## Welcome

## Highway 20 Twinning Functional Planning Study

Open House \#1
April 25, 2024
5:00-8:00 p.m.
Alberta Transportation and Economic Corridors would like to inform you of this project, and the work completed to date. Please review the display boards and let our project team know if you have any questions.

At this Open House you will be able to:
> Learn about the project and the options under consideration as part of the study
> Share your feedback on the twinning alignment options

## Study Overview



## Study Purpose:

The primary purpose of this study is to complete highway alignment and cross section planning for the twinning of Highway 20 from its current two-lane cross section to a four-lane divided highway cross section, between Highway 11 at the south end of the Town of Sylvan Lake and Highway 12 near Bentley (approx. 20 km ).

## Study Objectives / Goals:

$\square$ Confirm the right-of-way requirements for the highway twinning
$\square$ Identify associated access management requirements
$\square$ Identify operational and intersection improvements along the corridor, with roundabouts as the preferred intersection treatment within Sylvan Lake, where feasible

## Study Timeline



## Why Twinning?

- Highway 20, from Sylvan Lake to Rimbey, is classified as RAD or "Rural Arterial Divided" which ultimately requires a twinned rural cross section.
- Within Sylvan Lake, the classification is UAD or "Urban Arterial Divided" ultimately requiring a twinned urban cross section.
- Highway 20 is also designated as a "Level 2" highway in the provincial network.
- Level 2 highways accommodate the movement of people, goods, and services intra-provincially.
- They serve to connect provincially significant areas such as population centres over 5,000 and typically serve long trips.


| Freeway | RFD 工 UFD |  |
| :---: | :---: | :---: |
| Multi-Lane | RAD $=$ UAD | UED |
| Major | RAU $=$ UAU |  |
| Minor | $\mathrm{RCU}=\mathrm{UCU}$ |  |
| Non Classified | Municipal / Rural Road | - |

## Key Issues

## Within Sylvan Lake:

> Limited ROW availability in some areas
> High traffic volumes with multiple intersections
> Pedestrian activity
> Seasonal / tourist traffic (high proportion of drivers unfamiliar with the area)

## Urban-Rural Transition:

> Moderate-to-high traffic volumes, with multiple intersections
> Speed transition required
> Some pedestrian activity

## Rural Area:

> Wide ROW required for the highway
> Land requirements
> Access management
> Close proximity to the Blindman River


## Primary Evaluation Factors - Overall:

> Land impacts / ROW requirements
> Environmental impacts
> Access Management requirements
> Utility impacts
> Capital cost

## Traffic Volumes



The urban threshold for highway twinning is based on peak hour operations at key intersections, with Level of Service (LOS) D being the threshold for improvements. Based on the long-range forecast volumes, twinning of Highway 20 through all intersections is required.

NOTE: The Town of Sylvan Lake's 2022 Transportation Master Plan (TMP) notes some current operational concerns along Hwy 20. For example, several movements at the Herder Dr, 47 Ave and Memorial Tr intersections were found to be operating at LOS E (nearing their respective capacities). The TMP also notes that operating conditions for the westbound and southbound approaches to the Hwy 20/Hwy 11A roundabout suggest that this roundabout is expected to be approaching capacity with continued near-term traffic growth.

## Speed Limit Zones



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Highway 20 Twinning Functional Planning Study

## Highway 20 Twinning Overview

This is an "urban-to-rural" transitional area, both in terms of

Highway 20 Twinning ... THE BIG PICTURE the posted speed limit and the proposed highway cross section.

> Several options for this area are presented, following the three main twinning concepts.

What makes Option 1 different?
'Option 1' maintains the twinning alignment along the east side of the existing highway to just north of Township Road 394 before transitioning to the west side.
Yellow boxes indicate the key considerations as part of this Yellow boxes indicate the key considerations as part of this
alignment option, while red boxes highlight some of the significant


What makes Option 3 different?
'Option 3' maintains the twinning alignment along the east side of the exisiting highway to just north of Township Road 400 before transitioning to the west side.
Yellow boxes indicate the key considerations as part of this Yeliow boxes indicate the key considierations as part of this
alignment option, while red boxes highlight some of the significant


HIGHWAY 20


OPTION A
Carries high-speed rural cross section as far south as
possible. A portion of the wide cross section would have to be
posted at $80 \mathrm{~km} / \mathrm{h}$. Significant impact to the properties on the east of the
highway, south of Twp Rd 392. No impact to the provincial park or private properties on
the evest side wests of the highway from Twp Rd 391 to
north of Twp Rd 392 . the west side e west of
north of Twp Rd 392 .

OPTION B

* Carries high-speed rural cross section as far south as
$*$ possible. possible. of the wide cross section would have to be A portion of
posted a $80 \mathrm{~km} / \mathrm{h}$.
Significant
Significant impact to residential properties, the provicial
park and businesses on the evest of the highway, from
Jarvis Bay up to north of Twp Rd 392 .
 the east side of the highway, south of Twp Rd 392 .

OPTION C

* A variation of Option B, with an $80 \mathrm{~km} / \mathrm{h}$ transition
section installed between the urban and ruval sections

Section installed between the urban and rural sections
Reduced impact (compared to Option $B$ ) to residential Reduced impact (compared to option Bs to residential
propereties. the provincial para, and usinesses on the
west of the highway, from Jarvis Bay up to north of Twp
Rd 392 . No impact to the business or private properties on the
east side of the highway, south of Twp Rd 392 .

OPTION D1
A variation of Option A , with an $80 \mathrm{~km} / \mathrm{h}$ transition
section installed between the urban and rural section section instaleded between the urban and ruaral sections
This concent o ould also be adjusted to work with
.
 adianeent east-side business.
Siginicant increase in inpact (compared to option A
to Option B) to the provincial park, and businesses on the west Bide of the hrovinhiala park, and businesses on trom Jarvis Bay up to
torth of Twp Rd 392 . north of Twp Rd 392.
Does no utitiza aproximately 2.5 km of the existing
highway, leading to constructability concerns.
$*$
$* \quad$ Variation of Option D1, tring to balancelreduce impacts.
Reduced impact to the

 Reduced impact to the businesses (comparaed to Option D1)
in the northwest quadrant of the Twp Rd 392 intersection.


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## Cross Sections



PROPOSED TRANSITIONAL CROSS SECTION (TYPICAL) 80 km/h


PROPOSED URBAN CROSS SECTION (TYPICAL) - $60 \mathrm{~km} / \mathrm{h}$

## Next Steps

## The project team will:

> Review the feedback from the public open house and stakeholder meetings to inform the evaluation of the alignment options.
> Complete further technical analysis of the options and select a recommended twinning alignment and associated intersection treatments and access management.
> Present the recommended plan to stakeholders and the public in Fall 2024 through another Open House to gather final feedback.

> Construction Timeline: Construction of this project is not on the current Provincial Construction Program and timelines have not yet been determined at this point. Construction priority will depend on highway capacity, safety concerns, funding availability and the rate of development in the area.

## Thank You

Thank you for attending the Highway 20 Twinning Open House session. Before you leave, please take a moment to fill out the provided evaluation / feedback form.

If you would like to submit your comments at a later time, please email to the AECOM Project Manager prior to May 3, 2024: glen.holland@aecom.com

The information shown here today will be available on the project website: www.alberta.ca/highway-20-functional-planning-study

The project website can also be accessed by scanning the QR code below:


