# Highway 11 Functional Panning Study 

Public Engagement - Recommended Plans

## PROJECT PROCESS \& TIMELINE



- Through previous on-line engagement, several themes were identified:


## PREVIOUS ENCIGENENT THENES

- Safety concerns at existing intersections
- Strong support for Roundabout at Burnt Lake Trail \& Highway 781
- Preference for an interchange at Highway 20
- Access concerns for RR13
- Limited support at Benalto and Eckville for a roundabout
- Concerns about truck movements through the roundabouts
- Questions around timing and implementation


## INTERSECTION EVALUATION PROCESS

- Several criteria were used to evaluate options for intersections, including costs, and benefits, safety, access and sustainability.
- Qualitative and quantitative evaluation, not just scores and numbers
- Future traffic was projected to test options decades into the future to be sure recommendations would work
- Input from public engagement was included in Community Sustainability criteria

| Criteria | SAMPLE EVALUATION |  |  |
| :---: | :---: | :---: | :---: |
|  | Base Case <br> Do Nothing <br> (Highway 11 <br> Twinned) | Option 1 <br> Signalize Intersection + Upgrades | Option 2 <br> 2-Lane <br> Roundabout |
| Economic Indicators |  |  |  |
| Benefit Cost Ratio | - | 2.4 | 3.1 (29\% Better) |
| MAE Account |  |  |  |
| Project Cost | None | Moderate Cost | High Cost |
| User Benefits | Moderate Impact | Moderate Benefit | Significant Benefit |
| Environmental \& Geotechnical | Neutral | Netural | Neutral |
| Community Sustainability | Moderate Impact | Moderate Benefit | Significant Benefit |
| Economy | Moderate Impact | Moderate Benefit | Significant Benefit |
| Results |  |  |  |

## TRUCK MANOEVERS THROUGH ROUNDABOUTS

- Roundabouts today are designed to accommodate large vehicles by including:
- Truck aprons and mountable curbs in the middle
- Wider approach areas entering and exiting roundabouts
- As more roundabouts are constructed across Alberta, there are many examples of how roundabouts work for large vehicles
- Designs are always being improved, and truck movements through the roundabouts are part of the design process




## REOOMMENDTIOX:HIGTWUY 11/ HICHIW: 20

- 2 - Lane Roundabout with single EB Bypass and right-in/right-out Range Road 13 access (south leg).
- Roundabout has higher safety benefits for traffic and better for traffic processing (less delay).
- Public indicated desire to maintain RR 13 access.
- Not included in the Highway 11 twinning project, no timelines for construction at the present time.
- When traffic growth requires the need for an upgrade, the roundabout will be revisited with the Town of Sylvan lake and area residents.


## REGOMMENDITOX:HIGTWUY 11/HIGHW:V71

- Phased implementation of a 2-Lane Roundabout (full access) in conjunction with Highway 11 Twinning.
- Roundabout provides higher safety benefits and aligns with network needs.
- Westbound to northbound bypass lane could be constructed in future when conditions warrant further improvements.
- Construction recommended to proceed - currently pending funding and construction approvals.

- Construct 2-Lane Roundabout (full access) along with Highway 11 Twinning.
- Roundabouts provide higher safety benefits, maintains corridor consistency and additional capacity in the longer-term.
- Coordinated with Sylvan Lake development growth
- Construction recommended to proceed - currently pending funding and construction approvals.



## REGOMMENDTIOY:HIGTIWIV 11/ BURNT LIME TRAIL

- Upgrade intersection to a 2lane roundabout with right-turn bypass lane to support westnorth and south-west movements when warranted.
- No plans for construction, Implement upgrades when intersection delays warrant improvements in the future.
- Ultimate plan of Highway 11 / Highway 2 interchange will result in the closure of this intersection.
- Public largely in favour of improvements, with roundabout receiving the most positive feedback.


## REGOMWENDATION: HIGHUSV11 / RINGE ROID 2FA-BENALTO



- Maintain existing stop controlled intersection with future highway twinning.
- Recommend 2-Lane Roundabout beyond the long-term (30+ years) when traffic growth warrant improvements.
- Construction beyond 25 years - not currently being considered
- Traffic Signal was evaluated, but when traffic warrants the upgrade, a roundabout will be more effective.



## REGOMMEDDITON: IIOTWEY 11/ HICHIWIV 766 -ECKIILIE

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## REGOMWEDDIION: HIOTWAY $2 /$ HIGUWEV 11NTEHGHNGE



- Bridge will require rehabilitation within 10 years that will extend life for approximately 20 years.
- Within 30 years full reconstruction will be required on westbound structure (with rehabilitation).
- Ultimate bridge may be constructed for future interchange when warranted.
- Upgrades to Highway 2 (6lanes) will require this bridge to be replaced with ultimate bridge.


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Presentation to Councils \＆Elected Officials

## NEXTSTEPS

Move Forward with Design for Highway 781 and Range
Road 15 Roundabouts and plan for construction

Finalize Functional Planning Report

Hwy 11 Twinning Study－Sylvan Lake to Rocky Mountain House Commencing in May 2021

Ongoing investment in planning and monitoring of the function and safety of intersections along Highway 11.

## Thank you for your participation

