Highway 11 Twinning

Highway 22 to Township Road 390 Functional Planning Study

OPEN HOUSE #2

April 5, 2023



Welcome!

Today we will

- Review the study process and stakeholder engagement
- Share the evaluation process
- Identify the preferred highway twinning alignment
- Show the current twinning concept subject to change
- Gather your comments

Our Format

- Informal drop-in, no presentations
- View the project information, ask our staff questions

Next Steps

- Review cross-section options & develop functional plans
- Hold Group Meetings with impacted landowners along existing Highway 11 (Summer 2023)







Highway 11 Role

Highway 11 is a Level 2 Provincial Highway

• It accommodates the movement of people and goods and connects provincially significant areas

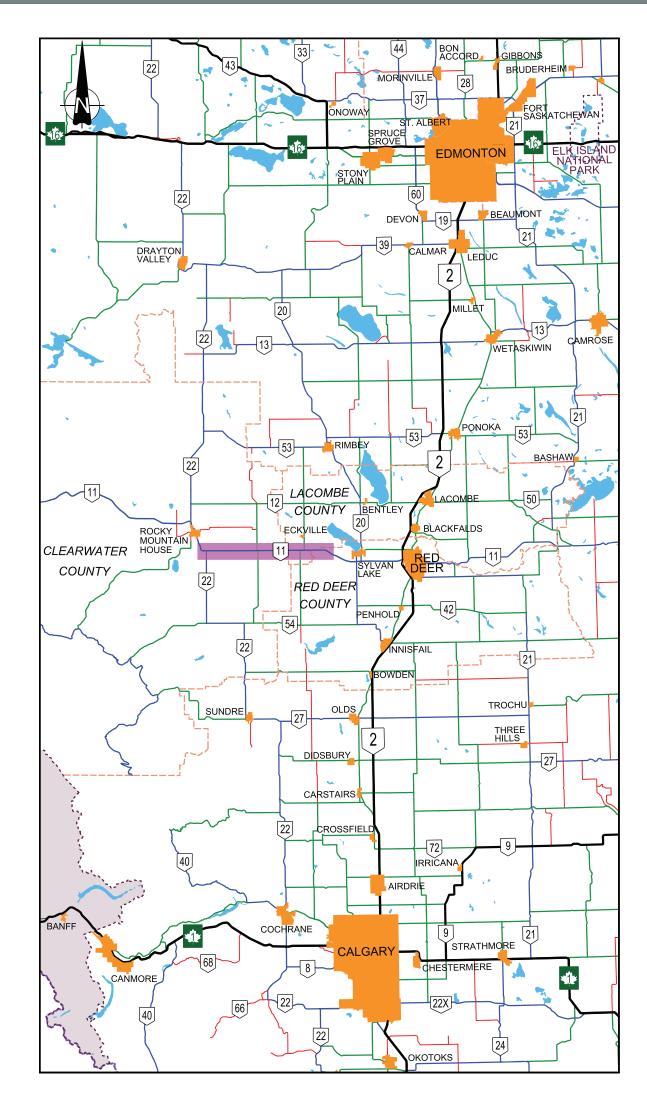
Highway 11 Serves Two Purposes

- Long trip lengths e.g., Red Deer to Rocky Mountain House,
 Nordegg and Banff National Park
- Local trips e.g., farming, businesses and communities along the corridor

Previous Plans

Planning studies and approvals determined the form and function for the future freeway segment (Hwy 766 to Twp Rd 390) and formed the starting point for the Highway 11 Twinning functional planning study.

- 2005, Highway 11 Corridor Management Study, Dillon Consulting
- 2009, Provincial Order-in-Council 587/2009
 - Designated freeway corridors and interchange locations
- 2016, Highway 11:12 Access Management Study, AMEC







Study Area

Highway Planning: Project 'B' Highway 22 to Township Road 390 (East of Benalto)

Clearwater County: Highway 22 to approximately Range Road 41 (28 km)

• Lacombe County: Range Road 41 to approximately Range Road 31 (9 km)

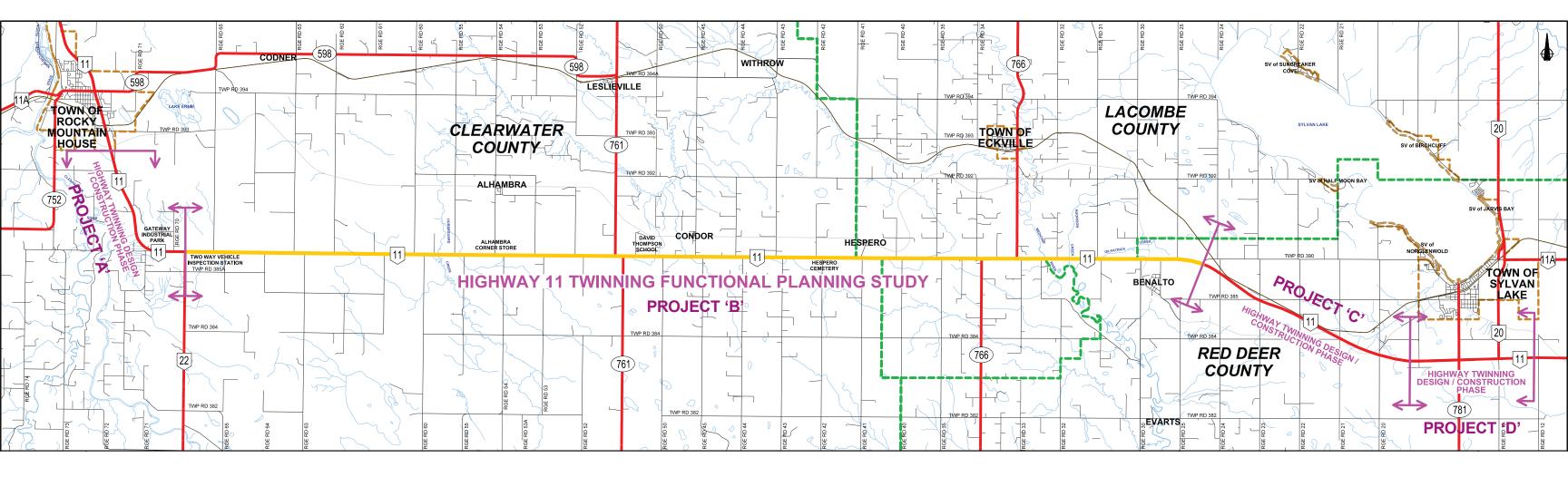
• Red Deer County: Range Road 31 to Township Road 390 (5 km)

Highway Twinning Design: By Others

Project 'A': Highway 22 to Rocky Mountain House (AECOM)

Project 'C': Township Road 390 to Sylvan Lake (WSP)

Project 'D': South of Sylvan Lake (Complete)







Study Objectives

The Study will

- 1. Evaluate alignment options to twin Highway 11
- 2. Identify preferred alignment and cross-section
- 3. Develop an access management plan to support highway twinning
- 4. Recommend project staging
- 5. Identify the required right-of-way







Public Engagement

Engagement has been ongoing since the beginning of this study in 2021.

July 2021: Project Appraisal Phase

• 240 letters, follow-up interviews with 130 landowners along existing Highway 11

November 2021: Study Progress Update emails and letters

June 2022: Alternative Development Phase emails and letters

- 240 letters to landowners along existing highway and an alignment 800m north
- Two days of Group Meetings in Condor with landowners representing 94 properties
- Open Houses in Condor and Rocky Mountain House

November 2022: Study Progress Update emails and letters

January 2023: Alternative Development Phase – Part 2

- 307 letters to new potentially impacted landowners along the two south alignment options
- Two days of Group Meetings in Condor with landowners representing 138 properties

March/April 2023: Study Update – Select Preferred Alignment

- 500 letters to landowners along all alignment options informing them of the Preferred Alignment
- Open House in Sylvan Lake







Public Input – What We Heard

There was a great deal of interest in the options, leading to much discussion and feedback.

- General agreement that Highway 11 needed to be twinned.
- Recognition that twinning the highway would be significantly disruptive for residents with properties adjacent to the existing highway.
- Stakeholders along the existing Highway asked to see alternative alignment options investigated.
- Land and business owners are eager to understand both the impacts to their properties and the land aquisition process
- Concerns centered around the loss of productive agricultural land and disruption to farming operations.
- The impact on farmland and agricultural operations should be considered as criteria in any decision-making process.
- Those who may have property impacted by the different options expressed frustration with the uncertainty of not knowing whether the preferred plan would impact them.
- Landowners not living along existing Highway 11 expressed concern and surprise that their property was now considered to be potentially impacted because of the new alignment concepts.

The full What We Heard Report is located on the study website:

https://www.alberta.ca/highway-11-from-highway-22-to-township-road-390.aspx





Alignment Options

Based on the feedback received from land and business owners, the study team developed alternative alignment options and conducted a thorough evaluation.

A Multiple Account Evaluation process was used to assess the highway options based on several key criteria and considered both qualitative and quantitative rationale for selecting a preferred option.

The four alignment options considered were:

- Option 1: Existing Highway 11
- Option 2: 800m North of Highway 11
- Option 3: 800m South of Highway 11
- Option 4: Township Road 38-4





Multiple Account Evaluation

The Multiple Account Evaluation (MAE) results in a comparative ranking of each option based on factors within each of the key criteria. A summary of the MAE process is shown here. The MAE identified the existing Highway 11 as the highest ranked alignment.

Criteria	Weight	800m North of Hwy 11		Existing Highway 11	800m South of Hwy 11		3200m South Hwy 11
Criteria	Weight	Couplet	Twinning	Twinning	Couplet	Twinning	Couplet
1 Financial (Delivery Requirements)	20						
1.1 Total Project Cost	7.5	8	4	10	8	4	1
1.2 Risks: Land Acquisition	2.5	8	9	8	9	10	1
1.3 Risks: Construction and Delivery	2.5	1	3	10	6	8	2
1.4 Stageability	7.5	6	3	10	6	3	1
2 Environmental (Regulatory)	10	23	19	38	28	25	5
2.1 Watercourse Crossings	2.0	10	10	9	7	7	1
2.2 Wetland Areas	2.0	1	1	10	4	4	3
2.3 Within Sensitive Fish Species Range	2.0	7	7	10	1	1	8
2.4 Sensitive Wildlife Mgmt Areas/Ranges	2.0	10	10	1	1	1	4
2.5 Historical Resources Target Areas	2.0	10	10	1	6	6	10
3 (Road) User Benefits	30	38	38	31	19	19	25
3.1 Service Life	8.0	9	8	7	9	8	6
3.2 Design Standards and Consistency	8.0	5	10	8	5	10	1
3.3 Operations and Safety	8.0	7	9	9	7	9	1
3.4 Improved Travel Time Reliability	3.0	10	8	7	10	8	3
3.5 Construction and Traffic Disruption	3.0	7	10	2	7	10	4
4 Community Sustainability (Local)	30	38	46	34	38	46	15
1.1 Disruption of Local Road Network	5.0	3	6	9	3	6	1
1.2 Impact on Residential Communities or Properties	5.0	4	7	3	5	10	1
Long-Term Impact on Agricultural Resources and Production	5.0	4	1	10	4	1	7
1.4 Impact on Current Agricultural Business Operations	7.5	2	5	10	3	5	1
1.5 Impact on Non-Agricultural Businesses	7.5	10	1	6	10	7	6
5 Economy (Regional)	10	22	20	38	25	29	16
Expanded Regional Mobility	4.0	9	10	10	9	10	5
Enhanced Freight/Trucking Mobility	3.0	9	10	10	9	10	5
Enhanced Regional Growth Potential	3.0	9	10	10	9	10	6
Total Score:	100	65	64	81	64	68	30
		Couplet	Twinning	Twinning	Couplet	Twinning	Couplet
		800m Nort	h of Hwy 11	Existing Highway 11	800m Sout	th of Hwy 11	3200m South Hwy 11







Highway 11 Twinning

Highway 22 to Twp Rd 390 - Functional Planning Study

Sensitivity Analysis

To understand the impact to the overall scores based on different criteria weightings, a sensitivity analysis was performed.

	Criteria	Weight	800m N c	of Hwy 11	Existing Hwy 11	800m S o	f Hwy 11	3200m S of Hwy 11
			Couplet	Twinning	Twinning	Couplet	Twinning	Couplet
MAE RESULT	1 Financial (Delivery Requirements)	20	65		81	64	68	30
	2 Environmental (Regulatory)	10		64				
E RE	3 (Road) User Benefits	30						
MAI	4 Community Sustainability (Local)	30						
	5 Economy (Regional)	10						
SCENARIO 1	1 Financial (Delivery Requirements)	20	65	63	80	60	63	33
	2 Environmental (Regulatory)	20						
	3 (Road) User Benefits	20						
SCEI	4 Community Sustainability (Local)	30						
	5 Economy (Regional)	10						
	1 Financial (Delivery Requirements)	20		65	79	60	62	34
10 2	2 Environmental (Regulatory)	25						
SCENARIO	3 (Road) User Benefits	20	66					
SCE	4 Community Sustainability (Local)	25						
	5 Economy (Regional)	10						
	1 Financial (Delivery Requirements)	20						
0 3	2 Environmental (Regulatory)	30	66	65	79	58	59	35
IARI	3 (Road) User Benefits	15						
SCENARIO	4 Community Sustainability (Local)	25						
	5 Economy (Regional)	10						
	1 Financial (Delivery Requirements)	10	63	65		62	69	32
0 4	2 Environmental (Regulatory)	10			79			
IARI	3 (Road) User Benefits	30						
SCENARIO	4 Community Sustainability (Local)	40						
	5 Economy (Regional)	10						
	1 Financial (Delivery Requirements)	10						
0 5	2 Environmental (Regulatory)	35						
SCENARIO	3 (Road) User Benefits	10	65	62	75	54	57	38
CEN	4 Community Sustainability (Local)	35						
0,	5 Economy (Regional)	10						
	1 Financial (Delivery Requirements)	20						
90	2 Environmental (Regulatory)	20	69	69	82	64	67	35
IARI	3 (Road) User Benefits	20						
SCENARIO 6	4 Community Sustainability (Local)	20						
	5 Economy (Regional)	20						
	1 Financial (Delivery Requirements)	40	65	60	86	65	63	27
SCENARIO 7	2 Environmental (Regulatory)	10						
	3 (Road) User Benefits	20						
	4 Community Sustainability (Local)	20						
0,	5 Economy (Regional)	10						
			Couplet	Twinning	Twinning	Couplet	Twinning	Couplet
			800m N c	of Hwy 11	Existing Hwy	800m S o	f Hwy 11	3200m S
				, -	11		•	of Hwy 11

 WORST
 MODERATE
 BEST

 LEGEND
 0
 10
 20
 30
 40
 50
 60
 70
 80
 90
 100

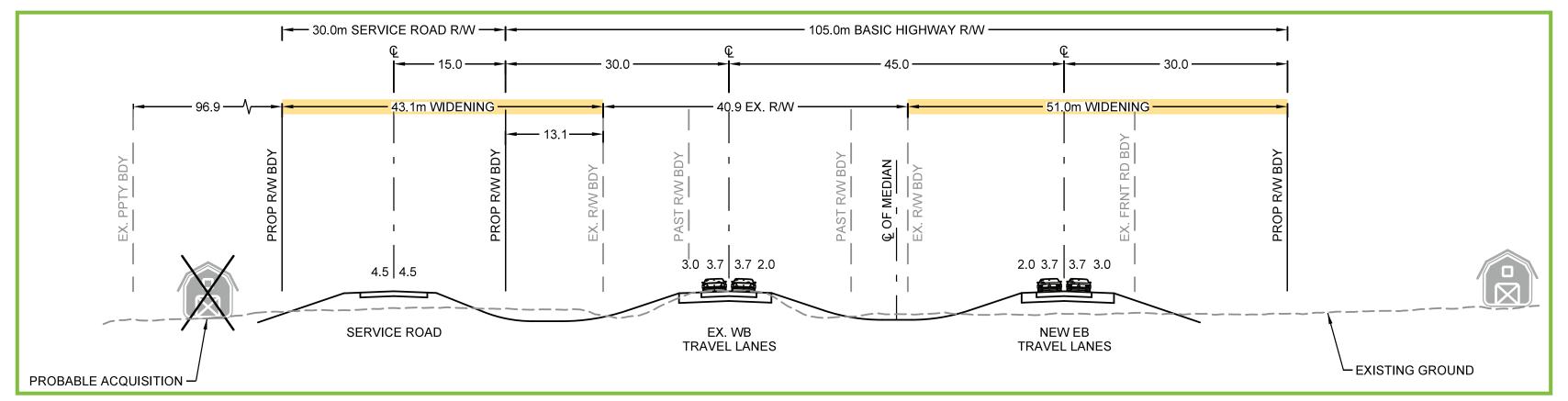




Recommended Alignment

The study team has presented the Multiple Account Evaluation results to Alberta Transportation & Economic Corridors; the Technical Review Committee (the administrations from Red Deer, Lacombe and Clearwater Counties and the Town of Eckville); and their respective municipal councils, where requested.

TWINNING HIGHWAY 11 ALONG THE EXISTING ALIGNMENT IS RECOMMENDED



Sample Cross-Section

This plan is subject to change as cross-section options and the associated impacts are explored in more detail. The right-of-way requirements for a standard twinning can vary from 105m to 165m depending on the need for service roads.

The cross-section options will include a narrow median option to see if there is an opportunity to reduce right-of-way reiquirements.





Cost Estimates

Planning Level cost estimates were prepared to support the Multiple Account Evaluation process and to help Alberta Transportation & Economic Corridors plan for the next steps following completion of this planning study.

Current Capital Budget Allocation Sequence

- 1. Project A Rocky Mountain House to Highway 22
 - a. Design (2023 2024)
 - b. Right-of-way Acquisition (2024)
 - c. Construction (2025 2026)
- 2. Project C Township Road 390 to Sylvan Lake
 - a. Design (2022)
 - b. Right-of-way Acquisition (2023)
 - c. Construction (2023 2024)
- 3. Project B Highway 22 to Township Road 390
 - a. Functional Planning (2021 2023)
 - b. Design (2024 2025)
 - c. Right-of-way Acquisition (2024 2025)
 - d. Construction (TBD)

LEGEND		
WORST	MODERATE	BEST

		TOTAL COST
800m N of Hwy 11	Couplet	\$293M
800III N OI HWY 11	Twinning	\$352M
Existing Hwy 11	Twinning	\$253M
000m C of Home 44	Couplet	\$289M
800m S of Hwy 11 Twinning		\$352M
3200m S of Hwy 11	Couplet	\$399M

Preliminary Cost Estimates Only



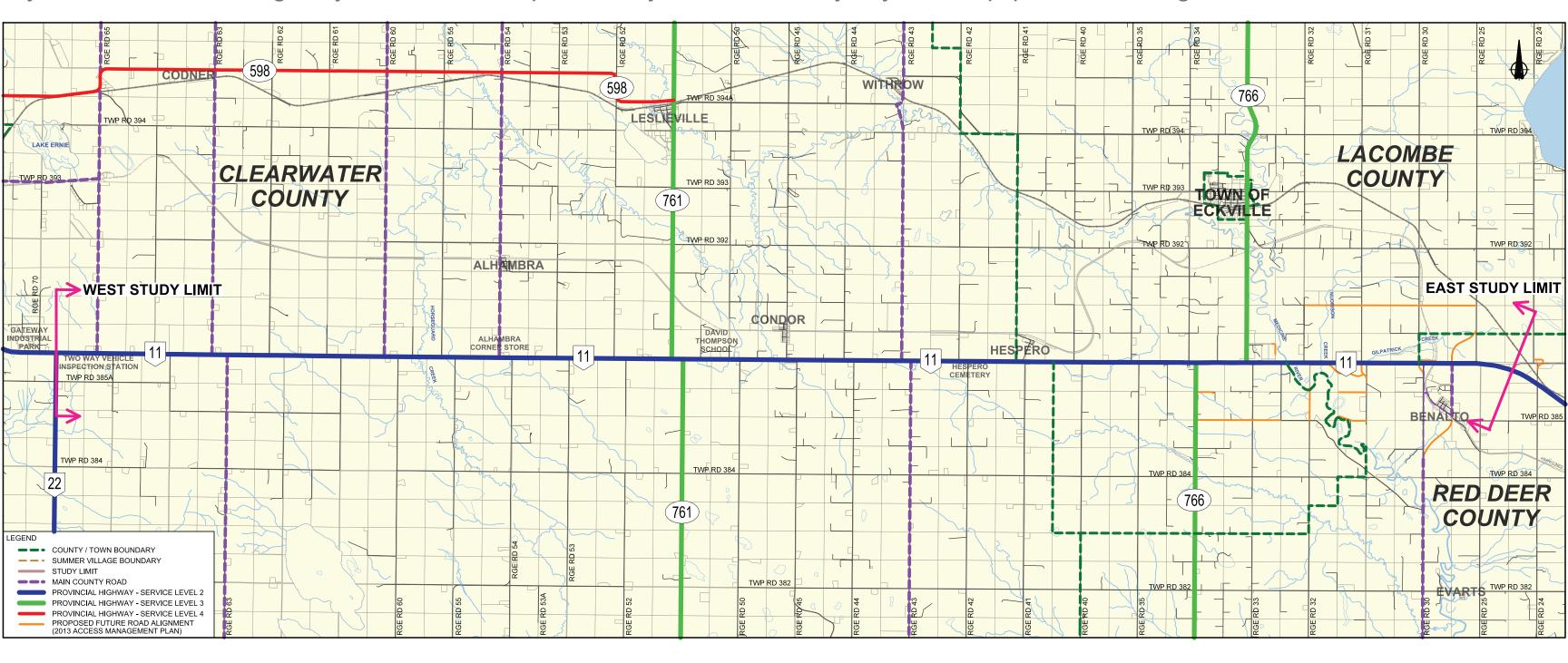


Farm Equipment Crossings

If you are a farmer that crosses Highway 11 with farm equipment, we are looking for your help!

The study team is investigating ways to accommodate farm equipment crossings along the twinned Highway 11 corridor.

Please use the coloured markers provided to circle the location where you farm on the map below and indicate the route that you travel to cross Highway 11. This will help the study team to identify key farm equipment crossing locations.







Next Steps

Spring 2023

- Review cross-section options and select preferred option
- Develop detailed functional plan to twin existing Highway 11

Summer 2023

- Hold Group Meetings with impacted landowners along existing Highway 11
 - The study team will have a functional plan for the twinning and will be able to provide more detailed information for the impacted property owners.
 - Property owners along Highway 11 will be contacted directly to invite them to discuss the specific impacts to their property, identify possible mitigation measure, and to apprise them of next steps regarding the right-of-way acquisition process.

Fall 2023

- Last presentation to the four municipal councils
- Recommend the final plan for approval by the Province

2024 - 2025

Following completion of the planning study, Alberta Transportation & Economic Corridors will begin detailed design and land aquisition.





Thank You!

Thank you for attending this open house, understanding the significance of the study and the importance of a thorough analysis of the options considered.

The study process has led to uncertainty for so many of you. We truly appreciate the time you have spent sharing your viewpoints and perspectives.

The information shown here today will be posted on the project website.

https://www.alberta.ca/highway-11-from-highway-22-to-township-road-390.aspx





