Engage MB What We Heard

Functional Design for PTH 1 and PTH 5 Intersection Improvements – Round 2A

Project Overview

The Functional Design for PTH 1 and PTH 5 Intersection Improvements ('the project') is located at the intersection of Provincial Trunk Highway 1 (PTH 1) and Provincial Trunk Highway 5 (PTH 5). PTH 1 is part of the National Highway System that facilitates interprovincial trade and travel, while PTH 5 provides a link between the major east-west provincial roadways running through the region. In June of 2023, this intersection was the site of a significant collision that resulted in the loss of 17 lives and impacts to many others. There have been subsequent collisions since this time.

The Government of Manitoba is focused on supporting those affected by the collision and identifying preventative measures to avoid reoccurrence. Manitoba Transportation and Infrastructure (MTI) has engaged WSP and Landmark Planning & Design Inc. (Landmark) to review the study area, illustrated in Figure 1, from an engineering, design, and safety perspective.

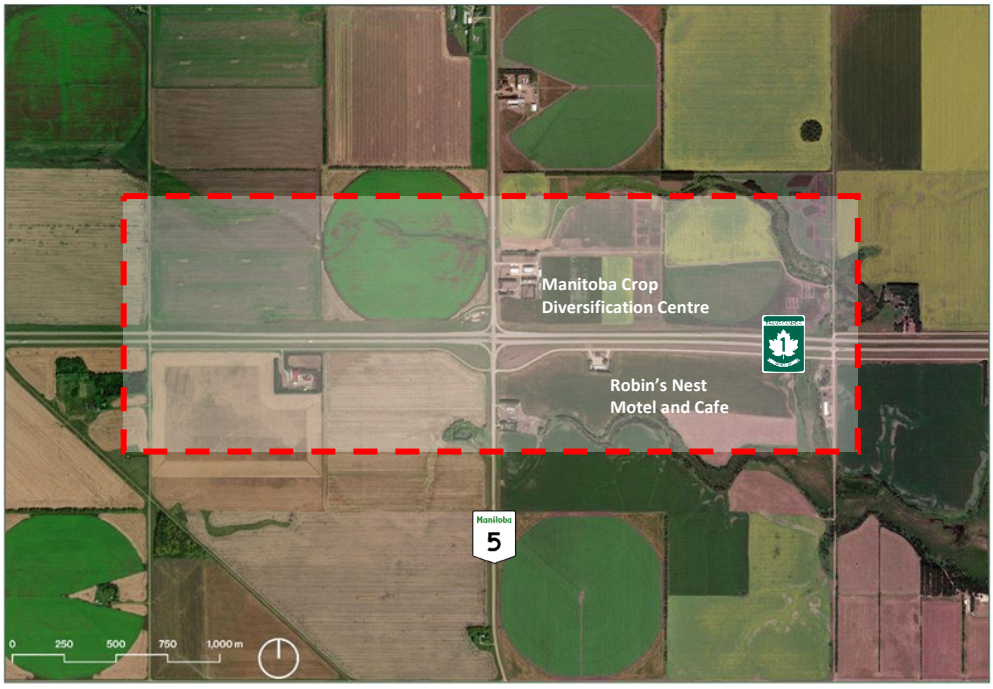


Figure 1: Project Study Area

Manitoba

The role of Landmark is to engage potentially impacted Rights Holders, stakeholders, and the general public to communicate project information, listen to individual perspectives and to effectively integrate those perspectives into the alternatives evaluation process.

Feedback from these interactions will be reviewed in a team setting and at key milestones in order to help ensure all perspectives and knowledge are incorporated into the study process and recommendations.

Engagement Overview

Round 1 Engagement Summary

Landmark led a series of Rights Holder, stakeholder, and public engagement meetings for the Round 1 PTH 1 and PTH 5 Functional Design Project in June and July 2024.

The objective of Round 1 was to identify and meet with potentially impacted Rights Holders and stakeholders, as well as members of the general public to communicate project information and gain feedback, particularly as it related to potential impacts, issues or concerns that the project team should consider while identifying and developing alternatives. Feedback gained during Round 1 of the engagement process was used to evaluate preliminary conceptual design alternatives for the PTH 1 and PTH 5 intersection.

Round 2A Engagement Objectives

Landmark led a comprehensive engagement process for Round 2A meetings in November 2024. A series of Rights Holder, stakeholder, and public engagement meetings were key components of the engagement process.

The objective of Round 2A was to provide project updates, offer an opportunity for participants to better understand project alternatives, share a preliminary evaluation of alternatives, gain feedback, and share important details regarding the next steps for the project.

Round 2A Engagement Meeting Invitations

Prior to the commencement of the engagement program, Landmark held a project initiation meeting with WSP and MTI. At the meeting, the project team confirmed the preliminary list of Rights Holders and stakeholders with potential interests. The following identified Rights Holders and stakeholders were invited to participate in both Round 1 and Round 2A engagement meetings.

MTI identified the following Rights Holders:

- Swan Lake First Nation
- The Manitoba Métis Federation (MMF)

The project team identified the following stakeholder groups:

- Municipality of North Cypress-Langford
- Town of Carberry

- Impacted families and communities of the June 2023 collision
- Adjacent landowners (including the Manitoba Crop Diversification Centre, Robin's Nest Motel and café, and McCain Foods Limited)
- Carberry North Cypress-Langford Fire & Rescue
- RCMP Carberry Detachment
- RCMP Dauphin Detachment
- Carberry Health Centre
- Carberry & District Chamber of Commerce
- Prairie Mountain Health EMS (Ambulance)
- Carberry Collegiate
- R J Waugh Elementary School
- Manitoba Trucking Association
- Snoman (Snowmobilers of Manitoba) Inc.
- Trails Manitoba
- General public
- Others, as identified

Round 2A Engagement Meetings

Interactive Meetings

Rights Holder and stakeholder meetings were targeted towards Rights Holder or stakeholder groups and held either virtually or in-person. At each meeting, there was a presentation from the project team, followed by a Question and Answer (Q&A) period where stakeholders were given an opportunity to ask questions, and share any comments, concerns, or feedback. The following Round 2A stakeholder engagement meetings were held in person or remotely via Microsoft Teams.

<u>Round 2A Rights Holder meetings:</u>

- Manitoba Métis Federation - November 27th, 2024, at 3:00 PM (virtual)

<u>Round 2A Stakeholder meetings:</u>

- Town of Carberry – November 21st, 2024, at 9:30 AM (virtual)
- Municipality of North Cypress-Langford – November 21st, 2024, at 11:00 AM (virtual)
- Key stakeholders and family members (Manitoba Trucking Association, RCMP, and Snoman, Sprucewoods Snowdrifters) – November 27th, 2024, at 1:30 PM (virtual)
- Adjacent Landowners – November 28th, 2024, at 4:00PM (Carberry Collegiate)

Families of the victims of the June 2023 collision were contacted at an early stage of the project in order to inquire about their preferred level of involvement in the project. Landmark worked with an RCMP representative and a representative from the families of victims to establish contact and communicate with the group of families. Only one family member elected to attend the Round 2A key stakeholders and family members meeting. Remaining family members elected not to attend, but to follow the project remotely via general project updates.

Public Open House

The Project Team hosted a presentation-style meeting for the general public to attend. At the Open House, a presentation was provided for meeting attendees. The presentation was followed by a Question and Answer (Q&A) period where meeting attendees were given an opportunity to ask questions, and share any comments, concerns, or feedback.

After the Q&A period ended, project team members from Landmark, MTI, and WSP, were available to answer additional questions from attendees. The project team provided paper copies of a comment sheet for attendees to fill out, as well as a link to an online comment sheet for questions, comments, or concerns.

Round 2A Public Open House:

- General Public – November 28th, 2024, at 6:30 PM (Carberry Collegiate)

Stakeholder Inquiries

Landmark answered subsequent phone and email inquiries and addressed potential concerns from Rights Holders, stakeholders, and the general public throughout rounds 1 and 2A of engagement. Correspondences were recorded by Landmark.

What We Heard

Round 2A Interactive Meetings

At each interactive meeting, Rights Holders and stakeholders were invited to ask questions, and share any comments concerns, or feedback. A feedback summary is outlined below for each of the targeted meetings.

Manitoba Métis Federation (MMF) Meeting

The Manitoba Métis Federation provided an update on their internal project review process. The following messages/remarks were provided:

- Comment that MMF may engage their citizens on a variety of MTI projects which could include the PTH 1 at PTH 5 Intersection Improvements project.
- Comment that MMF potential interests for this project relate to heritage resources and land use considerations.
- Note that the preliminary project footprint shared by the project team was sent to the MMF heritage department. There were no major preliminary concerns identified at this time.
- Request to stay informed about project updates on design milestones, engagement, and heritage assessments.

Municipality of North Cypress-Langford Meeting

The Municipality of North Cypress-Langford provided feedback on the progression of the PTH 1 and PTH 5 Intersection Improvements project and shared concerns and suggestions to be taken into consideration by the project team. The following comments were provided:

- Comments that the Municipality's main concern is that the intersection improvement project is progressing and that the work completed so far is appreciated.
- Concern about overall safety at the existing intersection.
- Comment that intersection alternatives that incorporate a widened median are a step in the right direction.
- Concern that the signalized intersection alternative could create a false sense of security and suggestion to make it a lower priority than other intersection alternatives being considered.
- Comment that the R-CUT intersection alternative may be difficult for potato trucks in the Fall harvest due to the need to make u-turns and travel across multiple lanes of traffic.
- Questions regarding the recency of collision and traffic volumes/counts at the PTH 1 and PTH 5 intersection.
- Comment that truck traffic can increase at certain points in the year.
- Comment that the number of vehicles passing through the PTH 1 and PTH 5 intersection seems to be increasing, and stacking seems to be becoming more prevalent.
- Comment that people are avoiding the PTH 1 and PTH 5 intersection, and using mile roads instead, to avoid long wait times when trying to make left turns.

Town of Carberry Meeting

The Town of Carberry provided feedback on the progression of the PTH 1 and PTH 5 Intersection Improvements project and shared concerns and suggestions to be taken into consideration by the project team. The following comments were provided:

- Concern that the land acquisition required with the majority of intersection improvement alternatives could hinder the project timeline.
- Comment that land expropriation in the past has caused issues for the Municipality.
- Suggestion that the intersection improvement alternatives should not be too complicated. Acknowledgement that driver error will always exist, and it is important to try and eliminate as much confusion as possible.
- Comment that the grade separated interchange would be beneficial due its simplicity and ability to ensure continuous traffic flow.
- Acknowledgement that the grade separated interchange would be high in cost compared to other intersection improvement alternatives and that signalization may be the most realistic alternative if cost was a primary consideration.
- Concerns about the roundabout intersection alternative due to required lane changes.
- Concern about right angle collisions at the PTH 1 and PTH 5 intersection. Comment that the widened median intersection alternative would not fully remove opportunities for right angle collisions.
- Concern about the R-CUT intersection alternative due to the speed differential created.

- Suggestion that reduced speed and photo radar enforcement could be utilized at the PTH 1 and PTH 5 intersection.
- Concerns that closing the medians east and west of the PTH 1 and PTH 5 intersection will be problematic for farmers who use those roads to avoid the PTH 1 and PTH 5 intersection.

Stakeholders Meeting

Stakeholders provided feedback on the progression of the PTH 1 and PTH 5 Intersection Improvements project and shared concerns and suggestions to be taken into consideration by the project team. The following comments were provided:

- Comment that the community wants to see changes made at the PTH 1 and PTH 5 intersection and there is uncertainty about the timing of the project.
- Comment that many drivers are nervous about crossing the current PTH 1 and PTH 5 intersection.
- Concerns about school busses driving down PTH 1 because of large vehicles not being able to fit in the existing PTH 1 and PTH 5 intersection median.
- Comment that the median at the current PTH 1 and PTH 5 intersection does not seem wide enough to fit more than two small SUV's.
- Comment that snowmobile trails will likely not be affected by any of the intersection improvement alternatives because they would still allow snowmobiles to cross over PTH 5.
- Concern that proposed median closures would create ditches. Suggestion to design gentle grades to reduce impacts on snowmobile trails.
- Comment that the Trans-Canada Trail that connects to Neepawa crosses PTH 1 west of the study intersection. The study intersection has always been a concern with regard to the trail. A signalized intersection or grade separated interchange would be ideal because these intersection alternatives would provide a safe passageway for people using active transportation.
- Comment that the grade separated interchange alternative would make the most sense in terms of safety and would not interrupt traffic flow.
- Concern about the roundabout intersection alternative potentially slowing traffic down.
- Comment that the evaluation matrix correctly highlights the limitations of the roundabout intersection alternative.
- Comment that the split intersection alternative will likely reduce mental load for drivers and could be applied to other intersections in the province to create consistency.
- Comment that the split intersection alternative would need longer runway lanes (also known as deceleration lanes) for right hand turns in all directions to ensure there is enough time to get into the turning lane.
- Suggestion to widen the median of the split intersection alternative further.
- Concerns about the R-CUT intersection alternative due to the extra amount of road that would need to be travelled as well as the risk of potatoes falling out of trucks doing u-turns.

- Suggestion to consider the maximum weight for heavy vehicles in the design of the proposed intersection.
- Suggestion to account for how semi-trucks may extend into multiple lanes while turning, when designing the intersection.
- Comment that more traffic could be anticipated in the future due to a new school proposed to be built in Neepawa.
- Suggestion to consider 24-hour lighting at the project intersection.

Adjacent Landowners Meeting

Adjacent landowners provided feedback on the progression of the PTH 1 and PTH 5 Intersection Improvements project and how their land or business could be affected. Participants shared concerns and suggestions for consideration by the project team. The following comments were provided:

- Concerns regarding the proposed service road extensions featured in the widened intersection and grade separated interchange alternatives due to potential infringement on potato crops, irrigation systems, and private property.
- Question whether the irrigation system in the southwest corner of the PTH 1 and PTH 5 intersection would be affected by intersection improvements.
- Suggestion to eliminate or reduce the extent of service roads on all intersection alternatives.
- Concerns about the proposed median closures on all intersection improvement alternatives, as they are currently used by farmers and other heavy machinery.
- Suggestions to include more farmers as stakeholders so that they can provide further insight on the proposed median closures.
- Concerns about the R-CUT intersection alternative due to limited Canadian precedents and perceived difficulties for removing snow.
- Suggestions that the evaluation matrix should better reflect the difficulty large vehicles will have navigating the R-CUT intersection alternative.
- Comments that large vehicles would not be able to get to highway speed while navigating the R-CUT intersection alternative and speeds would have to be reduced.
- Comments that the split intersection alternative could negatively impact land and irrigation systems.
- Comments that the roundabout intersection alternative appears to be less intrusive when considering land acquisition.
- Suggestions to implement photo radar and reduced speed limits at the study intersection.

Public Open House Event

A Public Open House was held on November 28th, 2024, at Carberry Collegiate, in Carberry, Manitoba and was attended by 47 people.

Question and Answer Period

The Project Team delivered a presentation to the meeting attendees. The presentation was followed by a Question and Answer (Q&A) period where meeting attendees were given an

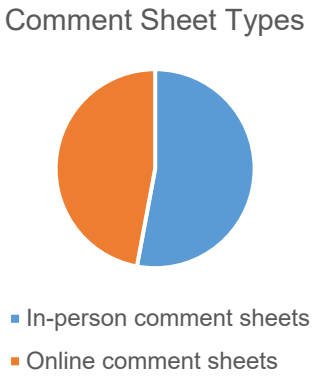
opportunity to ask questions, and share any comments, concerns, or feedback related to the project. Comments provided by meeting attendees are summarized as follows:

- Concerns about the R-CUT intersection alternative due to the need for traffic to cross two lanes to travel north-south on PTH 5.
- Concern that semi-trucks would not be able to fit in the median of the R-CUT intersection type.
- Concerns about the R-CUT intersection alternative due to the speed differential.
- Suggestions to reduce the speed limit near the PTH 1 and PTH 5 intersection to 80 kilometres per hour and enforce photo radar.
- Concern that reducing the speed limit at the PTH 1 and PTH 5 intersection would increase congestion.
- Comments that the grade separated interchange intersection alternative would be the safest option.
- Suggestion to paint double yellow lines on the roadways to indicate a no passing zone.
- Comment that drivers need more education related to merging.
- Comments that a signalized intersection would help improve safety.
- Concerns about the proposed median closures on all intersection improvement alternatives due to their use by agricultural equipment.
- Comment on the number of accidents and deaths at the PTH 1 and PTH 5 intersection.

Comment Sheets

A comment sheet was made available to provide additional feedback to the project team both in print format at the in-person event, as well as available online. A total of 34 comment sheets were received. Slightly more in-person comment sheets were received than online comment sheets.

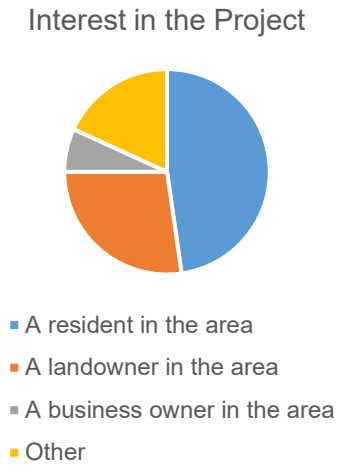
In-person comment sheets	18
Online comment sheets	16
Total	**34**



Question 1: Interest in Project

Participants were asked to indicate their interest in the project and provided the following responses[1]. The majority of respondents identified as residents or landowners in the area. A smaller number identified as business owners, while 10 respondents indicated that they had other interests in the project.

A resident in the area	21
A landowner in the area	12
A business owner in the area	3
Other	10



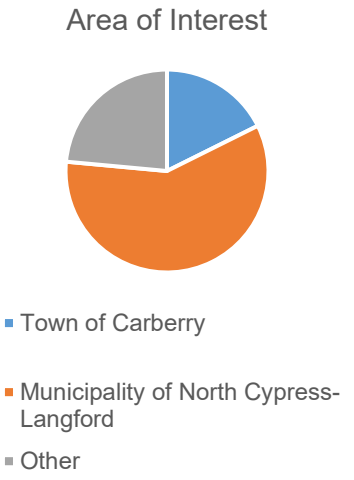
Of the ten (10) respondents who selected 'Other,' responses included:

- I drive through the intersection (4)
- I am a visitor/have family in the area (3)
- I am a casual highway designer (1)
- Emergency services (1)

Question 2: Area of Interest

Participants were asked to indicate which area affected by the project they are specifically interested in and provided the following responses[2]. A notable majority of respondents expressed interest in the project's impact on the Municipality of North Cypress-Langford, while others indicated an interest in the Town of Carberry and other locations within and outside of Manitoba.

Municipality of North Cypress-Langford	20
Town of Carberry	6
Brandon	0
Other	8



Of the eight (8) respondents who selected 'Other', responses included:

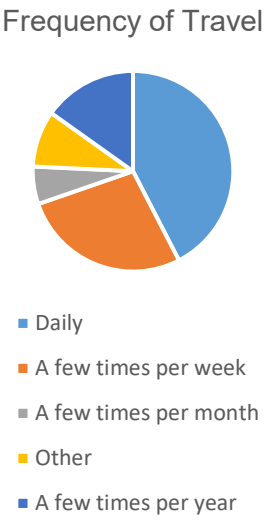
- Winnipeg, Manitoba (4)
- Ottawa, Ontario (2)
- RM of Stuartburn (1)
- Town of Steinbach (1)

[1] Respondents were able to select more than one answer.
[2] Respondents were able to select more than one answer.

Question 3: Frequency of Travel

When asked “How often do you travel through the PTH 1 and 5 intersection”, respondents provided the following responses. A notable majority of respondents were frequent users of the intersection, although some were occasional users.

Daily	14
A few times per week	9
A few times per year	5
A few times per month	2
Other	3



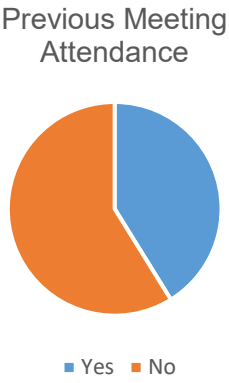
Of the three (3) respondents who selected ‘Other,’ responses included:

- 4-8 times a day (1)
- Once (1)
- Twice a year (1)

Question 4: Previous Meeting Attendance

Participants were asked to indicate whether they had attended a previous project meeting in July 2024 and provided the following responses. Over half of the respondents indicated that they had not attended the previous project meeting.

No	20
Yes	14



Question 5: Impacts of Intersection Improvement Types

Participants were provided with the list of intersection improvement alternatives for the PTH 1 and 5 intersection included in the presentation. Participants were asked if they see themselves or their organization positively or negatively impacted by any of the intersection improvement alternatives.

Intersection Alternatives

A number of respondents provided commentary on the intersection alternatives. Intersection types received the following responses:

Grade Separated Interchange

A total of fourteen (14) respondents indicated that they would be positively impacted by the grade separated interchange alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comments about grade separated interchanges being familiar and widely implemented throughout Canada and the USA.
- Comments that a grade separated interchange would improve safety.
- Comments that this intersection alternative would be the most acceptable option.

A total of two (2) respondents indicated that they would be negatively impacted by the grade separated interchange alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comment that this intersection alternative would be too expensive
- Comment that this intersection alternative would require too much land.

Widened Intersection + Auxiliary Lanes

A total of four (4) respondents indicated that they would be positively impacted by the widened intersection + auxiliary lanes alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comments that the current PTH 1 and 5 intersection median is not wide enough to fit trucks and semis.
- Comment that this intersection alternative would reduce conflict points between vehicles and allow more people to use the intersection at once.
- Suggestion to consider this intersection alternative as third best, after the split intersection (#1) and R-CUT (#2) alternatives.

One (1) respondent indicated that they would be negatively impacted by the widened intersection + auxiliary lanes alternative for the PTH 1 and 5 intersection. The respondent did not provide further commentary.

Signalized Intersection

A total of five (5) respondents indicated that they would be positively impacted by the signalized intersection alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comments that this intersection alternative would allow semis, double semis, and other large vehicles to flow more smoothly and quickly.
- Comments that signalization would be a good temporary measure for the PTH 1 and 5 intersection while waiting for further intersection improvements.

A total of five (5) respondents indicated that they would be negatively impacted by the signalized intersection alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comment that the respondent will not use the PTH 1 and 5 intersection if this alternative is chosen.
- Concern that reliance on signalized intersections has resulted in many accidents and deaths.
- Comment that this intersection alternative would not solve the issue at hand.
- Comments that although this intersection alternative is easier to implement, it would slow down traffic and cause more accidents.

R-CUT Intersection

A total of three (3) respondents indicated that they would be positively impacted by the R-CUT intersection alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Comments that this intersection alternative could work well and speed up traffic.
- Suggestion to consider this intersection alternative second, after the split intersection.

Although three (3) respondents provided positive comments regarding the R-CUT intersection alternative in the comment sheets, meeting attendees voiced their concerns about this intersection type during the Q&A portion of the in-person Open House event detailed in the 'Question and Answer' section of the report.

Split Intersection

A total of two (2) respondents indicated that they would be positively impacted by the split intersection alternative for the PTH 1 and 5 intersection. Respondent comments are summarized as follows:

- Suggestion to consider this intersection alternative first.
- Suggestion to widen the median in this intersection alternative like the intersection of Firdale Road and PTH 1 [one mile west of PTH 1 and PR 351 East Junction].

One (1) respondent indicated that they would be neutrally impacted by the split intersection alternative for the PTH 1 and 5 intersection. The respondent commented that this intersection alternative would make more sense than the others being considered and would require less driver education.

Roundabout

One (1) respondent indicated that they would be negatively impacted by the roundabout alternative for the PTH 1 and 5 intersection. The respondent commented that this intersection alternative would not work well on a 4-lane expressway.

Offset – T Intersection

One (1) respondent indicated that they would be positively impacted by the offset-T intersection alternative for the PTH 1 and 5 intersection. The respondent commented that this intersection alternative would be the safest option and would be able to handle increasing traffic as Manitoba grows.

Other Impacts

When answering how they might be affected by improvements at the PTH 1 and 5 intersection, a number of respondents did not reference specific intersection alternatives. Respondent comments are summarized as follows:

Positive Impacts

A total of nine (9) respondents indicated that they would be positively impacted by some aspect of the potential intersection improvement alternatives. While some respondents did not provide a further explanation, others provided the following comments:

- Comment that most intersection alternatives presented would be a significant improvement.
- Comment that the respondent cannot comment on the intersection alternatives because they need to study them first.
- Suggestion that the project team considers a new intersection alternative. This proposed intersection alternative was described as an Offset-T with an R-CUT intersection with left turns only at PTH 1 and PTH 5.

Negative Impacts

A total of seven (7) respondents indicated that they would be negatively impacted by some aspect of the potential intersection improvement alternatives. Respondents provided the following comments:

- Comment that the closure of mile roads featured in all intersection alternatives would negatively impact farmers who use them to cross PTH 1.
- Comment that any alternatives that ask drivers to cross multiple lanes of traffic could be dangerous.
- Concerns about service roads encroaching on private property (2).
- Comment that any intersection alternatives other than a grade separated interchange would be negative.
- Concern that all intersection alternatives would be taking a large amount of land.
- Comment that the respondent had been in an accident at the PTH 1 and 5 intersection[3].

[3] Respondent made reference to the current intersection in their response instead of the proposed intersection improvement alternatives

Neutral Impacts

A total of five (5) respondents indicated that they would be neither positively nor negatively impacted by the intersection improvement alternatives. While most respondents did not provide a further explanation, one (1) respondent noted that any improvements done correctly could reduce collision risks. However, if the improvements are done incorrectly, the collision risks could increase.

Question 6: Additional Topics

Participants were asked if there is anything else that they felt the project team should consider. A total of eight (8) respondents answered 'No.' A total of fifteen (15) respondents answered 'Yes." These respondents provided the project team with a variety of additional comments and considerations to include in the project evaluation process:

- Suggestion to consider using the original plan for an overpass that was created when the highway was twinned in 1975/1976.
- Comment that the current intersection is too small to accommodate large vehicles. People become impatient, resulting in accidents.
- Suggestion to consider engaging with the municipal government about improving their roads for agricultural equipment.
- Comment to consider not closing the medians at each end of the intersection, as farmers driving agricultural equipment will be negatively affected.
- Suggestion to consider adding merge lanes for drivers turning off of PTH 1 to prevent merging traffic from cutting across driving lanes.
- Suggestion to consider the landowners, who will be impacted by moving the service roads, in the decision making process.
- Suggestion to find cost savings and minimize land acquisition if implementing a grade separated interchange.
- Suggestion to consider slowing traffic down to 60 or 80 km/h and adding speeding cameras before and/or at the PTH 1 and 5 intersection.
- Comment that an overpass could have been built by now if the studies were quicker.
- Suggestion to find out how other Municipalities construct grade separated interchanges at a lower cost than the cost estimate provided in the presentation.
- Suggestion that a standard grade separated interchange should be designed and applied to a Manitoban intersection every two years until PTH 1 and the perimeter highway are fully grade separated.
- Comment that driver education is needed.

Next Steps

Feedback gained during Round 2A of the engagement process will be used to further evaluate the conceptual design alternatives for the PTH 1 and PTH 5 intersection. The next phase of engagement will be Round 2B. The objective of Round 2B will be to update participants on the latest project information and present more detailed design information on a shortlist of alternatives before selecting a preferred alternative.

The timeline for the project engagement process as the time of writing of this report is as follows:

- Project Initiation/Background (April/May 2024)
- Round 1 Engagement (July 2024)
- Round 2A Engagement (Fall 2024)
- Round 2B Engagement (Winter/Spring 2025)
- Round 3 Engagement (Spring/Summer 2025)
- Final Engagement Report (Summer 2025)

Questions?

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