as well as how the input informed the development and refinement of the preferred options for the intersection of Yellowhead Trail and 149 Street.

B. PUBLIC INVOLVEMENT PROCESS

As stakeholders and the public play a key role in providing local/community level input, a public involvement process was developed that created multiple opportunities for the City to inform and educate about the project, and for stakeholders and the public to provide input to inform the project team in their development of a concept plan for the intersection of Yellowhead Trail and 149 Street. The public involvement process followed the City of Edmonton's Public Involvement Policy and framework. (Appendix A: Public Involvement Plan).

The public involvement process was designed to:

- gather input and feedback from public and key stakeholders including immediately impacted businesses and residents
- identify stakeholder interests, issues and opportunities to inform decision making in the development of preferred options
- build awareness, knowledge and understanding of the scope and expected project outcomes

The public involvement process took place between June 2012 and September 2013. It included two public meetings (one to introduce the project and one to present the final two options); interviews with immediately impacted businesses, interested community groups and associations; discussions with internal and external stakeholders; an information bulletin to area residents and businesses; and the establishment of a project-specific volunteer Stakeholder Input Group that participated in five workshops, providing feedback to the Yellowhead Trail/149 Street configuration.

Profiling Interviews (11)	June – August 2012
Public Meeting #1 – Project Introduction	June 13, 2012
Stakeholder Input Group Workshops (5)	September 2012 – February 2013
Project Bulletin	September 2012
Public Meeting #2 – Two Options	September 17, 2013

The project team developed and investigated approximately 35 freeway configurations for Yellowhead Trail and 149 Street, each with numerous access sub-options. Each option underwent comprehensive technical analysis by both the City of Edmonton and Al-Terra Engineering contracted as a technical advisor for this project. Options were also presented to the Stakeholder Input Group for review and discussion. Through the process, options were eliminated due to fatal flaws and engineering or technical issues.

Following the elimination process, two preferred options (Strategy A – ¾ Diamond Interchange and Strategy B – No Interchange, One Way Service Roads) were considered to be the most viable and were presented to the Transportation Committee of City Council in May 2013 and at a public open house on September 17, 2013 at Dovercourt Community League Hall. Strategy B was presented as the preferred option.

B.1 WHAT WE HEARD: KEY THEMES

Need for an interchange

Participants, especially those involved in the Stakeholder Input Group, agree there is a significant need for a configuration at 149 Street and Yellowhead Trail that would increase traffic flow, minimize congestion and improve safety.

Respondents feel that the most important transportation issues related to the study area are traffic congestion and access to businesses, while the major benefit of an interchange would be improved traffic flow.

Impact on business visibility and viability

Input received highlights concerns about the impacts of an interchange on business viability. Key issues are potential loss of business due to negative impacts to accesses, loss of business visibility, constrained or loss of business access during construction, property impacts and physical space constraints.

Commuters are also concerned about access, specifically the potential decrease of access points onto and off of Yellowhead Trail. Comments were also received regarding the current lack of directional/way finding signs along Yellowhead Trail and suggested that this be improved in any new scenario.

Impact on community and other roadways

Respondents, specifically the Dovercourt Community, expressed concern about impacts on the community such as noise, increased diverted traffic through the neighbourhood and increased pressure on other roadways including the Yellowhead interchanges at 156 Street and St. Albert Trail, as well as on nearby roads including 111, 123, 124 and 128 Avenues, 156 and 127 Streets and St. Albert Trail.

Other

Respondents also expressed the need to include the crossing of the CN Rail mainline (located just north of Yellowhead Trail at approximately 127 Street) in the solution and consider the needs of large transport trucks, specifically their wide turning requirements. Respondents also want to ensure that the cost is not the main consideration in choosing strategy B over A.

Comments received at the final open house in September 2013 showed both support and criticism of the options presented with 48% of survey respondents stating they were satisfied with the preferred Option B.

C. PUBLIC CONSULTATION DETAILS

This section provides summary reports of each of the public and stakeholder engagement activities, timelines and input received.

C.1 STAKEHOLDER INTERVIEWS

Early in the process, interviews were conducted with stakeholders—impacted businesses and industry associations—to identify issues, opportunities and risks, and confirm the public involvement process outlined in the project’s Public Involvement Plan. A series of questions was developed to provide consistency to the interview process and ensure efficiency. (Appendix B – Interview Questionnaire)

Interviews were conducted with the following stakeholders:

Date	Stakeholder
June 11, 2012	· The Grocery People
June 12, 2012	· Kal Tire
July 19, 2012	· Yellowhead Highway Association
July 19, 2012	· Ambae
July 26, 2012	· Alberta Motor Transport Association
July 27, 2012	· Carpet Superstore
July, 2012	· Barcol Doors
August 2, 2012	· Safeway
August 2, 2012	· Platers Investments
August 20, 2012	· Yellowhead Inn
August 2012	· Costco (phone call)

A presentation was also made to the Dovercourt Community League executive on Tuesday, July 12, 2012.

Key Themes: What We Heard

There was general consensus among the interviewed stakeholders that there is a significant need for a configuration at 149 Street that would increase traffic flow/minimize congestion and improve safety. Priorities were identified as business access and visibility, and safety. Issues were identified as potential loss of business due to negative impacts to accesses, loss of business visibility, constrained or loss of business access during construction, as well as property impacts and physical space limitations.

The majority of respondents feel that providing service roads to ensure direct access to businesses would best accommodate their needs.

Opportunities to be considered during the project included obtaining the input of impacted businesses and considering solutions that increase visibility and access for businesses.

The primary risks identified were the direct impacts on businesses during construction and creating an interchange solution that severely impacts future business accesses/visibility.

C.2 PUBLIC MEETING #1

Attendance: 53

8 comment forms submitted

Public Meeting #1 was held on the evening of June 13, 2012 from 4:00 to 8:00 p.m. at Dovercourt School (13910 – 122 Avenue). This event provided an opportunity for the City to share information on the Yellowhead Strategic Plan and to gather input on issues, risks and opportunities relative to the proposed interchange at Yellowhead Trail and 149 Street. Input received from the public is considered together with technical studies and policy direction to inform the design team in the development of an interchange option.

The event was advertised in the Edmonton Journal and Examiner, on roadside signs in the study area, in a public service announcement to media, on Facebook, on Twitter, on the City of Edmonton website and on an advertising postcard that was distributed to the residents of the Dovercourt Community and area businesses. (Appendix C – Public Meeting #1 - Communication Materials).

How Information Was Shared - Information was provided through large maps of the study area and display boards with key project information. Project team members including City of Edmonton staff and consultants answered questions and provided information about the project and process. A project fact sheet was also distributed.

How Input Was Received - Formal input was gathered via a comment form which respondents could fill out either at the event or online at the City of Edmonton's project webpage. Participants could also record comments on "sticky notes" and place them directly on the maps and display boards at the event. A summary of input, as well as verbatim responses received on the comment form and on the sticky notes is included in the June 13, 2012 Public Event Summary Report. (Appendix D – Public Meeting #1 - Summary Report).

What We Heard

Key themes include the impact on access to and visibility of businesses both during and after construction, as well as access and egress to the community, and impacts on other roadways.

Respondents identified priorities to be considered during planning as traffic flow, impact on businesses, and inclusion of the CN Rail mainline in the solution.

The most important transportation issues were identified as traffic congestion and access to businesses, while the major benefit was noted as improved traffic flow.

Respondents feel that the risks to be considered include the impact on the community such as noise, increased neighbourhood traffic and increased pressure on other roadways, as well as decreased visibility of and potential financial loss to businesses.

C.3 STAKEHOLDER INPUT GROUP WORKSHOPS

A Stakeholder Input Group was created to provide guidance to the City's technical design team for the Yellowhead Trail/149 Street interchange planning study. Impacted and interested stakeholders were invited to volunteer to be a member of the Stakeholder Input Group at the public open house and during stakeholder interviews. The membership was assembled to represent impacted businesses, property owners, community leagues, industry associations, residents residing in the interchange study area and the community at large.

The group was made up of the following representatives:

- Alberta Motor Transport Association
- Ambae International
- Barcol Doors
- Casino Yellowhead
- Costco
- Dovercourt Community Resident
- Dovercourt Community League Executive
- Edge Equipment
- Kal Tire
- Lamba Financial
- Platers Investments
- Safeway
- The Grocery People
- Yellowhead Inn

Specifically, the role of the Stakeholder Input Group was to provide guidance to the City's technical team to aid in:

- Decision-making throughout the project
- The refinement of interchange and access configuration options
- The ultimate concept option recommendation

See Appendix E: Purpose Statement and Principles which outlines the roles and responsibilities of the Stakeholder Input Group.

Five workshops were conducted to discuss project topics such as existing conditions (traffic volumes, pedestrian usage, access, etc.) and to identify constraints, challenges and opportunities. During the process, the group was presented with different configuration options for Yellowhead Trail and 149 Street to discuss and evaluate—reviewing pros and cons of each, ultimately creating a short list of preferred concept options.

This group of stakeholders worked with City planners to develop ideas for converting Yellowhead Trail at 149 Street to a freeway operation, while retaining reasonable access to the adjacent businesses and the Dovercourt community. The stakeholder group helped to identify and develop:

- Issues and constraints
- Criteria for evaluating options and their relative weighting
- Interchange and preferred access arrangements

After significant development and evaluation of options, a recommended configuration for the area was selected based on input received from internal and external stakeholders, as well as Transportation Committee. The following details the process and outcomes of the Stakeholder Input Group workshops.

Workshop Summaries

(Appendix F – Workshop Presentations)

Workshop #1 (September 18, 2012)

Workshop #1 introduced the Stakeholder Input Group to the background on the City’s vision for Yellowhead Trail and details of the 149 Street interchange project. The members provided input to develop the group’s purpose statement and guiding principles, as well as to the criteria and weighting that would be used to evaluate future configuration options.

Workshop #2 (October 10, 2012)

During Workshop #2, the evaluation criteria and weighting were finalized and accepted by the group. (Appendix G - Final Weighting and Criteria). The group was introduced to general interchange concepts and some typical interchange options, and the pros and cons of each. The City technical team presented three general options for the intersection of 149 Street and Yellowhead Trail that would be the basis of the development of many more detailed interchange and freeway designs. All options assume Yellowhead Trail access is closed at 142 Street.

1. Close 149 Street, no access to Yellowhead Trail
2. 149 Street flyover with no connection to Yellowhead Trail
3. Interchange at 149, with full or partial connection to Yellowhead Trail

What We Heard

The following reflects the comments received about each of the three overarching concepts:

Concept 1 - Close 149 Street, no access to YHT

- If 142 Street access is closed, diverted traffic will short cut through the Dovercourt community heading to St. Albert Trail.
- Is a right in/right out option possible at 149 Street as there is merit in carrying forward alternatives showing how right in/right out would mitigate the impact of businesses? *The City noted that a right in/right out scenario does not provide enough distance between 156 Street and 149 Street to allow for safe acceleration and deceleration before the right turn.*
- If 149 Street is closed, significant improvements would need to take place to the transportation network (roads both north and south of Yellowhead Trail and to 156 Street and St. Albert Trail interchanges).
- Could the existing Yellowhead Trail be reconfigured to remove the left-turn lanes in the median to allow for full service roads paralleling the north and south sides of Yellowhead Trail to better utilize the existing Yellowhead Trail right-of-way?
- Several members expressed that they did not like this option.

Concept 2 - 149 Street flyover, no connection to Yellowhead Trail: Discussion

- This option provides more alternatives
- It would also make sense to grade separate the crossing of the rail mainline
- There are pros and cons for both a fly “over” and a fly “under” scenario—land impact versus drainage.
- Do properties north of the tracks need access to Yellowhead Trail via 149 Street?

Concept 3 - Interchange at Yellowhead Trail, connects to Yellowhead Trail: Discussion

- If the left turn lanes are gone, there may be space for a service road from Barcol to Kal Tire.
- Option 1 and 2 would be off the table for Yellowhead Inn as 90% of its traffic is from truckers—it is not a destination hotel. 156 Street could not accommodate truck turn around.

General Comments

- Need access at 149 Street to Yellowhead Trail—there are no benefits for closing access from 149 Street to Yellowhead Trail other than to impact access to surrounding businesses.
- Option #1 is most cost effective, but impact price could equal building an interchange. Interchange may look good as an option, but there would be major impacts to businesses.
- There are varied business types in the Yellowhead Trail area, of which some are destination-type businesses where patrons will find a way to get to them despite access, while others are opportunity-type businesses where patrons may just move on to the next most convenient location if access is too difficult. Impacts of the interchange decision will affect individual businesses differently.
- If 149 Street is going to be a thoroughfare then the CN Rail mainline crossing needs to be grade separated.

The City team also presented various interchange types as part of the interchange education process.

Workshop #3 (November 6, 2012)

During Workshop #3, group members reviewed and discussed 15 interchange/access options (Appendix H – Interchange Options - Workshop 3) as presented by the City’s technical team, with a goal to identify a short list for further study and evaluation. Breakout sessions allowed small group discussions followed by a large group discussion of the options discussing the pros, cons, benefits and risks of each, as well as the possible modifications that could be made.

The group’s evaluation resulted in the following six options preferred to move forward for further evaluation:

Option 1 - Partial Clover Leaf AB interchange

Option 2 - Single Point Urban Interchange with collector/distributor roads and grade separated railway crossing

Option 4 - Diamond with southeast loop interchange

Option 10 - Single Point Urban Interchange with collector/distributor roads and no railway crossing

Option 12 - Fly-over at Yellowhead Trail with at-grade rail crossing

Option 14 - Full closure at 149 Street

Comments received are summarized below:

Option 1

- Provides all movements for Yellowhead Trail and 149 Street with 100% access. Although the footprint of this option is large, it provides good road network access and opportunity to redevelop the area (at the expense of present businesses).
- Makes the most sense for best access, traffic flow. It has deep impacts to business but gets the transport network options desired.

Option 2

- Has the least property impact—good accessibility and is workable for most businesses with minimal impact. One modification: slip lane one-way service road westbound; one way east on north side.
- Better for truck accommodation; smaller footprint.
- Do not like this option because it impacts the same businesses as Option 1 but with greater impact to other businesses on the west side.

Option 3

- Don't carry forward

Option 4

- Keep this option as it minimizes southwest impact; good for trucks

Options 5-7

- Dismiss all three options (5, 6 and 7) noting that Option 5 has significant land impacts, no access to businesses north of the CN mainline and doesn't provide for good traffic flow
- Options 6 and 7 also don't provide access to businesses north of the tracks and therefore aren't considered viable options

Options 8-10

- Dismiss all three options (8, 9, and 10) as the orientation of businesses is to the south. Options benefit businesses between CN mainline and Yellowhead Trail but isolate those to the north
- Dismiss all options with a minor consideration of Option 9 only because it minimized business impacts
- Keep Option 10 as it has multiple point access, could be accommodated to have north side access road, keeping visibility

Option 11

- No access to Yellowhead Trail; really is not viable; great land impacts without gaining access point
- Don't carry forward; only benefit is uninterrupted flow that is true to all options

Option 12 and 13

- No access to Yellowhead Trail; really is not viable; great land impacts without gaining access point
- Don't carry forward; only benefit is uninterrupted flow that is true to all options
- Carry forward as it provides access to the business area on the north side of Yellowhead Trail between Yellowhead Trail and the CN mainline

Option 14

- Do not like this option; it helps Yellowhead Trail but kills 149 street—lots of impact on business viability; traffic congestion
- This options may be possible with modification for trucks, but not preferred
- Do not choose this option—truck access at St. Albert Trail is complicated although property impacts are minimized

Option 15

- Don't carry forward

Workshop #4 (November 22, 2012)

Workshop #4 was the final group exercise to evaluate the reduced number of options using the agreed upon evaluation and weighting criteria.

Following further analysis and input from internal stakeholders, the City technical team brought seven options forward for evaluation. The City considered the six options the Stakeholder Input Group suggested in Workshop #3 and determined that Options 1, 2, 4 and 14 were most viable to take to the next level of evaluation in Workshop #4. The City also determined that other options were also viable and deserved further analysis and evaluation.

These included options #9, #15 and #3.

Option #9 was determined to be preferable over #10 as it worked better operationally, has no collector/distributor roads on the south side of Yellowhead Trail and has similar land impacts on the south east corner as other options while reducing impacts on the south west corner.

Option #15 was given further consideration as it has reduced land impact and because it accommodates one of the peak traffic movements.

Options #3 was given further consideration as the City determined it had better traffic operations potential than some of the other options.

The City chose not to further consider Options #12 deeming it impractical due to the expensive grade separation of Yellowhead Trail, no direct access to Yellowhead Trail and the at-grade nature of the CN mainline crossing.

The group scored the seven different options using the eleven approved evaluation criteria. The results were tabulated and the options are listed below in order of preference based on those evaluations:

1. Option 3 – Full Diamond interchange with collector/distributor roads
2. Option 1 – Partial Clover Leaf AB interchange
3. Option 14 – Full Closure of 149 Street
4. Option 15 – Half Diamond interchange to the east
5. Option 2 – Single Point Urban Interchange with collector/distributor roads
6. Option 4 – Diamond with southeast loop interchange
7. Option 9 – Southeast loop interchange with business access

(Appendix I - Evaluation Data Summarized)

(Appendix J - Options – Workshop 4)

Workshop #5 (February 27, 2013)

Following Workshop #4, the City technical conducted further analysis, which resulted in the further narrowing of options.

The City revised the remaining options into three modified alternatives for discussion and comment by members of the Stakeholder Input Group.

Alternative 1 - Diamond interchange with ramps on the northwest, northeast and southeast quadrants

Alternative 2 - Full Closure of 149 Street at Yellowhead Trail

Alternative 3 - One-way Frontage Roads (requires full closure of 149 Street across Yellowhead Trail)

Discussions indicated that attendees felt that Alternative 1 had substantial land impacts but resulted in a full interchange with reasonable access for the remaining lands. There was general dislike for Alternative 2. The group generally agreed that Alternative 3 was the best alternative, offering reduced land impacts and better overall access.

Key Themes: What We Heard

General Comments

- Need to upgrade the eastbound ramp intersection at 156 Street—will need to look at traffic volumes to determine what upgrades are necessary to avoid traffic backing up onto Yellowhead Trail
- North of Yellowhead Trail, the pocket of land served by an interchange at 149 Street is quite small as 156 Street and the St. Albert Trail eventually meet up. The cost/benefit of an interchange may not be there considering the relatively small amount of land being served. Currently most drivers use 149 Street out of convenience when a train is not blocking the crossing, not out of a capacity need
- No options are good for Safeway

Alternative 1

- Appears to be an expensive option (land acquisition and two structures)
- Negative impact on many properties
- Access to businesses north of Yellowhead Trail is circuitous—no direct eastbound access
- Consider shifting the collect road alignment on the north side of Yellowhead Trail from the south side of properties to the north
- Best option in terms of connectivity and circulation—retains road grid and spreads traffic between several parallel routes
- Evaluate the merit of a pass over structure for the businesses to the south of Yellowhead Trail
- Minimal benefit of a structure at 149 Street

Alternative 2

- Rail underpass is perceived as expensive
- Concerns about vehicle shortcutting down 124 Avenue to get to and from St. Albert Trail and Yellowhead Trail
- Access to businesses appears circuitous—poor access back to Yellowhead Trail from businesses
- Minimizes property impacts

Alternative 3

- Appears to be least expensive of three alternatives
- Provides south side access back onto Yellowhead Trail
- Eastbound access to north of Yellowhead Trail not ideal
- Concerns about vehicle shortcutting down 124 Avenue to get to and from St. Albert Trail and Yellowhead Trail
- Consider a connection between 149 Street and 153 Street
- Consider tightening up space between the north service road and Yellowhead Trail
- Inadequate weave distance between 156 and 149 Streets (eastbound) causing safety concern

Following this workshop, further technical analysis, geometry refinement and cost estimates were conducted and discussions took place with CN about the crossing of its main and spur lines.

Ultimately, two preferred options for the intersection of Yellowhead Trail and 149 Street were presented to Transportation Committee in support of the Yellowhead Trail Strategic Plan. Strategy A: $\frac{3}{4}$ Diamond Interchange and Strategy B: No Interchange with One Way Service Roads. These two options were the result of a lengthy process of engineering, analysis, input and evaluation.

C.4 PROJECT BULLETIN

In September 2012, a project bulletin was distributed to businesses in the study area as well as the Dovercourt Community League, which provided an update on the project and process. (Appendix K – Project Bulletin)

C.5 PUBLIC MEETING #2 – TWO FINAL OPTIONS

Attendance: 92
50 comment forms submitted

Public Meeting #2 was held on the evening of September 17, 2013 from 4:00 to 8:00 p.m. at the Dovercourt Community League Hall (13510 Dovercourt Avenue). This event provided an opportunity for the City to show the public the two final options for Yellowhead Trail—Strategy A: $\frac{3}{4}$ Diamond Interchange and Strategy B: No Interchange with One Way Service Roads. Strategy B was presented as the preferred option. Attendees were able to learn about the planning study, the options considered, the evaluation process, have questions answered and provide feedback.

The event was advertised in the Edmonton Journal and Examiner, on roadside signs in the study area, in a public service announcement to media, on Facebook, on Twitter, on the City website and on an advertising postcard that was distributed to the residents of the Dovercourt Community League and area businesses. (Appendix L - Public Meeting #2 - Communication Materials).

How information was shared - Information was provided through large maps of the study area and display boards with key project information. Project team members including City of Edmonton staff

and consultants answered questions and provided information about the project and process. A project fact sheet was also distributed.

How input was received - Formal input was gathered via a comment form which respondents could fill out either at the event or online at the City of Edmonton's project webpage. Participants could also record comments on "sticky notes" and place them directly on the maps and display boards at the event. A summary of input can be found below and verbatim responses received on the comment form and on the sticky notes are included as an appendix in this report. (Appendix J - Public Meeting #2 -Comment Form Verbatim.)

Survey Summary/What We Heard

50% of respondents responded as being from the T5L postal code.

The respondents indicated they were*:

Interested Citizen – 41.3%

Commuter - 39.1%

Area Resident - 37%

Business owners/operator - 17.4%

Area property owner - 21.7%

**Respondents could choose more than one.*

Option B was presented as the preferred option and respondents were asked to rate their level of satisfaction with this option. 19 out of 40 respondents were satisfied or very satisfied with the plan presented. 11 were not satisfied or not at all satisfied and 10 remained neutral.

Business owners in the area expressed concerned about the negative impact that the access shown could have on their business viability, value and property usage.

Commuters also expressed concern about access, specifically about the decrease in accesses and exits onto and off of Yellowhead Trail.

There continues to be concern about the potential traffic impacts on nearby streets, intersections and neighbourhoods. Specific concerns involve the impact of increased traffic to the Yellowhead/156 Street and Yellowhead/St. Albert Trail intersections, as well as increased volume on 111, 123, 124 and 128 Avenues, and St. Albert Trail, as well as 127 Street. Increased traffic in the Dovercourt community was also noted as a potential issue.

Participants wanted to ensure that cost is not the main consideration in choosing strategy B over A and that careful consideration is given to the needs of transport trucks and their turning requirements.

D. NEXT STEPS

Following public input after the September Open House and further technical refinements to the preferred option the project team will present the final concept plan to the City Council's Transportation Committee (TC) in early 2014.

E. PUBLIC ENGAGEMENT EVALUATION

Evaluation forms were provided to the participants of the public meetings and the Stakeholder Input Group workshops to provide feedback on the public consultation process.

The following is a summary of their responses.

E.1 Public Meeting #1

When asked for their input to help with the future planning of meetings:

- 5 out of 5 agreed or strongly agreed the information presented at the event was useful and informative.
- 4 out of 5 agreed or strongly agreed the information was easy to understand.
- 5 out of 5 agreed or strongly agreed the project representatives were helpful, friendly and available to talk to them.
- 5 out of 5 agreed or strongly agreed that they were able to find satisfactory answers to their questions.
- 5 out of 5 agreed or strongly agreed that they have a better understanding of the project because of their attendance.
- 5 out of 5 agreed or strongly agreed that participating in this session was a good use of their time.
- 5 out of 6 agreed or strongly agreed the venue location was appropriate.

When asked how they heard about the public meeting:

6 respondents answered with the following responses:

- Website **1**
- Email **1**
- Roadside Signs **1**
- Newspaper Ads **3**
- Other **3**
 - Post card in mail
 - Did not know until 7:45 p.m.
 - Radio/TV

E.2 Stakeholder Input Group Process

Nine members of the Stakeholder Input Group responded to the workshop evaluation.

When asked for to rate their level of agreement:

- Nine out of 9 members agreed or strongly agreed that the objectives of the process were communicated clearly
- Seven out of 9 members agreed or strongly agreed the background information (Interchange 101) allowed them to provide educated input to the project.
- Eight out of 9 members agreed or strongly agreed the support materials were adequate for them to provide input to the project.
- Eight out of 9 members agreed or strongly agreed there was a clear process for collecting individual or collective input.
- Eight out of 9 members agreed or strongly agreed there was adequate opportunity for group discussion among stakeholders.
- Nine out of 9 members agreed or strongly agreed the discussions were well-managed.
- Nine out of 9 members agreed or strongly agreed the process provided an opportunity for them to contribute to the project in a meaningful way.
- Nine out of 9 members agreed or strongly agreed their understanding of the proposed interchange project improved after attending the workshops.
- Nine out of 9 members agreed or strongly agreed the process was a valuable use of their time.

**When asked to rate their level of satisfaction with the Stakeholder Input Group process:
9 out of 9 were satisfied or very satisfied.**

When asked what improvements they would suggest be made to future Stakeholder Input Groups, respondents said:

- Criteria evaluation is good tool but takes some discipline to be effective.
- Can't think of any area I would improve. Staff was helpful and accessible. Materials were easily understood and well distributed. Refreshments were plentiful and enjoyable. Workshops well run and kept on track.
- Traffic stats should have been provided. Stakeholder input should have been used when developing new alternatives, all three new alternatives.
- Support materials should have included traffic study data (none provided) for both roadways and rail.

When asked to provide further comments or recommendations on the stakeholder engagement process for this project respondents said:

- Very much appreciated the levels of technical detail because it illustrates that there are no easy solutions.
- It was important earlier in the process that it be made clear that there would only be one opinion considered per stakeholder. I had the impression at times that more presence meant more input.
- Important to know that casinos are not able to relocate. Therefore, impacting access would require management to adjust resources to meet business levels.
- Appreciate the City giving our organization opportunity to contribute and supply business needs feedback. Good collaboration, City should consider this method for other major projects.
- Some participant recommendations were not added to maps (i.e., west bound exit ramp between St. Albert Trail and 142 Street on to north businesses.)

E.3 Public Meeting #2

When asked for their input to help with the future planning of meetings:

- 33 out of 40 agreed or strongly agreed that the information presented was useful and informative
- 29 out of 40 agreed or strongly agreed that the information was easy to understand.
- 38 out of 40 agreed or strongly agreed that the project representatives were helpful, friendly and available.
- 34 out of 39 agreed or strongly agreed that they were able to find satisfactory answers to their questions.
- 28 out of 29 agreed or strongly agreed that they had a better understanding of the project because of their attendance.
- 35 out of 40 agreed or strongly agreed that participating in the session was a good use of their time.
- 37 out of 40 agreed or strongly agreed that the venue location was appropriate.

When asked what aspect of the meeting respondents felt was most valuable (they could choose all that applied):

39 respondents answered as follows:

- Interaction with representatives- 69.2%
- Display boards - 66.7%
- Handouts - 20.5%
- 1 respondent add that they thought the table maps were most valuable

When asked how they heard about the public meeting:

40 respondents answered with the following top three responses:

- Roadside signs – 40%
- Flyer in mailbox – 22.5%
- Newspaper advertisement – 15%

Appendix A – Public Involvement Plan



Involving Edmonton Public Plan

Project: 149th Street Interchange at Yellowhead Trail

Department/Branch Responsible: Facility and Capital Planning: Transportation Services

Project Manager: Natalie Lazurko, P. Eng.

Consultant (if applicable): Jacqueline Schimpf Communications

Draft or Final Plan: Draft 3 – June 28, 2012

Other city participants or partners:

The Public Involvement Input Commitment is:

Recognizing that the City is committed to a transparent and open public consultation process, we have structured the public consultation component of this project to follow the City's *Involving Edmonton* initiative. The public engagement focus for this project will be as follows:

- To gather input and feedback from internal and external stakeholders, including immediately impacted businesses and residents and the communities in which they reside, to assist with the development of a recommended option for the 149 Street interchange at Yellowhead Trail that can be further developed during concept planning – Phase 3 of the project.
- To continue to build awareness, knowledge and understanding of the scope and expected project outcomes.
- To provide ongoing project updates and information in plain language at the outset of the project.

This plan has been vetted through the Public Involvement Readiness Test (p. 57)

_____ Sign off

Background: Summary of Worksheets I and II

<p>Description of the overall project or initiative:</p>	<p>The purpose of this project is to develop one preferred option for an interchange at 149 Street and Yellowhead Trail that will be further developed to a concept plan at Phase 3. The work will involve a grade separated interchange at 149 Street, railway crossing grade separations along Yellowhead Trail and 149 Street, and access management along Yellowhead Trail from 156 Street to St. Albert Trail.</p> <p>Yellowhead Trail is the most highly used goods movement corridor in the City. As part of the national highway network and the Inner Ring Road, it is a key facility for the City, as well as for the region and the regional economy. It is an important regional roadway which operates as Highway 16 through Edmonton and accommodates a significant amount of vehicle traffic, particularly goods movement. In order to support the movement of goods and services in Edmonton and to maximize its role in the economic activity of the region, Yellowhead Trail should be upgraded to a freeway.</p> <p>The Yellowhead Trail Strategic Plan proposed the construction of a new interchange at 149 Street, as well as staged closure of accesses at 143 Street and 145 Street, and eventual closure of the intersection at 142 Street. Based on this proposal and significant input from stakeholders, Stage 1 changes to Yellowhead Trail near 143 Street and 145 Street have been deferred until planning is completed for the future interchange at 149 Street. Deferring conceptual planning for these access changes to coincide with interchange planning will allow Transportation Services and affected stakeholders to examine the proposed changes within a more comprehensive and long-term context. Concept planning for this interchange is scheduled to begin in 2013 subject to the Department's workplan priorities and budget availability. In preparation for the concept planning of the interchange, the Department will undertake a study to determine the preferred interchange configuration option and access management strategy. Public consultation will be a key aspect of the both the concept planning process and the interchange configuration study.</p> <p>Opportunities for stakeholder/public involvement will occur throughout the project, beginning in June 2012 and will continue until project completion in the spring of 2013.</p> <p>There will be two opportunities for public input – open house events in both June and the fall of 2012 followed by an information session in the spring of 2013. The information session will provide the recommended interchange option to be developed into the concept plan in Phase 3 of the project.</p> <p>Profiling interviews will be conducted between May and August 2012 with the businesses/landowners immediately impacted, as well as the Dovercourt Community League and key organizations. These interviews will identify key concerns and gather information on how an interchange can fit into the area and how access can be accommodated. Early interviews will assist in validating this plan.</p> <p>A Stakeholder Input Group (SIG) will be created to participate and provide input and feedback throughout the interchange concept planning process. The group membership will include interested stakeholders who represent impacted businesses, property owners and community leagues in the interchange study area, as well as other organizations.</p> <p>A series of workshops (4) will be conducted with the SIG to discuss specific items to inform the project including topics such as existing conditions (traffic volumes, pedestrian usage, access, etc.) and interchanges styles, as well as identification of evaluation criteria, and project constraints, challenges and opportunities.</p>
<p>The decision being made is:</p>	<p>The selected option for the 149 Street interchange at Yellowhead Trail will define the interchange configuration at 149 Street, the railway grade separation alternatives, land acquisition requirements, and the access road network between 156 Street and St. Albert Trail.</p>



	<p>This will include project decisions on:</p> <ul style="list-style-type: none"> • Roadway configuration and grade separation • Vehicular access/egress to businesses and community • Pedestrian/cyclist circulation • Transit circulation • Deep utility impacts • Land acquisition requirements
<p>Decision makers:</p>	<p>This project will identify a preferred/recommended interchange configuration using input from the public and other stakeholders, as well as technical analysis.</p> <p>The Director of Facility and Capital Planning and other members of the administrative team will make final decisions.</p>
<p>The scope (impact, and complexity) of this decision is:</p>	<p>An interchange at Yellowhead Trail and 149 Street, along with the proposed access management changes, will have an impact on existing businesses and property owners.</p> <p>The project will include significant changes to access to Yellowhead Trail from 156 Street to St. Albert Trail, including limiting direct access to Yellowhead Trail strictly to the new interchange, as well as considerable land acquisition requirements.</p> <p>In order balance impacts on businesses and property owners, it is necessary to involve the public in discussions regarding the ultimate goals of this study. These goals include determining interchange configurations, evaluation criteria and weightings, and service road connections and access configurations. It is hoped that the input from the public through Profiling Interviews, Open Houses and the Stakeholder Input Group can aid in identifying key issues which will need to be considered when choosing a preferred interchange configuration option.</p> <p>The challenge will come in balancing the need for an efficient goods movement corridor with the need for business access while minimizing land acquisition requirements and cost.</p> <p>Decisions made for the 149 Street interchange at Yellowhead Trail must be undertaken in accordance with City of Edmonton policies, bylaws and standards as well as coordinated associated studies and plans for the immediate area</p> <p>These include:</p> <ul style="list-style-type: none"> • The Way We Grow, Municipal Development Plan, 2010 • The Way We Move, Transportation Master Plan, 2009 • The Yellowhead Trail Strategic Plan • Traffic studies and city standards related to managing roadway congestion • Land Use Bylaw • Access Management Guidelines
<p>The timeline for this decision is:</p>	<p>A recommended interchange option for 149 Street and Yellowhead Trail is to be selected by Spring 2013.</p>
<p>The public is being involved in because:</p>	<p>The 149 Street interchange at Yellowhead Trail is a key element of the vision of the Yellowhead Strategic Plan to develop Yellowhead Trail into a future freeway.</p> <p>Public and stakeholder involvement will be a key component of the planning process to build project awareness, identify issues and opportunities, inform decision-making and</p>



	<p>generate project understanding and support.</p> <p>The public involvement process must take place within the scope of City of Edmonton policies, standards and bylaws. The public involvement process will seek local knowledge about the potential benefits and impacts of the specific decisions that will be made, and it will seek to understand local issues and values.</p>
--	--

LEVEL OF INVOLVEMENT:	This process predominantly fits in		
	Information Sharing	Consultation	
	<ul style="list-style-type: none"> - Sharing information to build awareness 	<ul style="list-style-type: none"> - Testing ideas or concepts to build knowledge 	<ul style="list-style-type: none"> - Collaborating to develop solutions to build commitment

The specific information being sought is:	<p>The process will seek to understand local values and knowledge about use and activity patterns to enrich decisions made under the study.</p> <p>The project team will test ideas on:</p> <ul style="list-style-type: none"> - Interchange configuration options - Evaluation criteria for interchange configurations - Evaluation criteria weighting - Configuration evaluation - Strategies to address vehicle access/egress to businesses and communities - Parking - Pedestrian/cyclist circulation impacts and mitigations - Connectivity - Constraints, risks and opportunities <p>The project team will share information on:</p> <ul style="list-style-type: none"> - Strategic plan and rationale for interchange - Associated constraints and risks - Background information and data - Impacts during construction - The chosen preferred configuration option.
--	--

How will information be used in the decision-making?	<p>Public and stakeholder input is necessary to understand how the project will impact local businesses, communities, stakeholder groups, motorists, pedestrians, cyclists, etc. Understanding the impacts will help the project team identify and evaluate mitigation strategies and will inform decision-making.</p> <p>All feedback gathered will be shared with participants at public involvement activities and via the City of Edmonton website. The process of how the information will be used to inform the decision-making process will be communicated.</p> <p>Information from public involvement will be shared with the project team, to be considered along with technical findings as an input into the technical engineering process and to aid in the selection and development of the recommended interchange configuration.</p>
---	--

Public Involvement Methods Strategy

Summary of Worksheet IV and Stakeholder Identification Strategy/ Public Involvement Methods Strategy

Potential Participants	Proposed Level of Involvement	Involvement Strategy
<ul style="list-style-type: none"> • Property owners/businesses in the vicinity of the proposed interchange: • Yellowhead Highway Association • Dovercourt Community League • Residents of Dovercourt Community 	<p>Testing Ideas</p>	<p>Open House - June 2012</p> <p>Share the Yellowhead Trail Strategic Plan, project staging and next steps. Introduce the 149 Street interchange concept planning project and proposed timelines.</p> <p>Gather input about risks, opportunities, access, etc.</p> <p>Recruit members for the Stakeholder Input Group</p>
<ul style="list-style-type: none"> • Businesses and property owners in the vicinity of the proposed interchange: <ul style="list-style-type: none"> • Barcol • Kal-Tire • Safeway • Costco • Ambae • The Grocery People • Carpet Superstore • Yellowhead Inn • Office Building Owner (SE Corner YHT / 149 St) • Alberta Motor Transport Association • Northwest Industrial Business Association • Yellowhead Highway Association • Dovercourt Community League 	<p>Consultation - Testing Ideas</p>	<p>Profiling interviews (one-on-one meetings) - May – August 2012</p> <ul style="list-style-type: none"> • How can an interchange best fit into the area? • How could business/community accesses be accommodated? • Recruit members for the Stakeholder Input Group
<p>Stakeholder Input Group – created with members of business community</p>	<p>Consultation – Collaboration</p>	<p>Workshops – Summer 2012 to Winter 2012/2013</p> <p>A series of workshops at key milestones to discuss specific items that will inform the project including topics such as</p>



Potential Participants	Proposed Level of Involvement	Involvement Strategy
		existing conditions (traffic volumes, pedestrian usage, access, etc.) and interchanges styles, as well as identification of constraints, evaluation criteria, weighting, and challenges and opportunities.
<ul style="list-style-type: none"> • Property owners/businesses in the vicinity of the proposed interchange. • Yellowhead Highway Association • Dovercourt Community League • Residents of Dovercourt Community 	Testing Ideas	<p>Open House – Fall 2012</p> <p>Share information from SIG input and present a few feasible options. Gather input on options presented.</p>
<ul style="list-style-type: none"> • Property owners/businesses in the vicinity of the proposed interchange. • Yellowhead Highway Association • Dovercourt Community League • Residents of Dovercourt Community 	Information Sharing	<p>Information Session – Spring 2013</p> <p>This session is intended to present the recommended interchange option incorporating feedback from previous input from the open houses, one on one interviews and SIG workshops. No feedback will be gathered.</p>

Special Outreach Strategy

See Tips for Outreach (p. 15)

Public requiring Outreach	Strategy
Hearing Impaired	Advertise that services are available during public events that will meet their specific needs.

Evaluation Strategy

Process Evaluation Strategy, Evaluation and Monitoring Tips

What are the indicators of success for the public involvement process?	Stakeholder and public understanding of project and outcomes. Unanimous support and agreement will not be indicators of success.
What will we measure or evaluate about the public involvement process?	<p>Level of understanding and tone of feedback received via project inquiries, completed comment forms, and open house and workshop participation.</p> <p>Tone of media coverage received.</p> <p>Facilitated discussion with Stakeholder Input Group participants to gather feedback on the process and suggestions on improvements in the future.</p>
When and how	<p>Participant comment forms at events and online (Survey Monkey).</p> <p>Comprehensive contact record of all discussions with the public, stakeholders, and SIG.</p> <p>Qualitative discussion with project team members (key milestones).</p> <p>Media analysis at key milestones.</p>
What will we do with the results of the evaluation?	Further develop and improve public involvement processes for future projects.

Appendix B – Interview Questionnaire

149 Street Interchange at Yellowhead Trail

Public Involvement Process *Stakeholder Profiling Interview*

Name:

Representing:

Date and Time:

Location:

Attendees:

1. Awareness

- What is your general knowledge of this project?
- What involvement have you and your organization had in previous planning processes for this project?

2. General Considerations

- What are your general thoughts and impressions about the need for this interchange?
- What do you see as the major transportation issues with the affected area?
- What do you think are the three primary issues or priorities that should be considered in developing concept plan for the interchange?

3. Interchange

- What do you see as the benefits of the interchange project?
- What do you see as potential issues with the interchange project?

- How can an interchange best fit into the area?
- How could business/community accesses be accommodated?
- What are the opportunities and risks that should be considered during concept planning?
- Are you aware of any community or business initiatives that will need to be considered in more detail with this improvement?

4. **The Public Involvement Plan** (Refer to the draft public involvement plan document)

- What do you think of the proposed public involvement process for this project? Any suggestions?
- How do you see yourself or your group participating in the process going forward? (i.e., information, meetings, etc.)
- Would you be willing to distribute information or updates on behalf of your organization?
- Are there stakeholders or groups that should be involved? How should they be involved?

5. **Stakeholder Input Group**

- Would you like to continue to be involved in the planning process?
- We are creating a Stakeholder Input Group that will be involved with examining interchange options and determining evaluation criteria. There would likely be about 4 half-day workshops to participate in over the next few months. Would you like to participate in our Stakeholder Input Group?
- If yes, when is the best time for you to attend meetings? Daytime/Evening/Weekends

6. **Conclusion**

- What did you think of this interview?
- Was it worthwhile?
- Did we ask the right questions?
- Did you anticipate any questions that were not asked?
- Any other questions or comments?

Appendix C – Public Meeting #1: Communication Materials

- **Project fact sheet**
- **Display Boards**
- **Print Ad**
- **Mail out flyer**
- **Road side signs**



149 STREET INTERCHANGE AT YELLOWHEAD TRAIL Planning Study



PROJECT OVERVIEW

- The City of Edmonton is undertaking a concept planning study for an interchange at Yellowhead Trail and 149 Street.
- The goal is to balance the needs of area businesses and residents with the long-term transportation needs of the City.
- Planning will consider access to businesses and properties, crossing of CN Rail lines and performance of the transportation network.

STUDY CORRIDOR

- Study corridor extends from 156 Street to St. Albert Trail.
 - Includes some of the most congested and collision-prone intersections along Yellowhead Trail.
 - Includes one of the most congested at-grade rail crossings at 149 Street north of Yellowhead Trail.
 - Includes connections to interchanges at both 156 Street and St. Albert Trail.
 - Signalized intersections at 149 and 142 Streets.
 - Several unsignalized intersections and accesses.
- The intersection at 149 Street marks the first and last set of signals entering or exiting the City along Yellowhead Trail.

BACKGROUND

- Yellowhead Trail was identified in the Transportation Master Plan as a key to the Inner Ring Road.
- Both Yellowhead Trail and 149 Street are designated 24-hour truck routes.
- Yellowhead Trail is a dangerous goods route.
- The Yellowhead Trail Strategic Plan recommends Yellowhead Trail be made into a freeway.
- Transportation Bylaw 15896 designates Yellowhead Trail as a future freeway.

TIMELINE

2012 - early 2013	Public Involvement
Early 2013	Preferred Interchange Option Identified
2013	Detailed Concept Planning

GET INVOLVED!

LET US KNOW what you think about the proposed interchange. Help us identify issues, opportunities and risks to inform the planning and decision-making for this project.

NEXT STEPS

WATCH FOR DETAILS of our next public event to be held in this fall.

MORE INFORMATION

www.edmonton.ca/roadplans



THE WAY WE MOVE

**YELLOWHEAD TRAIL /
149 STREET INTERCHANGE**

TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE



WELCOME

Today we are introducing the concept planning project for a new grade-separated interchange at Yellowhead Trail and 149 Street

PURPOSE

- Provide information on the Yellowhead Trail Strategic Plan
- Provide background information on the need for a grade separation
- Gather input from you about existing issues, opportunities and risks
- Inform about the project process

Representatives from the City of Edmonton are available to discuss the project and answer questions

PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews, and a Stakeholder Input Group and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

PROJECT SCOPE

- Study corridor extends from 156 Street to St. Albert Trail:
 - 149 Street is the first set of signals entering the City from the West and the last set of signals exiting the City heading westbound
 - Bordered by interchanges at 156 Street and St. Albert Trail
 - Includes some of the most congested and collision-prone intersections along Yellowhead Trail
 - Includes one of the most congested at-grade rail crossings at 149 Street north of Yellowhead Trail
 - Several unsignalized intersections and accesses between 156 Street and St. Albert Trail in addition to signals at 149 Street and 142 Street

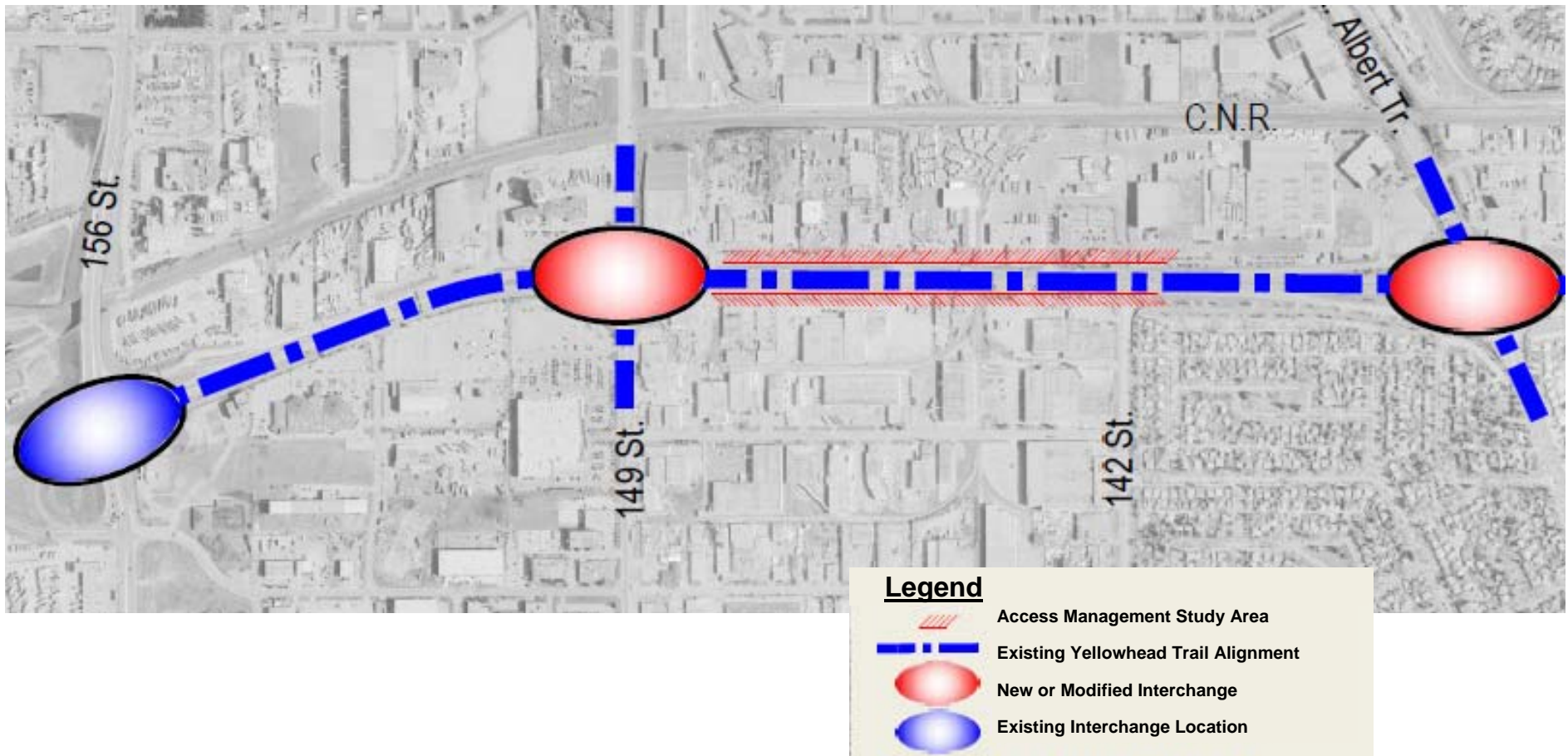
PROJECT PROCESS



PROJECT BACKGROUND

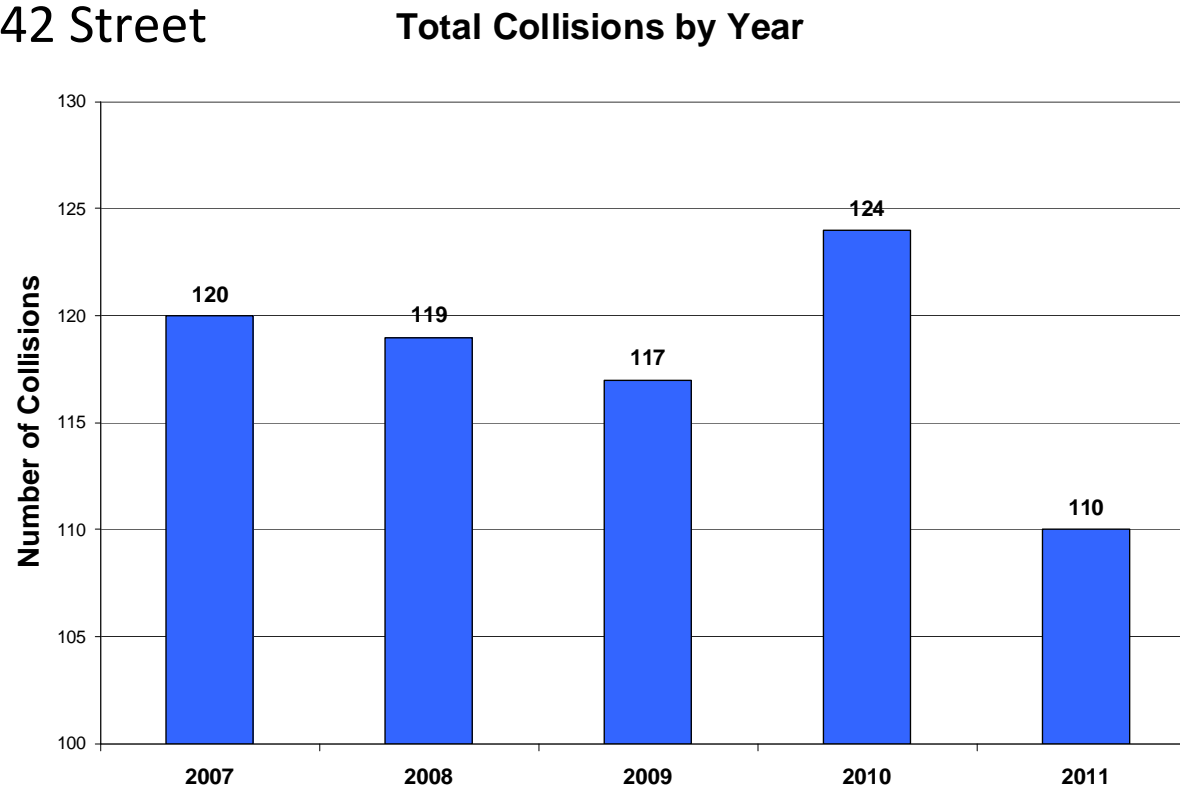
- Yellowhead Trail was identified in the Transportation Master Plan in 1999 and 2009 as a key component of the Inner Ring Road
- Both Yellowhead Trail and 149 Street are designated 24-hour Truck Routes, Yellowhead Trail is also a Dangerous Goods Route
- The Yellowhead Trail Strategic Plan recommended that Yellowhead Trail be made into a freeway and also
 - Identified 149 Street as a future grade separated interchange
 - Recommended closure of the 142 Street intersection
 - Recommended closure of all other direct access to Yellowhead Trail between 156 Street and St. Albert Trail

PROJECT BACKGROUND - Yellowhead Trail Strategic Plan



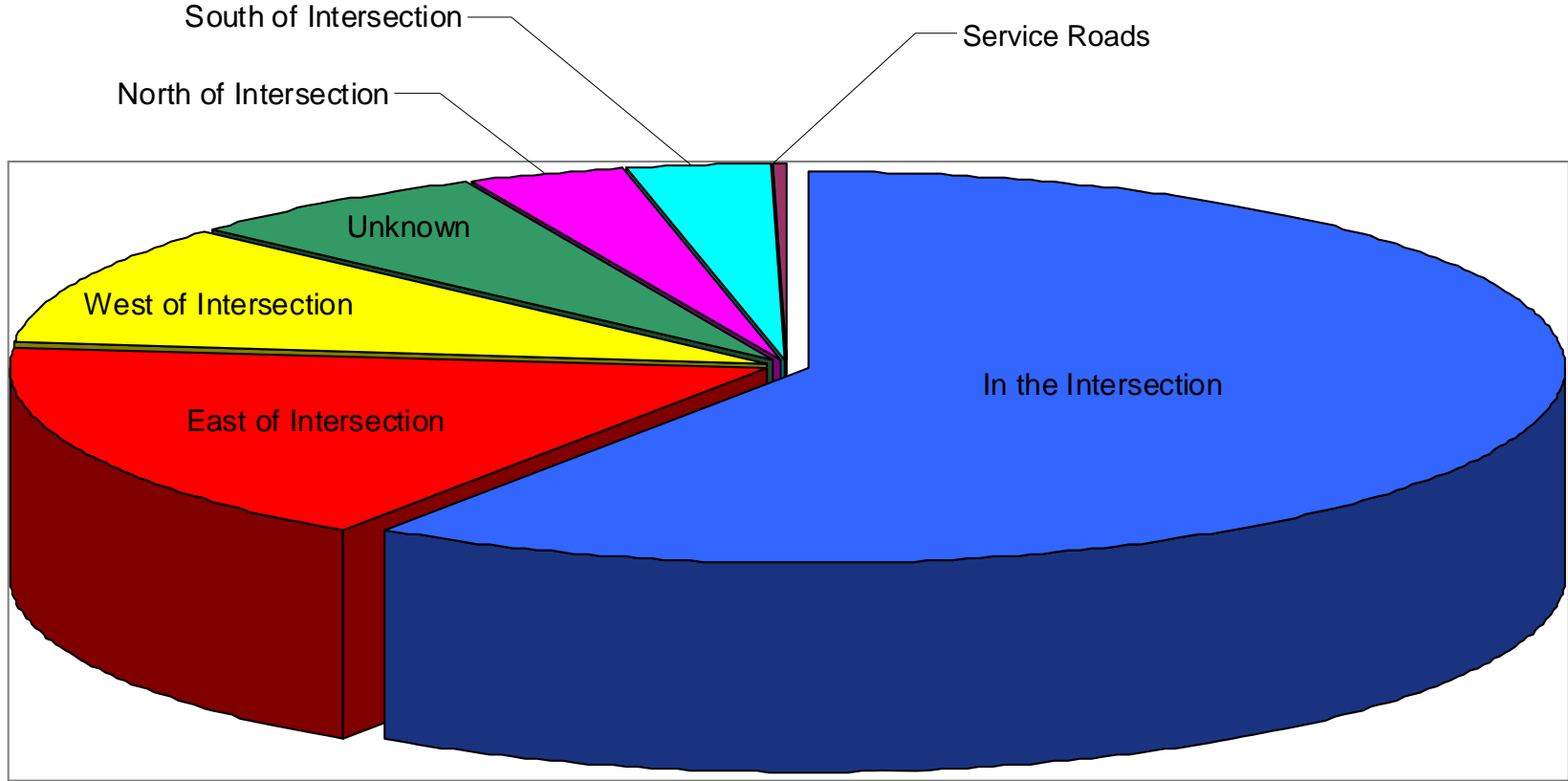
PROJECT BACKGROUND - EXISTING STATISTICS

- 149 Street ranks 4th in the City for collisions based on 2011 statistics
 - Many collisions can be linked to “stop-and-go” traffic at 149 Street & 142 Street

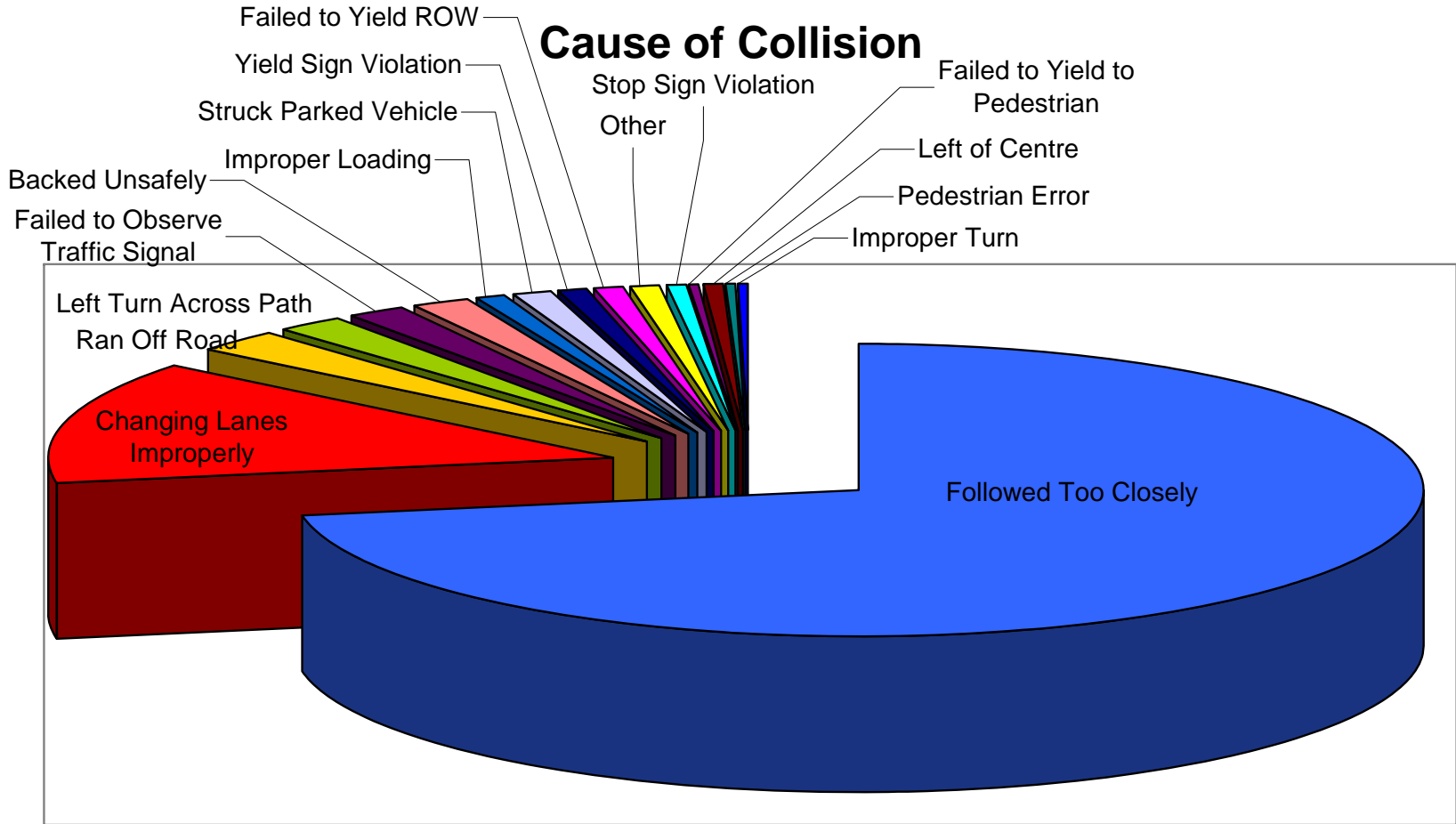


PROJECT BACKGROUND - EXISTING STATISTICS

Location of Collision

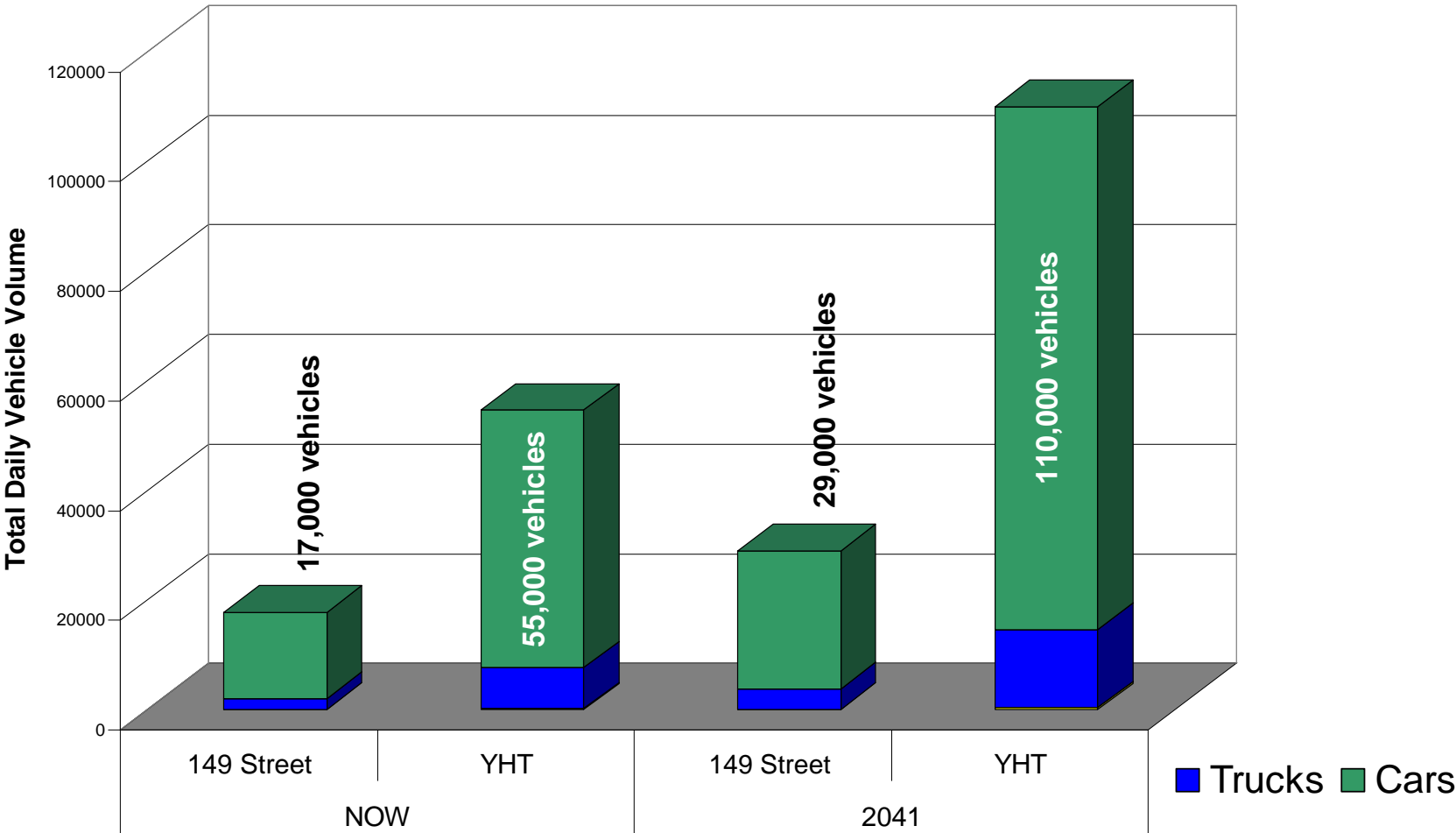


PROJECT BACKGROUND - EXISTING STATISTICS



PROJECT BACKGROUND - EXISTING VOLUMES

Existing and Projected Vehicle Volumes



PROJECT BACKGROUND – EXISTING STATISTICS

- June 2008 Railway Crossing study examined all railway crossings for grade-separation priority based on factors such as:
 - Current & future traffic volumes
 - Train volumes
 - Traffic delays
 - Yearly cost to economy
- For the corridor:
 - Average 40 trains per day cross at 149 Street north of Yellowhead Trail, with an average delay of 4.5 minutes
 - Ranks as priority for grade separation
 - Average 4 trains per day cross at the Yellowhead Trail spur line, with an average queue of 3.5 minutes
 - Crossing has low train volumes but high traffic volumes
 - Ranks lower in priority

OPPORTUNITIES AND CONSTRAINTS

- Please identify areas of concern, issues, opportunities or risks on the plans provided on the table.



KEY ISSUES

- Some of the key issues identified for the corridor include:
 - Railway crossing grade separation
 - Access management and providing access to businesses and properties
 - Intersection performance

NEXT STEPS

- Ongoing public involvement (open houses, Stakeholder Input Group, and one-on-one meetings) – 2012 and early 2013
- Identify interchange configuration alternatives, access alternatives, and evaluation criteria and weighting – 2012
- Identify a preferred alternative based on public input and technical evaluation – early 2013
- Begin detailed concept planning of the preferred alternative – 2013



Thank you!

Please fill out the comment form and
join the Stakeholder Input Group.



Interested in Participating Further?

Join our Stakeholder Input Group today.

We are recruiting members for the Stakeholder Input Group who will be involved in examining interchange configurations and determining evaluation criteria. There would be up to 4 half-day workshops to participate in over the next few months.

Ask one of the City of Edmonton representatives for more details.

THE WAY WE MOVE

149 STREET INTERCHANGE AT YELLOWHEAD TRAIL

TRANSFORMING | **EDMONTON**
BRINGING OUR CITY VISION TO LIFE



GET INVOLVED.

WEDNESDAY, JUNE 13, 2012
3:30-8 PM

Dovercourt School
13910-122 Avenue

The City of Edmonton is hosting a public meeting regarding a planned interchange on 149 Street and Yellowhead Trail. The project will involve a grade separated interchange at 149 Street, as well as changes to railway crossings and access points between 156 Street and St. Albert Trail.

This meeting is part of a study to determine the preferred interchange configuration and access management strategy. The study will help the City prepare for concept planning in 2013.

This meeting is an opportunity for community members and business owners to learn more about the project, and provide input on potential impacts and mitigation strategies. A follow up meeting will take place in fall 2012.

FOR MORE INFORMATION
www.edmonton.ca/roadplans

Strategy

Where we are today
CONCEPT
PHASE

Design

Build

Operate



Services for deaf or hard of hearing persons provided upon request. Call 311 at TTY/NexTalk 944-5555 and press 0, or email 311@edmonton.ca.

Learn more about and get involved in City issues affecting you and your neighbourhood. Go to www.edmonton.ca/PublicInvolvementCalendar for a list of public involvement opportunities.

THE CITY OF
Edmonton

THE WAY WE MOVE

149 STREET INTERCHANGE AT YELLOWHEAD TRAIL

TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE



PROJECT BACKGROUND

This project is part of the Yellowhead Strategic Plan that aims to develop Yellowhead Trail into a future freeway. This will ensure efficient goods movement across Edmonton and economic activity in the Capital Region. Improved access and mobility are goals laid out in the City's Transportation Master Plan, *The Way We Move*.

FOR MORE INFORMATION

www.edmonton.ca/roadplans



Services for deaf or hard of hearing persons provided upon request. Call 311 at TTY/NexTalk 780-944-5555 and press 0, or email 311@edmonton.ca.

Learn more about and get involved in City issues affecting you and your neighbourhood. Go to www.edmonton.ca/PublicInvolvementCalendar for a list of public involvement opportunities.

THE CITY OF
Edmonton



THE WAY WE MOVE

149 STREET INTERCHANGE AT YELLOWHEAD TRAIL

TRANSFORMING | **EDMONTON**
BRINGING OUR CITY VISION TO LIFE

GET INVOLVED.

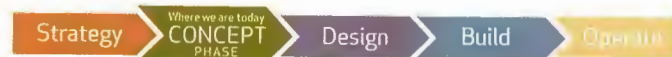
WEDNESDAY, JUNE 13, 2012
3:30-8 PM

Dovercourt School
13910 - 122 Avenue

The City of Edmonton is hosting a public meeting regarding a planned interchange on 149 Street and Yellowhead Trail. The project will involve a grade separated interchange at 149 Street, as well as changes to railway crossings and access points between 156 Street and St. Albert Trail.

This meeting is part of a study to determine the preferred interchange configuration and access management strategy. The study will help the City prepare for concept planning in 2013.

This meeting is an opportunity for community members and business owners to learn more about the project, and provide input on potential impacts and mitigation strategies. A follow up meeting will take place in fall 2012.



THE CITY OF
Edmonton

GET INVOLVED!

**149ST / YELLOWHEAD
INTERCHANGE**

PLANNING STUDY

JUNE 13 3:30-8PM

DOVERCOURT SCH

Appendix D – Public Meeting #1 – Summary Report

**149 Street Interchange at Yellowhead Trail Planning Study
Public Involvement
June 13, 2012 Public Event: Summary of Input**



**Submitted by
Jacqueline Schimpf Communications
October 2012**

A. Introduction

A Concept Planning Study for the 149 Street Interchange at Yellowhead Trail was initiated by the City of Edmonton in the spring of 2012 as part of the Yellowhead Strategic Plan vision.

As stakeholders and the public play a key role in providing local/community level input as one element to help inform the design team, Jacqueline Schimpf Communications was retained by the City of Edmonton to assist with organizing and facilitating the stakeholder/public involvement process for the project. The goals of the stakeholder/public involvement process are to build project awareness and understanding, identify issues and opportunities, and inform decision-making.

This report provides a summary of input as well as verbatim comments received at the June 13, 2012 public event which was held at Dovercourt School. The objective of the meeting was to share the Yellowhead Trail Strategic Plan, to introduce the 149 Street interchange concept planning project and proposed timelines, as well as to gather input about issues and opportunities.

B. Public Involvement Process

A public involvement process involving two public meetings and four Stakeholder Input Group workshops was designed to obtain stakeholder/public input to inform the planning study.

Public Event #1 was held on the evening of June 13, 2012 from 4:00 to 8:00 p.m. at Dovercourt School (13910 – 122 Avenue) in Edmonton. This event provided an opportunity for the City of Edmonton to share information on the Yellowhead Strategic Plan and to gather input on issues, risks and opportunities relative to the proposed interchange at Yellowhead Trail and 149 Street.

How information was shared - Information was provided through roll maps and display boards. Project team members including City of Edmonton staff and consultants answered questions and provided information about the project and process. A project fact sheet was also distributed.

How input was received - Formal input was gathered via a comment form which respondents could fill out either at the event or online at the City of Edmonton's project webpage. Participants could also record comments on "sticky notes" and place them directly on the maps and display boards at the event. A summary of input as well as verbatim responses received on the comment form and on the sticky notes is included in this document.

Input received from stakeholders and the public is considered together with technical studies and policy direction to inform the design team in the development of the interchange option.

C. Event Attendance

June 13, 2012

Location:	Dovercourt School, 13910 – 122 Avenue, Edmonton
Time:	4:00 - 8:00 p.m.
Attendance:	53

D. Questionnaire Summary

8 Questionnaires submitted in total.

Note: Numbers of responses may not add up to the total number of respondents due to incomplete answers, no answer, etc.

E. What We Heard: Key Themes

Input provided via comments forms and sticky notes can be categorized into the following key themes:

- Negative impact on businesses
- Access to businesses – service roads
- Visibility of business after construction
- Negative impact on businesses and access during construction
- Impact on nearby communities – traffic diversions both during and after construction
- Impact on other key corridors (St. Albert Trail, 142 Street, 149 Street)

F. What We Heard Overall

Feedback from respondents indicated that the main issues with the present 149 Street/Yellowhead intersection are traffic flow, congestion at lights and the CN Rail crossing, as well as access to businesses along Yellowhead Trail.

While most respondents agree that there are issues with the present intersection they are also concerned about how the new interchange configuration will impact area businesses and traffic flow into nearby neighborhoods and other key corridors such as St. Albert Trail, 142 Street and 149 Street both during and after construction.

Most respondents agree that the benefits of an interchange at the intersection would be better traffic flow, less congestion and reduced collisions. However, feedback indicates that access to and visibility of businesses in the area both during and after construction are top priorities for consideration during planning.

If the interchange project proceeds, potential issues are identified as traffic delays, access interruptions, and higher traffic volumes on St. Albert Trail and through neighborhoods.

Respondents suggested that business and community accesses could be accommodated by service roads with good signage.

Opportunities and risks that should be considered during concept planning were noted as traffic diversion through neighborhoods and St. Albert trail during and after construction, funding, as well as building for future usage.

G. Comment Form Verbatim Responses

1. What are the three priorities that should be considered in developing a concept plan for the interchange?

Traffic Flow

- Traffic Flow. (3 comments)
- Free flowing east-west traffic.
- Ensure free flowing – 4 lanes east and 4 lanes west.

Business Impact

- Impact on businesses.
- Access to business.

CN Rail Line

- If CN's spur tracks are necessary and anticipated to be used far into the future, a design similar to 121 Street rail fly over would appear to be appropriate.
- When the project begins construction, it should be modeled after the provincial P3 format.
- CNR mainline underpass.
- Either CNR spur line underpass or posted restricted railway use i.e., off peak hours – midnight to 6 a.m.

Other

- Where will northbound traffic be destined for?
- (What is) The Economic viability of an interchange at Yellowhead as opposed to reconfiguring RR crossing?
- Clearance on bridges/underpass.
- Drainage/flooding.
- Maintain and enhance bike/pedestrian connections throughout the project area.
- Inconvenience to residential areas.
- Priority of area.
- What are my concerns?
 - Access. But recognizing that not every eventuality can be accommodated – eliminate left hand turns with loops and/or three right hand turns, free flow entry.
 - Expandability to meet future increased traffic. Don't make the mistakes at 97 Street that required at least two costly upgrades to provide a third lane!

2. What do you see as the most important transportation issue within the affected area?

Lights/Traffic Flow

- Length of lights.
- Longer signals needed.
- Line ups at lights.
- Traffic flow.
- Inefficient traffic flow, lights, stop and go.

Congestion / Business Access

- Congestion – from truck traffic east bound and west bound as well as car traffic accessing Costco, Yellowhead Casino and other businesses. This congestion on Yellowhead leads vehicular traffic to use neighborhoods to access nearby businesses.
- Train congestion/delays.
- Access to business on Yellowhead Trail.
- 149 Street intersecting CN railings – build flyover so traffic flowing north does not stall/stop.
- Maintaining reasonable business access.
- How far is the affected area – up to the connection to 137 Avenue? That could be very close to the St. Albert Trail and 137 Avenue. What will that do to traffic congestion there??? It seems an over/underpass should be considered??

Other

- Turn lanes.
- Short cutting through neighborhoods.
- If drivers were properly educated in road rules this interchange's problems would not exist.

3. What do you see as potential issues if the interchange project proceeds?

Traffic Delays

- Potential bottleneck at 137 Avenue as 149 Street traffic meets 137 Avenue.
- Traffic delays when construction.
- Major traffic delays.

Access / Traffic diversion

- How to access areas currently able to access Yellowhead trail, i.e., Industrial north of Yellowhead.
- Access to businesses.
- Businesses upset at having to sacrifice their convenient access to Yellowhead/149 Street.
- Potential shortcutting through neighborhoods.
- More pressure on St. Albert Trail.
- The railroad spur/siding lines into the commercial sector? How essential are they? How many times are they used? Daily? Weekly? It appears that Costco doesn't have rail issues, do the others? It just may come down to no other alternative of relocation, compensation, etc.

Other

- Cost, who pays?
- Money better spend on 127 Avenue interchange.
- Many accidents.
- The length of time during the construction process.
- How long will it take?

4. What do you see as the benefits of the interchange project?

Traffic flow / Congestion

- Keep traffic flowing on Yellowhead west bound – eastbound traffic will back up at 127 Street as it does already and will be increased as volumes increase.
- Traffic flow.
- Much better traffic flow.
- Less east/west congestion on 149 Street and St. Albert Trail.
- Less frustration with general traffic.
- Much better access to businesses due to faster and more efficient flow of traffic.
- This is a “motherhood” question. Isn’t it always traffic flow?? This route has been neglected for too long!! Far too long and especially one or two members of city council believed that Anthony Henday (northeast especially) would reduce Yellowhead traffic...I disagree.

Other

- Reduced collisions.
- Only to area businesses.
- Eliminate cross traffic at 142 Street provide only eastbound exit from Yellowhead or eastbound access from 142 Street.

5. How could business/community accesses be accommodated?

- Not sure.
- Service roads especially for freight.
- Michigan exchange?
- Business frontage roads accessed on north south arteries.
- By providing access roads beside Yellowhead/149 Street with large signage at the access points of these roads.
- When I look at MacDonald’s Consolidated/Safeway is there a possibility to build/provide a roadway to provide access to the St. Albert Trail overpass and/or under the proposed 149 Street one to provide an eventual east bound direction egress?? Or you may have to provide a ramp up & over to gain east bound access.

6. What are the opportunities and risks that should be considered during concept planning?

Traffic Diversion / Neighborhood considerations

- When considering the type of construction this interchange will be, the affect it will have for nearby neighborhoods should be considered. For example: noise, traffic increases within neighborhoods.
- Short cutting through Dovercourt, Sherbrooke, and potentially Woodcroft.
- Pressure on roads that were not meant to be thoroughfares.
- Pressure on St. Albert Trail.

Other

- Access to Barcol Doors from all directions.
- Build for future use.
- Risk is building for today not tomorrow.
- Consideration for possible LRT.
- \$.
- Taking money from other traffic issues.
- Under utilization of 142 Street.
- More vertical landscaping, not necessarily lawns/grass but trees in small (20' x 20') planting areas which might be easier for maintenance crews to manage.
- There has to be more information provided about the entire route. I was told that there was one or more public presentations last fall on the intersection at 66 Street and Yellowhead. I never heard about that because I would have been there if available!! This location has potential for some "winter works" funding to relocate the underground services in preparation for other work.

7. Are you aware of any community or business initiatives that will need to be considered in more detail with this improvement?

- Access to Yellowhead from Dovercourt is restricted severely with closure of 142 Street intersection with Yellowhead.
- No – but the City should start now to acquire the properties along the Yellowhead that will be needed to develop all the changes.

Your responses to the following questions will assist us in planning future meetings. Using the following scale from 1 to 5 where 1 means Strongly Disagree and 5 means Strongly Agree. Please circle appropriate number to indicate the extent to which you agree with each of the following statements:

8. The information presented at the event was useful and informative. **4 4 4 5 5**
9. The information was easy to understand. **3 4 4 5 5**
10. The project representatives were helpful, friendly and available to talk to me. **4 4 5 5 5**
11. I was able to find satisfactory answers to my questions. **4 4 4 5 5**
12. I have a better understanding of the project because of my attendance. **4 4 4 5 5**
- Comment: "The only previous knowledge was the ad in the paper."
13. Participating in this session was a good use of my time. **3 4 4 5 5**
14. The venue location was appropriate. **3 4 4 5 5 5**
- Comment: "But are north side residents the only ones interested or have some valued input?"

15. Please tell us how you heard about the session today? (Circle all that apply)

- Website **1**
- Email **1**
- Twitter
- Facebook
- Roadside Signs **1**
- Poster
- Newspaper Ads **3**
- From Someone Else
- Community League or Other Organization
- Other **2**

If you said Organization or Other, please specify:

- Post card in mail.
- Did not know until 7:45pm.
- Radio/TV.

16. What are the first three digits of our postal code:

- T5L – 3
- T5M - 1
- T8N – 1
- T6L - 1

General Comments:

- First of all I don't like these type of response forums they seem to want a specific or stilted answer. While some of this response to on (questions) 8 to 15 is needed, it too often appears slanted to justify the existence of the originator. Where is the opportunity to say 'how can we do better?'

H. Sticky Note Comments Verbatim

General Comments

- Maintain/enhance bike/pedestrian connections throughout the project area.
- One way signage on "jug handle" (horseshoe road on 143 Street/142 Street around Petrol Canada/McDonald's/Yellowhead Centre)
- Service road for access to all businesses on north side of Yellowhead.
- Incline of overpass is steep, going north making tough to make left turns with a tractor-trailer. (Note might be referring to present 156 Street/Yellowhead trail overpass).

- Danger of shortcutting through residential area to access St. Albert Trail if access to Yellowhead and 142 Street is blocked off. Shortcutting! (various arrows pointing through Dovercourt community towards St. Albert Trail).

142 Street

- Sidewalk along 142 Street from 118 Avenue (northward).
- I don't want my property value to go down due to Safeway access to 142 Street.
- Drivers turn right onto 142 Street (wrong way down one way street) (Note on northeast corner of 142 Street and Yellowhead).

149 Street/Yellowhead

- Go under 149 Street with Yellowhead bridge structure of 149 Street north of Yellowhead access for Hotel, Barcol and service road north of Hotel.
- Access Hotel here (arrow pointing to northeast corner of Yellowhead Inn block) via service road under bridge. Close (arrow pointing to present access to Yellowhead Inn off of 149 Street). Start of Bridge (arrow pointing slightly south of present access).

Appendix E – Purpose Statement and Principles

STAKEHOLDER INPUT GROUP PURPOSE STATEMENT

- To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:
 - development of evaluation criteria and weighting
 - decision-making throughout the project,
 - the refinement of interchange and access configuration options, and
 - the ultimate recommendation.

DRAFT GUIDING PRINCIPLES

The guiding principles in support of this purpose are:

- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
- Focus on:
 - achieving the ultimate freeway vision for Yellowhead Trail
 - minimizing and mitigating impacts to surrounding businesses
 - users (passenger vehicles, commercial traffic, employees, and customers) by providing efficient, safe, attractive, logical and convenient interchange/access configuration
 - safety for all users
- Consider:
 - the transportation system in broad terms, beyond the Yellowhead Trail/149 Street intersection
 - access and egress for all users rather than properties in isolation
 - business visibility as options are refined
 - cost-effective solutions
 - integration and accommodation for all modes (i.e., bus, cycle, pedestrians, auto)
 - potential impact to businesses
- Ensure:
 - the solution integrates with the existing traffic patterns and accommodates future growth projections

**YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
SIG WORKSHOP #1**

- appropriate integration/interface with railway infrastructure
- transportation network and land use support each other
- sustainable options for operating businesses

Appendix F – Workshop Presentations



THE WAY WE MOVE

YELLOWHEAD TR/149 ST INTERCHANGE

Stakeholder Input Group Workshop #1
September 18, 2012

TRANSFORMING | **EDMONTON**

BRINGING OUR CITY VISION TO LIFE



WELCOME

Today we are introducing the concept planning project for a new grade-separated interchange at Yellowhead Trail and 149 Street to the Stakeholder Input Group (SIG).

TODAY'S WORKSHOP PURPOSE

- Provide Yellowhead Trail background information
- Provide information on the need for making Yellowhead Trail a freeway
- Inform the SIG about the project process
- Gather input from the SIG about existing issues, opportunities and risks
- Develop a Project Purpose Statement and Guiding Principles
- Discuss and Modify Evaluation Criteria

WORKSHOP AGENDA

3:00 pm	Introductions Project Background Purpose Statement/Principles
4:30 pm	Break
4:45 pm	Evaluation Criteria SIG Process
5:45 pm	Questions
6:00 pm	Closing Comments

PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews and a Stakeholder Input Group, and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

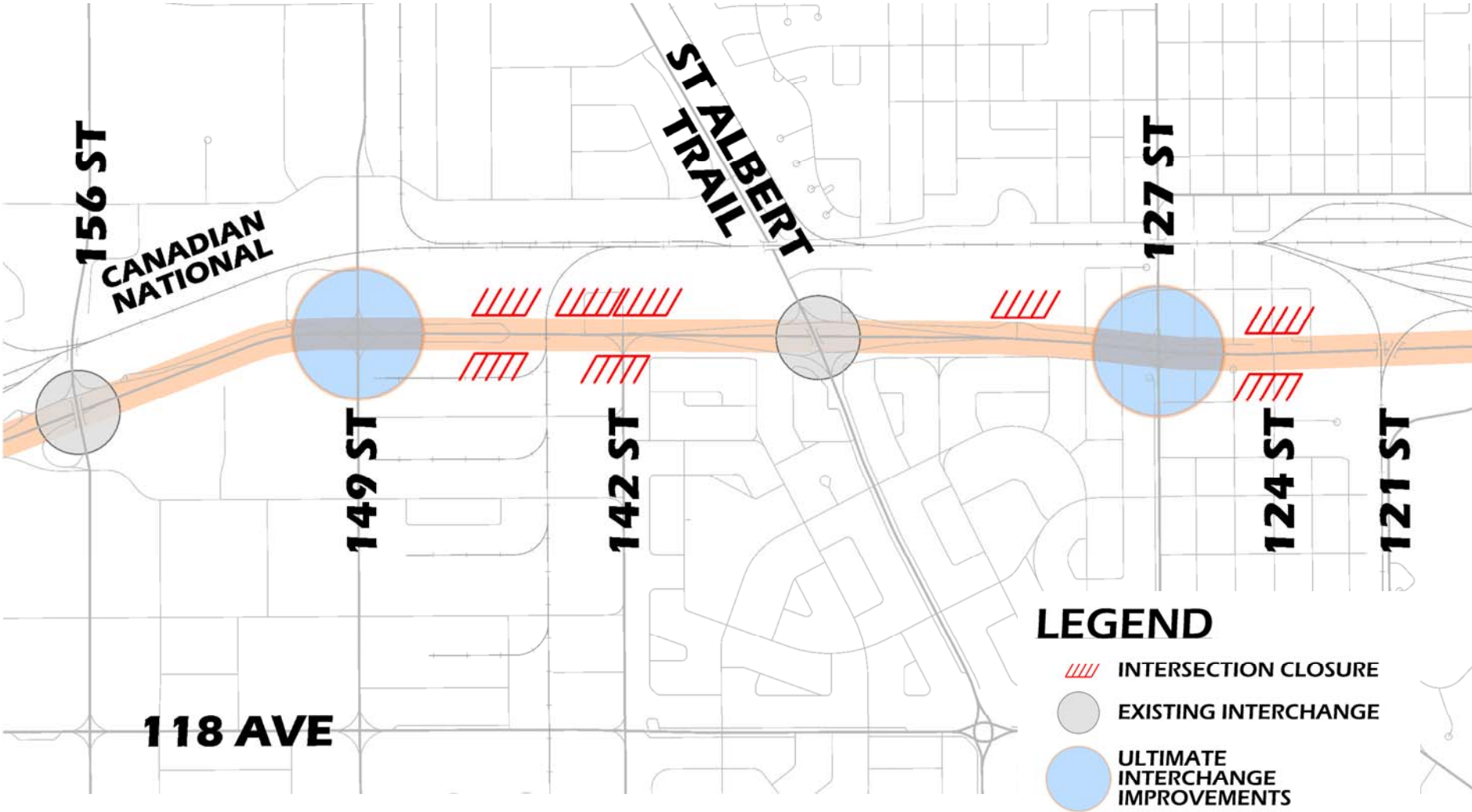
PROJECT SCOPE

- Study corridor extends from 156 Street to St. Albert Trail:
 - 149 Street is the first set of signals entering the City from the west
 - Bordered by interchanges at 156 Street and St. Albert Trail
 - Includes some of the most congested and collision-prone intersections along Yellowhead Trail
 - Includes one of the most congested at-grade rail crossings at 149 Street north of Yellowhead Trail
 - Several unsignalized intersections and accesses between 156 Street and St. Albert Trail

PROJECT BACKGROUND

- Yellowhead Trail has been designated a future freeway and is a key component of the Inner Ring Road
- Both Yellowhead Trail and 149 Street are designated 24-hour Truck Routes, Yellowhead Trail is also a Dangerous Goods Route
- The Yellowhead Trail Strategic Plan:
 - Identified 149 Street as a future grade separated interchange
 - Recommended closure of the 142 Street intersection
 - Recommended closure of all other direct access to Yellowhead Trail between 156 Street and St. Albert Trail

PROJECT BACKGROUND - Yellowhead Trail Strategic Plan

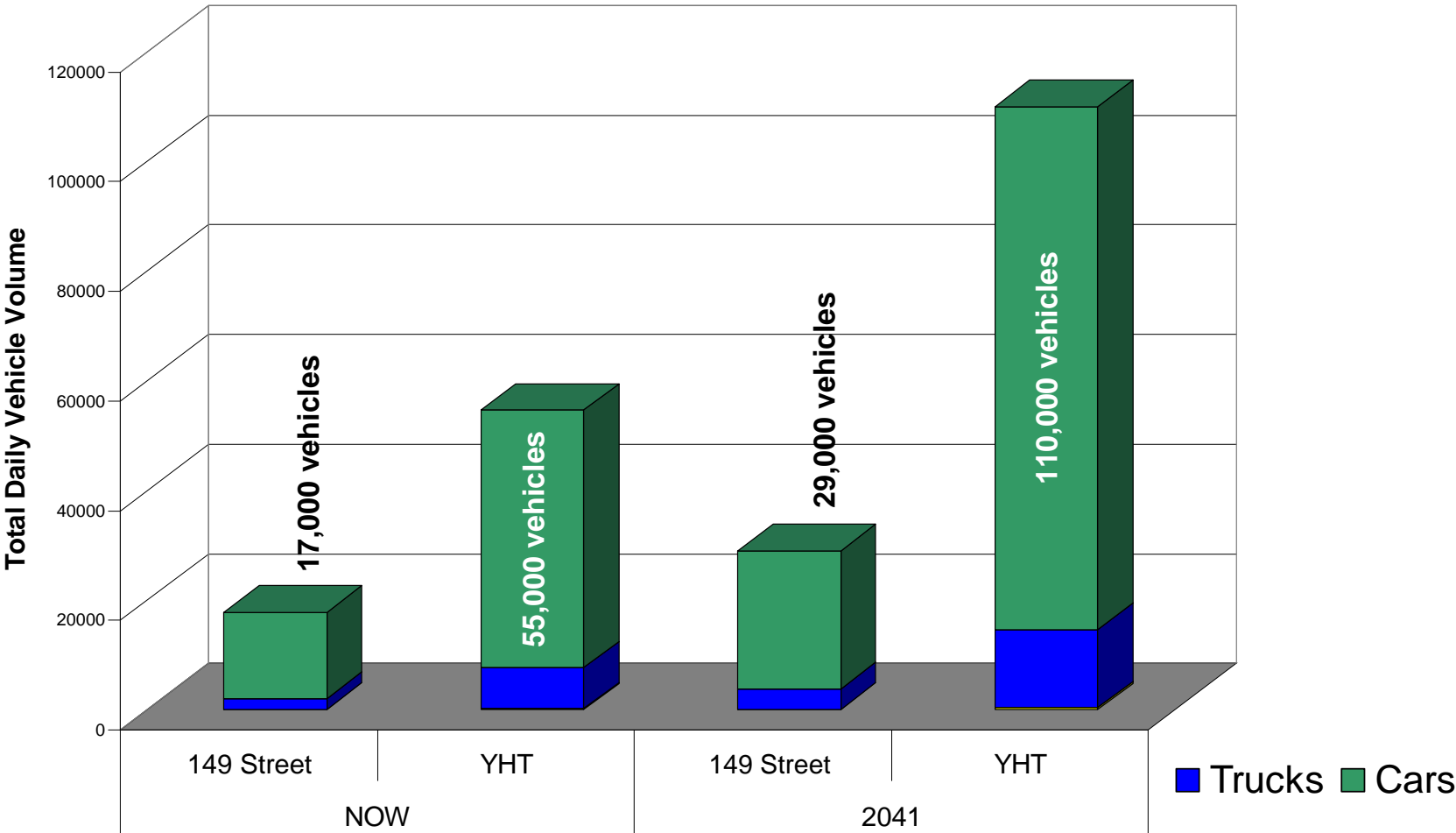


PROJECT BACKGROUND - EXISTING STATISTICS

- 149 Street ranks 4th in the City for collisions in terms of numbers based on 2011 statistics
 - Many collisions can be linked to “stop-and-go” traffic at 149 Street and 142 Street
 - A majority of the collisions were attributed to following too closely

PROJECT BACKGROUND - EXISTING VOLUMES

Existing and Projected Vehicle Volumes

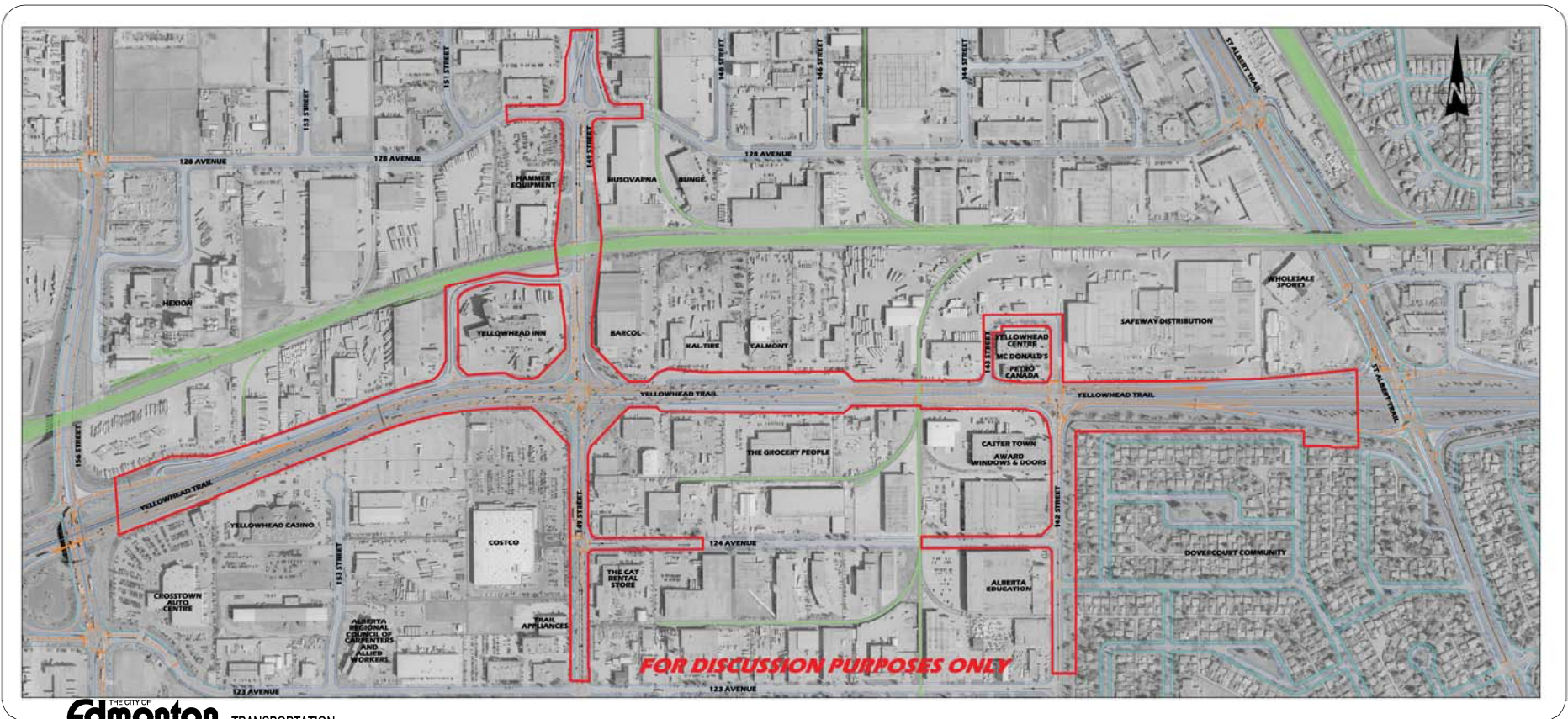


PROJECT BACKGROUND – EXISTING STATISTICS

- Average 40 trains per day cross at 149 Street north of Yellowhead Trail, with an average delay of 4.5 minutes
 - Ranks as priority for grade separation
- Average 4 trains per day cross at the Yellowhead Trail spur line, with an average queue of 3.5 minutes
 - Crossing has low train volumes but high traffic volumes
 - Ranks lower in priority

PROJECT STUDY AREA

- Yellowhead Trail From 156 Street to St Albert Trail. Also 128 Avenue north of the CN rail line to 123 Avenue south of Yellowhead Trail.



PROJECT CONSTRAINTS

- Yellowhead Trail is classified as a future freeway. A freeway is defined as a high speed access controlled multi-lane roadway with interchanges.
- There will be no driveways or at-grade intersections, no traffic signals or at-grade railway crossings of the Yellowhead Trail mainline.
- Access will be provided to all properties in some form – likely with service roads.
- There will be some property impacts.

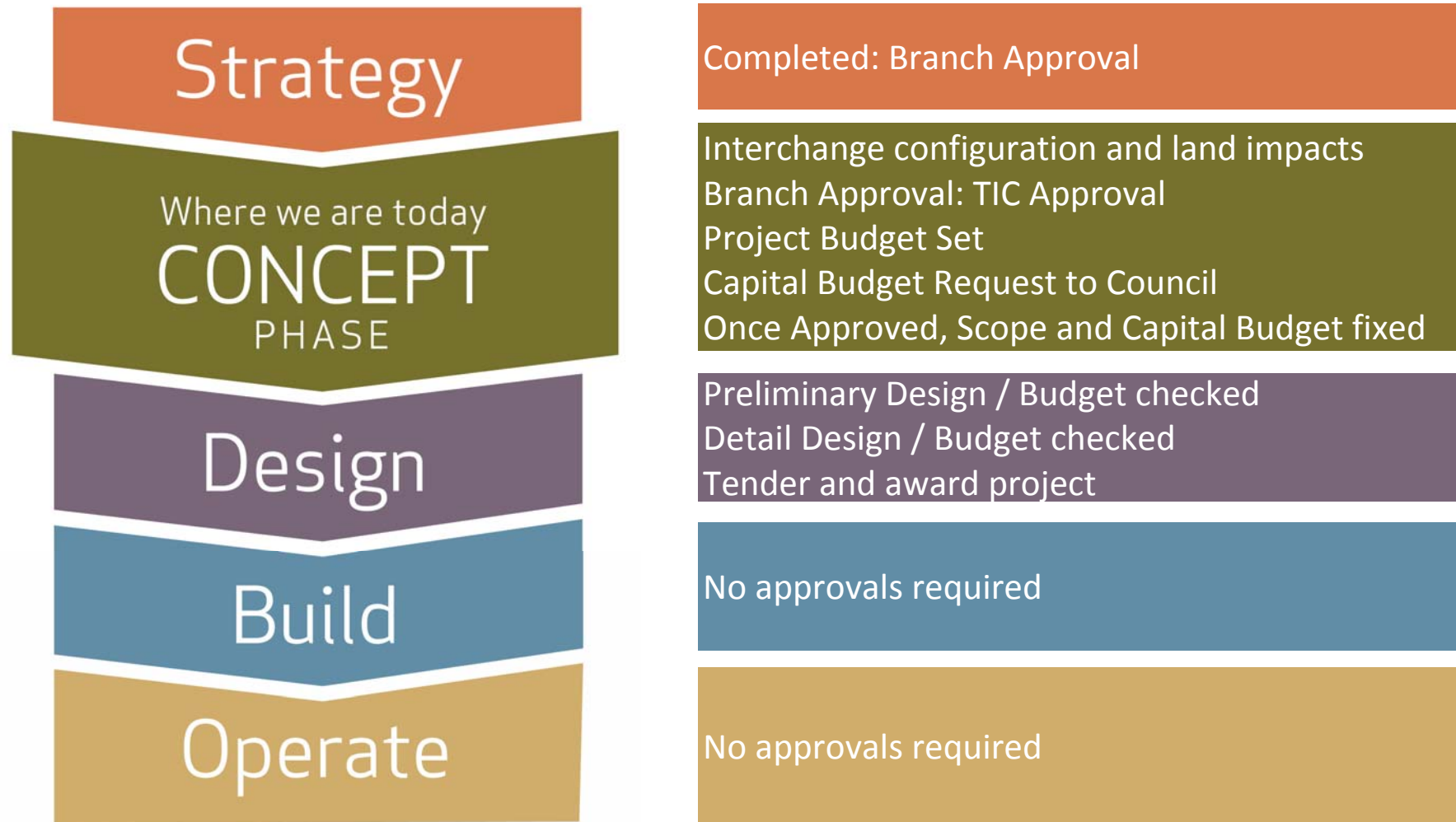
PROJECT MILESTONES

- September 18: SIG Workshop #1
- October 4, November 6, November 22: Other SIG Workshops
- End of November (Tentative): Public Information Session
- January 2013: Final SIG Workshop – Recommended configuration to be presented.
- February 2013: Public Information Session to present recommended plan to the public
- March to December 2013: Finalize configuration and complete Concept Plan

PROJECT PROCESS



TYPICAL PROJECT APPROVALS



SIG PROCESS

- SIG will provide input on:
 - Issues, constraints, and concerns;
 - Evaluation Criteria and Weighting; and
 - Preferred interchange configurations and access options and possible modifications.
- The City will:
 - Listen and consider SIG input and will make decisions based on technical criteria and SIG guidance.

DRAFT SIG Purpose Statement

- *To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:*
 - *decision-making throughout the project,*
 - *the refinement of interchange and access configuration options, and*
 - *the ultimate recommendation.*

DRAFT SIG Guiding Principles - Simplified

- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
- Focus on:
 - freeway vision for Yellowhead Trail
 - Businesses and users
 - Safety for all users
- Consider:
 - the transportation system and all modes (bus, active, auto/truck)
 - overall access rather than isolated properties
 - business visibility as options are refined
 - cost-effective solutions
- Ensure:
 - the solution accommodates future growth projections
 - railway infrastructure integration
 - transportation network and land use support each other

It's time for a BREAK!!



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

DRAFT Evaluation Criteria

CRITERION	CONSIDERATIONS
Geometric Considerations	design speed, weaving distance, design vehicles, sight lines, interchange operations, grades, consistency, etc.
Construction	constructability, staging, commuter impacts, ability to widen in future
Costs	lifecycle costs to build, to maintain, to rehabilitate
Traffic Considerations	accommodating large trucks, traffic capacity, driver expectation, driver friendliness, consistency
Land Impacts	land acquisition requirements, severity of impacts, impact on businesses and revenues, business visibility
Access Requirements	access to existing businesses, accommodating movements, emergency access
Utility Implications	relocation of utilities, drainage
Railway Impacts	grade separation of crossings
Network Operation	existing and future parallel routes, travel time, short cutting, network operation (regional and overall)
Community Impacts	noise, aesthetics, landscaping
Alternative Modes	accommodation and integration of pedestrians and cyclists, pedestrian safety

NEXT STEPS For SIG

- Next Workshop: Thursday October 4, 2012
3:00 pm to 6:00 pm
- PROPOSED AGENDA
 - Review SIG Purpose Statement
 - Review and finalize the evaluation criteria
 - Develop criteria weighting
 - Review Design Criteria
 - Review and discuss interchange options

Thank you!
QUESTIONS?



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

THE WAY WE MOVE

YELLOWHEAD TR/149 ST INTERCHANGE

Stakeholder Input Group Workshop #2
October 10, 2012

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE



TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

WORKSHOP AGENDA

3:00 pm	Introductions Project Vision Purpose Statement/Principles Evaluation Criteria and Weighting General Project Options 149 Street Connectivity/CN Rail
4:00 pm	Break
4:15 pm	Interchange 101 Review of Interchange Options
5:55 pm	Questions
6:00 pm	Closing Comments

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews and a Stakeholder Input Group, and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

PROJECT STUDY AREA

- Yellowhead Trail From 156 Street to St Albert Trail. Also 128 Avenue north of the CN rail line to 123 Avenue south of Yellowhead Trail.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

PROJECT CONSTRAINTS

- Yellowhead Trail is classified as a future freeway. A freeway is defined as a high speed access controlled multi-lane roadway with interchanges.
- There will be no driveways or at-grade intersections, no traffic signals or at-grade railway crossings of the Yellowhead Trail mainline.
- Access will be provided to all properties in some form – likely with service roads.
- There will be some property impacts.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

PROJECT PROCESS


Strategy	Yellowhead Strategic Plan 2008 – 2011
Where we are today CONCEPT PHASE	Start: May 2012 Expected Completion: December 2013
Design	Beyond 2013 This is a 2 year process
Build	Beyond 2015 This is a 2 to 3 yr process
Operate	Beyond 2017

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

SIG Purpose Statement


- To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:
 - the development of evaluation criteria and weighting
 - decision-making throughout the project
 - the refinement of interchange and access configuration options
 - the development of the ultimate recommendation.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

SIG Guiding Principles - Simplified


- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
 - Focus on:
 - freeway vision for Yellowhead Trail
 - businesses and users
 - safety for all users
 - Consider:
 - the transportation system and all modes (bus, active, auto/truck)
 - overall access rather than isolated properties
 - business visibility as options are refined
 - cost-effective solutions
 - potential impact to businesses
 - Ensure:
 - the solution accommodates future growth projections
 - railway infrastructure integration
 - transportation network and land use support each other
 - Sustainable options for operating businesses

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

Final Evaluation Criteria


Criteria
1. Land Impacts <ul style="list-style-type: none"> Land acquisition requirements, severity of impacts, impact on businesses and revenues, business visibility, future viability of parcels
2. Access Requirements <ul style="list-style-type: none"> Access to existing businesses, accommodating existing movements, emergency access
3. Geometric Considerations <ul style="list-style-type: none"> Design speed, weaving distance, design vehicles, sight lines, interchange operations, grades, consistency, etc.
4. Construction <ul style="list-style-type: none"> Constructability, staging, commuter impacts, ability to widen in future, business access impacts
5. Costs <ul style="list-style-type: none"> Lifecycle costs to build, to maintain, to rehabilitate
6. Localized Traffic Considerations <ul style="list-style-type: none"> Impacts within the study area, including accommodating large trucks, traffic capacity, driver expectation, driver frustration, consistency
7. Utility Implications <ul style="list-style-type: none"> Relocation of utilities, drainage
8. Railway Impacts <ul style="list-style-type: none"> Grade separation at crossings
9. Global Network Operation <ul style="list-style-type: none"> Impacts on the overall transportation network, including existing and future parallel routes, travel time, short cutting network operation (regional and overall)
10. Community Impacts <ul style="list-style-type: none"> Noise, aesthetics, landscaping
11. Alternative Modes <ul style="list-style-type: none"> Accommodation and integration of pedestrians and cyclists, pedestrian safety, public transportation



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

General Options for 149 St at YHT


- Consider what the options are for creating a freeway at this location.
- Ignore for now the need for access. We will work access into the options as we go along.
- We have come up with 3 general options:
 - Close 149 Street at YHT with no access to or from, or crossing of YHT.
 - Have 149 Street flyover YHT, but still have no access to or from YHT.
 - Create an interchange at YHT that will permit some or all movements between YHT and 149 Street.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

General Options


Close 149 Street at Yellowhead Trail.



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

General Options

149 Street Flyover of Yellowhead Trail, with no connection to YHT.



TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

General Options
Interchange at YHT

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

Mainline Railway Crossing

- Does 149 Street need to cross the CN mainline?
- If there is a crossing, does it need to be grade-separated?
- Does the land north of the CN mainline need to access YHT at 149 Street or can drivers use 156 Street and St. Albert Trail?
- What about the land between Yellowhead Trail and the CN mainline?

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE


It's time for a BREAK!!

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

Typical Interchanges

- The following slides show some typical interchanges and the pros and cons of each.
- These are meant to be illustrative only, but you should know them.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE


Single Point Urban Interchange - YHT @ 97 Street


Pros:

- Several exist in the City
- Can accommodate large trucks
- Can accommodate U-turn movements
- Good capacity, especially for balanced, heavy movements
- Low land impacts

Cons:

- Poor at accommodating through traffic
- Large, wide structure. Higher Cost.
- Large intersection, can be difficult to navigate for unfamiliar motorists
- Requires retaining structures. Higher Cost
- No space for aesthetic features
- Complicated pedestrian crossing



Also YHT @ 82 Street, YHT @ Fort Road 

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE


Diamond Interchange - YHT & St. Albert Trail


Pros:

- Very common
- Small structure. Lower cost
- Room for aesthetic features
- Retaining walls generally not needed
- Moderate land impacts

Cons:

- Capacity can be an issue with heavy turning movements - may require extensive turning bays and wider structure. Increased costs.
- Can be difficult for trucks to maneuver



Also many others along WMD 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE


Diamond Interchange w/ Loop - YHT @ 156 Street

Pros:


- Can accommodate a heavy turn movement in near free-flow depending on location of loop ramp
- Small structure. Lower cost
- Room for aesthetic features
- Retaining walls generally not needed
- Opportunity for service road connection or access at ramp intersection

Cons:

- Capacity can be an issue with heavy turning movements - may require extensive turning bays and wider structure. Increased costs.
- Can be difficult for trucks to maneuver
- Larger land impacts



Also AHD @ 111 Street, YHT @ Victoria Trail



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

Split Diamond Interchange - WMD @ 111 Street

Pros:

- Can accommodate a heavy turn movements
- Room for aesthetic features
- Retaining walls not always needed

Cons:

- Requires two structures
- Signal coordination between intersections is critical to operation
- Can be difficult for trucks to maneuver
- Considerable land impacts



Also WMD @ Gateway Boulevard



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE


Partial Cloverleaf - Hwy 16 @ Cloverbar Road

Pros:


- Can accommodate two near free-flow movements
- Room for aesthetic features
- Retaining walls generally not needed
- Requires single structure. Lower costs
- Opportunity for service road connections or access at ramp intersections

Cons:

- Can be difficult for trucks to maneuver
- Large land impacts



Also, AHD @ 17 Street, AHD @ Lessard Road, AHD @ 97 Street



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE


Partial Cloverleaf -YHT @ 184 Street

Pros:


- Can accommodate two near free-flow movements
- Room for aesthetic features
- Retaining walls generally not needed
- Requires single structure. Lower cost
- Opportunity for service road connections or access at ramp intersections

Cons:

- Can be difficult for trucks to maneuver
- Larger land impacts
- Less than ideal off-ramp loop
- Creates weaving issue on cross road between loop ramps



Also AHD @ Rabbit Hill Road, AHD @ 91 Street, AHD @ 50 Street



TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

Project Design Criteria

Criteria	Yellowhead Trail	149 Street	Ramps
Road Classification	Freeway	Arterial	Arterial
Posted Speed	90 km/h	60 km/h	60 km/h (35 km/h for loops)
Number of Lanes	6 lanes (minimum)	4 lanes	1 or 2 lanes
Minimum Radius	440 m	190 m	190 m (70m for loops)
Max Grade	Desired 3%	Desired 4%	Desired 4%
Min Grade	0.6%, 1.0% on bridge	0.6%, 1.0% on bridge	0.6%
Lane Width	3.7 m	4.2 m curb 3.7 m median	3.7 m (multiple) 4.8 m (single)
Shoulder Width - Right	3.0 m	N/A	3.6 m (1 lane) 2.0 - 3.0 m (2 lane) ¹
Shoulder Width - Left	2.5 m	N/A	1.0 m (1 lane) 1.0 - 2.0 m (2 lane) ¹
Median Width	5.5 m (F-Barrier)	4.5 m	N/A
Vertical Clearance	5.5 m to road 7.01 m to top of rail	5.5 m to road 7.01 m to top of rail	5.5 m to road 7.01 m to top of rail

Notes:


1. Shoulder width to be finalized at a later stage.

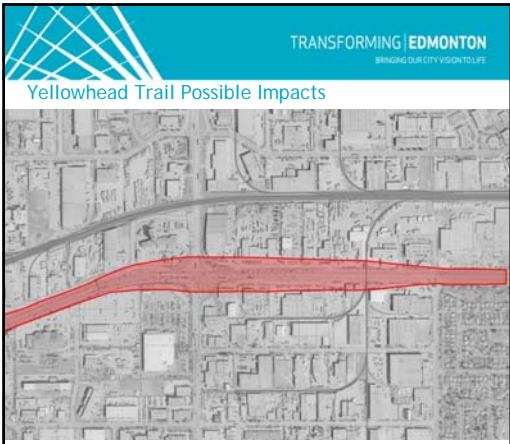
TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

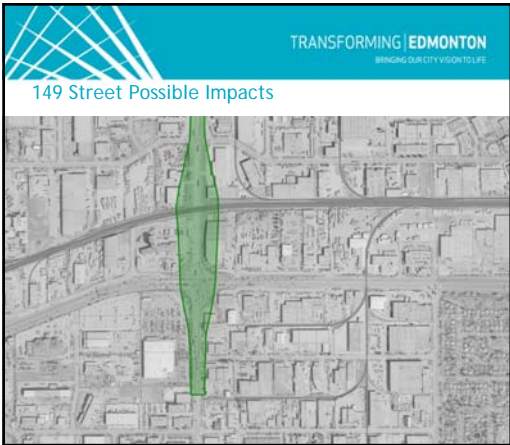
A Look At Land Impacts

- The following slides show possible land impacts for very simple grade separations between Yellowhead Trail and 149 Street. No access roads and no interchange ramps.
- In one case, we have assumed that 149 Street stays at its current elevation and YHT goes under 149 Street and the spur line.
- In the other case, we assumed that YHT stays at its current elevation and 149 Street goes over YHT and the CN mainline.
- These are meant to be illustrative to show the possible impacts of a grade separation.
- It may be possible to reduce these impacts slightly with retaining walls and some refinement of the roadway alignments.
- Once we add ramps for an interchange and access roads the impacts will increase.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE









TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE


NEXT STEPS For SIG


- Next Workshop: Wednesday November 6, 2012
3:00 pm to 6:00 pm
- PROPOSED AGENDA
 - Review SIG Purpose Statement
 - Review Interchange 101
 - Review options in breakout sessions

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 

TRANSFORMING EDMONTON
BRINGING OUR CITY VISION TO LIFE

Thank you!
QUESTIONS?



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE 



THE WAY WE MOVE

YELLOWHEAD TR/149 ST INTERCHANGE

Stakeholder Input Group Workshop #3
November 6, 2012

TRANSFORMING | **EDMONTON**

BRINGING OUR CITY VISION TO LIFE



WORKSHOP AGENDA

- 3:00 pm Introductions
 Project Vision
 Purpose Statement/Principles
- 3:10 pm Review Group 1 (30 mins) 10 Min group discussion after
- 3:50 pm Review Group 2
- 4:30 pm Review Group 3
- 5:15 pm Review Group 4

- 5:55 pm Questions
- 6:00 pm Closing Comments

PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews and a Stakeholder Input Group, and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

PROJECT CONSTRAINTS

- Yellowhead Trail is classified as a future freeway. A freeway is defined as a high speed access controlled multi-lane roadway with interchanges.
- There will be no driveways or at-grade intersections, no traffic signals or at-grade railway crossings of the Yellowhead Trail mainline.
- Access will be provided to all properties in some form – likely with service roads.
- There will be some property impacts.

PROJECT PROCESS



SIG Purpose Statement

- To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:
 - *the development of evaluation criteria and weighting*
 - *decision-making throughout the project*
 - *the refinement of interchange and access configuration options*
 - *the development of the ultimate recommendation.*

SIG Guiding Principles - Simplified

- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
- Focus on:
 - freeway vision for Yellowhead Trail
 - businesses and users
 - safety for all users
- Consider:
 - the transportation system and all modes (bus, active, auto/truck)
 - overall access rather than isolated properties
 - business visibility as options are refined
 - cost-effective solutions
 - potential impact to businesses
- Ensure:
 - the solution accommodates future growth projections
 - railway infrastructure integration
 - transportation network and land use support each other
 - Sustainable options for operating businesses

It's time for a **BREAK!!**



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

Thank you!
QUESTIONS?



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



THE WAY WE MOVE

YELLOWHEAD TR/149 ST INTERCHANGE

Stakeholder Input Group Workshop #4
November 22, 2012

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE



TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

WORKSHOP AGENDA

3:00	<ul style="list-style-type: none"> Introductions Project Vision Purpose Statement/Principles
3:10	<ul style="list-style-type: none"> Project Process and Timeline <ul style="list-style-type: none"> - Overall input process and timeline
3:15	<ul style="list-style-type: none"> Review of Final Evaluation Criteria and Weighting
3:25	<ul style="list-style-type: none"> Review of Options: <ul style="list-style-type: none"> - Overview of option refinement / elimination process - Overview and discussion of shortlisted options
3:45	<ul style="list-style-type: none"> Overview of Evaluation Process
3:55	<ul style="list-style-type: none"> Option Evaluation <ul style="list-style-type: none"> - guided exercise to be completed by each SIG business or representative
5:55	<ul style="list-style-type: none"> Questions
6:00	<ul style="list-style-type: none"> Closing Comments

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews and a Stakeholder Input Group, and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



PROJECT CONSTRAINTS

- Yellowhead Trail is classified as a future freeway.
- A freeway is defined as:
 - A road limited to through-traffic, with access via interchanges.
 - A high speed access controlled multi-lane roadway with interchanges.
- There will be no driveways or at-grade intersections along Yellowhead Trail.
- There will be no traffic signals on Yellowhead Trail.
- There will be no at-grade railway crossings along Yellowhead Trail (spur line will be grade separated or removed).
- Access will be provided to all properties in some form – likely with service roads.
- There will be property impacts.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



PROJECT PROCESS



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



SIG Purpose Statement

- To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:
 - *the development of evaluation criteria and weighting*
 - *decision-making throughout the project*
 - *the refinement of interchange and access configuration options*
 - *the development of the ultimate recommendation.*

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



SIG Guiding Principles - Simplified

- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
- Focus on:
 - freeway vision for Yellowhead Trail
 - businesses and users
 - safety for all users
- Consider:
 - the transportation system and all modes (bus, active, auto/truck)
 - overall access rather than isolated properties
 - business visibility as options are refined
 - cost-effective solutions
 - potential impact to businesses
- Ensure:
 - the solution accommodates future growth projections
 - railway infrastructure integration
 - transportation network and land use support each other
 - Sustainable options for operating businesses

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



Overall Input Process

Input into the project is being gathered from three major groups.

1. Public: Stakeholder Input Group, one-on-one profiling interviews, open houses
2. Internal: City departments, project team, and specialist consultants
3. Political: Transportation Infrastructure Committee (TIC) and City Council

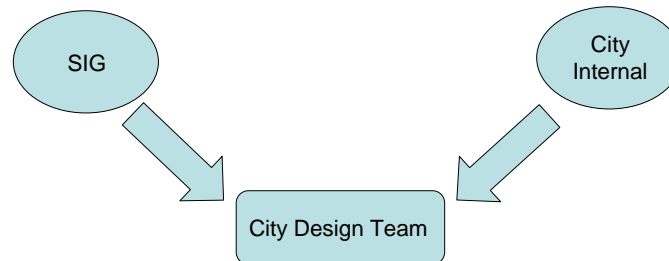
YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



Input Process to Date

We sought input from the SIG and City stakeholders to:

- Develop evaluation criteria
- Weight evaluation criteria
- Review and discuss options
- Reduce the number of options



These same groups will evaluate the options to help develop the short-list of preferred options for further engineering.

Next Steps (Approximate Schedule)

November	<ul style="list-style-type: none"> • Evaluate options
December/ January	<ul style="list-style-type: none"> • Meet with additional stakeholders to understand concerns and update them on planning process / progress • Complete technical refinements to options and other engineering to create short-list of options • Distribution of project fact sheet / update #2
February/ March	<ul style="list-style-type: none"> • Present short-list of options to Transportation and Infrastructure Committee (TIC) for information / feedback • Review short-list with SIG • Hold a public open house to obtain public input on the short-list
April	<ul style="list-style-type: none"> • Use input and refinements to develop recommended interchange and access strategy
May/June	<ul style="list-style-type: none"> • Present recommended strategy to TIC • Make recommended strategy public – website, project fact sheet #3, possible open house

Evaluation Criteria

- Eleven evaluation criteria were agreed on.
- SIG and Internal City group helped determine the relative weighting of each criterion.
- A total of 35 people provided input into criteria weighting.
- The 35 responses were averaged and rounded up or down to the nearest 5.

Evaluation Criteria Weighting

Criteria	Average All	Proposed Weighting
1. Land Impacts • Land acquisition requirements, severity of impacts, impact on businesses and revenues, business visibility, future visibility of parcels	18.00	20
2. Access Requirements • Access to existing businesses, accommodating existing movements, emergency access	16.86	15
3. Geometric Considerations • Design speed, weaving distance, design vehicles, sight lines, interchange operations, grades, consistency, etc.	18.71	20
4. Construction • Constructability, staging, commuter impacts, ability to widen in future, business access impacts	14.71	15
5. Costs • Lifecycle costs to build, to maintain, to rehabilitate	14.57	15
6. Localized Traffic Considerations • Impacts within the study area, including accommodating large trucks, traffic capacity, driver expectation, driver friendliness, consistency	16.29	15
7. Utility Implications • Relocation of utilities, drainage	8.71	10
8. Railway Impacts • Grade separation of crossings	11.14	10
9. Global Network Operation • Impacts on the overall transportation network, including existing and future parallel routes, travel time, network operation (local and overall)	15.43	15
10. Community Impacts • Noise, aesthetics, landscaping, short cutting	7.71	7.5
11. Alternative Modes • Accommodation and integration of pedestrians and cyclists, pedestrian safety, public transportation	7.86	7.5
Total Weighting: (Total Weighting Should Equal 150)	150	150

Option Summary

Option #	Internal Team	SIG Workshop	Carry Forward
1	Yes	Yes	Yes
2	Yes	Yes	Yes
3	Yes	No	Yes
4	Yes	Yes	Yes
5	No	No	No
6	No	No	No
7	No	No	No
8	Yes	No	No
9	Yes	No	Yes
10	Yes	Yes	No
11	Yes	No	No
12	No	Yes	No
13	No	No	No
14	Yes*	Yes	Yes
15	Yes	No	Yes

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



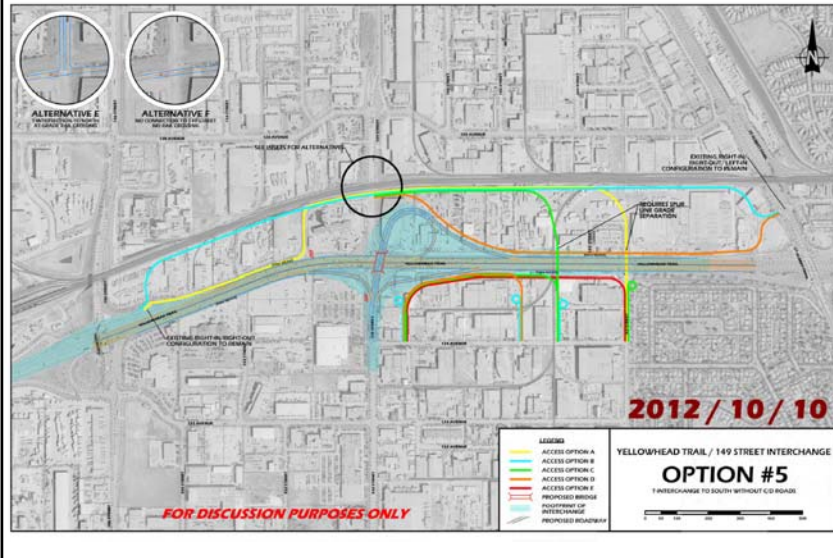
Option Refinement

- Both SIG and Internal City group provided input into the reduction of options.
- Options 5 (trumpet interchange), 6 (diamond with no access to north), and 7 (SE loop with no access to north) were eliminated by both groups because they were T-interchanges to the south. Access was deemed poor and there are better options for consideration.
- Option 13 (fly-over of Yellowhead with at-grade crossing of CN mainline) was eliminated because it was deemed impractical. It provides a costly grade separation without providing access to Yellowhead Trail.

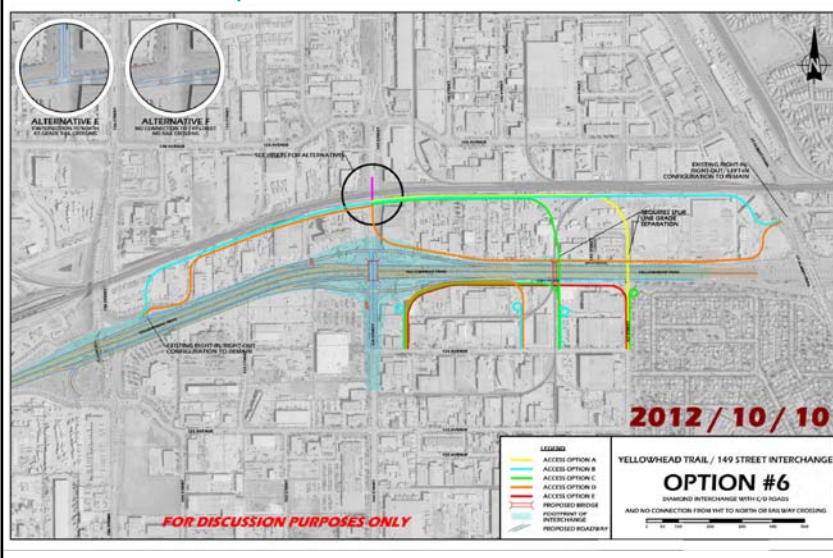
YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



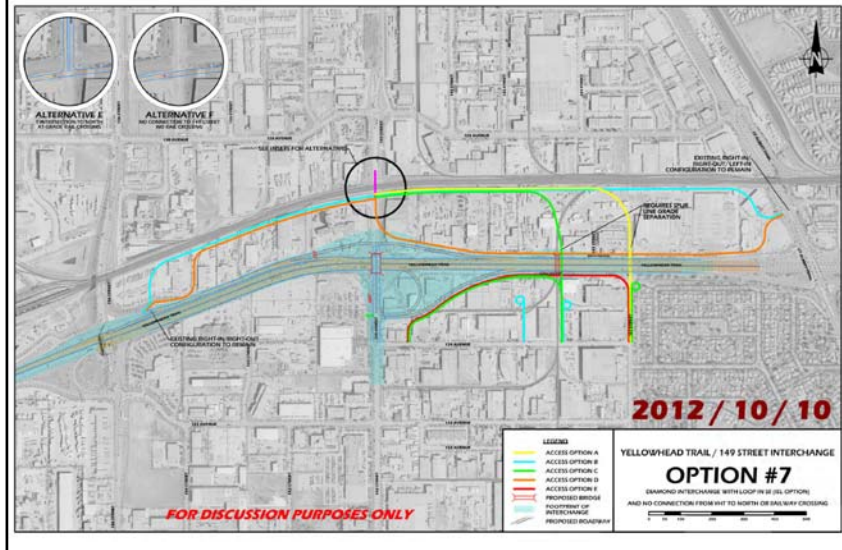
Eliminated Options



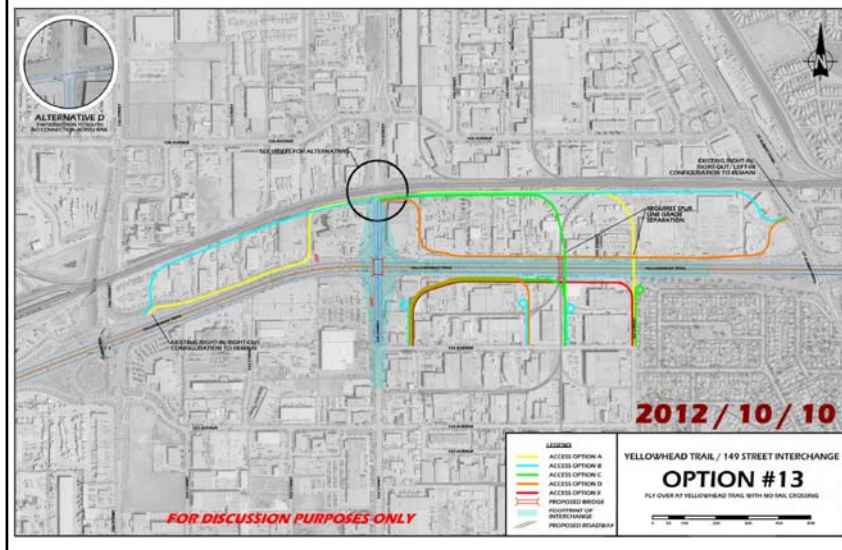
Eliminated Options



Eliminated Options



Eliminated Options



Option Discussion

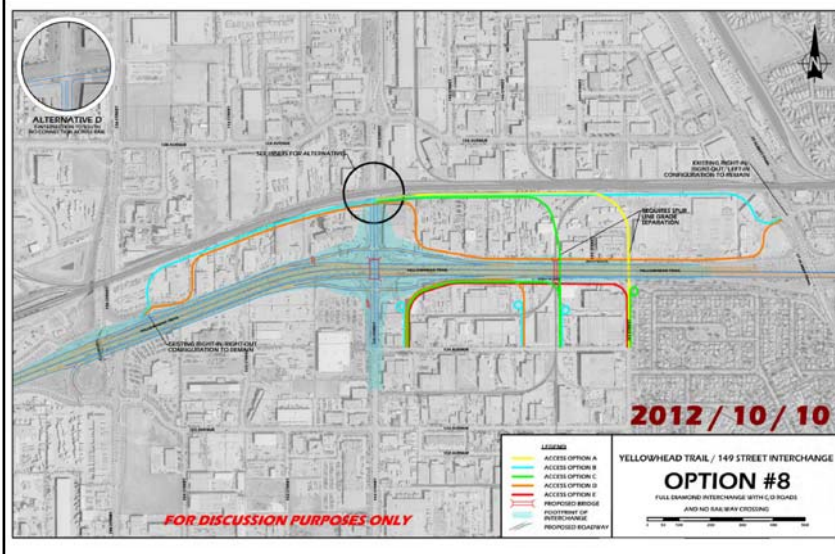
- Option 3 - SIG eliminated this option, but we chose to keep it because of better traffic operations than others.
- Options 8, 9, and 10 – These options are full interchanges with direct access to the businesses north of Yellowhead Trail. It was felt that we should only carry forward one option from this group.
 - Option 8 - SIG eliminated this option and we agreed.
 - Option 9 – We believe Option 9 is the best of these three options as it works better operationally (no C/D roads on south side) and has similar land impacts on the SE side as other options while reducing impacts on the south west.
 - Option 10 – SIG kept this option, but we dropped it in favour of Option 9.

Discussion: From a network perspective, it is okay not to cross the CN Mainline.

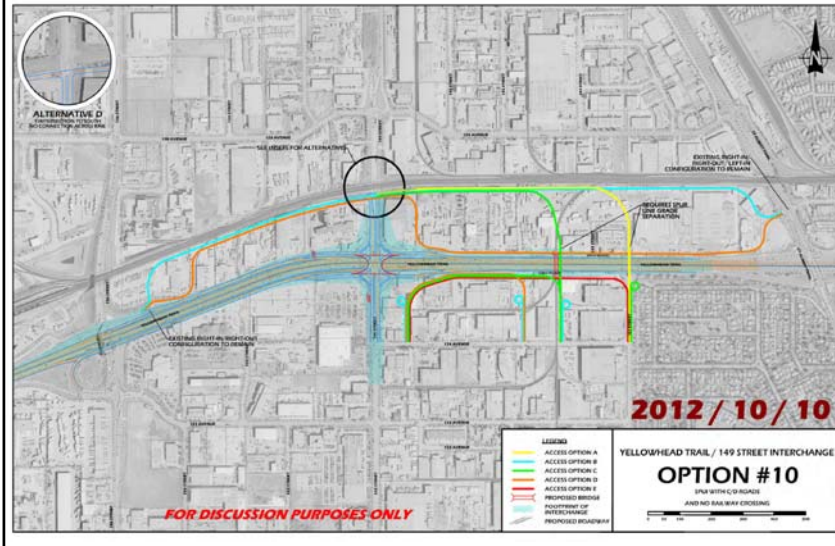
YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



Eliminated Options



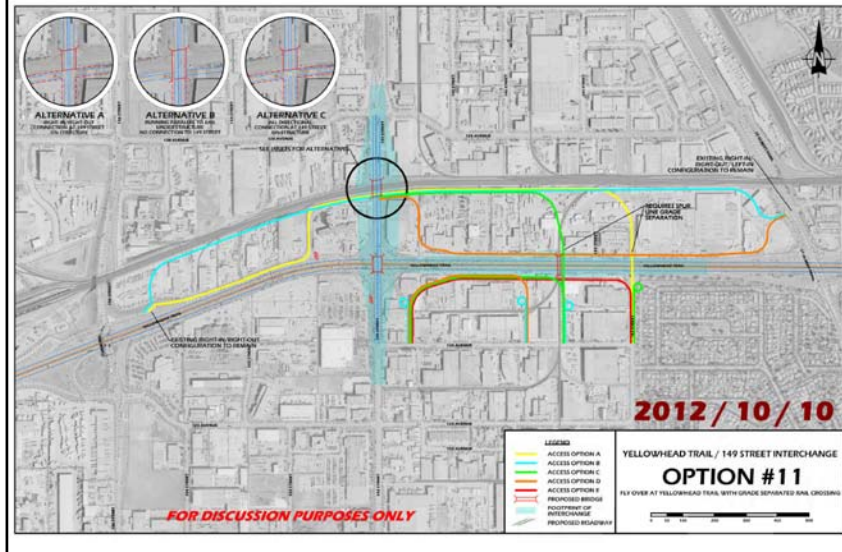
Eliminated Options



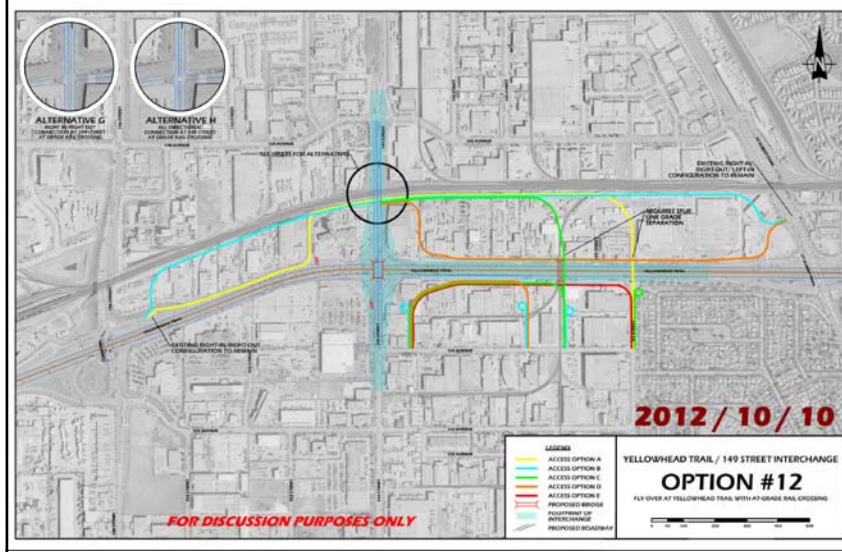
Option Discussion

- Option 11 – SIG eliminated Option 11 and we agreed.
- Option 12 - SIG suggested we keep this option. However, it is impractical due to the expensive grade separation of Yellowhead Trail, no direct access to Yellowhead Trail, and the at-grade nature of the CN mainline crossing.
- Option 15 - SIG eliminated this option, but we felt that it had merit because of the reduced land impact and the accommodation of one of the peak traffic movements.

Eliminated Options



Eliminated Options



Options to be Evaluated

- Seven options remain. They are:
 - Option 1: Parclo AB – east side impacts and rail crossing
 - Option 2: SPUI – west side CD roads and rail crossing
 - Option 3: Full Diamond – west side CD roads and rail crossing
 - Option 4: Diamond with SE loop – WB CD road only and rail crossing
 - Option 9: Option 4 with north side access instead of rail crossing
 - Option 14: No interchange or access to YHT
 - Option 15: Half diamond – no CD Roads and east side impacts

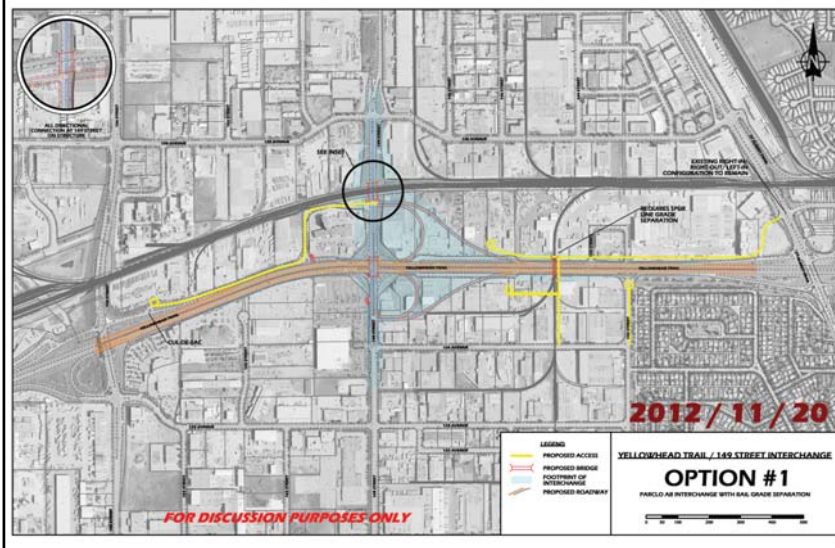
- We chose access options for each based on comments received at the last SIG workshop and our judgment.

Question: Why does the SW corner appear to be immune from major impacts?
• Weaving Distance

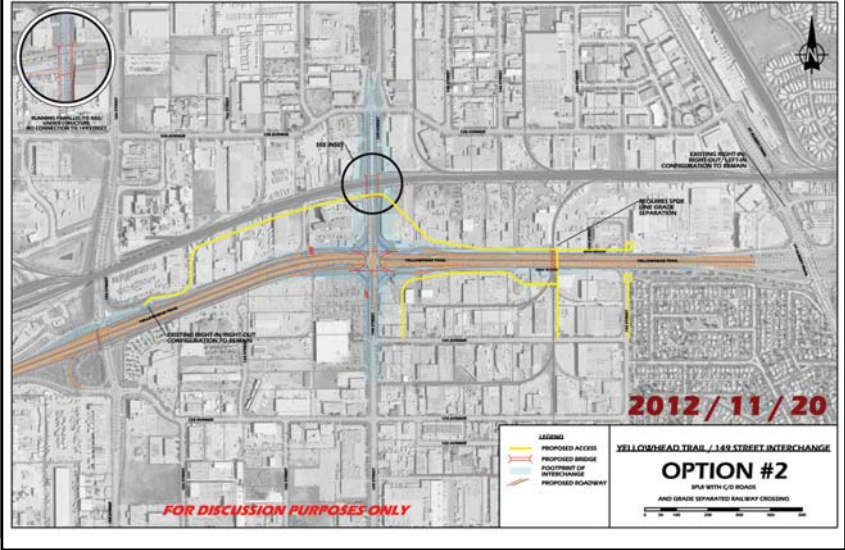
YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



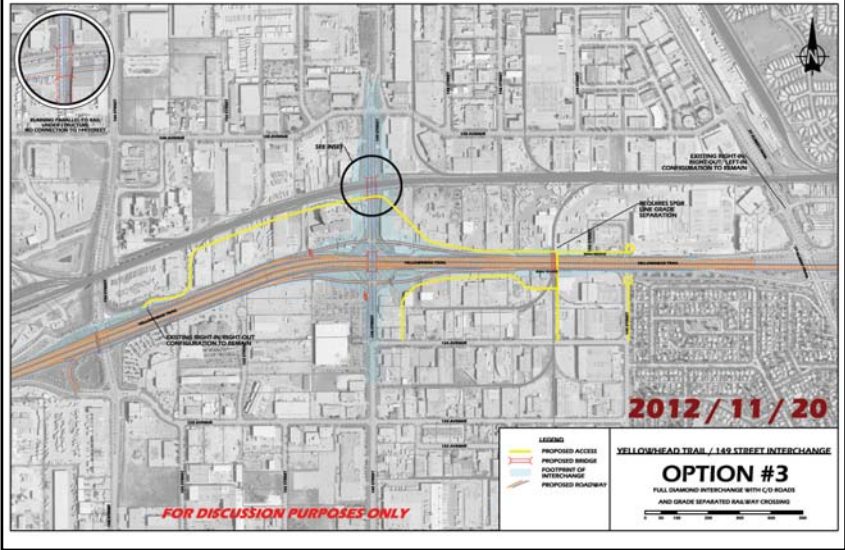
Modified Options for Evaluation



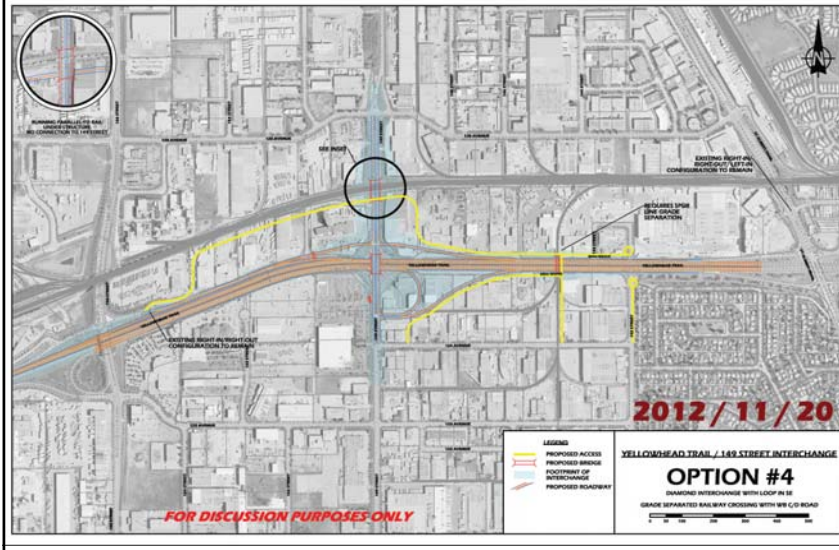
Modified Options for Evaluation



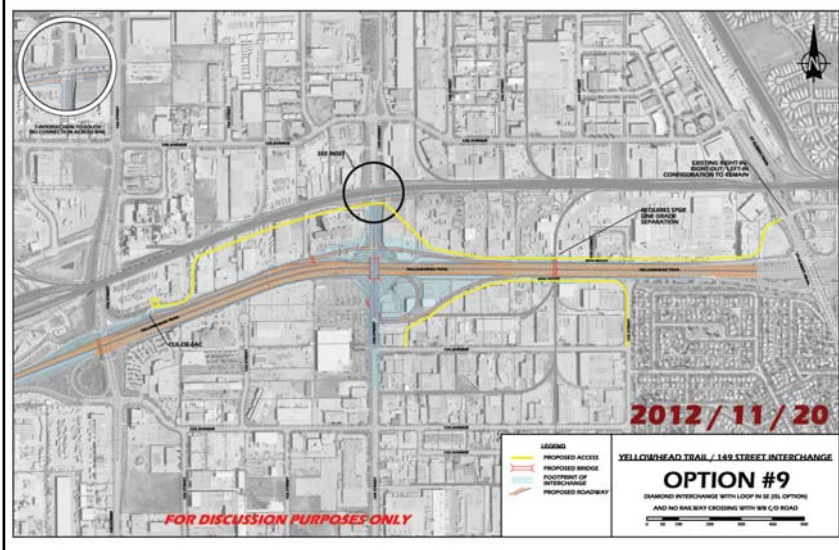
Modified Options for Evaluation



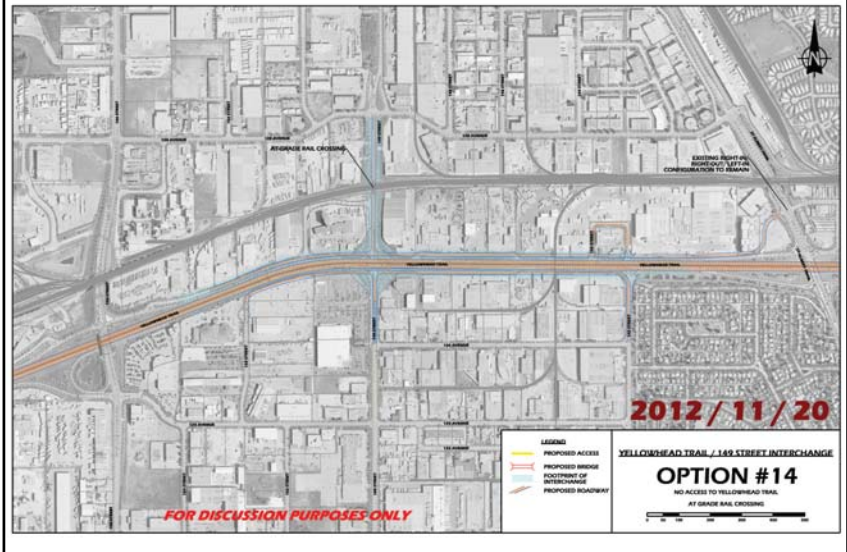
Modified Options for Evaluation



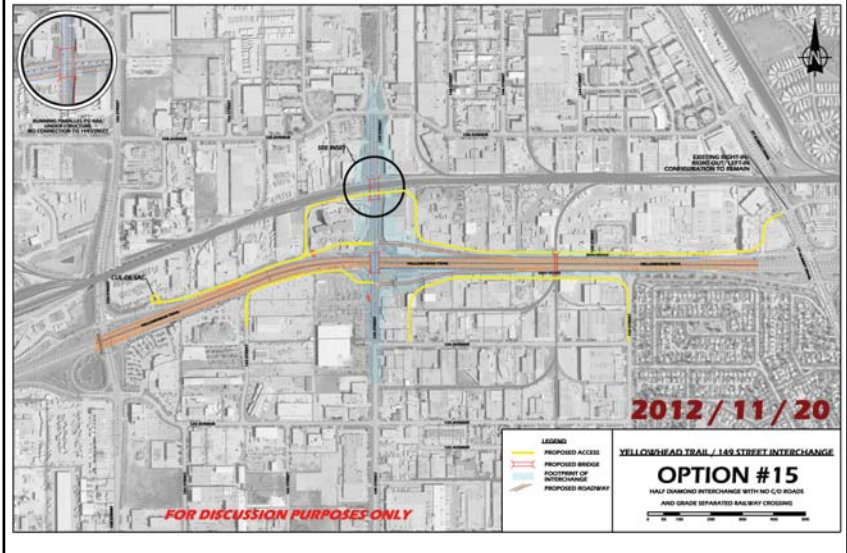
Modified Options for Evaluation



Modified Options for Evaluation



Modified Options for Evaluation



Evaluation Process

- Evaluate each option (7 options total) one criterion at a time.
 - Options are to be rated on a scale of 1 to 5, where 1 is very poor at satisfying the criterion and 5 is very good.
- Supporting materials provided:
 - Option Configuration
 - Evaluation Criteria and Weighting
 - Data summary (Detailed data to be posted on walls with options)
- Some technical criterion include the project team's interpretation of how well each option performs.
- Approximately 10 minutes will be permitted per criterion.
- Include name / organization on evaluation form before handing it in.
- Only one evaluation from per organization.
- All forms are to be submitted before moving on to next criterion.

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



Thank you!
QUESTIONS?




YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



NEXT STEPS For SIG

- Next Workshop:
 - To be determined
- PROPOSED AGENDA
 - Review short-list of alternatives (best 3 or 4 alternatives)




THE WAY WE MOVE

**YELLOWHEAD TRAIL/
149 STREET INTERCHANGE**

Stakeholder Input Group Workshop #5
February 27, 2013

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE



TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

WORKSHOP AGENDA

- Welcome and Introductions
 - Project Vision, Constraints, Purpose Statement and Principles
- Project Process and Timeline
 - Overall input process and timeline
- Review of Workshop #4 Options and Latest Developments
- Review of Options:
 - Overview of option refinement / elimination process
 - Overview and discussion of shortlisted options
- Overview of Evaluation Process
- Review and Discussion of Alternatives (Small Groups)
 - guided exercise to be completed by each SIG business or representative
- Questions
- Closing Comments



PROJECT VISION

- To develop an interchange concept plan which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews and a Stakeholder Input Group, and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations

PROJECT CONSTRAINTS

- Yellowhead Trail is classified as a future freeway.
- A freeway is defined as:
 - A road limited to through-traffic, with access via interchanges.
 - A high speed access controlled multi-lane roadway with interchanges.
- There will be no driveways or at-grade intersections along Yellowhead Trail.
- There will be no traffic signals on Yellowhead Trail.
- There will be no at-grade railway crossings along Yellowhead Trail (spur line will be grade separated or removed).
- Access will be provided to all properties in some form – likely with service roads.
- There will be property impacts.

SIG PURPOSE STATEMENT

- To provide guidance to the City's technical design team for the Yellowhead Trail/149 Street Interchange Project which will aid in:
 - *the development of evaluation criteria and weighting*
 - *decision-making throughout the project*
 - *the refinement of interchange and access configuration options*
 - *the development of the ultimate recommendation.*

SIG GUIDING PRINCIPLES

- Understand and respect differing perspectives and priorities
- Understand that there will be property impacts
- Focus on:
 - freeway vision for Yellowhead Trail
 - businesses and users
 - safety for all users
- Consider:
 - the transportation system and all modes (bus, active, auto/truck)
 - overall access rather than isolated properties
 - business visibility as options are refined
 - cost-effective solutions
 - potential impact to businesses
- Ensure:
 - the solution accommodates future growth projections
 - railway infrastructure integration
 - transportation network and land use support each other
 - Sustainable options for operating businesses

PROJECT STAGES AND TIMELINE



YELLOWHEAD TRAIL / 149 STREET INTERCHANGE



INPUT PROCESS

Input into the project has been or will be gathered from three major groups:

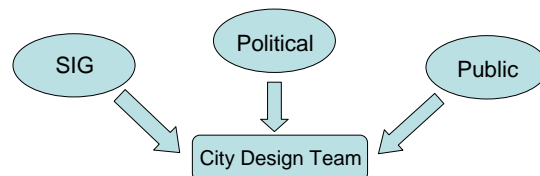
Public: Stakeholder Input Group, one-on-one profiling interviews, open houses

Internal: City departments, project team, and specialist consultants

Political: Transportation Committee (TC) and City Council

We gathered input from SIG and City internal stakeholders to:

- Develop evaluation criteria
- Weight evaluation criteria
- Review and discuss options
- Reduce the number of options



PROCESS TO DATE

Fall / Winter 2012

- 4 workshops were held with SIG to:
 - Review project scope;
 - Discuss options to make Yellowhead free-flow at 149 Street;
 - Develop evaluation criteria; and
 - Evaluate options.

Mid December 2012

- SIG evaluated 7 options in detail using the evaluation criteria previously developed by SIG and City staff, and using the data provided by the design team.

PROCESS TO DATE (CONTINUED)

Late December 2012:

- Results of the evaluation were e-mailed to SIG members. As shown previously, SIG's evaluation results were, in order of preference:
 1. Option 3 – Full Diamond interchange with CD Roads
 2. Option 1 – Parclo AB interchange
 3. Option 14 – Full Closure of 149 Street
 4. Option 15 – Half Diamond interchange to the east
 5. Option 2 – SPUI with CD Roads
 6. Option 4 – Diamond with SE loop interchange
 7. Option 9 – SE Loop interchange with business access

January 2013:

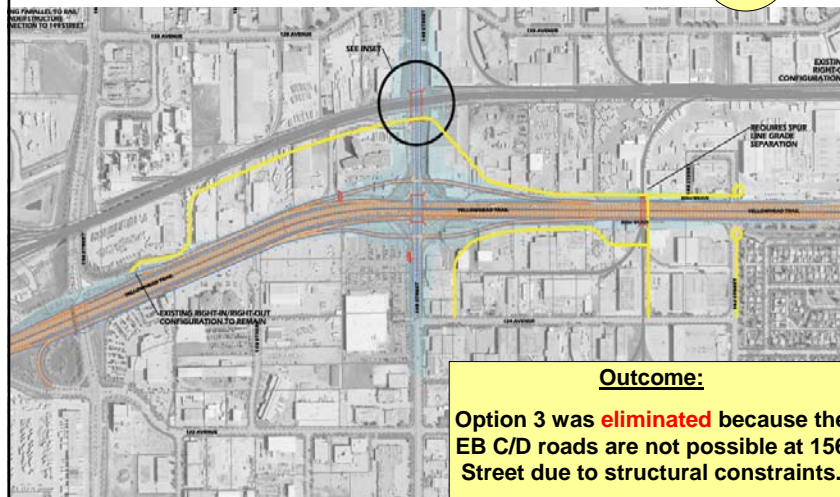
- Using the results of the SIG and City evaluations, options were carried forward for more detailed technical analysis and refinement.

TECHNICAL ANALYSIS

- Technical analysis of the options involved looking at each of the options based on a number of items, including:
 - Feasibility of C/D (collector/distributor) roads under 156 Street interchange.
 - Review of weaving distance on Yellowhead mainline and compliance with safety requirements.

OPTIONS EVALUATED BY SIG

1



OPTIONS EVALUATED BY SIG

2

Outcome:
Option 1 was **eliminated** due to insufficient weaving distance between 149 St. and St. Albert Tr.

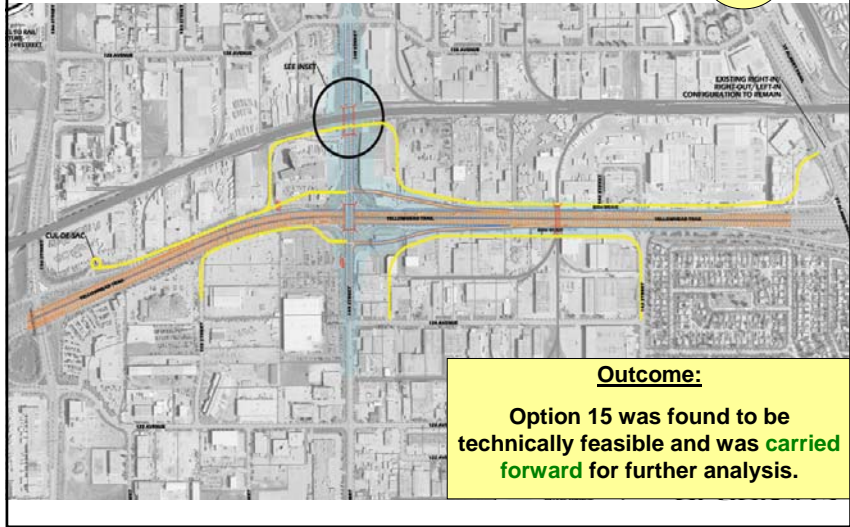
OPTIONS EVALUATED BY SIG

3

Outcome:
Option 14 was found to be technically feasible and was **carried forward** for further analysis.

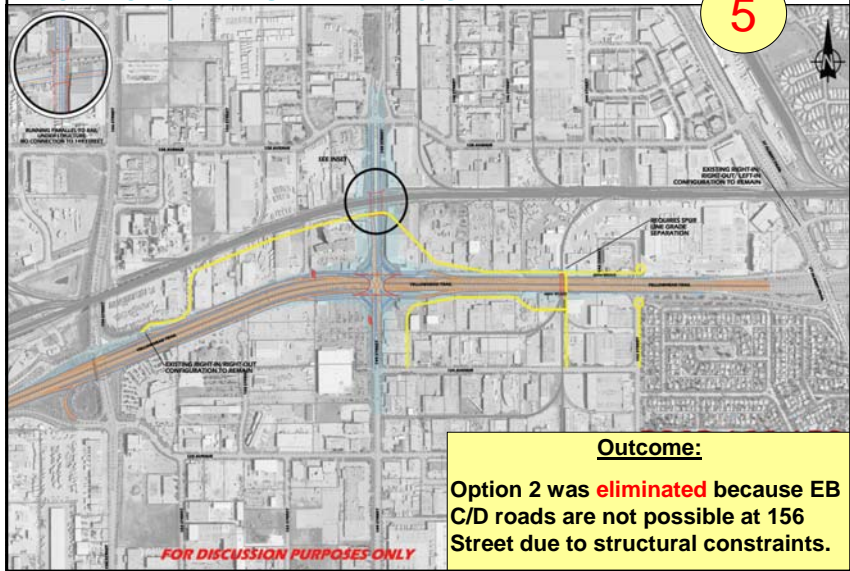
OPTIONS EVALUATED BY SIG

4



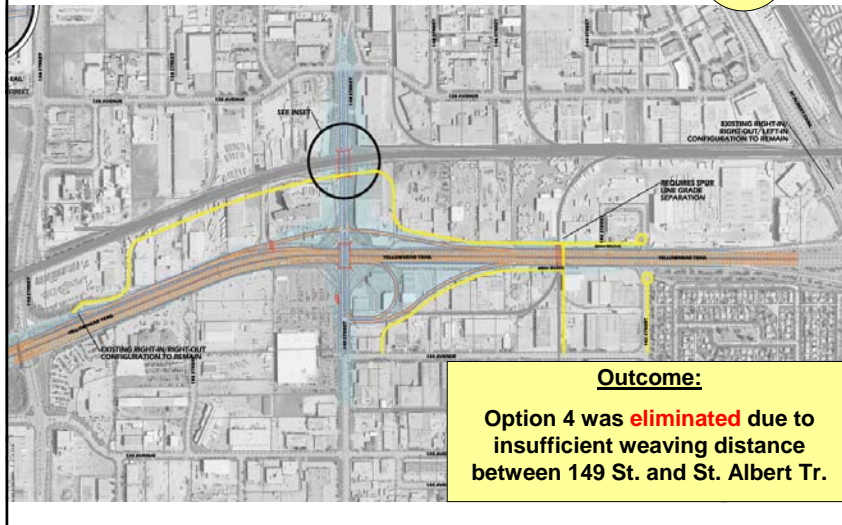
OPTIONS EVALUATED BY SIG

5



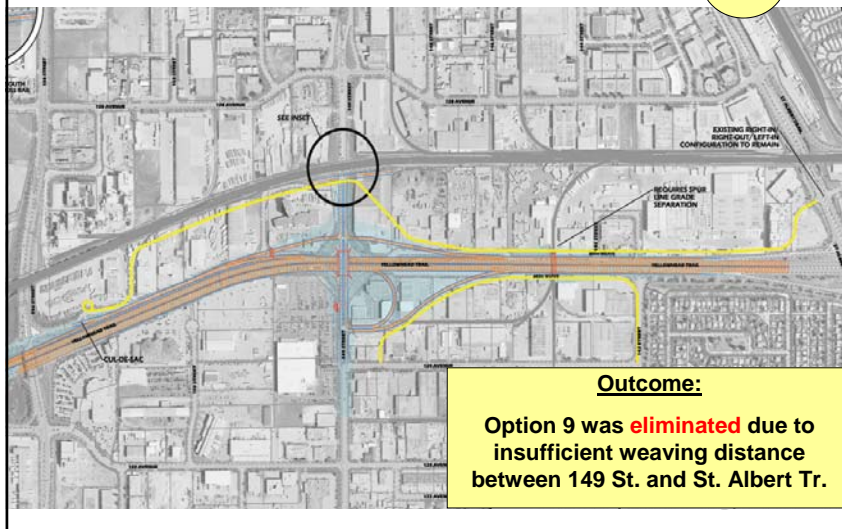
OPTIONS EVALUATED BY SIG

6



OPTIONS EVALUATED BY SIG

7



OPTION REFINEMENT

- Reviewed the alignment of 149 Street east and west to understand the impacts on land and technical aspects such as weave distance.
- Reviewed CN mainline crossing options.
- Examined non-interchange access options.
- Investigated spur line options.

SHIFT 149 STREET: RETAIN EXISTING



SHIFT 149 STREET: TO WEST



SHIFT 149 STREET: TO EAST



NEW OPTION DEVELOPMENT

- The project team felt it would be worthwhile to re-examine discounted alternatives and to develop new, more-innovative solutions based on what we heard from the SIG group.
- Including the two options carried forward from the technical analysis, a total of 12 new and reconsidered options were explored in further detail.

CLOSURE REFINEMENTS



CLOSURE REFINEMENTS



CARRIED FORWARD



CLOSURE REFINEMENTS



CARRIED FORWARD



PARTIAL INTERCHANGE REFINEMENTS



OPTION 15-A



PARTIAL INTERCHANGE REFINEMENTS




OPTION 15-B




TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

PARTIAL INTERCHANGE REFINEMENTS




OPTION 15-C




TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

PARTIAL INTERCHANGE REFINEMENTS



OPTION 15-D



TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

PARTIAL INTERCHANGE REFINEMENTS

EXISTING RIGHT-OF-WAY SHOWN IN LIGHT BLUE CONFIGURATION TO REMAIN

OPTION 15-E

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

PARTIAL INTERCHANGE REFINEMENTS

OPTION 15-F

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

FLYOVER REFINEMENTS

CARRIED FORWARD

EMERGENCY ACCESS

EMERGENCY ACCESS

FLYOVER A

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

FLYOVER REFINEMENTS

ELIMINATED

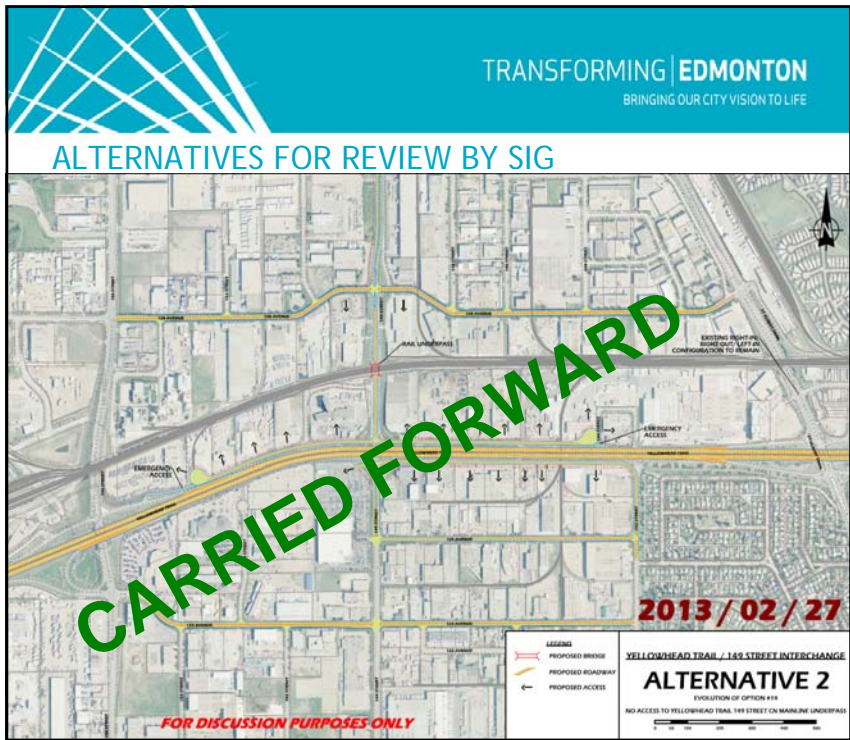
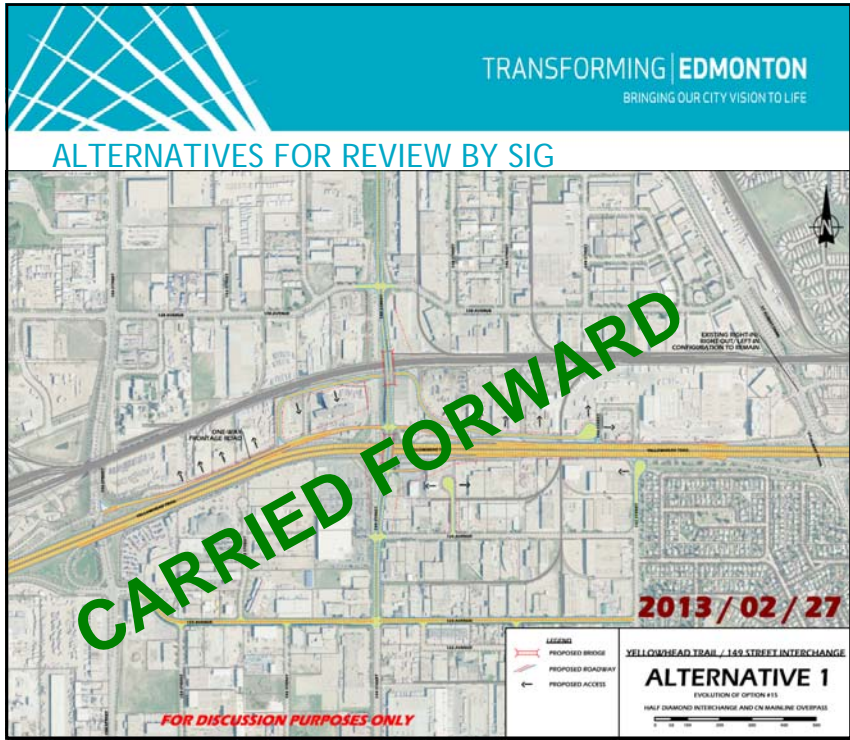
FLYOVER B

FLYOVER REFINEMENTS



TOP ALTERNATIVES

- 7 Alternatives remained.
 - 2 Closure Alternatives
 - 3 Partial Interchange Alternatives
 - 2 Flyover Alternatives
- The City team refined evaluation criteria developed previously with SIG and evaluated these alternatives.





TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

Budget Process/Schedule

- **Concept Planning Now** – No budget needed. To be Completed by end of 2013
- Next 4 year Capital Budget is approved by December 2014. Includes projects for 2015 to 2018.
- **149 Street Interchange Budget**
 If Council approves funding for the entire project in the next Capital Budget, design and construction to start as early as 2017. (4 year process – construction could start as early as 2017.)

NEXT STEPS (Approx. Schedule)

Nov 2012	<ul style="list-style-type: none"> Evaluate options (COMPLETE)
Dec 2012 / Jan 2013	<ul style="list-style-type: none"> Meet with additional stakeholders to understand concerns and update them on planning process / progress (ONGOING) Complete technical analysis and additional engineering to refine options (ONGOING) Distribute project fact sheet / update #2 (DEFERRED)
Feb 2013	<ul style="list-style-type: none"> Present refined alternatives (short-list) to SIG for discussion and feedback. Review next steps with SIG. (TODAY)
Mar / Apr 2013	<ul style="list-style-type: none"> Use input and refinements to develop recommended interchange and access strategy.
May 2013	<ul style="list-style-type: none"> Present short-list of configurations to Transportation Committee (TC) for information / feedback Hold a public open house to obtain public input on the short-list
Future	<ul style="list-style-type: none"> Present recommended strategy to TC Make recommended strategy public – website, project fact sheet #3, possible open house

Thank you!
QUESTIONS?



Appendix G – Final Weighting and Criteria



Yellowhead Trail / 149 Street Interchange

Evaluation Criteria Weighting

Please read the instructions below carefully!

Assign a weighting to each criteria in the list below. Weightings should be in 5 point increments from 5 to 25. A higher weighting represents a greater importance for a particular criteria (i.e. an item with a weighting of 10 is less important than one with a weighting of 15). Two or more criteria may receive the same weighting if you feel they are equally important. The total weighting of all criteria cannot exceed 150.

Safety has not been included as a standalone item because elements influencing safety are built into other evaluation criteria including Geometric Considerations, Traffic Consideration, Railway Impacts, Network Operations, Community Impacts, and Alternative Modes.

Criteria	Weighting
1. Land Impacts <ul style="list-style-type: none"> Land acquisition requirements, severity of impacts, impact on businesses and revenues, business visibility, future viability of parcels 	
2. Access Requirements <ul style="list-style-type: none"> Access to existing businesses, accommodating existing movements, emergency access 	
3. Geometric Considerations <ul style="list-style-type: none"> Design speed, weaving distance, design vehicles, sight lines, interchange operations, grades, consistency, etc. 	
4. Construction <ul style="list-style-type: none"> Constructability, staging, commuter impacts, ability to widen in future, business access impacts 	
5. Costs <ul style="list-style-type: none"> Lifecycle costs to build, to maintain, to rehabilitate 	
6. Localized Traffic Considerations <ul style="list-style-type: none"> Impacts within the study area, including accommodating large trucks, traffic capacity, driver expectation, driver friendliness, consistency 	
7. Utility Implications <ul style="list-style-type: none"> Relocation of utilities, drainage 	
8. Railway Impacts <ul style="list-style-type: none"> Grade separation of crossings 	
9. Global Network Operation <ul style="list-style-type: none"> Impacts on the overall transportation network, including existing and future parallel routes, travel time, short cutting, network operation (regional and overall) 	
10. Community Impacts <ul style="list-style-type: none"> Noise, aesthetics, landscaping 	
11. Alternative Modes <ul style="list-style-type: none"> Accommodation and integration of pedestrians and cyclists, pedestrian safety, public transportation 	
Total Weighting: <i>(Total Weighting Should Equal 150)</i>	Maximum Score

Appendix H – Interchange Options – Workshop 3

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

LEGEND AND ACRONYM SHEET










ACRONYM

C/D ROAD
PARCLO
SPUI

DEFINITION

COLLECTOR/DISTRIBUTOR ROAD
PARTIAL CLOVERLEAF INTERCHANGE
SINGLE POINT URBAN INTERCHANGE

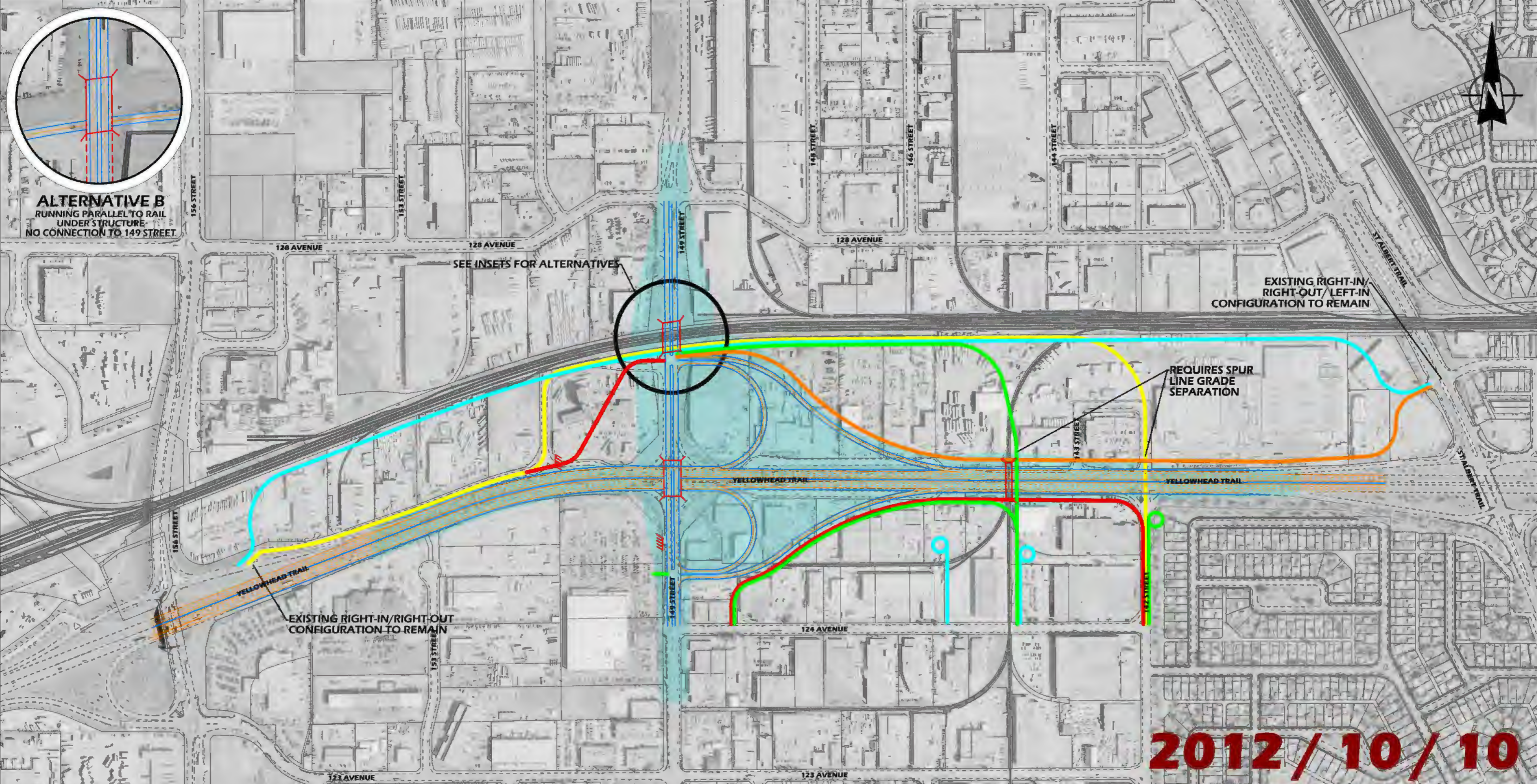
LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY
	PROPOSED ROADWAY OR ACCESS CLOSURE

NOTE: ACCESS OPTION CONFIGURATIONS ARE SCHEMATIC ONLY. ALIGNMENT, LANING, AND LAND IMPACTS TO BE FURTHER REFINED AT A LATER STAGE.



ALTERNATIVE B
 RUNNING PARALLEL TO RAIL
 UNDER STRUCTURE
 NO CONNECTION TO 149 STREET



2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

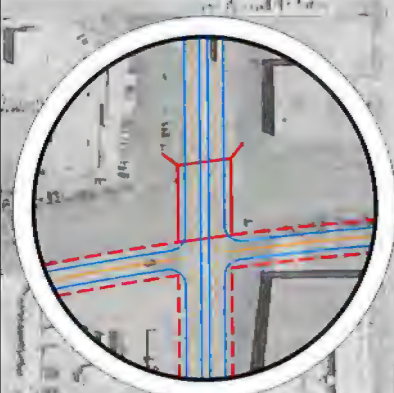
- ACCESS OPTION A
- ACCESS OPTION B
- ACCESS OPTION C
- ACCESS OPTION D
- ACCESS OPTION E
- PROPOSED BRIDGE
- FOOTPRINT OF INTERCHANGE
- PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #1

PARCLO AB INTERCHANGE WITH RAIL GRADE SEPARATION

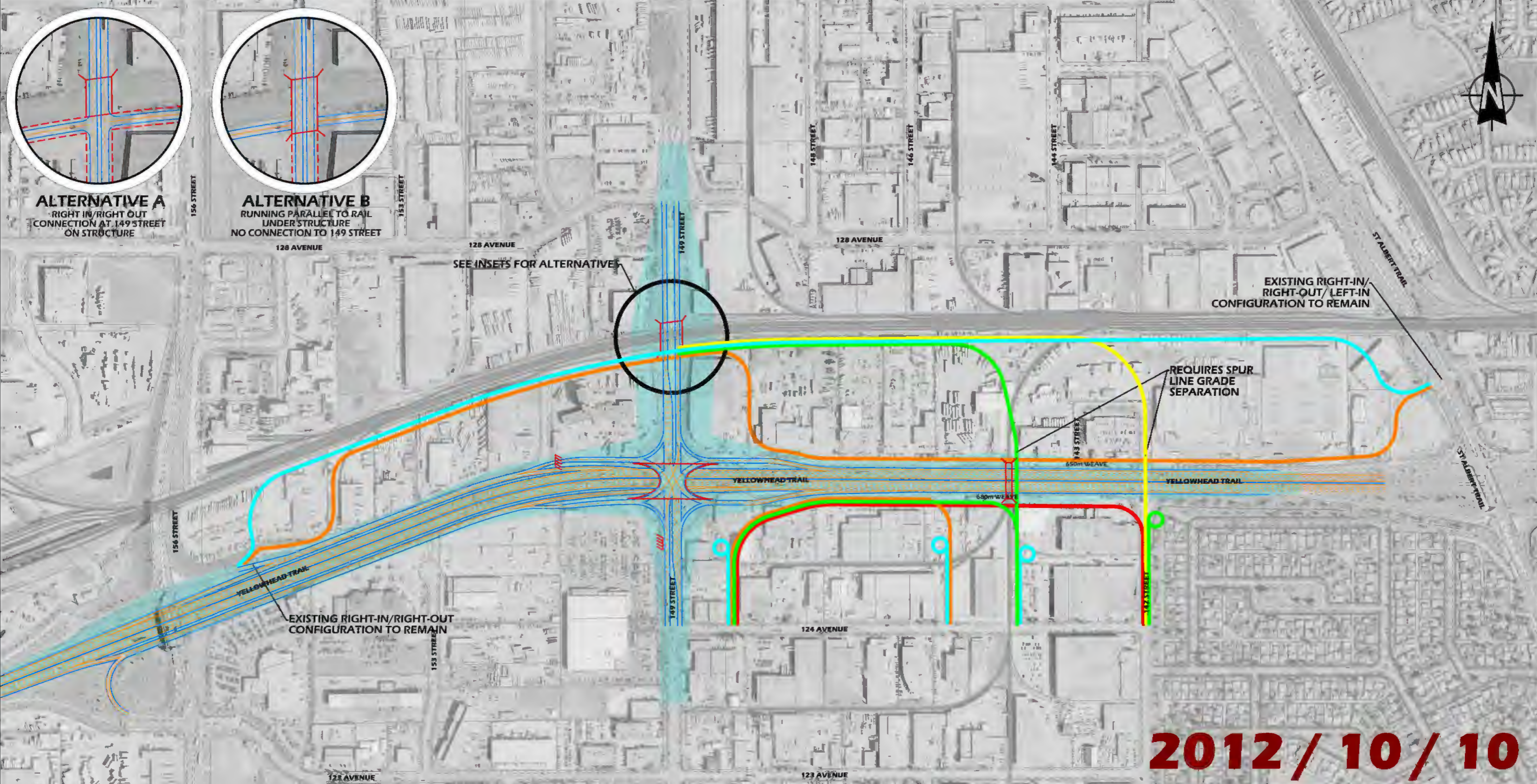




ALTERNATIVE A
RIGHT IN/RIGHT OUT
CONNECTION AT 149 STREET
ON STRUCTURE



ALTERNATIVE B
RUNNING PARALLEL TO RAIL
UNDER STRUCTURE
NO CONNECTION TO 149 STREET



2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

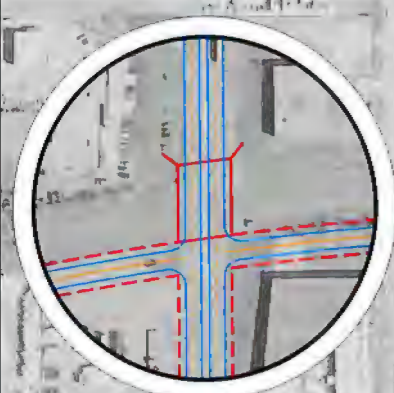
LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #2

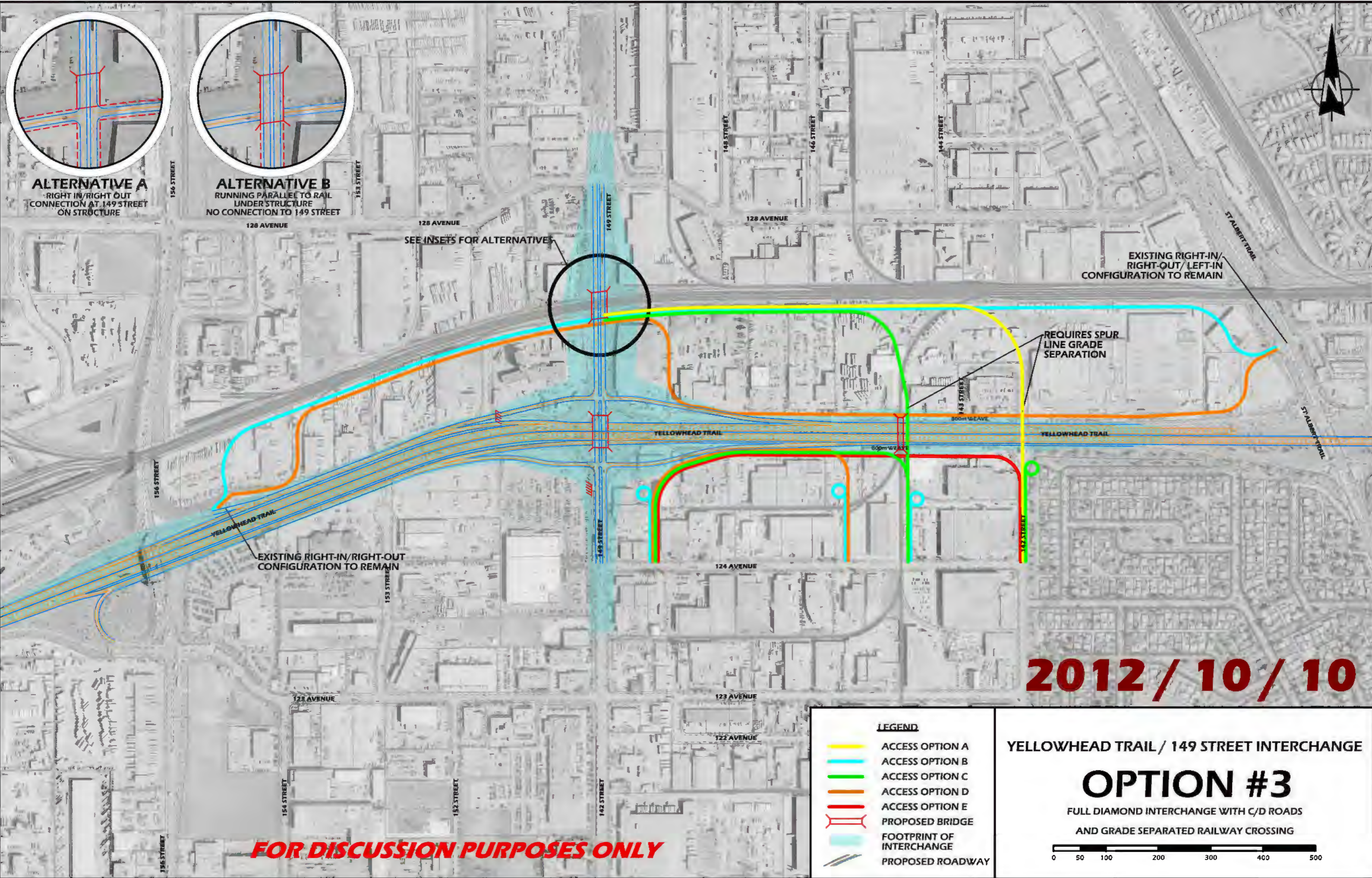
SPUI WITH C/D ROADS
AND GRADE SEPARATED RAILWAY CROSSING



ALTERNATIVE A
RIGHT IN/RIGHT OUT
CONNECTION AT 149 STREET
ON STRUCTURE



ALTERNATIVE B
RUNNING PARALLEL TO RAIL
UNDER STRUCTURE
NO CONNECTION TO 149 STREET



SEE INSETS FOR ALTERNATIVES

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #3

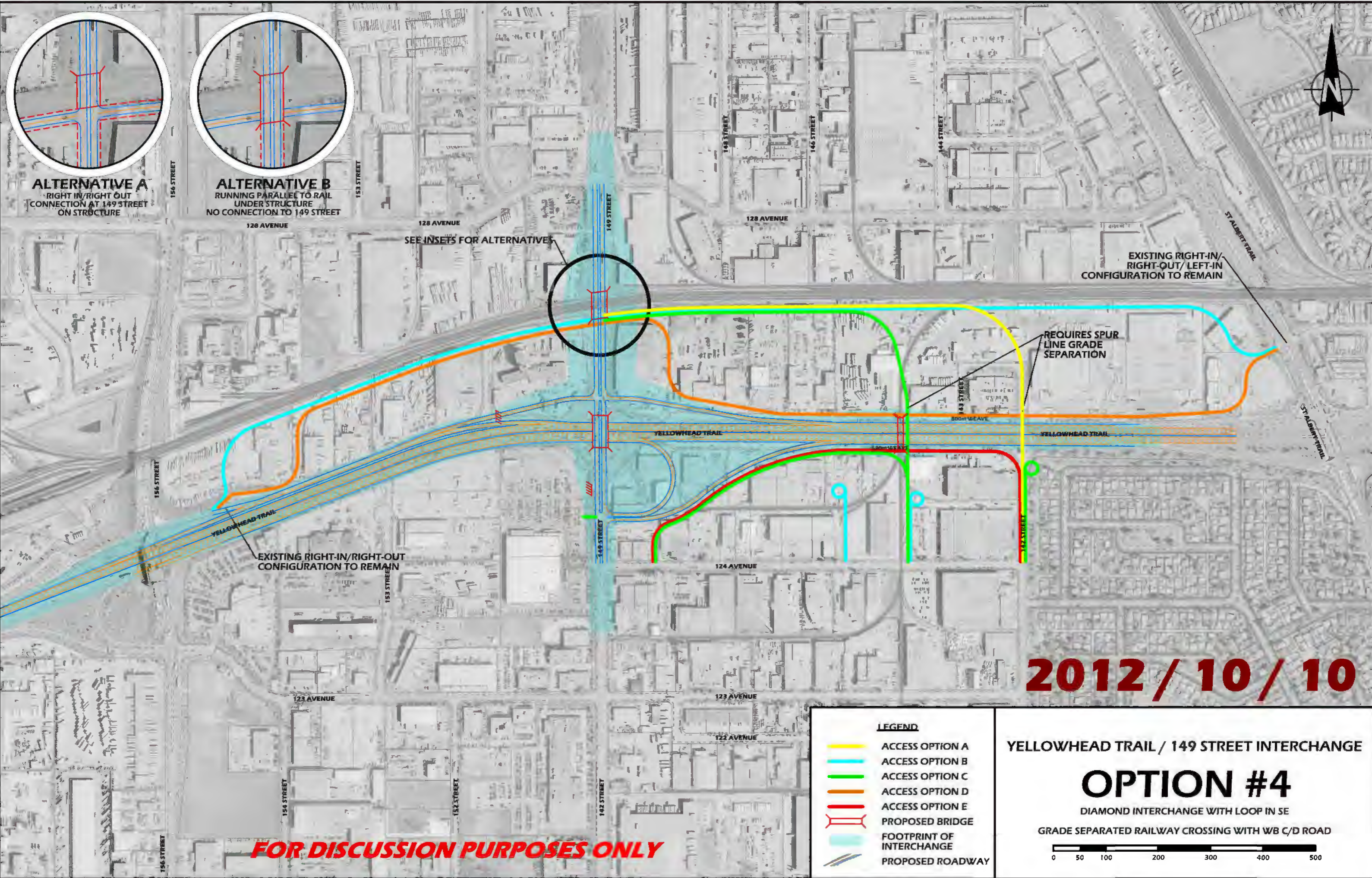
FULL DIAMOND INTERCHANGE WITH C/D ROADS
AND GRADE SEPARATED RAILWAY CROSSING





ALTERNATIVE A
RIGHT IN/RIGHT OUT
CONNECTION AT 149 STREET
ON STRUCTURE

ALTERNATIVE B
RUNNING PARALLEL TO RAIL
UNDER STRUCTURE
NO CONNECTION TO 149 STREET



2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #4

DIAMOND INTERCHANGE WITH LOOP IN SE

GRADE SEPARATED RAILWAY CROSSING WITH WB C/D ROAD

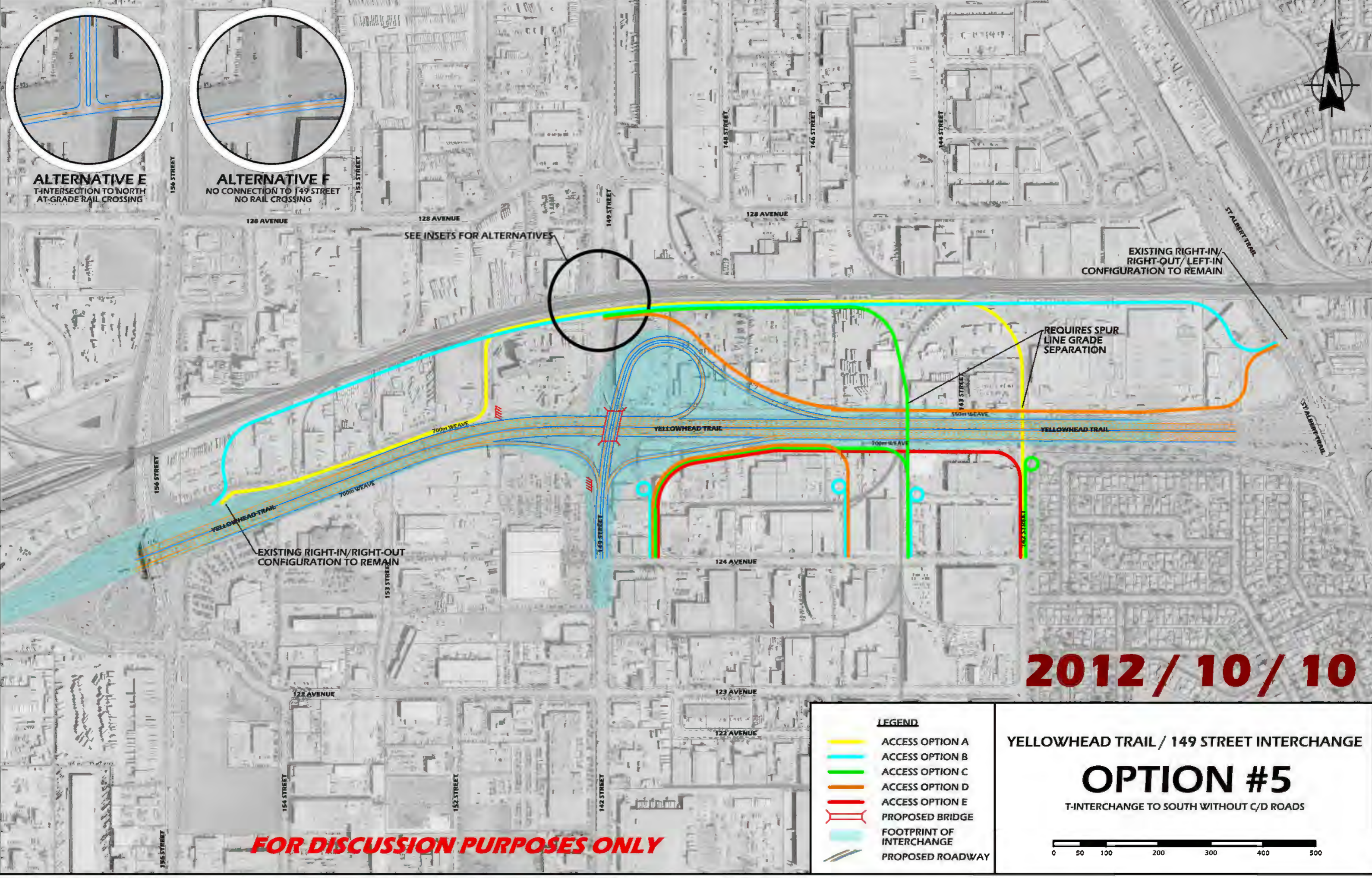




ALTERNATIVE E
T-INTERSECTION TO NORTH
AT-GRADE RAIL CROSSING



ALTERNATIVE F
NO CONNECTION TO 149 STREET
NO RAIL CROSSING



SEE INSETS FOR ALTERNATIVES

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/
RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

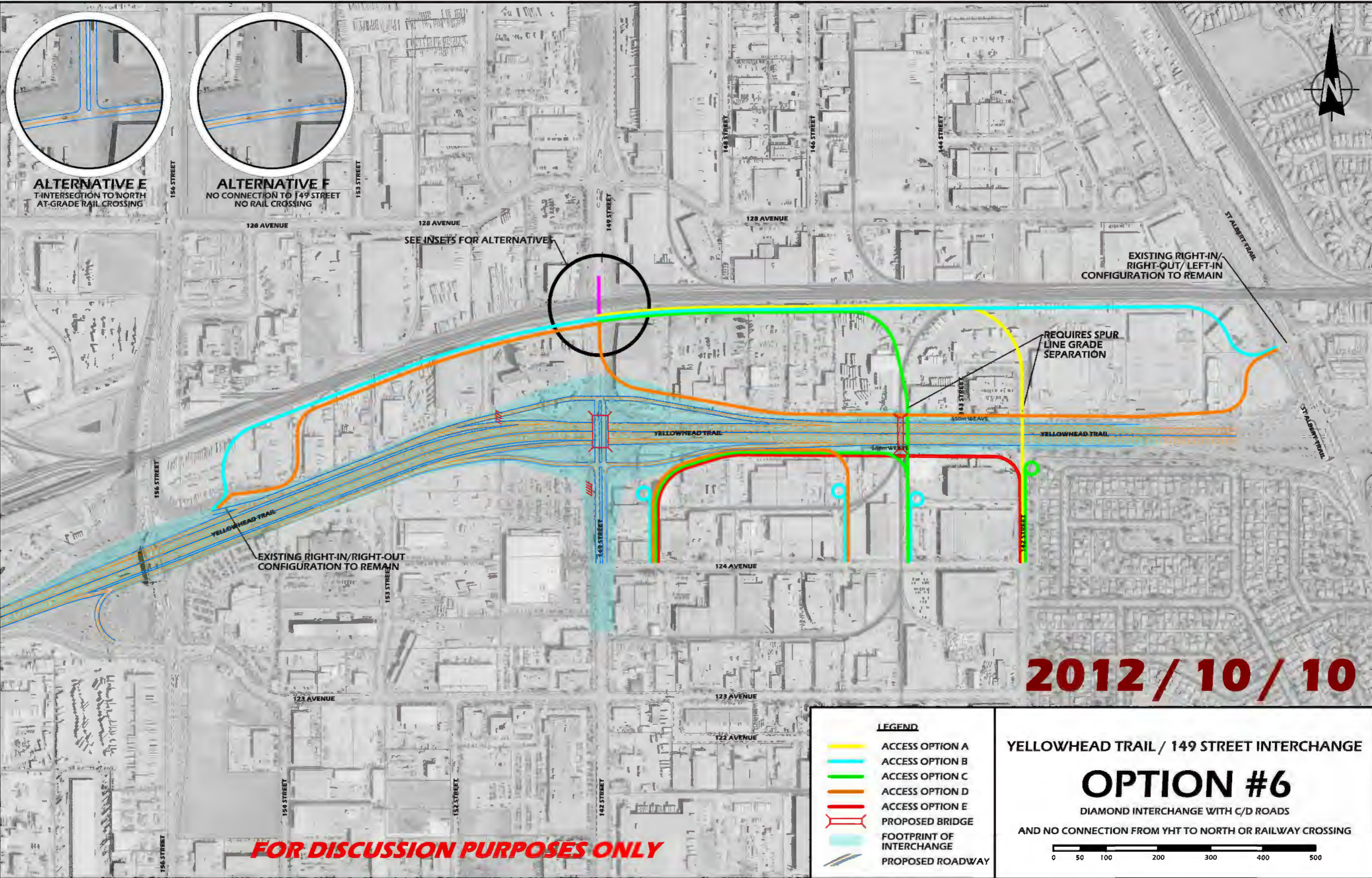
	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #5

T-INTERCHANGE TO SOUTH WITHOUT C/D ROADS





ALTERNATIVE E
T-INTERSECTION TO NORTH
AT-GRADE RAIL CROSSING

ALTERNATIVE F
NO CONNECTION TO 149 STREET
NO RAIL CROSSING

SEE INSETS FOR ALTERNATIVE

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

- ACCESS OPTION A
- ACCESS OPTION B
- ACCESS OPTION C
- ACCESS OPTION D
- ACCESS OPTION E
- PROPOSED BRIDGE
- FOOTPRINT OF INTERCHANGE
- PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #6

DIAMOND INTERCHANGE WITH C/D ROADS

AND NO CONNECTION FROM YHT TO NORTH OR RAILWAY CROSSING

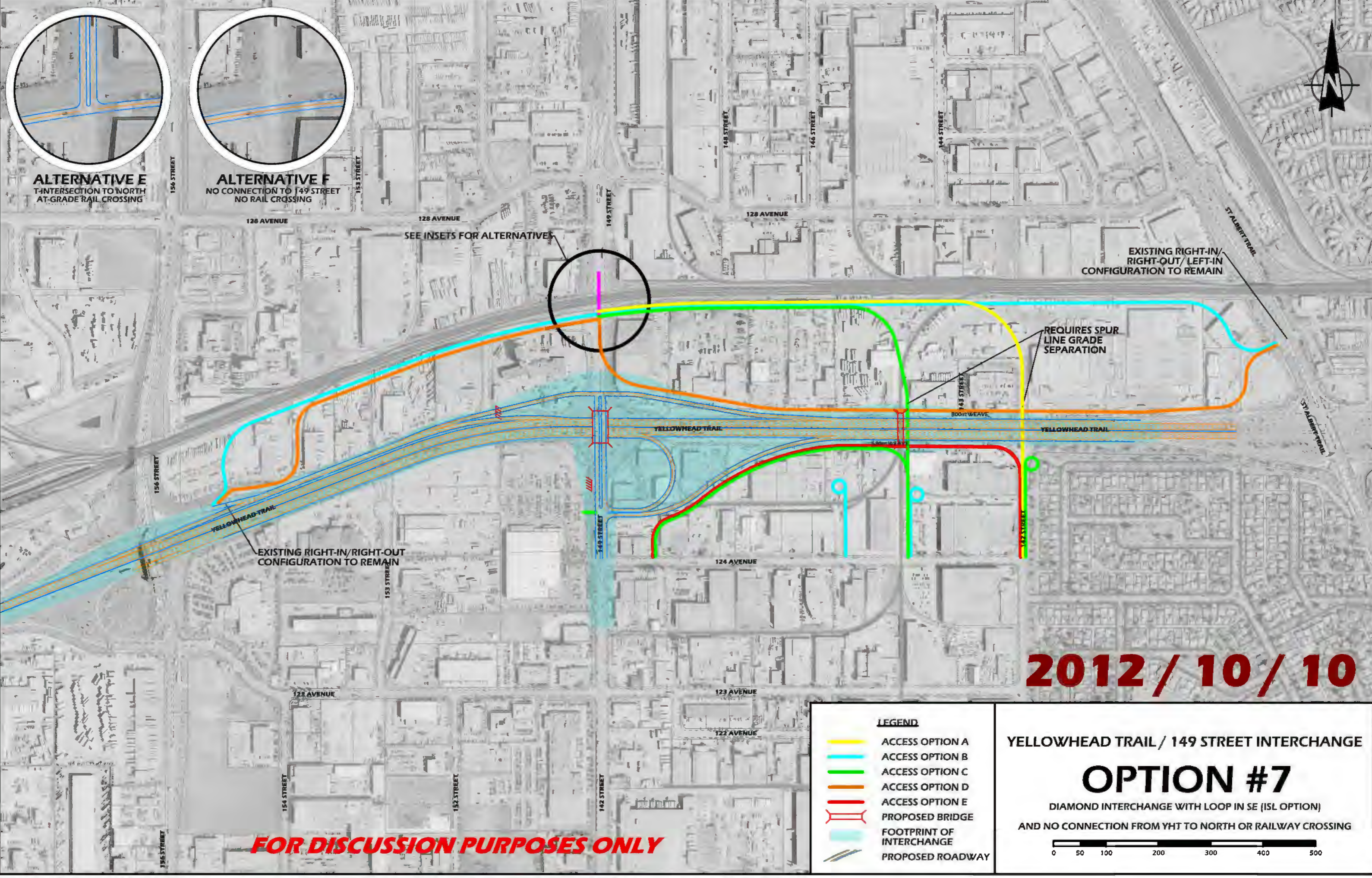




ALTERNATIVE E
T-INTERSECTION TO NORTH
AT-GRADE RAIL CROSSING



ALTERNATIVE F
NO CONNECTION TO 149 STREET
NO RAIL CROSSING



SEE INSETS FOR ALTERNATIVES

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

- ACCESS OPTION A
- ACCESS OPTION B
- ACCESS OPTION C
- ACCESS OPTION D
- ACCESS OPTION E
- PROPOSED BRIDGE
- FOOTPRINT OF INTERCHANGE
- PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

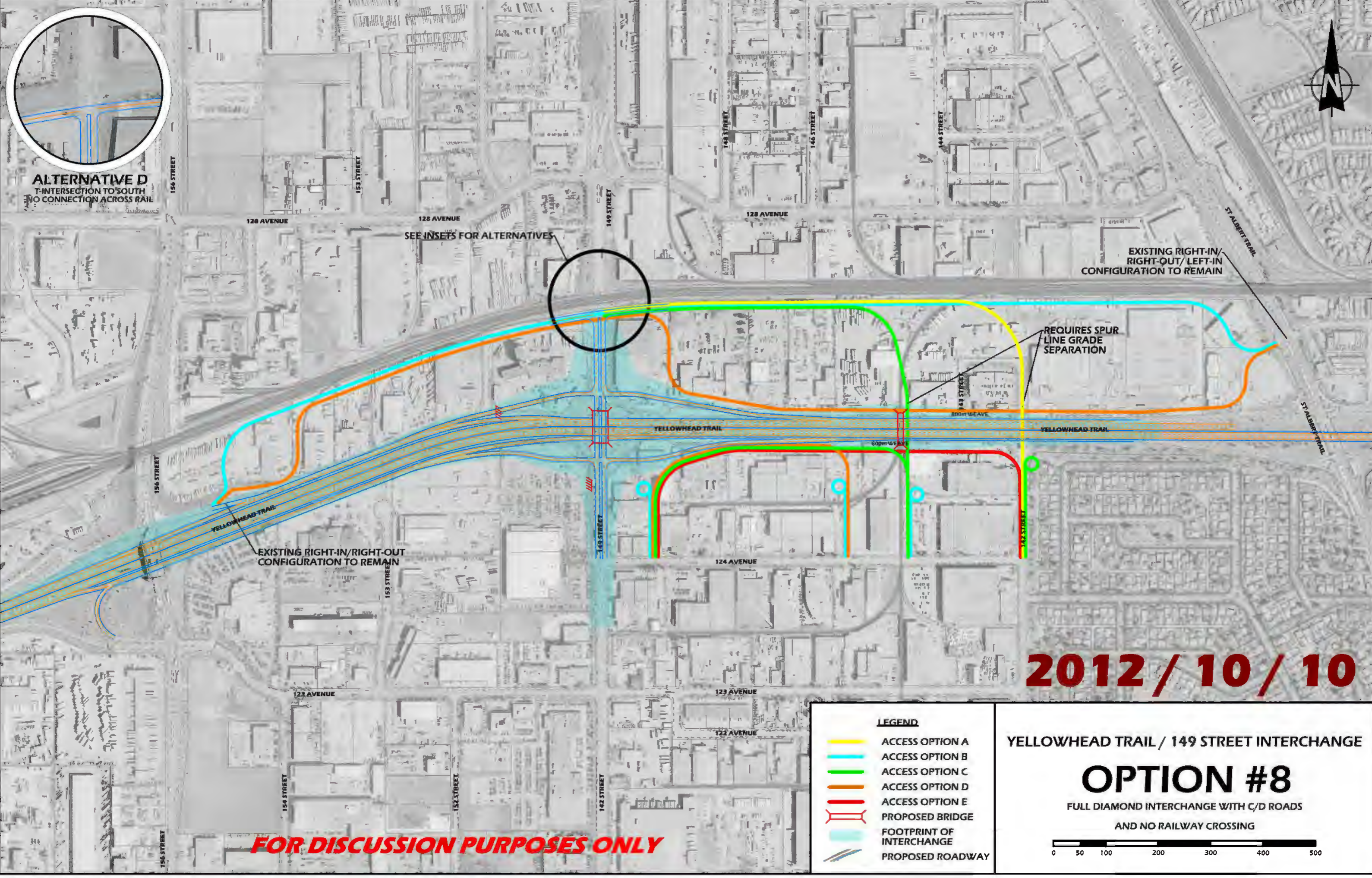
OPTION #7

DIAMOND INTERCHANGE WITH LOOP IN SE (ISL OPTION)
AND NO CONNECTION FROM YHT TO NORTH OR RAILWAY CROSSING





ALTERNATIVE D
T-INTERSECTION TO SOUTH
NO CONNECTION ACROSS RAIL



2012 / 10 / 10

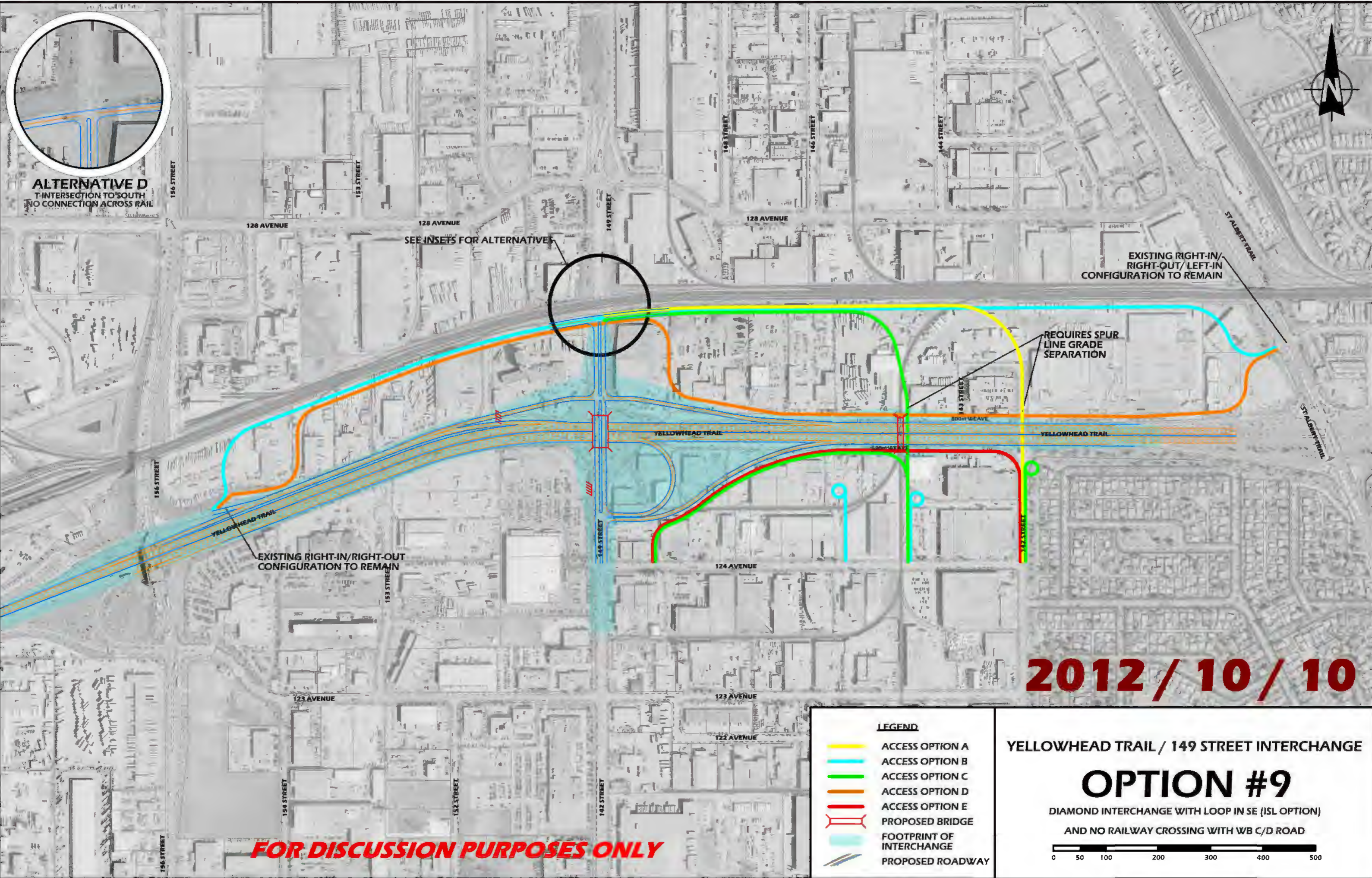
LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #8

FULL DIAMOND INTERCHANGE WITH C/D ROADS
AND NO RAILWAY CROSSING



ALTERNATIVE D
T-INTERSECTION TO SOUTH
NO CONNECTION ACROSS RAIL



128 AVENUE

SEE INSETS FOR ALTERNATIVES

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN









REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

-  ACCESS OPTION A
-  ACCESS OPTION B
-  ACCESS OPTION C
-  ACCESS OPTION D
-  ACCESS OPTION E
-  PROPOSED BRIDGE
-  FOOTPRINT OF INTERCHANGE
-  PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #9

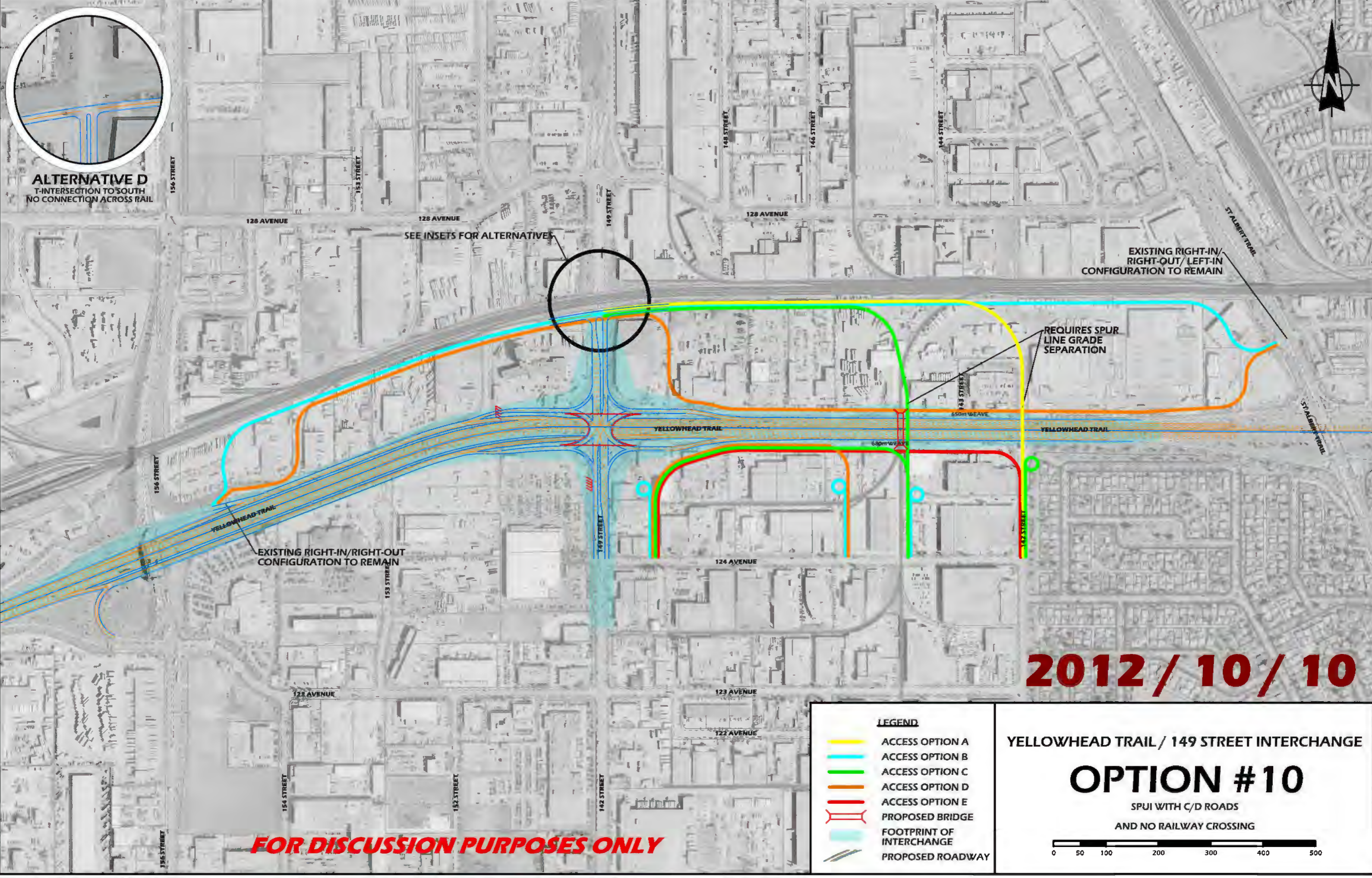
DIAMOND INTERCHANGE WITH LOOP IN SE (ISL OPTION)

AND NO RAILWAY CROSSING WITH WB C/D ROAD





ALTERNATIVE D
T-INTERSECTION TO SOUTH
NO CONNECTION ACROSS RAIL



SEE INSETS FOR ALTERNATIVES

EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

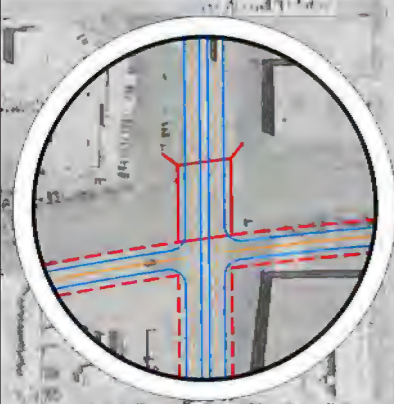
LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #10

SPUI WITH C/D ROADS
AND NO RAILWAY CROSSING



ALTERNATIVE A
RIGHT IN/RIGHT OUT
CONNECTION AT 149 STREET
ON STRUCTURE

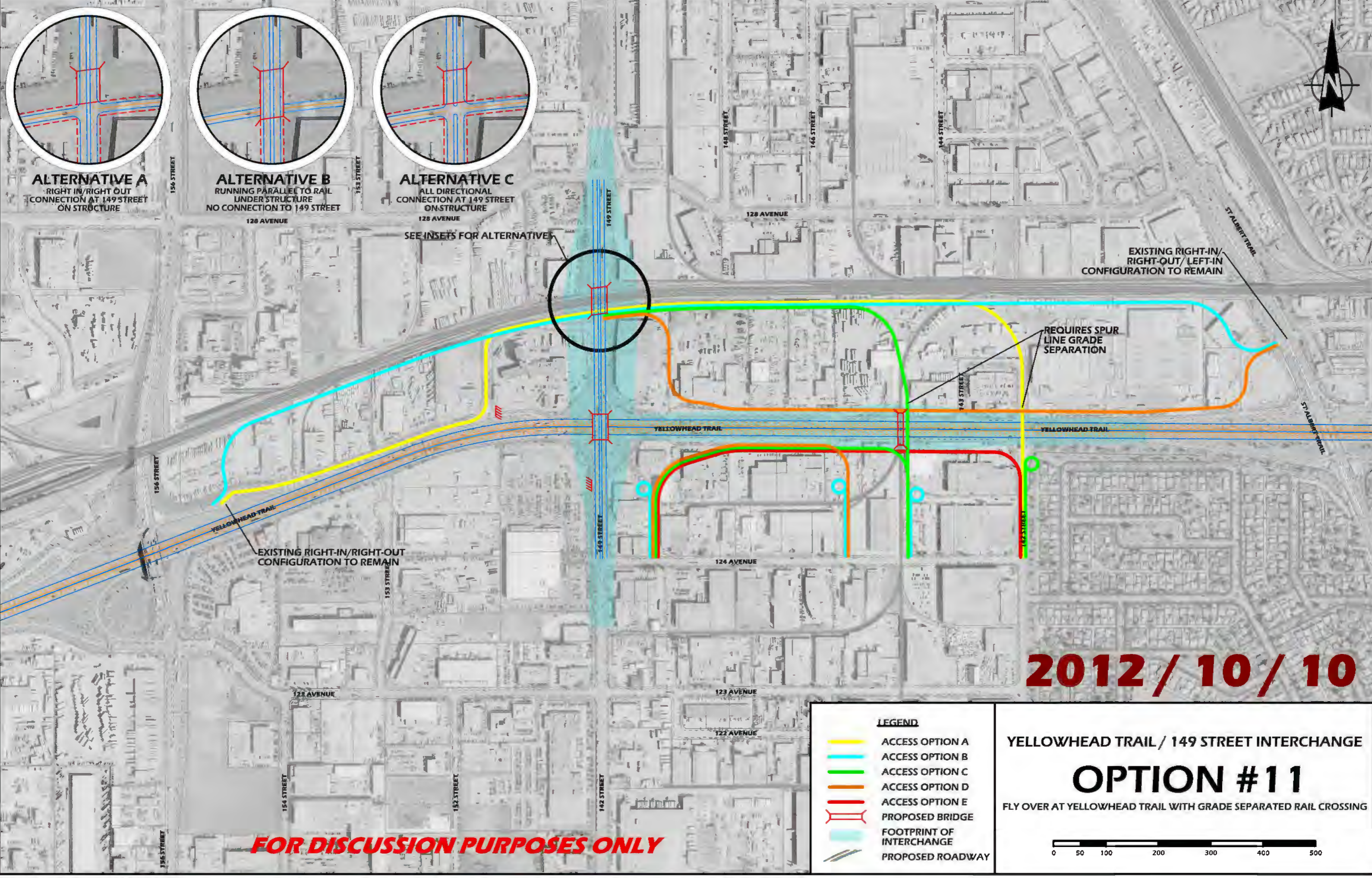


ALTERNATIVE B
RUNNING PARALLEL TO RAIL
UNDER STRUCTURE
NO CONNECTION TO 149 STREET



ALTERNATIVE C
ALL DIRECTIONAL
CONNECTION AT 149 STREET
ON STRUCTURE

SEE INSETS FOR ALTERNATIVES



EXISTING RIGHT-IN/
RIGHT-OUT/ LEFT-IN
CONFIGURATION TO REMAIN

REQUIRES SPUR
LINE GRADE
SEPARATION

EXISTING RIGHT-IN/RIGHT-OUT
CONFIGURATION TO REMAIN

2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND	
	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #11

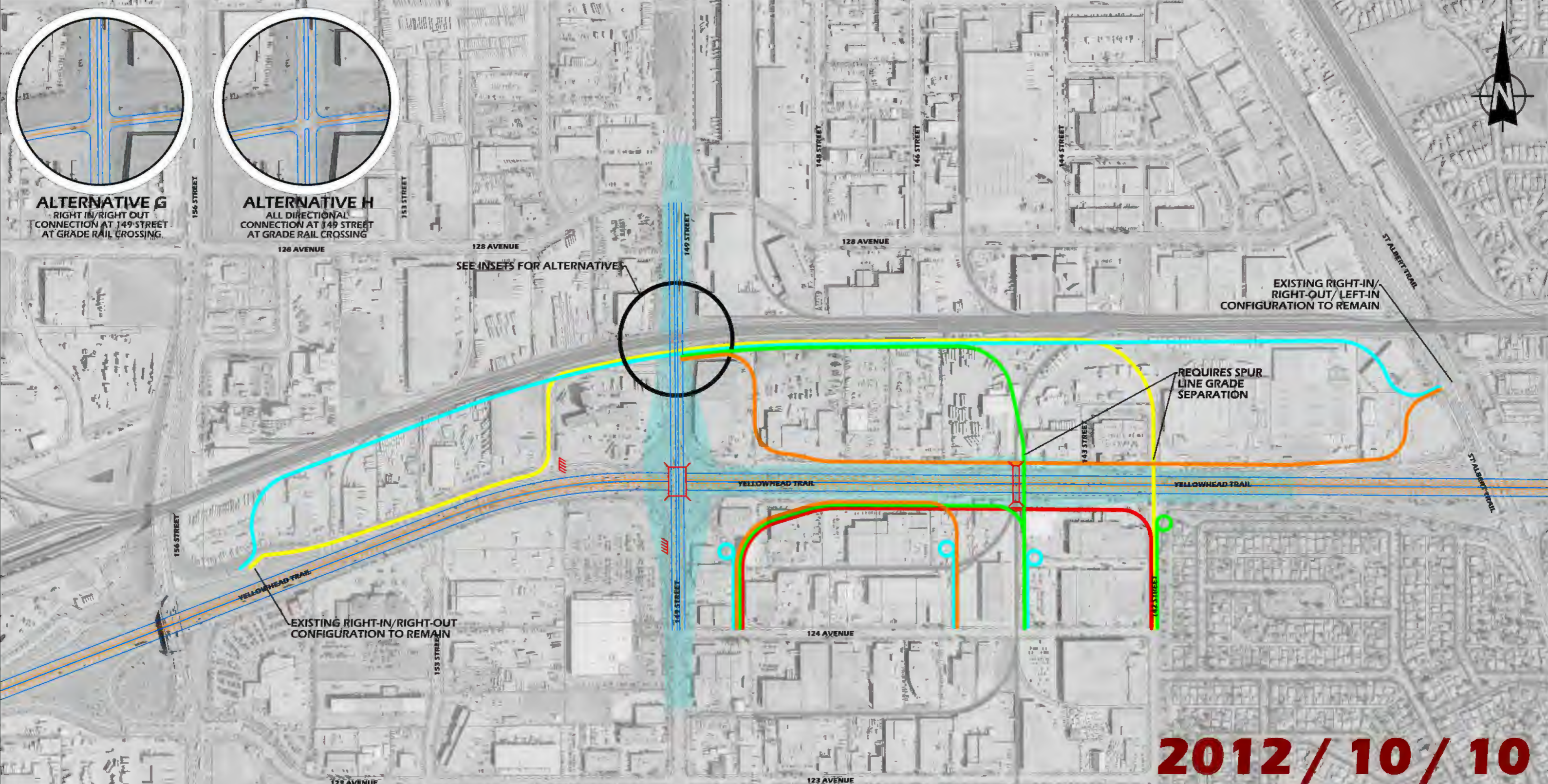
FLY OVER AT YELLOWHEAD TRAIL WITH GRADE SEPARATED RAIL CROSSING





ALTERNATIVE G
RIGHT IN/RIGHT OUT
CONNECTION AT 149 STREET
AT GRADE RAIL CROSSING.

ALTERNATIVE H
ALL DIRECTIONAL
CONNECTION AT 149 STREET
AT GRADE RAIL CROSSING



FOR DISCUSSION PURPOSES ONLY

LEGEND

	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

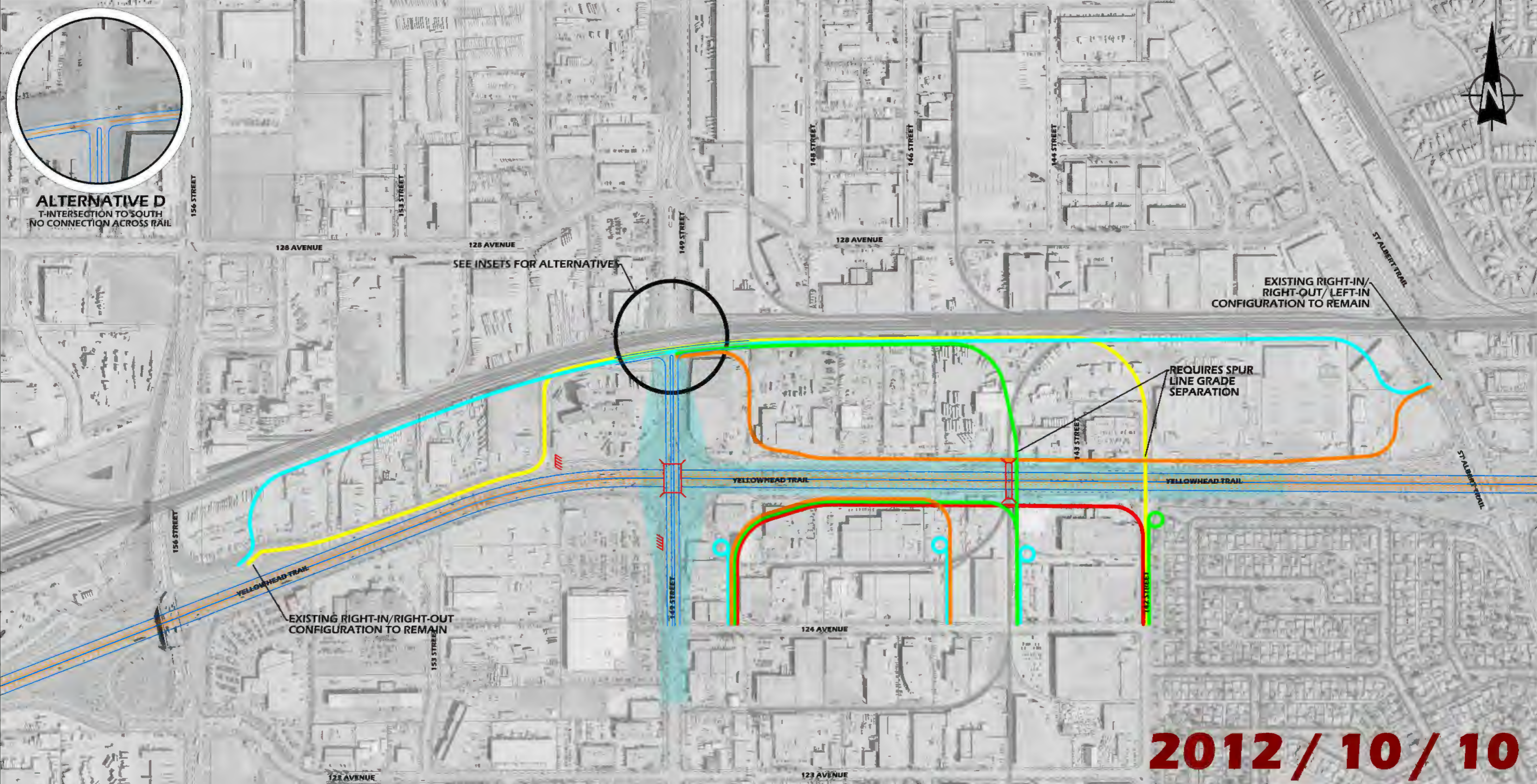
YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #12

FLY OVER AT YELLOWHEAD TRAIL WITH AT-GRADE RAIL CROSSING



ALTERNATIVE D
T-INTERSECTION TO SOUTH
NO CONNECTION ACROSS RAIL



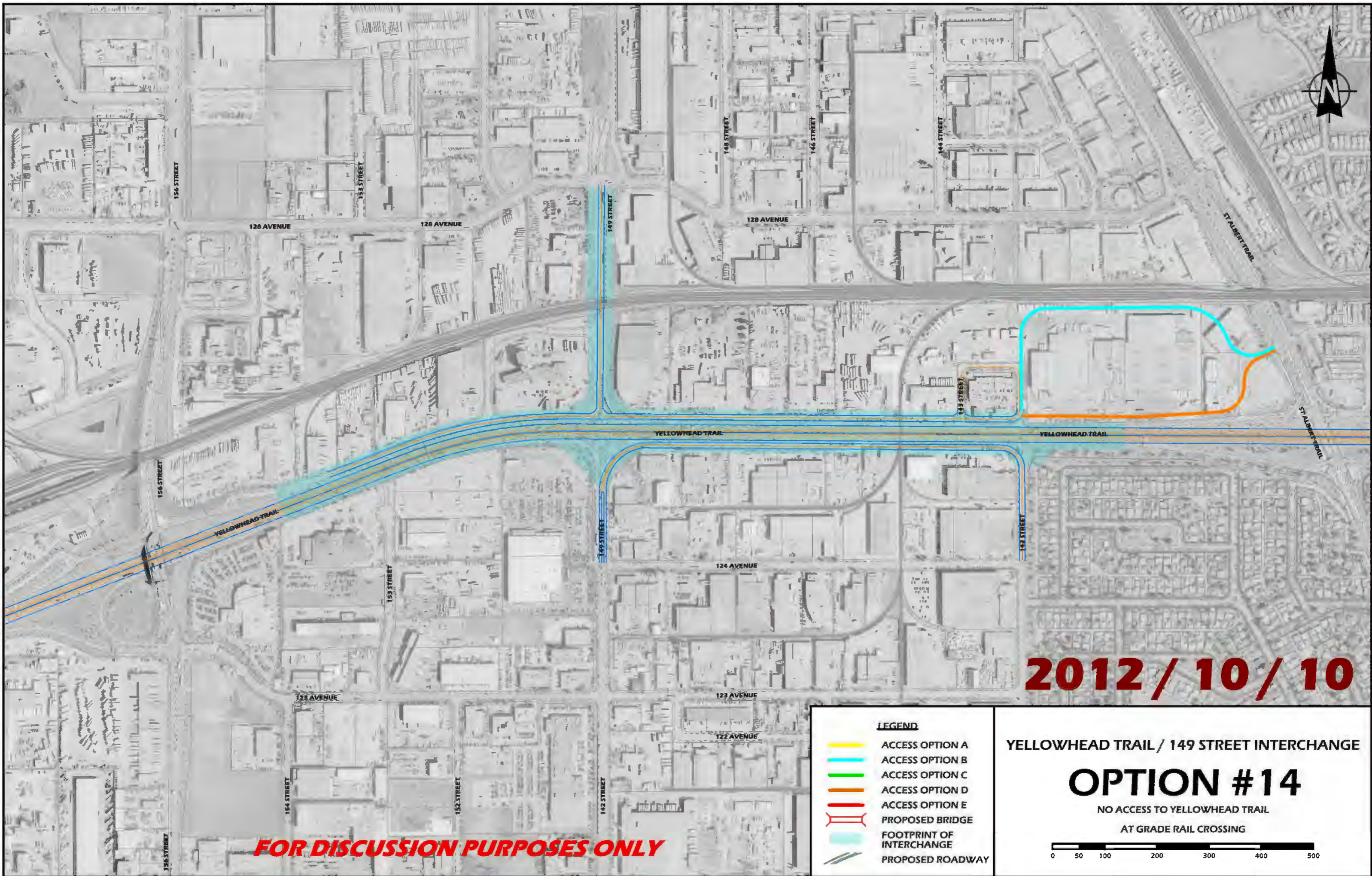
FOR DISCUSSION PURPOSES ONLY

LEGEND	
	ACCESS OPTION A
	ACCESS OPTION B
	ACCESS OPTION C
	ACCESS OPTION D
	ACCESS OPTION E
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #13

FLY OVER AT YELLOWHEAD TRAIL WITH NO RAIL CROSSING



2012 / 10 / 10

FOR DISCUSSION PURPOSES ONLY

LEGEND

- ACCESS OPTION A
- ACCESS OPTION B
- ACCESS OPTION C
- ACCESS OPTION D
- ACCESS OPTION E
- PROPOSED BRIDGE
- FOOTPRINT OF INTERCHANGE
- PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #14

NO ACCESS TO YELLOWHEAD TRAIL
AT GRADE RAIL CROSSING



Appendix I – Evaluation Data Summarized

Name: _____

Organization: _____






YELLOWHEAD TRAIL / 149 STREET INTERCHANGE EVALUATION DATA

Legend

The following information is presented based on the preliminary configuration sketches. The data is presented based on the interchange and access configurations as they are shown today; the data may change as the options are refined and finalized. This information provides a similar level of detail for all options, which is suitable for comparison.

Where technical data is being summarized, “guiding pies” have been provided in the summary tables. These pies are the Project Team’s interpretation of how well each criterion is satisfied by each option from a technical standpoint. The “guiding pies” are intended to be a guide. All participants are welcome to use a different interpretation for any category.

The “guiding pies” can be read as follows:

-  – Very Poor – this option does not satisfy the criterion.
-  – Poor
-  – Fair
-  – Good
-  – Very Good – this option fully satisfies the criterion.

Detailed information for each of the sub categories can be found with each option during the evaluation process. This information can also be discussed with any of the project team members.

Based on the data provided, please score each of the options on a scale of 1 to 5, with 1 being very poor at satisfying the criterion, and 5 being very good at satisfying the criterion. Multiple options can have the same rating (i.e. more than one option may have a rating of 1). Not all numbers must be assigned (i.e. it is possible to have options which score as 1, 2, 2, 3, 4, 4, 4, 3, with no option being scored at 5). Please score all options for each criterion.

- 1 – Very Poor
- 2 – Poor
- 3 – Fair
- 4 – Good
- 5 – Very Good

Where there is more than one representative from each company, business, or organization, only one (1) evaluation sheet provided will be used to ensure an equal distribution of scores amongst participant businesses.

Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

1. Land Impacts

Evaluate Based On: Number of properties impacted by interchange, total area of land required, number of entire property takes, number of partial property takes, number of buildings impacted, viability of remaining parcels, and visibility of businesses

Option No.	# Properties Impacted	Area (hectares)	# Total Takes	# Partial Takes	Access Impacts	Viability	Visibility (next page)	Overall Score
1 – Parclo AB	25	30.1 ha	16	6	3	No hard data is available for viability. Please rank each option based on your feeling of parcel viability.	See next pages for samples of visibility for each configuration.	
2 – SPUI	33	20.9 ha	15	12	6			
3 – Full diamond	33	21.4 ha	15	12	6			
4 – Diamond with SE loop	30	20.3 ha	15	9	6			
9 – SE loop with business access	28	15.6 ha	13	9	6			
14 – Full closure of 149 Street	21	3.7 ha	3	16	2			
15 – Half diamond to east	22	17.9 ha	14	6	2			

Notes:

- Number of properties shown includes all properties which may be impacted by interchange and access road construction.
- Total area of land required only considers the parcels which will be required for interchange construction. Area of land required for access roads is not included at this time.
- Any property where more than 1/3 of all land is taken, or building is taken, is assumed to be a total take.







Name: _____

Organization: _____

**YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA**

1. Land Impacts: Continued









Evaluate Based On: Visibility of the businesses form Yellowhead Trail and 149 Street.

Option No.	Visibility from Yellowhead Trail and 149 Street		
1 – Parclo AB	<p>YHT Approaching Interchange</p> 	<p>YHT at Interchange</p> 	<p>149 Street at Interchange</p> 
2 – SPUI	<p>YHT Approaching Interchange</p> 	<p>YHT at Interchange</p> 	<p>149 Street at Interchange</p> 

Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

<p>3 – Full diamond 15 – Half diamond to east</p>	<p>YHT Approaching Interchange</p> 	<p>YHT at Interchange</p> 	<p>149 Street at Interchange</p> 
<p>4 – Diamond with SE loop 9 – SE loop with business access</p>	<p>YHT Approaching Interchange</p> 	<p>YHT at Interchange</p> 	<p>149 Street at Interchange</p> 
<p>14 – Full closure of 149 Street</p>	<p>YHT Mainline</p> 	<p>YHT Mainline</p> 	

Name: _____

Organization: _____

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE EVALUATION DATA

2. Access Requirements

Evaluate Based On: How circuitous access is to businesses from 149 Street and Yellowhead Trail using representative points in each area of the interchange, whether existing movements are accommodated, and emergency access requirements.

Option No.	Distance to Access Yellowhead Trail and 149 Street			Existing Movement	Emergency Access	Overall Score
	Less	Same	More			
1 – Parclo AB	0	5	4 (+2365 m)	●	◐	
2 – SPUI	0	4	6 (+3180 m)	●	◐	
3 – Full diamond	0	5	5 (+4290 m)	●	◐	
4 – Diamond with SE loop	0	5	5 (+3690m)	●	●	
9 – SE loop with business access	0	4	6 (+3295m)	◐	◐	
14 – Full closure of 149 Street	0	1	9 (+6550m)	○	●	
15 – Half diamond to east	2 (-590 m)	5	3 (+2770m)	◐	◐	

Notes:

- Parclo AB configuration likely requires the total purchase of target parcel #5.
- The representative properties were determined as per the attached map.
- All full interchanges (options 1, 2, 3, and 4) can accommodate existing movement configurations to and from YHT and 149 Street.
- Emergency Response Services requires that all cul-de-sac and no-exit roads longer than 120 meters have an alternative emergency access constructed. The emergency access can be blocked off from all traffic, or can provide a pedestrian connection when not in use.








Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

3. Geometric Considerations

Evaluate Based On: Whether design speed of ramps, mainlines, and service roads meets the design criteria, weaving distances, design vehicles, grades, sight lines and intersection and interchange operation.

Option No.	Design Speed	Weaving Distance to St. Albert Trail	Weaving Distance to 156 Street	Design Vehicle	Sight Lines	Grades	Intersection and Interchange Operation along 149 Street	Overall Score
1 – Parclo AB	Met	No C/D Roads	No C/D Roads	WB-36	Met	5.5% Max North of CN Mainline		
2 – SPUI	Met	No C/D Roads	C/D Roads Required North and South Side	WB-36	Met	5.5% Max North of CN Mainline		
3 – Full diamond	Met	No C/D Roads	C/D Roads Required North and South Side	WB-36	Met	5.5% Max North of CN Mainline		
4 – Diamond with SE loop	Met	No C/D Roads	C/D Roads Required North Side Only	WB-36	Met	5.5% Max North of CN Mainline		
9 – SE loop with business access	Met	No C/D Roads	C/D Roads Required North Side Only	WB-36	Met	No Grade Issues		
14 – Full closure of 149 Street	Met	No C/D Roads	No C/D Roads	WB-36	Met	No Grade Issues		
15 – Half diamond to east	Met	No C/D Roads	No C/D Roads	WB-36	Met	5.5% Max North of CN Mainline		

Notes:

- Closely spaced adjacent intersections will have a negative impact on overall performance of the network, however, numerous sequential intersections will require signal timing consideration to ensure proper operation.






















Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

4. Construction

Evaluate Based On: The ability to construct the interchange without closure of Yellowhead Trail/149 Street and commuter impacts. The need to detour any railway lines. The ability to construct the interchange configuration without significant additional costs. Ability to widen in the future. Business impacts and access during construction.

Option No.	Constructability, Staging, and Commuter Impacts	Ability to Widen in Future	Construction Access	Overall Score
1 – Parclo AB				
2 – SPUI				
3 – Full diamond				
4 – Diamond with SE loop				
9 – SE loop with business access				
14 – Full closure of 149 Street				
15 – Half diamond to east				

Notes:

- It is assumed that all options will require some detouring and partial temporary closures to accommodate construction. Any unusual detours or full closures are considered to be constructability issues.















Name: _____

Organization: _____

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE EVALUATION DATA

5. Costs

Evaluate Based On: Relative construction, maintenance, and rehabilitation costs.

Option No.	Construction Cost	Maintenance and Rehabilitation Costs	Overall Score
1 – Parclo AB			
2 – SPUI			
3 – Full diamond			
4 – Diamond with SE loop			
9 – SE loop with business access			
14 – Full closure of 149 Street			
15 – Half diamond to east			

Notes:

-

Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

6. Localized Traffic Considerations

Evaluate Based On: Impacts on immediately adjacent routes, and any upgrades which may be necessary. This includes upgrades required at 156 Street, 128 Avenue and St. Albert Trail. Overall local capacity of the east/west and north/south links. Driver expectation along the corridor. Driver friendliness of the proposed configuration.

Option No.	Impacts on Adjacent Routes	Local Traffic Capacity	Driver Expectation	Driver Friendliness	Overall Score
1 – Parclo AB	●	●	◐	◐	
2 – SPUI	●	●	◐	◐	
3 – Full diamond	●	●	●	●	
4 – Diamond with SE loop	●	●	◐	◐	
9 – SE loop with business access	◐	◐	◑	◐	
14 – Full closure of 149 Street	○	○	○	◑	
15 – Half diamond to east	◐	◐	◑	◑	

Notes:

- Upgrades are assumed to be required along 123 Avenue, 124 Avenue, and 128 Avenue regardless of the interchange configuration selected.
- Any modifications required at 156 Street to accommodate C/D road alignments are excluded from this section.
- Driver expectation refers to whether the interchange configuration and accommodated movements are consistent with the corridor and adjacent routes. Being unable to make certain manoeuvres at a configuration would result in a low driver expectation score.
- Driver friendliness refers to whether the interchange configuration itself is easy to navigate for an average driver. An interchange that utilizes an unusual intersection configuration would result in a low driver friendliness score.















Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

7. Utility Implications

Evaluate Based On: How many utility lines will be impacted. How many are major utilities. What work is needed to relocate them. Can the configuration be drained in a major storm event. What storm infrastructure is required to accommodate the interchange.

Option No.	Utility Relocations	Drainage Concerns	Overall Score
1 – Parclo AB			
2 – SPUI			
3 – Full diamond			
4 – Diamond with SE loop			
9 – SE loop with business access			
14 – Full closure of 149 Street			
15 – Half diamond to east			

Notes:

- Drainage infrastructure will be required for all ramps, service roads, and C/D roads.
- It is assumed that YHT will not be depressed at 149 Street.
- YHT is assumed to be depressed at the spur line in all cases.

Name: _____

Organization: _____

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE EVALUATION DATA

8. Railway Impacts:

Evaluate Based On: Is the CN Mainline and CN Spur Line grade separated or crossed.

Option No.	CN Mainline	CN Spur	Overall Score
1 – Parclo AB	●	●	
2 – SPUI	●	●	
3 – Full diamond	●	●	
4 – Diamond with SE loop	●	●	
9 – SE loop with business access	●	●	
14 – Full closure of 149 Street	◐	●	
15 – Half diamond to east	●	●	

Notes:

- Any full interchange (option 1, 2, 3 and 4) or flyover of YHT will automatically require a grade separation of the CN mainline.
- To meet the definition of a freeway along Yellowhead Trail, the CN spur line will need to either be grade separated or removed. An at-grade crossing will not be retained.

Name: _____

Organization: _____

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE EVALUATION DATA

9. Global Network Operations

Evaluate Based On: How does the configuration impact the overall performance of the network along Yellowhead Trail and 149 Street as a whole. Impact on travel time along the Yellowhead Trail corridor.

Option No.	Transportation Network Impact	Travel Time Impacts	Overall Score
1 – Parclo AB	●	●	
2 – SPUI	●	●	
3 – Full diamond	●	●	
4 – Diamond with SE loop	●	●	
9 – SE loop with business access	◐	●	
14 – Full closure of 149 Street	◑	●	
15 – Half diamond to east	◐	●	

Notes:

- Examines how the overall Yellowhead Trail and 149 Street corridor operates through the City.
- Travel time along the Yellowhead Trail corridor.

Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

10. Community Impacts

Evaluate Based On: How likely is the configuration to result in shortcutting through the Dovercourt community? What are the noise impacts on the community. Is there an ability to provide aesthetic features as part of the design, including retaining structures, artwork, and a generally pleasing configuration. Does the configuration allow space for landscaping and tree planting.

Option No.	Shortcutting Potential	Noise	Aesthetics (Hardscaping)	Landscaping	Overall Score
1 – Parclo AB					
2 – SPUI					
3 – Full diamond					
4 – Diamond with SE loop					
9 – SE loop with business access					
14 – Full closure of 149 Street					
15 – Half diamond to east					

Notes:

- Based on likely travel patterns resulting from the proposed configuration.
- In all cases, no roads built on fill will be constructed immediately adjacent to the Dovercourt community. Traffic volumes (and associated noise) along 142 Street are expected to decrease as there will no longer be access to and from Yellowhead Trail at 142 Street.
- A noise impact assessment will be carried out as part of the formal concept planning study process to determine whether any additional noise attenuation measures will be required adjacent to the Dovercourt community.
- Aesthetic data is based on space availability for “hard-scaping” such as retaining walls, artwork, and other non-vegetative decorative measures.
- All interchange side slopes provide opportunity to plant trees. Some configurations provide for additional planting space, while others provide very little space for landscaping.
- Landscaping includes all vegetative elements (trees, shrubs, planters, etc.).

Name: _____

Organization: _____

YELLOWHEAD TRAIL /
149 STREET INTERCHANGE
EVALUATION DATA

11. Alternative Modes

Evaluate Based On: How well are pedestrians, cyclists, and transit accommodated, and what movements are available to them.

Option No.	Pedestrians and Cyclists	Transit	Overall Score
1 – Parclo AB	●	●	
2 – SPUI	◐	●	
3 – Full diamond	◑	●	
4 – Diamond with SE loop	◒	●	
9 – SE loop with business access	◓	◐	
14 – Full closure of 149 Street	○	○	
15 – Half diamond to east	●	●	

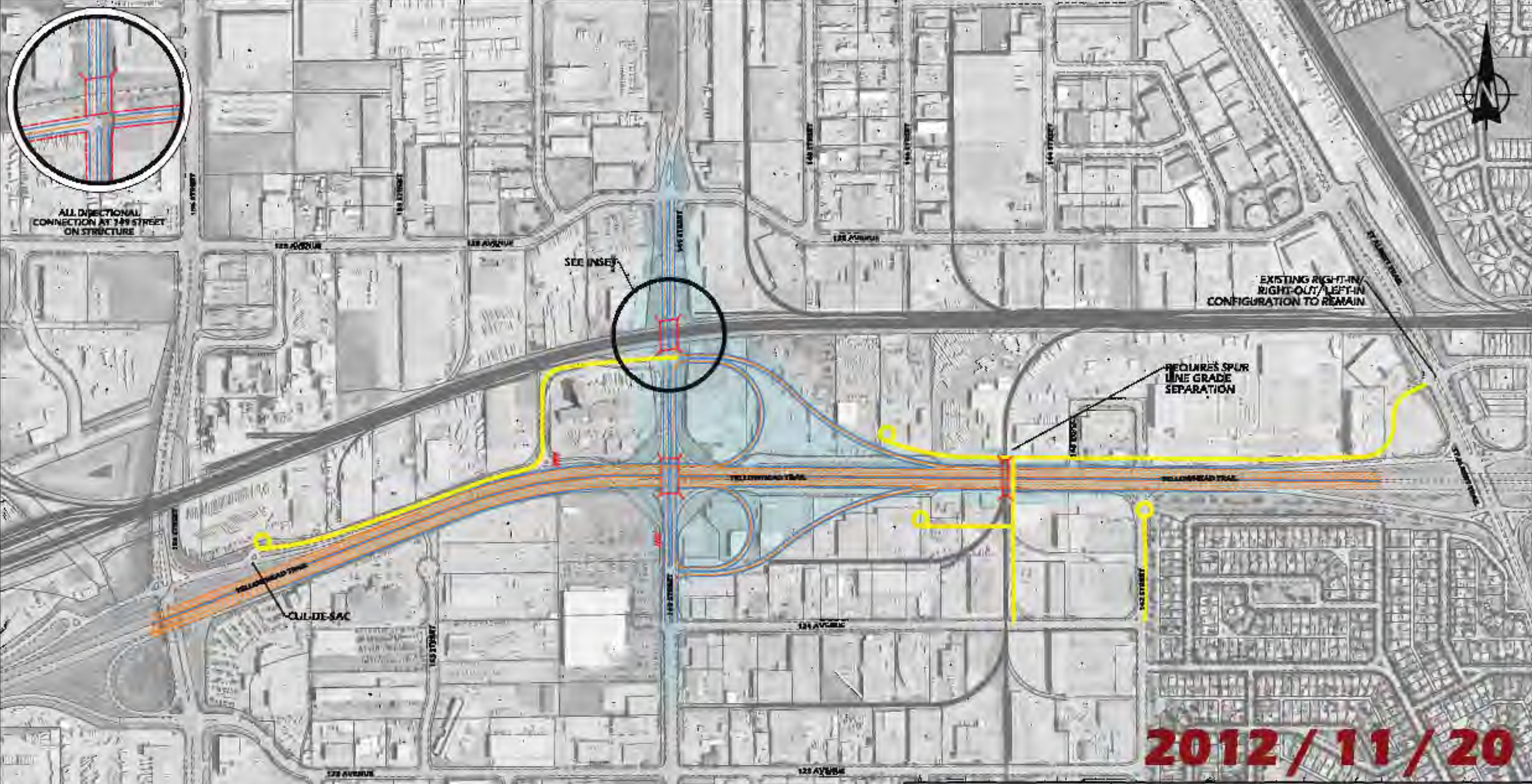
Notes:

- Based on ability provide connection to pedestrians in the area.
- Which routes are available for transit in the future.

Appendix J – Options – Workshop 4



ALL DIRECTIONAL CONNECTION AT 149 STREET ON STRUCTURE



FOR DISCUSSION PURPOSES ONLY

LEGEND	
	PROPOSED ACCESS
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

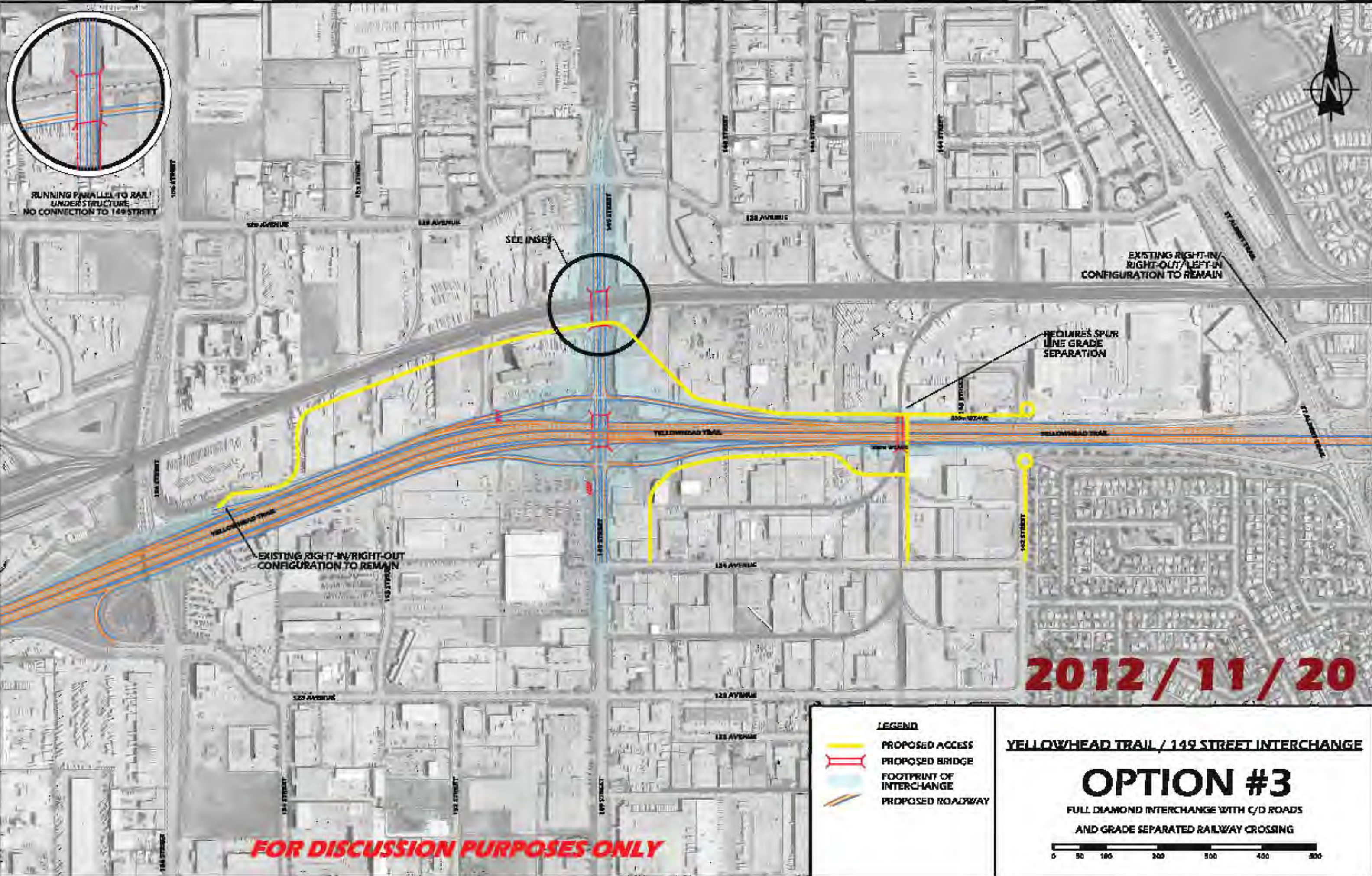
OPTION #1

PARCLO AB INTERCHANGE WITH RAIL GRADE SEPARATION





RUNNING PARALLEL TO RAIL UNDER STRUCTURE NO CONNECTION TO 149 STREET



2012 / 11 / 20

FOR DISCUSSION PURPOSES ONLY

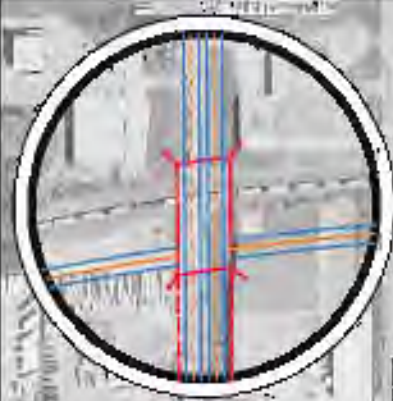
- LEGEND**
-  PROPOSED ACCESS
 -  PROPOSED BRIDGE
 -  FOOTPRINT OF INTERCHANGE
 -  PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

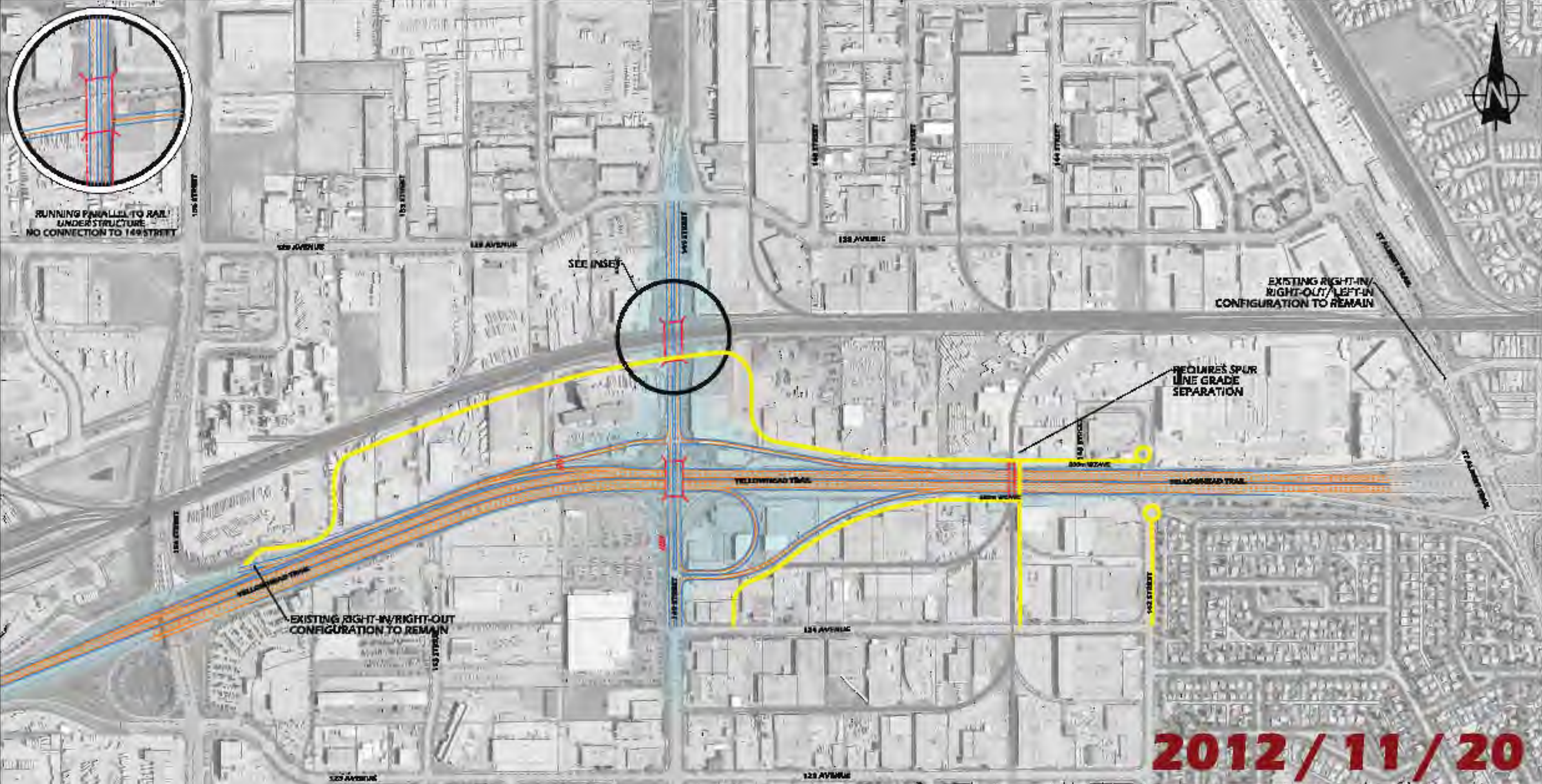
OPTION #3

FULL DIAMOND INTERCHANGE WITH C/D ROADS AND GRADE SEPARATED RAILWAY CROSSING





RUNNING PARALLEL TO RAIL UNDER STRUCTURE
NO CONNECTION TO 149 STREET



FOR DISCUSSION PURPOSES ONLY


LEGEND

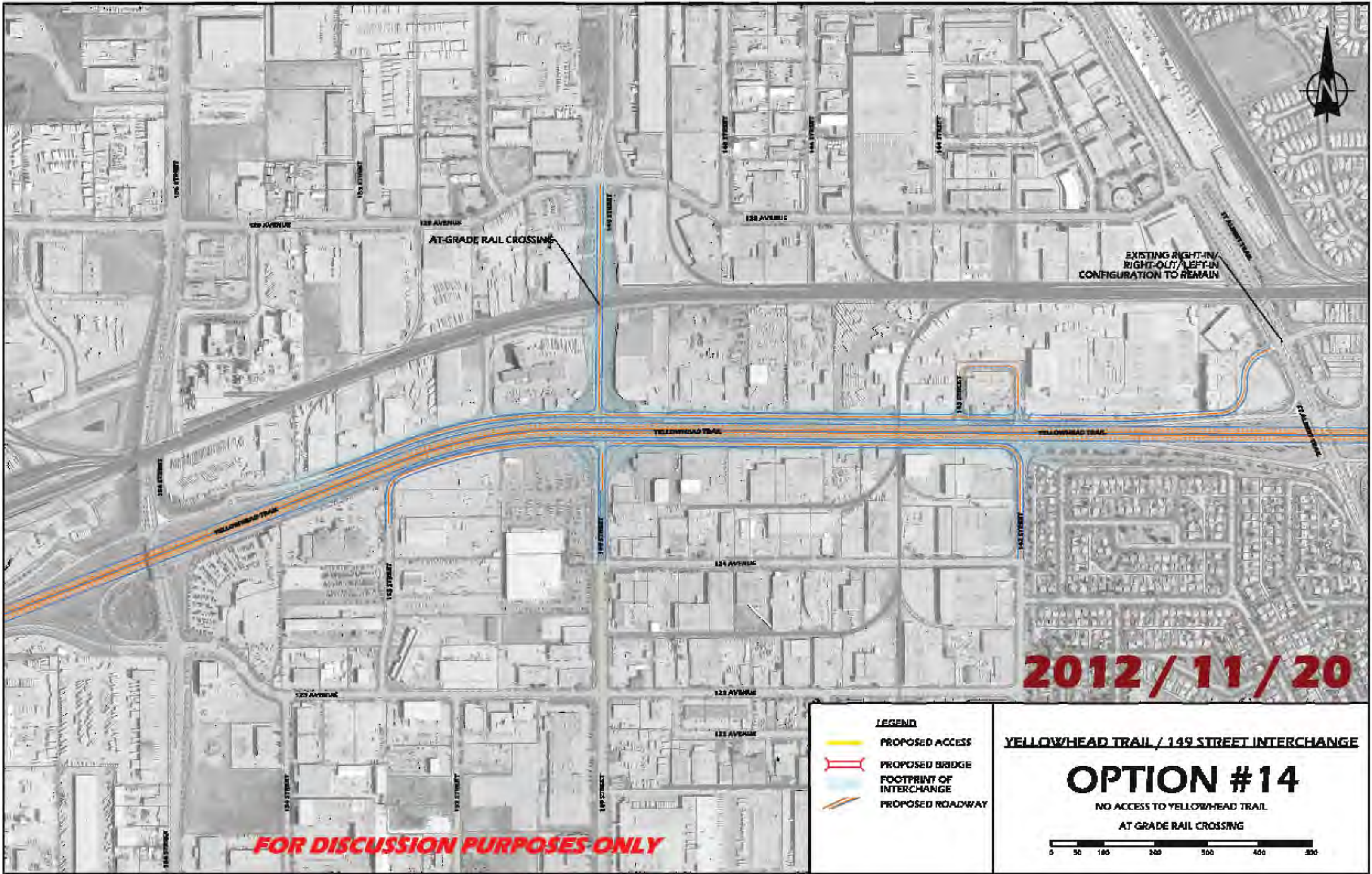
	PROPOSED ACCESS
	PROPOSED BRIDGE
	FOOTPRINT OF INTERCHANGE
	PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #4

DIAMOND INTERCHANGE WITH LOOP IN SE
GRADE SEPARATED RAILWAY CROSSING WITH WB C/D ROAD







AT-GRADE RAIL CROSSING

EXISTING RIGHT-IN/
RIGHT-OUT/
LEFT-IN
CONFIGURATION TO REMAIN

2012 / 11 / 20

FOR DISCUSSION PURPOSES ONLY

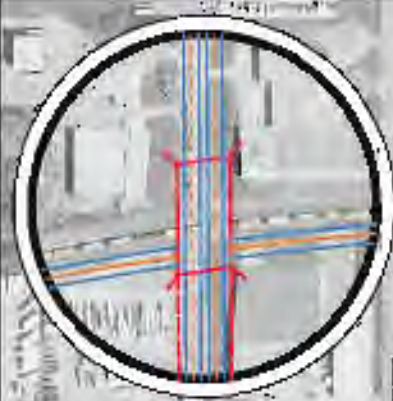
- LEGEND**
-  PROPOSED ACCESS
 -  PROPOSED BRIDGE
 -  FOOTPRINT OF INTERCHANGE
 -  PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

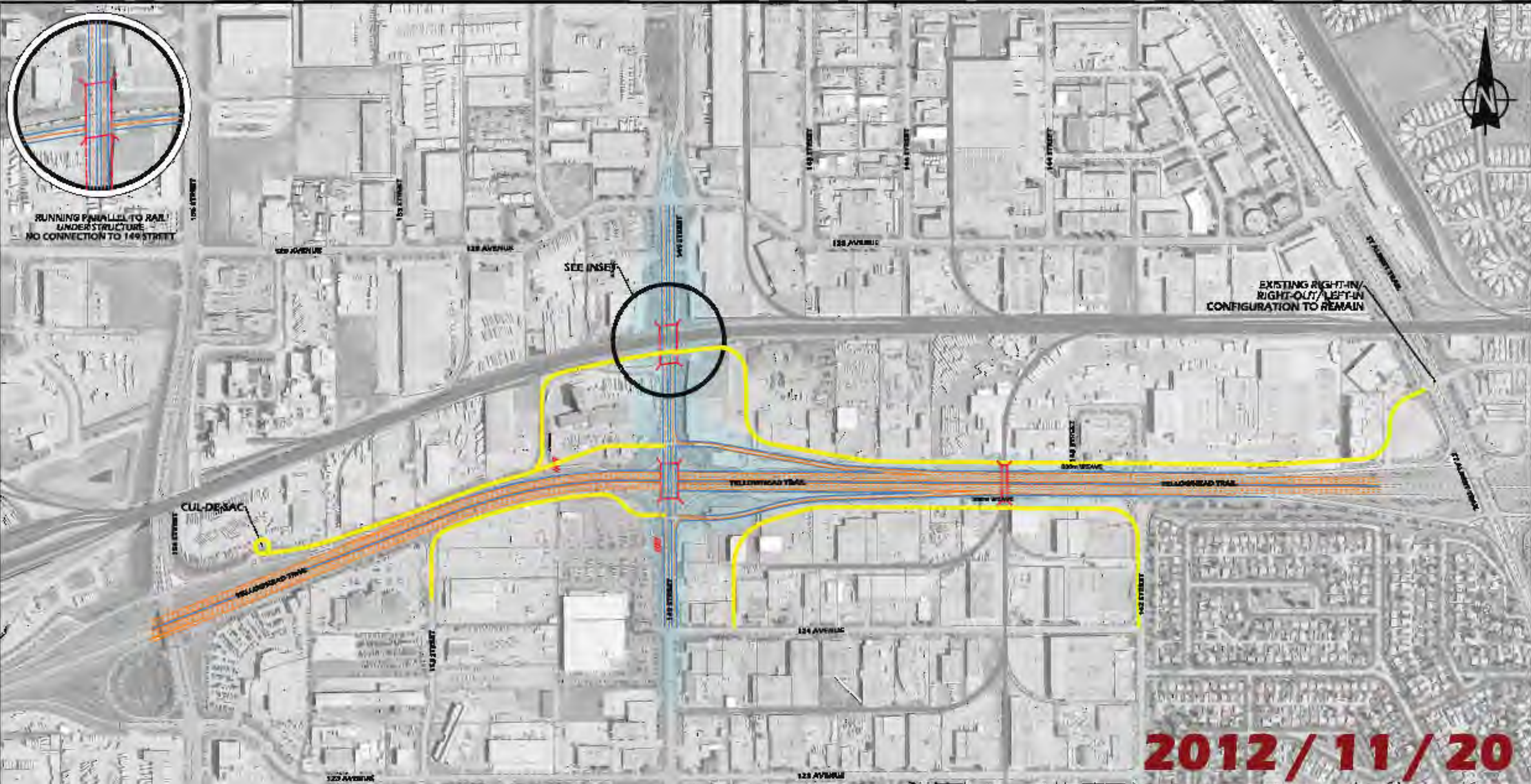
OPTION #14

NO ACCESS TO YELLOWHEAD TRAIL
AT GRADE RAIL CROSSING









RUNNING PARALLEL TO RAIL UNDERSTRUCTURE NO CONNECTION TO 149 STREET



2012 / 11 / 20

FOR DISCUSSION PURPOSES ONLY

- LEGEND**
-  PROPOSED ACCESS
 -  PROPOSED BRIDGE
 -  FOOTPRINT OF INTERCHANGE
 -  PROPOSED ROADWAY

YELLOWHEAD TRAIL / 149 STREET INTERCHANGE

OPTION #15

HALF DIAMOND INTERCHANGE WITH NO C/D ROADS AND GRADE SEPARATED RAILWAY CROSSING



Appendix K – Project Bulletin



Yellowhead Trail and 149 Street Interchange Planning Study UPDATE

September 2012



PROJECT OVERVIEW

- The City of Edmonton is undertaking a concept planning study for an interchange at Yellowhead Trail and 149 Street.
- The goal is to balance the needs of area businesses and residents with the long-term transportation needs of the City.
- Planning will consider access to businesses and properties, crossing of CN Rail lines and performance of the transportation network.

STUDY CORRIDOR

- Study corridor extends from 156 Street to St. Albert Trail and includes:
 - Some of the most congested and collision-prone intersections along Yellowhead Trail.
 - One of Edmonton's most congested at-grade rail crossings at 149 Street north of Yellowhead Trail.
 - Connections to interchanges at both 156 Street and St. Albert Trail.
 - Signalized intersections at 149 and 142 Streets.
 - Several unsignalized intersections and accesses.
- The intersection at 149 Street marks the first and last set of signals entering or exiting the City along Yellowhead Trail.

BACKGROUND

- Yellowhead Trail is identified in the Transportation Master Plan as a key segment of the Inner Ring Road.

- Both Yellowhead Trail and 149 Street are designated 24-hour truck routes.
- Yellowhead Trail is a dangerous goods route.
- The Yellowhead Trail Strategic Plan recommends Yellowhead Trail be made into a freeway.
- Transportation Bylaw 15896 designates Yellowhead Trail as a future freeway.

PUBLIC INVOLVEMENT

A public meeting was held at Dovercourt Elementary School on June 13, 2012 to introduce the planning study and to gather public/stakeholder input on issues, opportunities and risks related to the project.

A second public event will be held in the fall of 2012 to present what we heard in June as well as draft interchange concepts for public feedback.

WHAT WE HEARD

Feedback received at the June public event is being used to inform the planning team and the Stakeholder Input Group.

Key themes include the impact on access to and visibility of businesses both during and after construction, as well as access and egress to the community and impacts on other roadways.

Priorities to be considered during planning include traffic flow, impact on businesses, inclusion of the CN rail lines in the solution.

The most important transportation issues were identified as traffic congestion and access to businesses, while the major benefit was noted as improved traffic flow.

Risks to be considered include the impact on the community such as noise, increased neighbourhood traffic and increased pressure on other roadways and decreased visibility of and financial loss to businesses.



THE WAY WE MOVE

TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE

STAKEHOLDER INPUT GROUP

A Stakeholder Input Group has been established with representatives from impacted businesses in the study area, as well as the broader community. The group will work together with the City over the next several months to review and evaluation interchange concepts.

If you have comments or suggestions to provide to the Stakeholder Input Group or City planning team, please email Rob Gibbard, Project Manager, City of Edmonton at rob.gibbard@edmonton.ca.

TIMELINE

2012 - early 2013	Public/stakeholder Involvement
Early 2013	Preferred Interchange Option Identified
2013	Detailed Concept Planning
Future	Construction (subject to funding)

MORE INFORMATION

www.edmonton.ca/roadplans

Appendix L – Public Meeting #2 – Communication Materials

- **Project fact sheet**
- **Display Boards**
- **Print Ad**
- **Mail out flyer**
- **Road side signs**

YELLOWHEAD TRAIL / 149 STREET STREET PLANNING STUDY

September 2013

About the Project

The City of Edmonton is in the final stages of a significant public engagement process that has resulted in the development and refinement of a preferred strategy for freeway operation of Yellowhead Trail at 149 Street.

The ultimate goal of the concept plan is to balance the needs of area businesses and residents with the long-term transportation needs of the City.

The project team has considered access to surrounding properties, crossing of CN Rail lines and performance of the transportation network, among many other factors during the development of the preferred plan.



Background

The City of Edmonton's Yellowhead Strategic Plan aims to ultimately develop Yellowhead Trail into a freeway to ensure efficient goods movement across Edmonton and to aid in the economic activity across the Capital Region. The Strategic Plan was endorsed by City Council in November 2011, and the Transportation Systems Bylaw was amended in late

2011 to designate Yellowhead Trail as a future freeway.

This future freeway designation is supported by the results of the City's 2012 Truck Study which showed that traffic flow along the Yellowhead Trail is a major challenge for truck trips in and around Edmonton. As a result, the City's draft Goods Movement Strategy recommends the implementation of Yellowhead Trail Strategic Plan.

As a major commuter route and a designated 24 hour Truck Route and Dangerous Goods Route, Yellowhead Trail currently sees significant traffic. As Edmonton grows, traffic along Yellowhead Trail is projected to increase to over 110,000 vehicles per day by 2044. This growth will exceed the capacity of the route with the current traffic signalization and configuration.

How Was the Public Involved?

The City of Edmonton's Public Involvement Process includes a Continuum of Public Involvement to help set clear expectations and inform the public during each stage of the process.

To date, the public engagement process for this project has included an Open House in June 2012, 11 stakeholder meetings, discussions with internal and external stakeholders such as CN Rail and utility companies, information bulletins to the community and the establishment of a Stakeholder Input Group.

The Stakeholder Input Group worked with the project team to develop and evaluate options for the planning study. The stakeholder group helped to identify and develop:

- Issues and constraints
- Evaluation criteria and their relative weighting
- Freeway configuration and preferred access arrangements

Over the course of several workshops and after receiving significant input from internal and external

stakeholders, the project team arrived at two final strategies for the area (Strategy A: a $\frac{3}{4}$ diamond interchange; and Strategy B: a no-interchange scenario with one-way service roads paralleling Yellowhead Trail on the north and south sides).

To date, more than 400 hours of public involvement provided valuable input into the concept planning process.

Preferred Concept Plan - Strategy B

While both Strategy A and Strategy B meet the objective of providing free flow along Yellowhead Trail, the project team prefers Strategy B for a number of reasons:

- Better access to businesses along the corridor
- Lower capital cost as it does not include a grade separated interchange
- Lower maintenance cost
- Lower land requirements and business impacts
- Lower disruptions to Yellowhead Trail during construction
- Preferred strategy by Stakeholder Input Group

Providing Access

Service Roads

At present, access to properties along Yellowhead Trail on the north and south sides are provided via a combination of service road access, access to cross-streets, and direct access to Yellowhead Trail. Upon implementation of the preferred strategy at Yellowhead Trail / 149 Street, access to adjacent properties will generally be provided via one-way service roads paralleling Yellowhead Trail or from other collector or arterial roadways. Access to properties will not be provided directly from Yellowhead Trail.

Alternate Access to the Yellowhead

Upgrades to parallel routes, including 128 Avenue, 123 Avenue and 124 Avenue will help to enhance the modified access to communities and businesses along Yellowhead Trail.

City Council

In July 2013, the project team presented two freeway strategies to Transportation Committee and City Council; Freeway Strategy A which includes a $\frac{3}{4}$ diamond, grade separated interchange and Freeway Strategy B that includes one-way service roads with right-in/right-out access north and south of Yellowhead Trail.

The project team proposed Freeway Strategy B as the preferred option. Transportation Committee accepted the report for information.

What's Next



Following public input at the September 2013 Open House and further technical refinements to the preferred option, the Project team will present the final concept plan to Transportation Committee for approval in early 2014.

At this time, there is no approved funding to continue the project to the next stages of preliminary engineering and design and therefore no timeline for construction.

For More Information

Visit: www.edmonton.ca/roadplans
Call: Rob Gibbard, Project Manager
780-423-5280

THE WAY WE MOVE

YELLOWHEAD TRAIL/149 STREET PLAN

Open House
September 17, 2013

TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE



WELCOME

Today we are presenting the recommended 149 Street concept plan to support a freeway along Yellowhead Trail.

PURPOSE

- Provide information on the Yellowhead Trail Strategic Plan
- Provide background information on the need for a freeway
- Provide information about the concept planning process
- Provide information about the recommended concept plan

City of Edmonton representatives are available to discuss the project and answer questions.



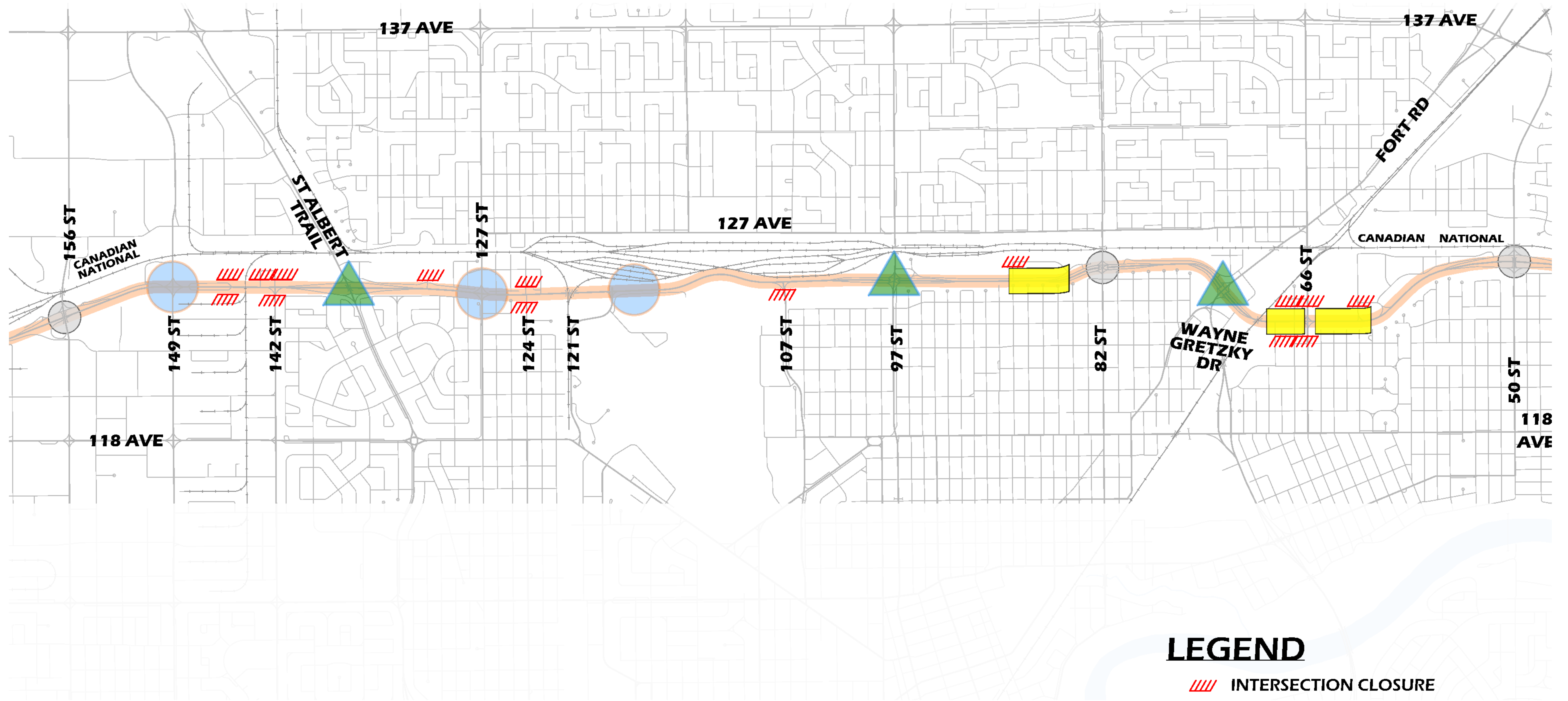
BACKGROUND INFORMATION

Transportation Committee and City Council have approved policy documents and received updates that pertain to Yellowhead Trail planning as follows:

- [*The Way We Move*](#) defines the strategic goal and guides decisions for Yellowhead Trail as a key goods and services movement corridor
- The [*Transportation Systems Bylaw*](#) identifies Yellowhead Trail as a future freeway
- The [*Yellowhead Strategic Plan*](#) defines the corridor as a freeway with proposed interchange locations, including at 149 Street
- The [*Yellowhead Trail Long-Term Plan Update*](#) presented to Transportation Committee in October 2012 identifies the staging for improvements to Yellowhead Trail, with 149 Street improvements being one of the first stages
- The draft [*Goods Movement Strategy*](#) identifies Yellowhead Trail as a route of regional importance and highlights improvements to Yellowhead Trail as a means of “Increasing Transportation Network Efficiency”

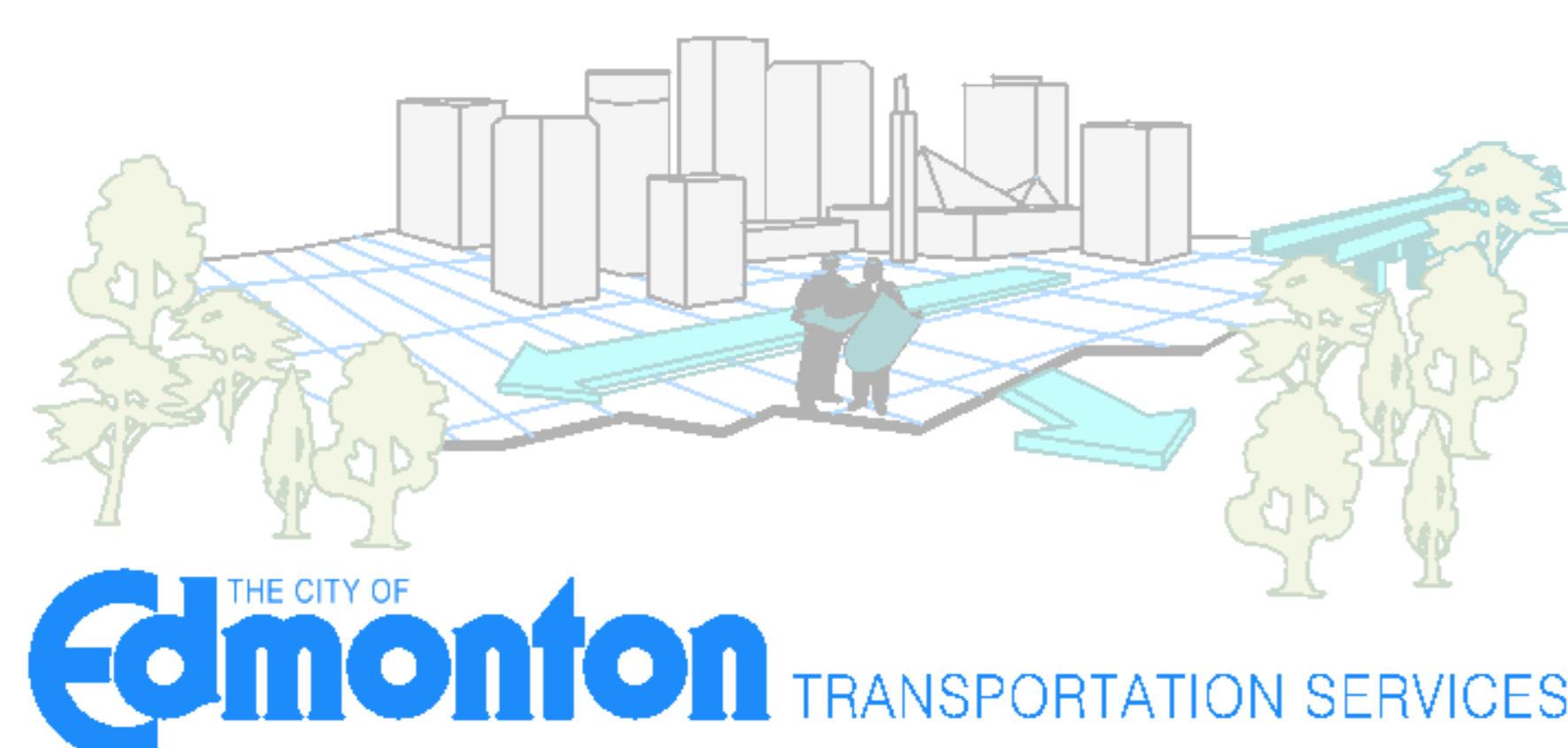


YELLOWHEAD TRAIL STRATEGIC PLAN



LEGEND

- INTERSECTION CLOSURE
- EXISTING INTERCHANGE
- STAGE 1 IMPROVEMENTS
- ULTIMATE INTERCHANGE IMPROVEMENTS
- EXISTING INTERCHANGE TO BE MODIFIED



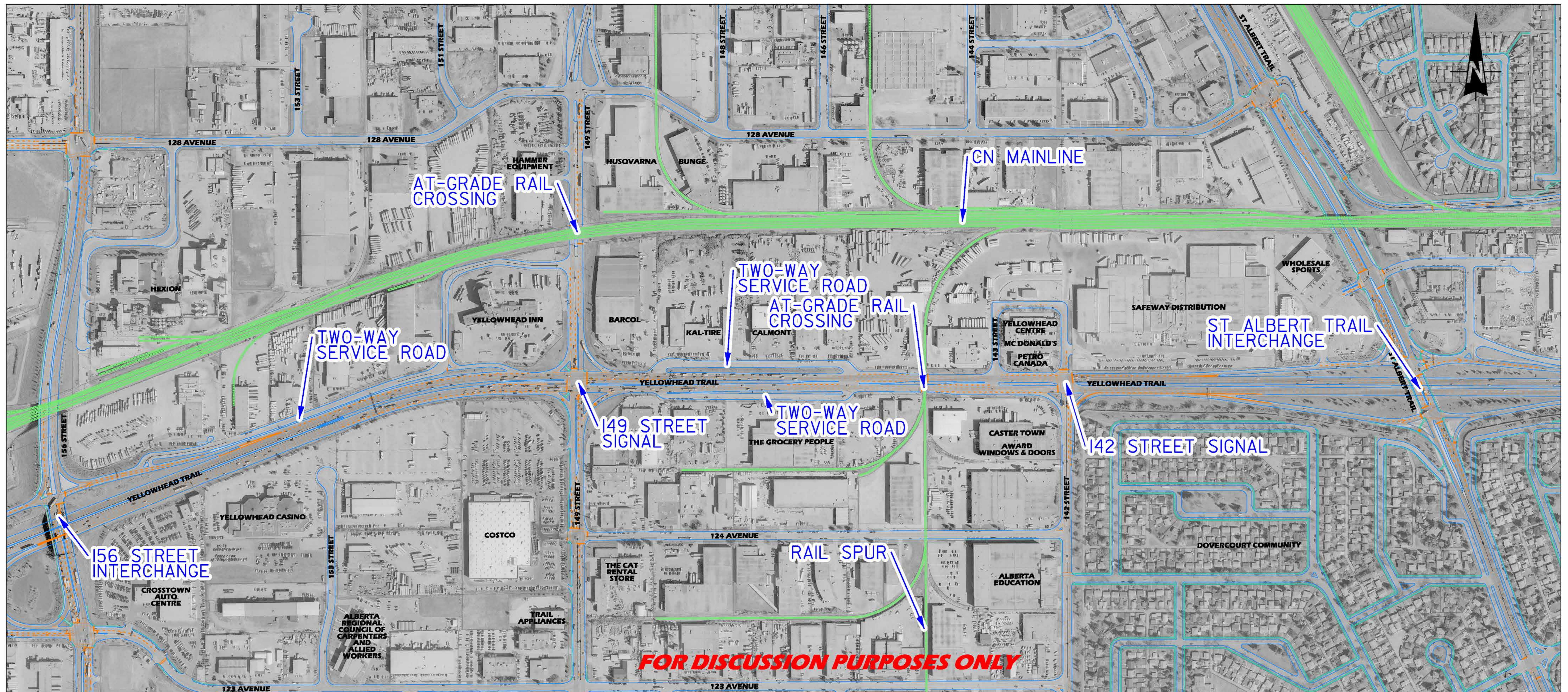
YELLOWHEAD TRAIL CORRIDOR PLAN

PROJECT VISION

- To develop a concept plan for 149 Street and Yellowhead Trail which balances the needs of area businesses and residents with the long term transportation needs of the City
- To engage the public via public events, one-on-one interviews, and a Stakeholder Input Group and to inform the project on:
 - Interchange configuration and access options
 - Evaluation criteria and weighting
 - Preferred interchange configuration and access plans
 - Preferred railway grade separation configurations



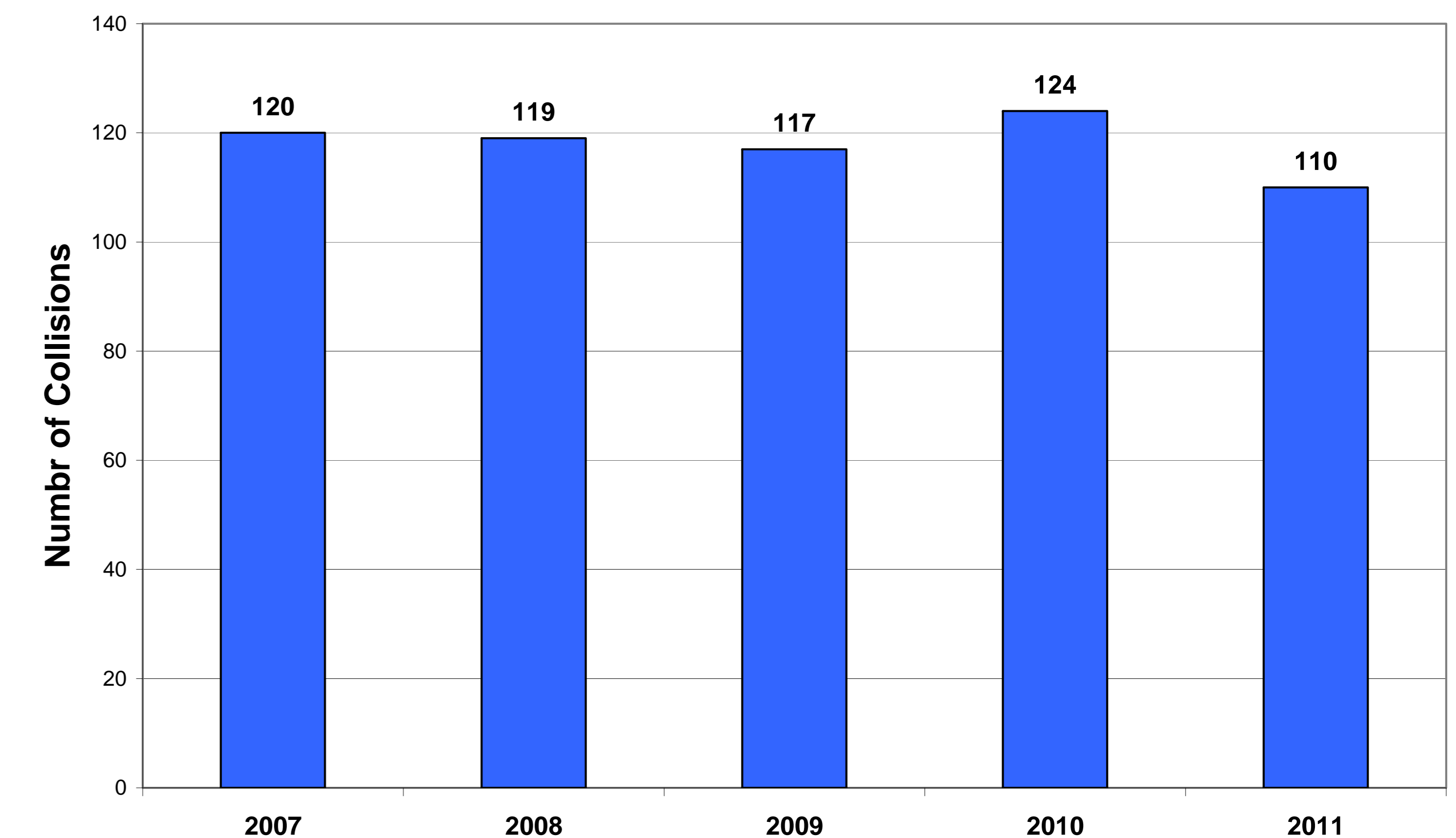
PROJECT STUDY AREA - EXISTING CONDITIONS



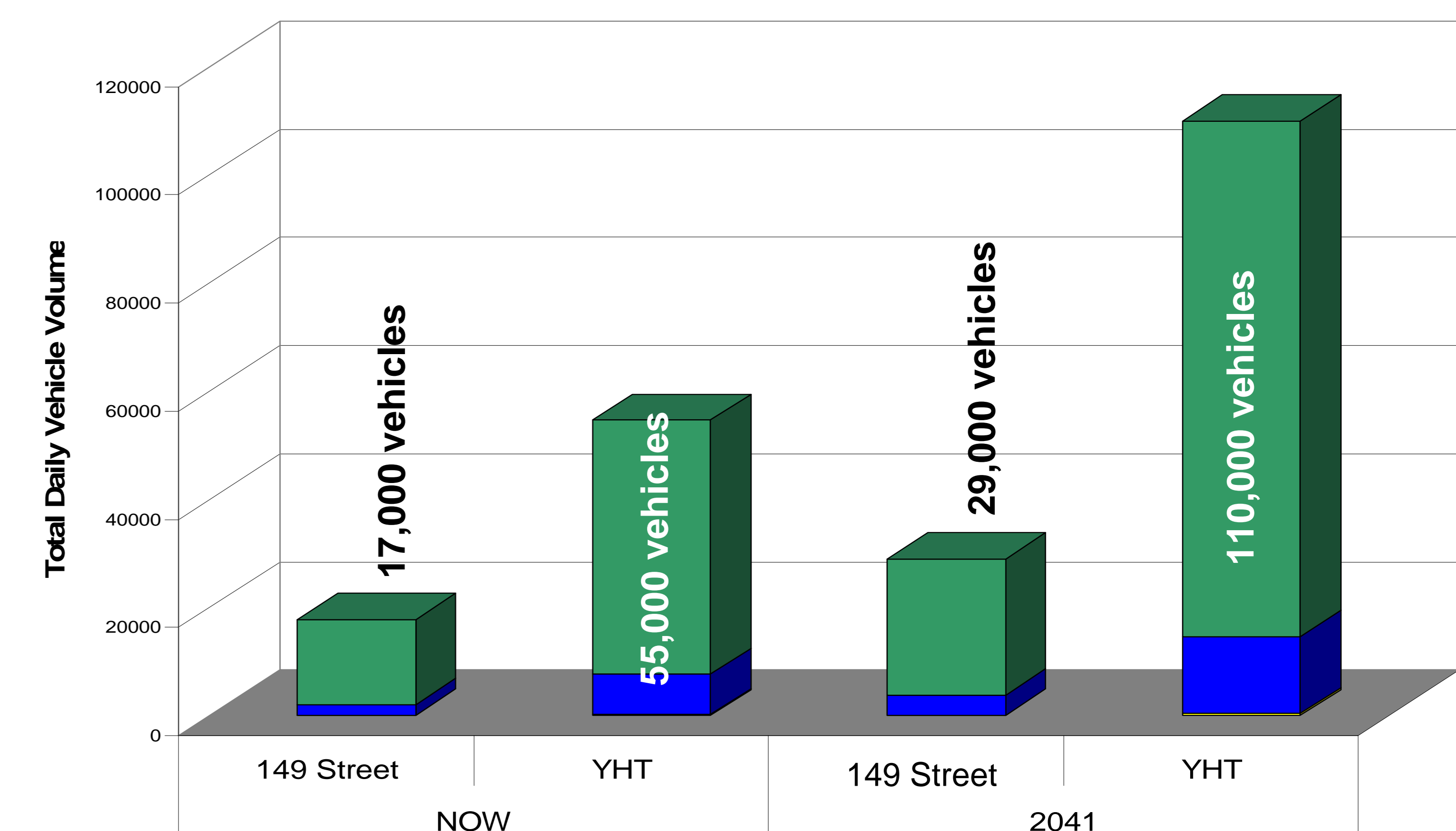
WHY A FREEWAY?

- Yellowhead Trail is a key component of the Inner Ring Road
- Yellowhead Trail and 149 Street are 24 Hour Truck Routes and Yellowhead Trail is also a Dangerous Goods Route
- By 2044, Yellowhead Trail will:
 - Accommodate over 110,000 vehicles per day (anticipated double current volumes)
 - Carry 20,000 trucks per day
 - Be congested with excessive delays at existing traffic signals
- 149 Street ranks 4th in the City for collisions based on 2011 statistics
 - Many collisions can be linked to “stop-and-go” traffic at 149 Street and 142 Street

Total Collisions by Year (Yellowhead Trail & 149 Street)

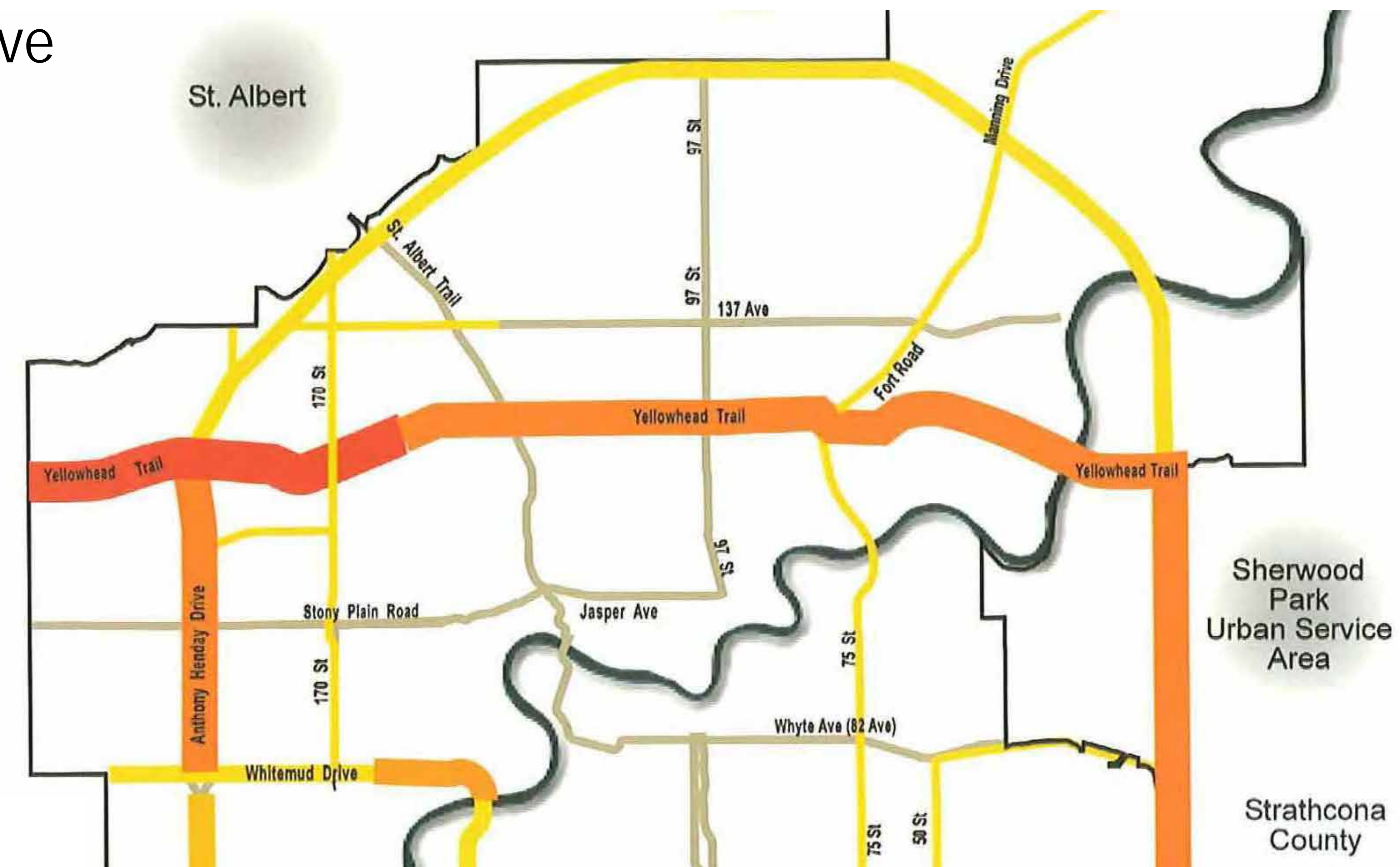


Existing and Projected Vehicle Volumes



ANTHONY HENDAY DRIVE vs. YELLOWHEAD TRAIL

- The short term impact of Anthony Henday Drive on Yellowhead Trail traffic volumes is not as significant as you might think.
- The project team compared current 2011 traffic volumes to 2019 forecast traffic volumes with Anthony Henday Drive open:
 - Near Anthony Henday, Yellowhead Trail traffic volumes decrease by approximately 10%
 - Near 97 Street, Yellowhead Trail traffic volumes increase by 8%.



- **Conclude that Edmonton is a destination for trucks – traffic is still destined to core of the City via Yellowhead Trail.**

INPUT PROCESS

Input into the project has been and will continue to be gathered from three major groups:

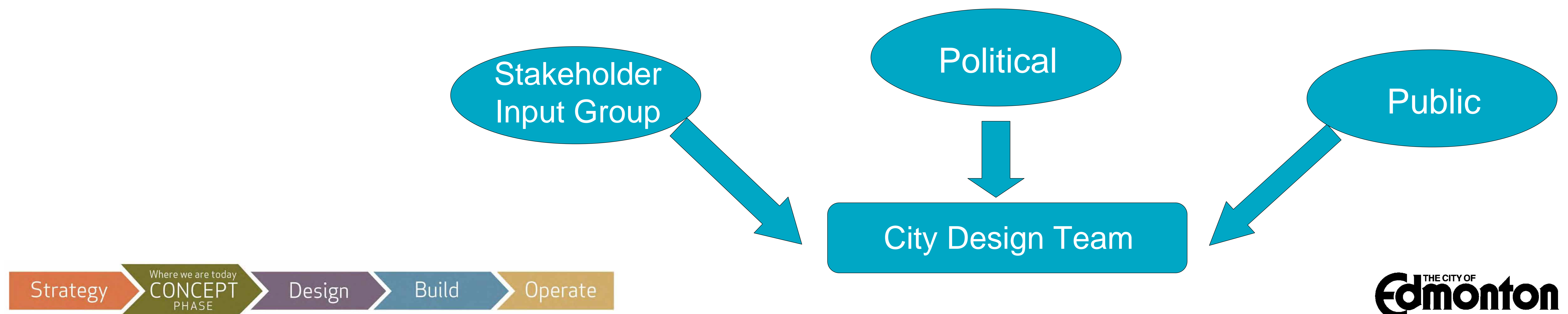
Public: Stakeholder Input Group, one-on-one stakeholder interviews and meetings, open houses

Internal: City departments, project team, and specialist consultants

Political: Transportation Committee (TC) and City Council

The City worked with external and internal City stakeholders through workshops which:

- Explained technical considerations in detail
- Developed evaluation criteria and weighting with the big picture in mind
- Reviewed, evaluated, and discussed options



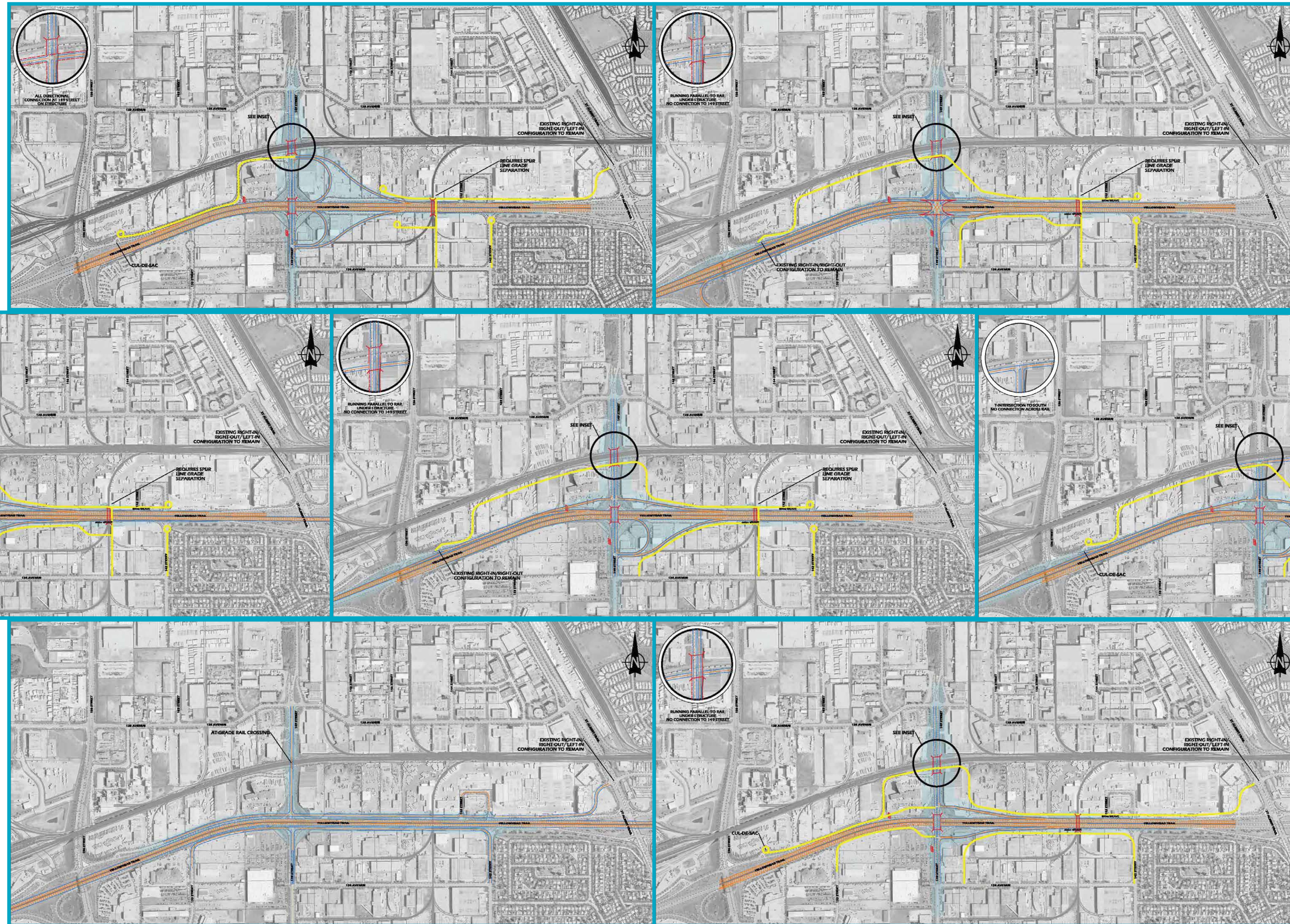
FREEWAY STRATEGIES

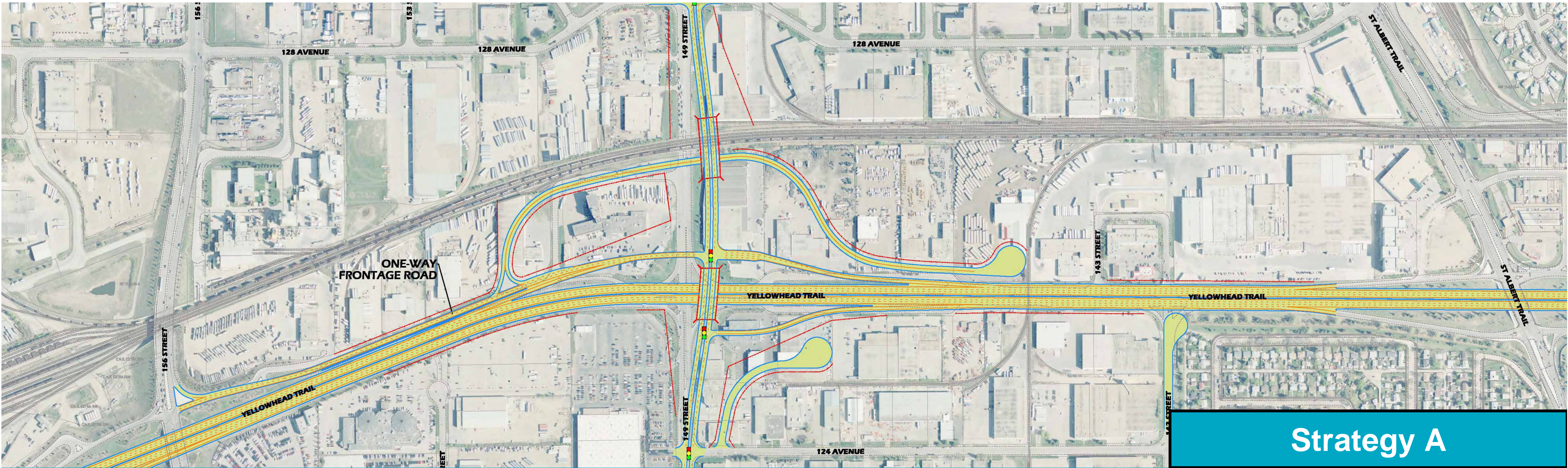
- Over 35 freeway configurations were developed and each had up to 5 access sub-options.
- Options included full closure, right-in right-out, flyover, and interchange options.
- The options were evaluated and refined using evaluation criteria and detailed technical analyses.
- Two freeway strategies (Strategy A and Strategy B) were presented to Transportation Committee in July 2013.

Criteria
1. Land Impacts <ul style="list-style-type: none"> • Land acquisition requirements, severity of impacts, impact on businesses and revenues, business visibility, future viability of parcels
2. Access Requirements <ul style="list-style-type: none"> • Access to existing businesses, accommodating existing movements, emergency access
3. Geometric Considerations <ul style="list-style-type: none"> • Design speed, weaving distance, design vehicles, sight lines, interchange operations, grades, consistency, etc.
4. Construction <ul style="list-style-type: none"> • Constructability, staging, commuter impacts, ability to widen in future, business access impacts
5. Costs <ul style="list-style-type: none"> • Lifecycle costs to build, to maintain, to rehabilitate
6. Localized Traffic Considerations <ul style="list-style-type: none"> • Impacts within the study area, including accommodating large trucks, traffic capacity, driver expectation, driver friendliness, consistency
7. Utility Implications <ul style="list-style-type: none"> • Relocation of utilities, drainage
8. Railway Impacts <ul style="list-style-type: none"> • Grade separation of crossings
9. Global Network Operation <ul style="list-style-type: none"> • Impacts on the overall transportation network, including existing and future parallel routes, travel time, network operation (regional and overall)
10. Community Impacts <ul style="list-style-type: none"> • Noise, aesthetics, landscaping, short cutting
11. Alternative Modes <ul style="list-style-type: none"> • Accommodation and integration of pedestrians and cyclists, pedestrian safety, public transportation



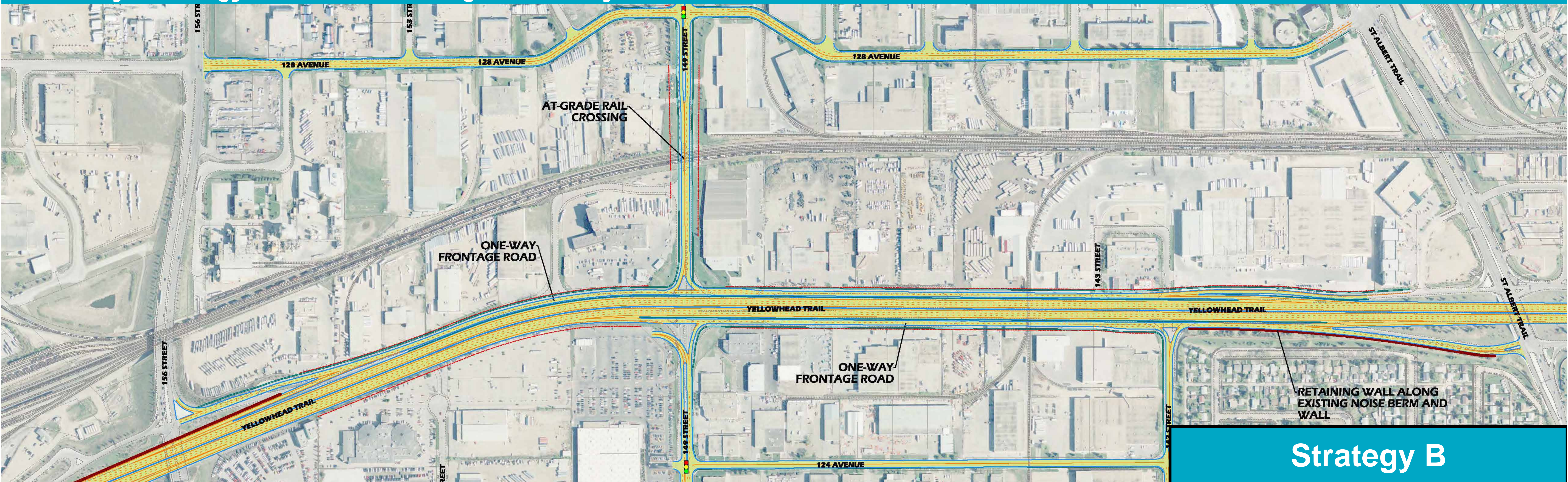
SOME OPTIONS CONSIDERED





Freeway Strategy A: $\frac{3}{4}$ Diamond Interchange

Freeway Strategy B: No Interchange One Way Service Roads



Strategy B

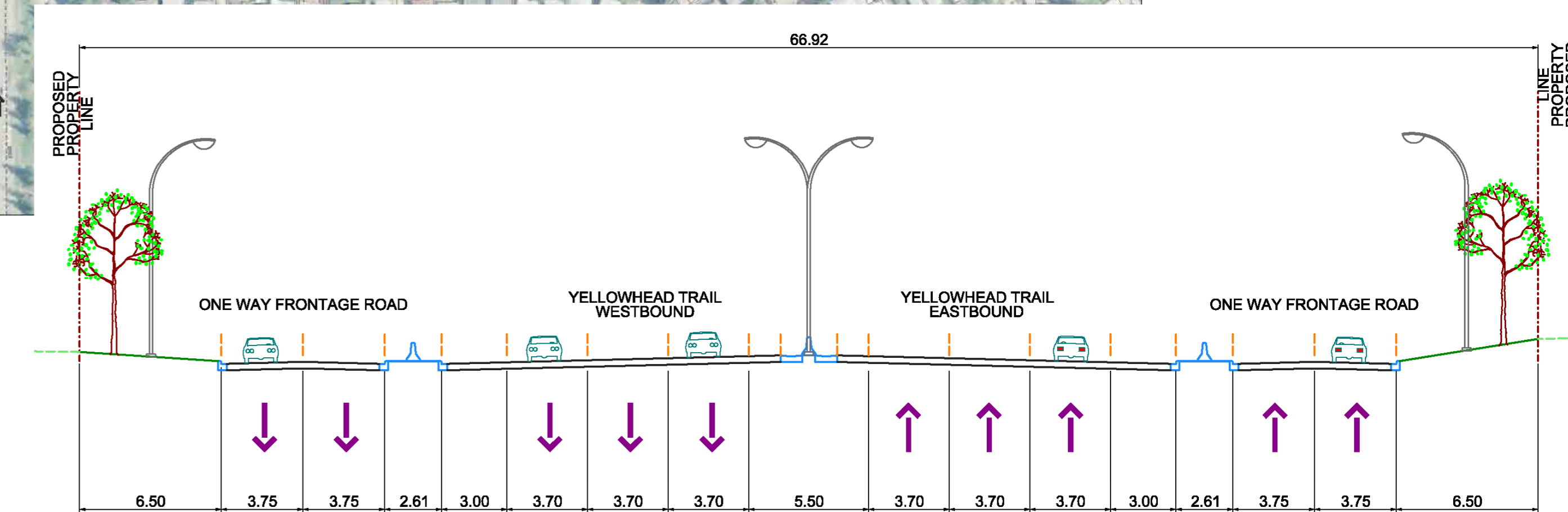
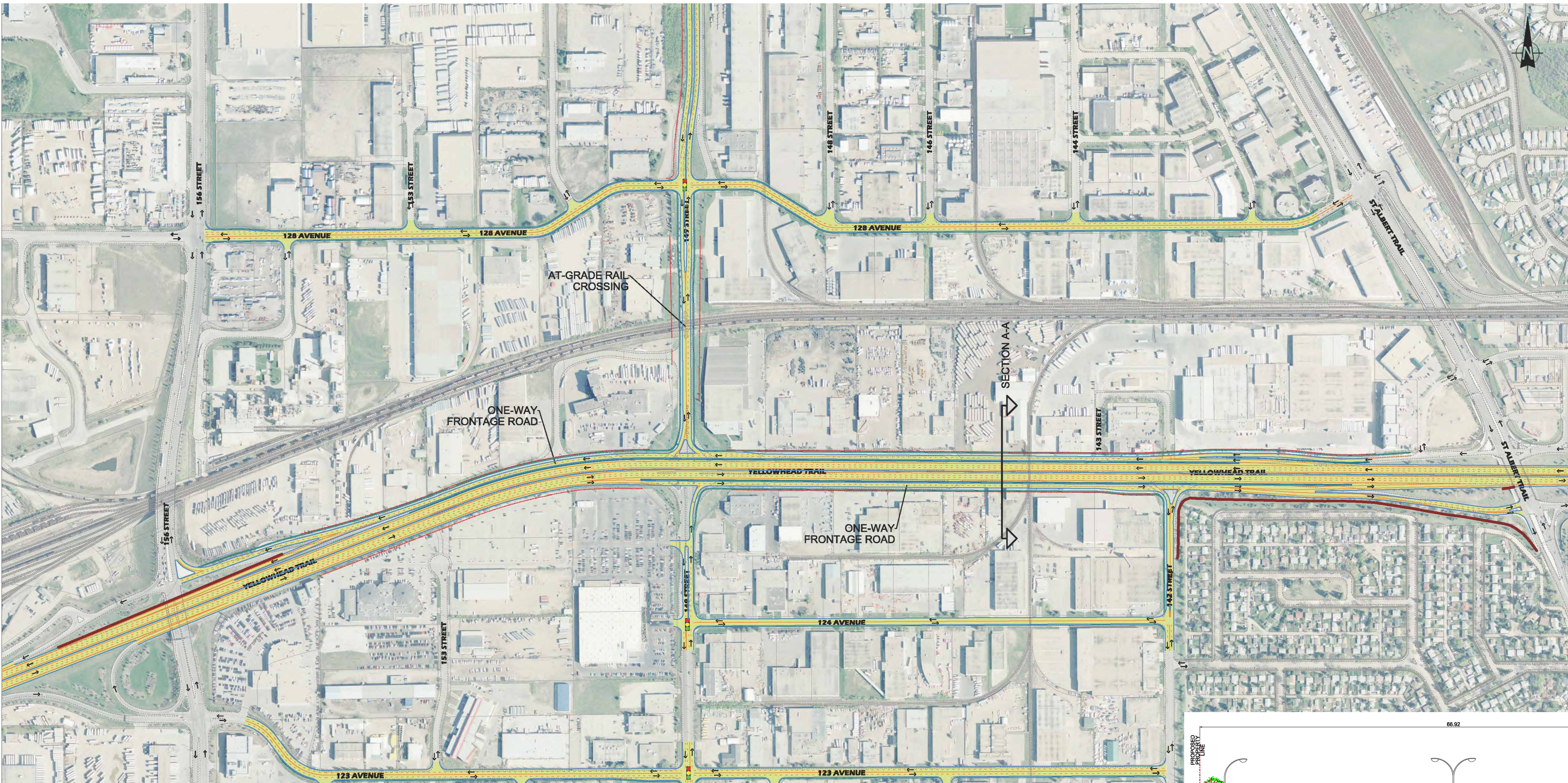
TECHNICAL PREFERENCES

Although Strategy A and Strategy B both meet the requirement of achieving free-flow along Yellowhead Trail, the project team prefers Strategy B for a number of reasons:

- Better access to businesses along the corridor
- Lower capital cost
- Lower maintenance cost
- Lower land requirements and business impacts
- Lower disruptions to Yellowhead Trail Traffic during construction
- Preferred strategy by Stakeholder Input Group



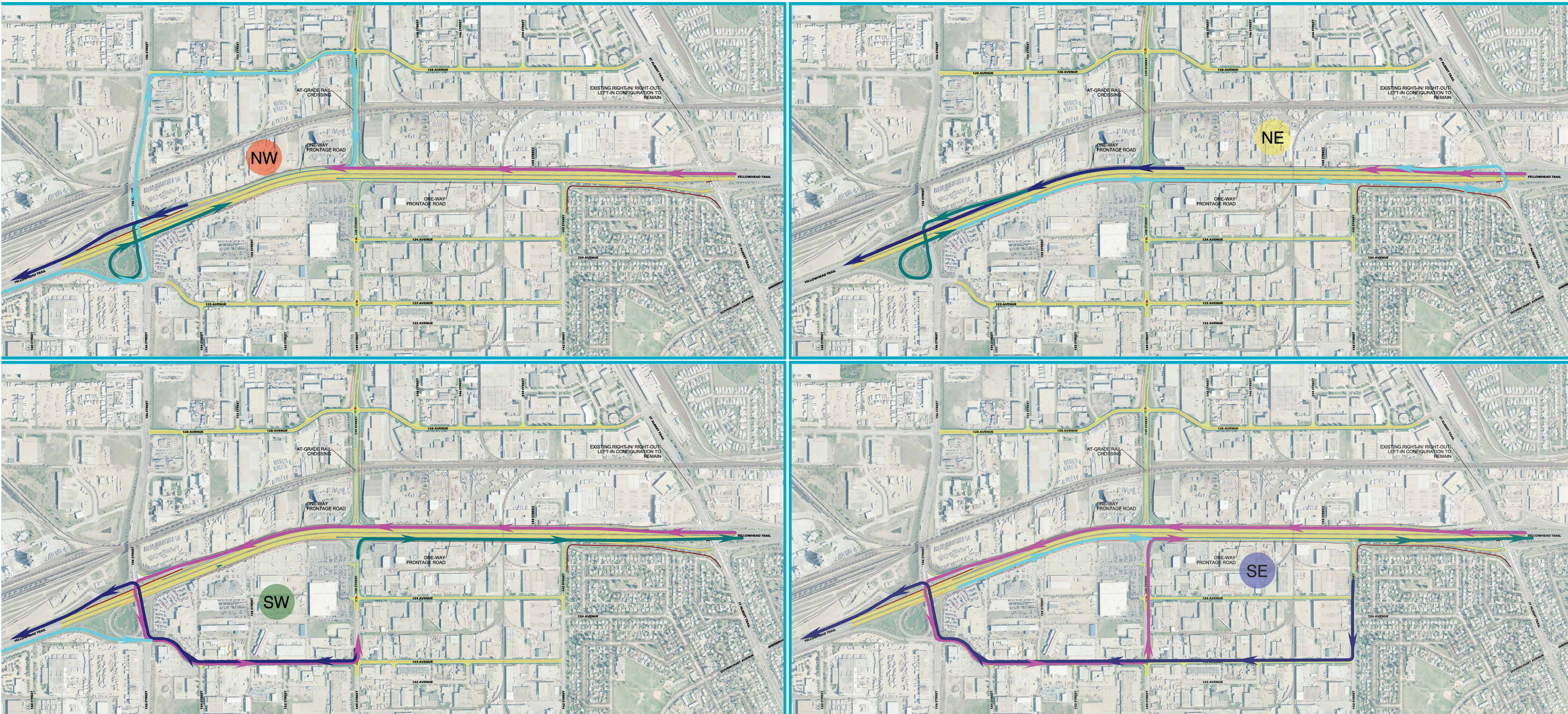
PREFERRED STRATEGY B - ONE-WAY SERVICE ROADS







SECTION A-A: YELLOWHEAD TRAIL (LOOKING EAST)
NOTE: MEDIAN AND BOULEVARD WIDTHS TO BE REVIEWED AND CONFIRMED DURING PRELIMINARY DESIGN



EXAMPLES: GETTING ON AND OFF YELLOWHEAD TRAIL



LEGEND

-  TO AREA FROM WB YELLOWHEAD TRAIL
-  TO AREA FROM EB YELLOWHEAD TRAIL
-  FROM AREA TO WB YELLOWHEAD TRAIL
-  FROM AREA TO EB YELLOWHEAD TRAIL



Thank you for attending!

Please fill out the comment form. Your input is appreciated..



For project updates visit: www.edmonton.ca/roadplans



YELLOWHEAD TRAIL/ 149 STREET PLAN

TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE

GET INFORMED

Open House

Tuesday, September 17, 2013, 4:00 p.m. – 8:00 p.m.

Dovercourt Community Hall, 13510 Dovercourt Avenue

The City of Edmonton is hosting a public meeting to provide information on the recommended concept for free flow operation of Yellowhead Trail at 149 Street.

This public meeting is a drop-in Open House; members of the public are invited to view the presentation boards and maps, ask questions of our project staff and pick-up project information material anytime during the event hours.

This is an opportunity for interested businesses and community members to learn about the planning study, the options considered, and the resulting recommended concept plan. Project staff will be collecting feedback on the information presented for future refinements to the concept plan.



FOR MORE INFORMATION

Visit us online at www.edmonton.ca/roadplans.



Services for deaf or hard of hearing persons provided upon request.
Call 311 at TTY/NexTalk 780-944-5555 and press 0, or email 311@edmonton.ca.

Learn more about and get involved in City issues affecting you and your neighbourhood. Go to www.edmonton.ca/PublicInvolvementCalendar for a list of public involvement opportunities.

THE CITY OF
Edmonton

THE WAY WE MOVE

YELLOWHEAD TRAIL 149 STREET PLAN

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

GET INFORMED

OPEN HOUSE

Tuesday, September 17, 2013
4:00 p.m. - 8:00 p.m.

Dovercourt Community Hall
13510 Dovercourt Avenue

The City of Edmonton is hosting a public meeting to provide information on the recommended concept for free flow operation of Yellowhead Trail at 149 Street.

During this drop-in Open House, the public is invited to view the presentation boards and maps, ask questions of our project staff and pick-up project information material anytime during the event hours.

This open house comes after a significant public involvement process that examined numerous configurations and arrived at two possible options for the intersection. In July, these two options were presented to the City's Transportation Committee. Based on feedback and further evaluation, a draft concept plan has been developed.

This meeting is an opportunity for interested businesses and community members to learn about the recommended concept plan. Project staff will be collecting feedback for future refinements to the concept plan.



THE WAY WE MOVE

YELLOWHEAD TRAIL 149 STREET PLAN

PROJECT SECTION MAP



PROJECT BACKGROUND

This project is part of the Yellowhead Strategic Plan that aims to develop the Yellowhead Trail into a future freeway as approved by council in November 2011. A freeway will ensure efficient goods movement across Edmonton and aid in the economic activity across the Capital Region. Improved access and mobility are goals laid out in the City's Transportation Master Plan, *The Way We Move*.

FOR MORE INFORMATION

Visit: www.edmonton.ca/roadplans



Services for deaf or hard of hearing persons provided upon request. Call 311 at TTY/NexTalk 780-944-5555 and press 0, or email 311@edmonton.ca.

Learn more about and get involved in City issues affecting you and your neighbourhood. Go to www.edmonton.ca/PublicInvolvementCalendar for a list of public involvement opportunities.

GET INFORMED !

OPEN HOUSE
YELLOWHEAD / 149ST
PLAN

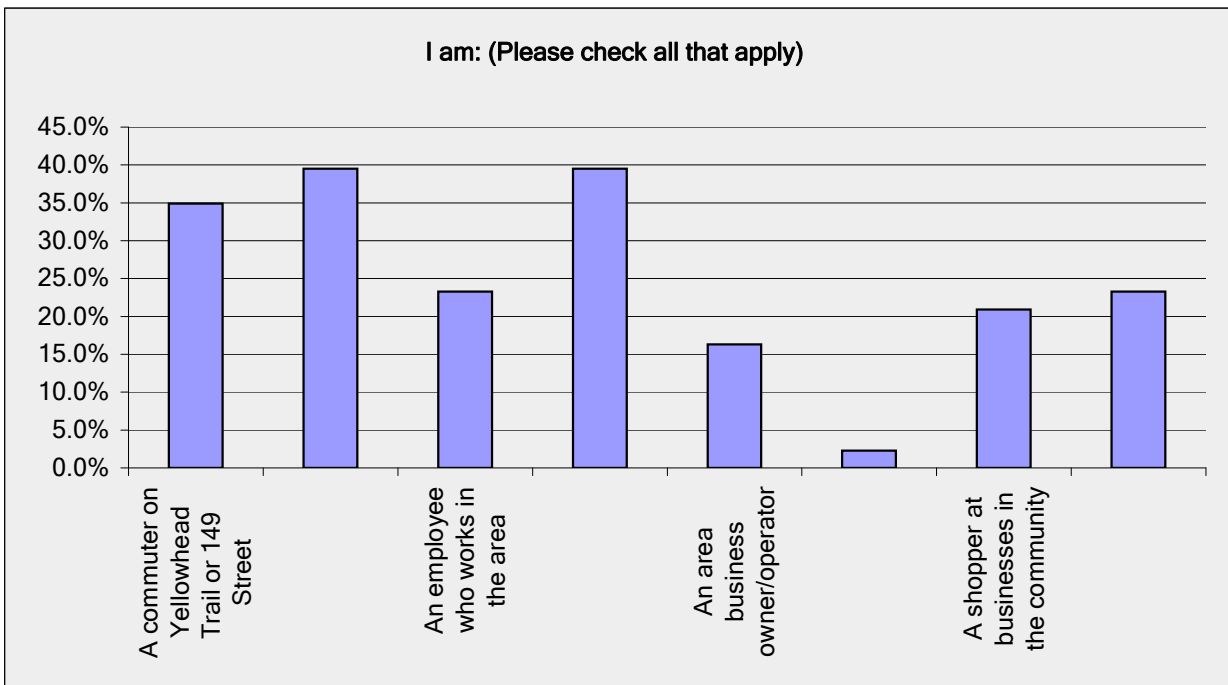
TUES SEPT 17 4-8PM
DOVERCOURT HALL

Appendix M – Public Meeting #2 - Comment Form Verbatim

Yellowhead Trail/149 Street Plan - September 2013

I am: (Please check all that apply)		
Answer Options	Response Percent	Response Count
A commuter on Yellowhead Trail or 149 Street	34.9%	15
An area resident	39.5%	17
An employee who works in the area	23.3%	10
An interested citizen	39.5%	17
An area business owner/operator	16.3%	7
A representative of an association /organization	2.3%	1
A shopper at businesses in the community	20.9%	9
An area property owner	23.3%	10
Other (please specify)		4
<i>answered question</i>		43
<i>skipped question</i>		4

Number	Response Date	Other (please specify) Categories
1	Sep 26, 2013 8:01 PM	
2	Sep 25, 2013 8:58 PM	
3	Sep 25, 2013 8:55 PM	
4	Sep 25, 2013 8:48 PM	



Yellowhead Trail/149 Street Plan - September 2013

What are the first three digits of your Postal Code?	
Answer Options	Response Count
	43
<i>answered question</i>	43
<i>skipped question</i>	4

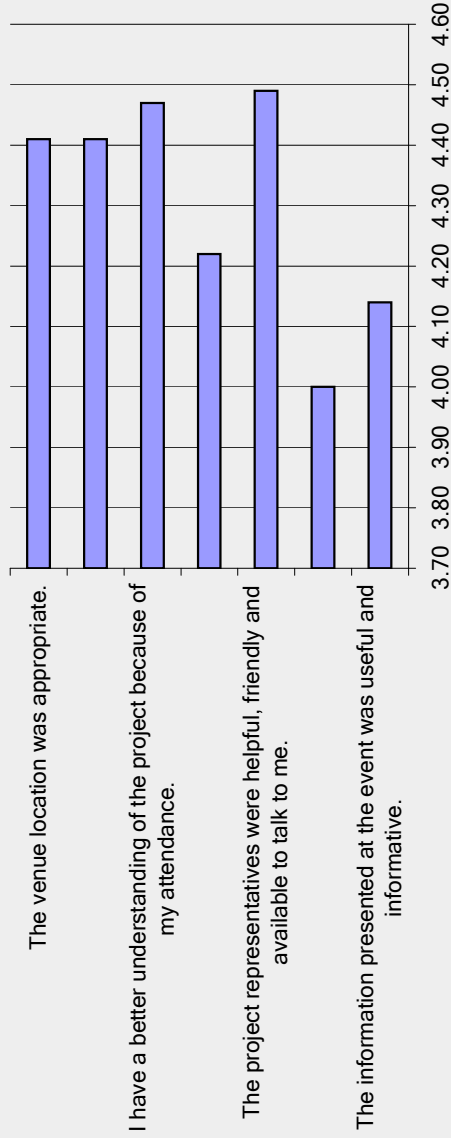
Number	Response Date	Response Text	Categories
1	Sep 26, 2013 8:18 PM	T5T	
2	Sep 26, 2013 8:13 PM	T5V	
3	Sep 26, 2013 8:12 PM	T5M	
4	Sep 26, 2013 8:11 PM	T5L	
5	Sep 26, 2013 8:10 PM	T5L	
6	Sep 26, 2013 8:09 PM	T5V	
7	Sep 26, 2013 8:07 PM	T5L	
8	Sep 26, 2013 8:06 PM	T7X	
9	Sep 26, 2013 8:04 PM	T5V	
10	Sep 26, 2013 8:03 PM	T6V	
11	Sep 26, 2013 8:01 PM	T5T	
12	Sep 26, 2013 7:59 PM	T5L	
13	Sep 26, 2013 7:58 PM	T5L	
14	Sep 26, 2013 7:56 PM	T5L	
15	Sep 26, 2013 5:52 PM	T5L	
16	Sep 26, 2013 5:51 PM	T5L	
17	Sep 26, 2013 5:48 PM	T5L	
18	Sep 25, 2013 9:24 PM	T5L	
19	Sep 25, 2013 9:12 PM	T5L	
20	Sep 25, 2013 9:11 PM	T5L	
21	Sep 25, 2013 9:10 PM	T5L	
22	Sep 25, 2013 9:09 PM	T5L	
23	Sep 25, 2013 9:08 PM	T5P	
24	Sep 25, 2013 9:07 PM	T5P	
25	Sep 25, 2013 9:06 PM	T5L	
26	Sep 25, 2013 9:03 PM	T5M	
27	Sep 25, 2013 9:02 PM	T5L	
28	Sep 25, 2013 9:00 PM	T5L	
29	Sep 25, 2013 8:59 PM	400000	
30	Sep 25, 2013 8:58 PM	T5L	
31	Sep 25, 2013 8:55 PM	T5L	
32	Sep 25, 2013 8:52 PM	T5V	
33	Sep 25, 2013 8:50 PM	T5L	
34	Sep 25, 2013 8:48 PM	T5L	
35	Sep 22, 2013 2:11 AM	T5L	
36	Sep 21, 2013 8:06 PM	T5x	
37	Sep 20, 2013 7:59 PM	t8n	
38	Sep 20, 2013 1:10 PM	T5S	
39	Sep 19, 2013 10:11 PM	T5L	
40	Sep 19, 2013 9:36 PM	T6R	
41	Sep 19, 2013 7:39 PM	t5r	
42	Sep 18, 2013 4:31 PM	T5V	
43	Sep 18, 2013 1:52 PM	T6E	

Yellowhead Trail/149 Street Plan - September 2013

Your responses to the following questions will assist us in planning future meetings. Using the following scale from 1 to 5 where 1 means Strongly Disagree and 5 means Strongly Agree. Please circle the appropriate number to indicate the extent to which you agree with each of the following statements:

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Rating Average	Response Count
The information presented at the event was useful and the information was easy to understand.	1	1	5	15	15	4.14	37
The project representatives were helpful, friendly and I was able to find satisfactory answers to my questions.	0	0	2	15	20	4.49	37
I have a better understanding of the project because of Participating in this session was a good use of my time.	0	1	0	16	19	4.22	36
The venue location was appropriate.	0	1	4	11	21	4.47	37
	1	0	2	14	20	4.41	37
<i>answered question</i>							37
<i>skipped question</i>							10

Your responses to the following questions will

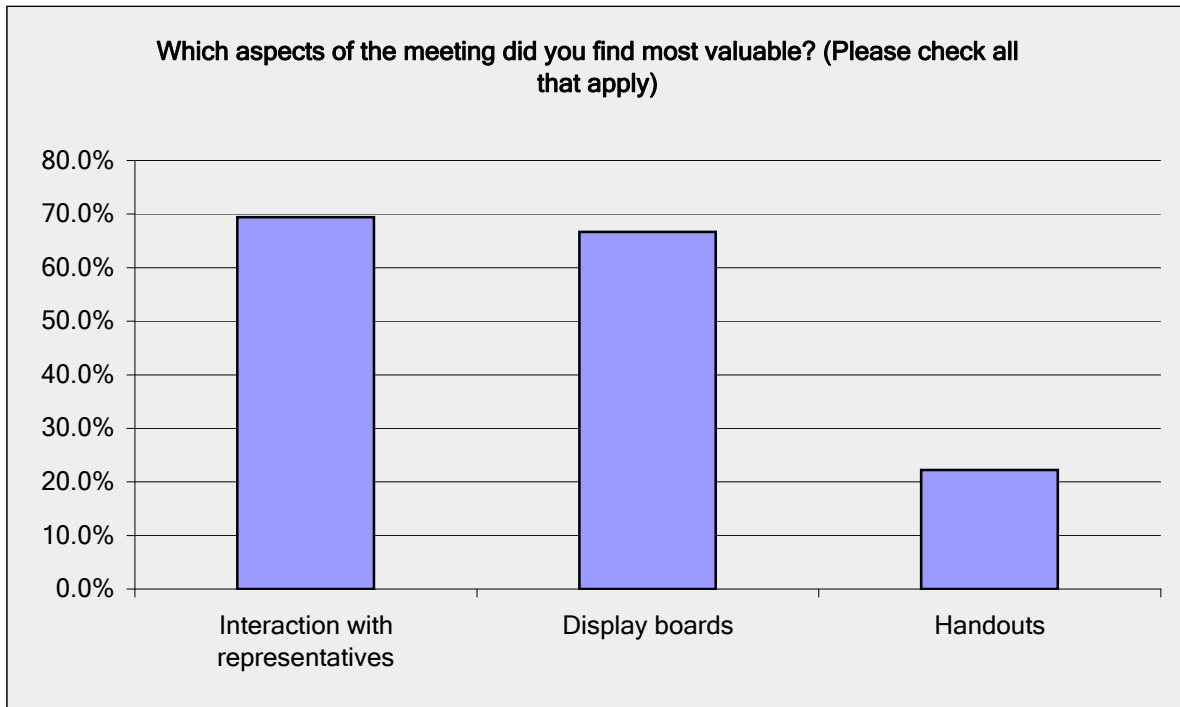


Yellowhead Trail/149 Street Plan - September 2013

Which aspects of the meeting did you find most valuable? (Please check all that apply)

Answer Options	Response Percent	Response Count
Interaction with representatives	69.4%	25
Display boards	66.7%	24
Handouts	22.2%	8
Other (please specify)		2
<i>answered question</i>		36
<i>skipped question</i>		11

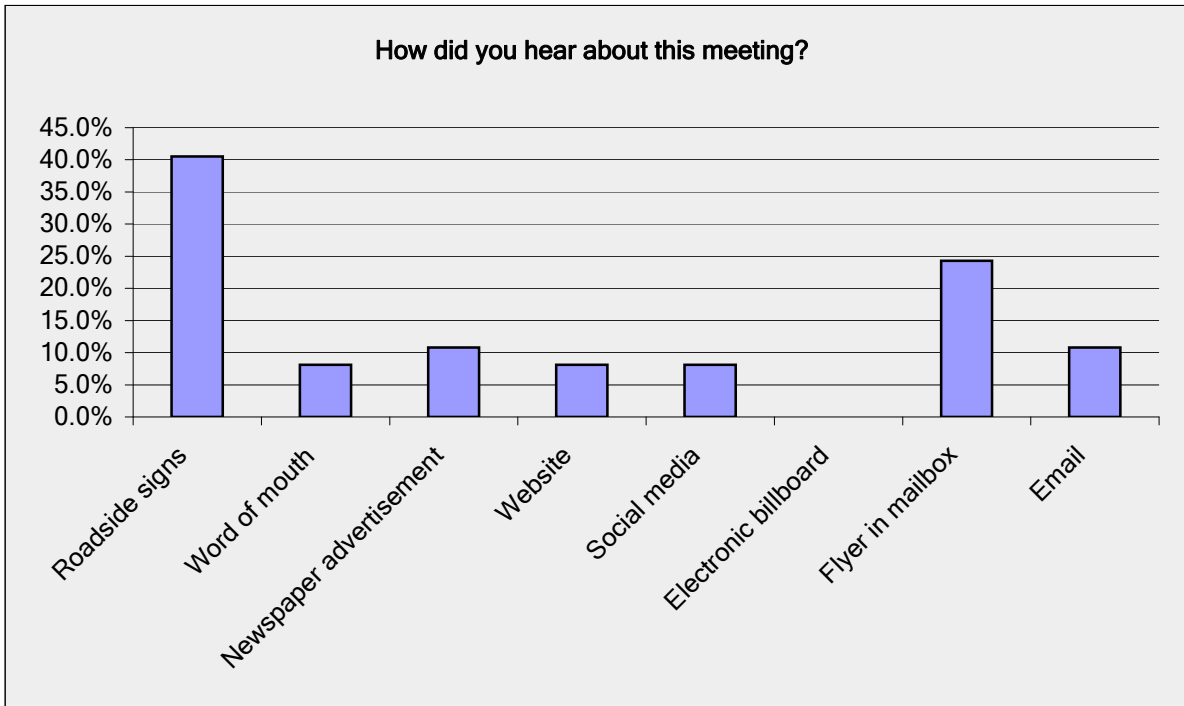
Number	Response Date	Other (please specify)	Categories
1	Sep 26, 2013 8:09 PM	Table map	
2	Sep 25, 2013 9:01 PM	Interaction	



Yellowhead Trail/149 Street Plan - September 2013

How did you hear about this meeting?		
Answer Options	Response Percent	Response Count
Roadside signs	40.5%	15
Word of mouth	8.1%	3
Newspaper advertisement	10.8%	4
Website	8.1%	3
Social media	8.1%	3
Electronic billboard	0.0%	0
Flyer in mailbox	24.3%	9
Email	10.8%	4
Other (please specify)		1
<i>answered question</i>		37
<i>skipped question</i>		10

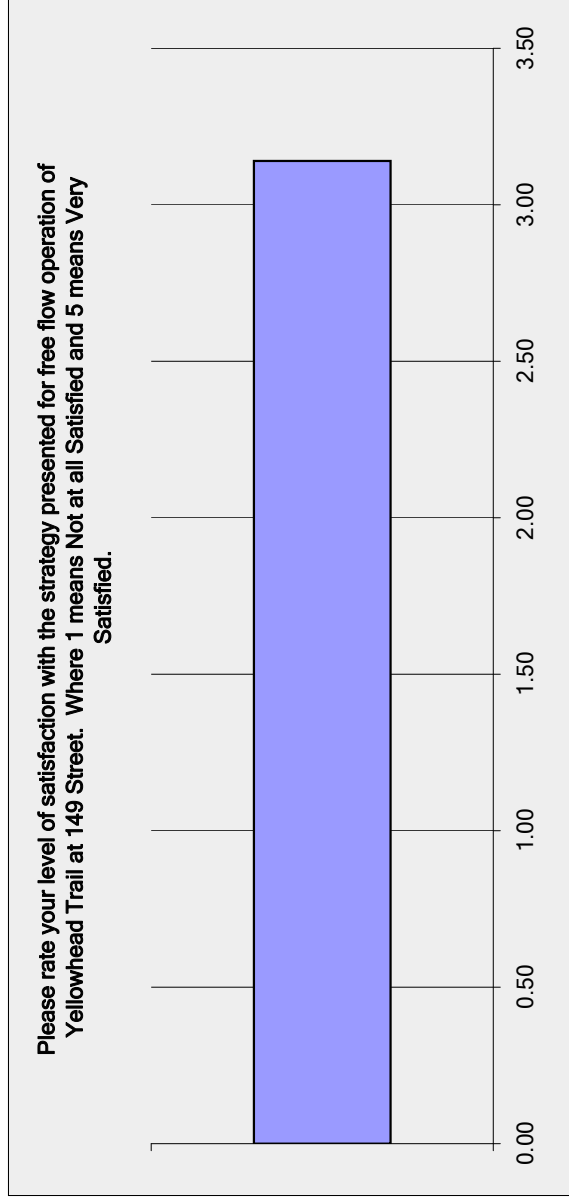
Number	Response Date	Other (please specify)	Categories
1	Sep 26, 2013 8:01 PM	WEBA	



Yellowhead Trail/149 Street Plan - September 2013

Please rate your level of satisfaction with the strategy presented for free flow operation of Yellowhead Trail at 149 Street. Where 1 means Not at all Satisfied and 5 means Very Satisfied.

Answer Options	Not at all Satisfied	Neutral	Very Satisfied	Rating Average	Response Count
	8	10	8	3.14	37
					<i>answered question</i>
					<i>skipped question</i>
					37
					10



Yellowhead Trail and 149 Street Interchange Planning Study

Open House – September 17, 2013

What We Heard - Comment Form Verbatim

Access Concerns

Address access before 156 Street going westbound.

Add service road sooner to merge onto Yellowhead Trail.

Business access is already poor.

Adjacent interchanges need improvement.

Access to my business only available westbound

Keep right turn from Yellowhead Trail to southbound 149 Street.

Need right turn from Yellowhead Trail onto 149 Street.

No access to Yellowhead Trail from 149 Street is a pain.

Missed exit means long reroute.

Missed exit too long to go back.

156 Street and St. Albert Trail are already difficult to access.

Right turn lane open to come onto Yellowhead Trail from west onto Yellowhead Trail southbound.

Busy already, this reduces four intersections to two.

Signage

Need to have good signage.

Additional signage could overcome access obstacles.

Trucks

Consider needs of trucks industry.

Plan B difficult for trucks to access from west.

St. Albert Trail trucks eastbound turning to go westbound an issue.

128 Avenue

Experiences heavy traffic/peak hours; plan will cause heavy delays at 156 Street intersection and 128 Avenue. Right and left turn lane should be considered to help with volumes.

124 Avenue

Fix right now.

Parking issues on 124 Avenue.

Improvements to 124 Avenue and 123 Avenue.

Why only one stop sign at railroad tracks? (124 Avenue).

156 Interchange

Already a mess

Concerned how busy it will be if 149 Street and 142 Street accesses are removed.
Need more lanes along 156 Street from 111 Avenue to 137 Avenue if 142 Street and 149 Street accesses to Yellowhead Trail are removed.
Concerned about impact on 156 Street interchange with an increase in big truck traffic.

127 Street

Was promised as a priority – issues, emissions, noise, backed up.
Please consider 127 Street as a priority.
Do not agree with 149 Street as priority; should be 127 Street.

St. Albert Trail

Better traffic signal for left turns onto St. Albert Trail.

Business viability

Concept reduces property flexibility/value.
As a storefront/concern with 149 Street reduction in traffic but increased signage would help
Concern about impact on businesses.
My business location could cause people to miss off ramp at 156 or St. Albert Trail. Provide off ramp for westbound traffic onto Yellowhead Trail at 156 Street and shift to the off ramp for eastbound traffic to a location to the east of 149 Street.
It would be a short matter of time before our company is out of business.

Cost

Cost shouldn't drive decision.
Function and form versus cost; not just cost.

Community Concern

Dovercourt shortcutting.

General Support

Excellent! Move ahead.
Looks great! Sooner the better.
Really sound idea.
Benefits outweigh the transition issues.
Like that there would be improvements along the 128 Avenue corridor.

Option B Support

Strategy B works best for our location
Dramatically better and less expensive.
Strategy B seems very well thought out.
I think option B is the best choice.
Perfect plan, let's get it built.
Great concept to create traffic flow cheaply.
Strategy B all the way.

Option A support

Option B will cause too much disruption. Option A makes a more harmonious intersection and community.

Strategy A would be the preferred choice.

Option A is first choice. Best meets needs of future.

Other Options

Leave it as is.

Prefer interchange like 156 Street.

Prefer a diamond interchange although understand cost implications.

Should be an intersection like 156 Street.

Leave it alone.

Changes won't make a difference.

Sticky note Comments

(east Yellowhead/156 Street)

Off ramp congested in p.m. to almost 160 Street; upgrade to 2-lane off-ramp.

(156 Street/123 Avenue)

Trucks in this left turn movement have conflict with median.

((156 Street/128 Avenue)

This radius to accommodate turn-pike movement.

(142 Street)

Need sidewalks along 142 Street.

(Dovercourt/St. Albert Trail intersection)

Traffic lights.

(Yellowhead Trail(heading east before St. Albert Trail)

South St. Albert Trail sign missing.

(St. Albert Trail (south intersection)/Yellowhead Trail

This turn to accommodate turnpike movement.

(approx 143 Street/service road access to Yellowhead Trail westbound)

This access to Yellowhead Trail on service road should be sooner going westbound

Right turn – Yellowhead Trail and 149 Street