THE

# North Perimeter (PTH 101) Highway Design Study

# Phase 1 Engagement

February 2023





### Welcome



To develop a plan that will accommodate the future development of the north Perimeter Highway into a fully access-controlled, grade-separated freeway that can ultimately accommodate six lanes.

### The intent of Phase 1 Engagement is to:



Inform you of the purpose and scope of the study for PTH 101



Review highway crossing locations, future access configuration and discuss any other potential study impacts



Develop an understanding of future development plans that should be considered in the study



Offer an opportunity to provide input to and ask questions of the design team

### Background

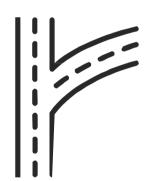
WSP Canada Inc. (WSP), a planning and engineering firm was engaged by the Government of Manitoba to develop a design for the reconstruction of the North Perimeter Highway (PTH 101).



The PTH 101 redesign, once constructed, will create a modern freeway facility.



The study was initiated due to existing highwaysafety, operations, and condition issues.

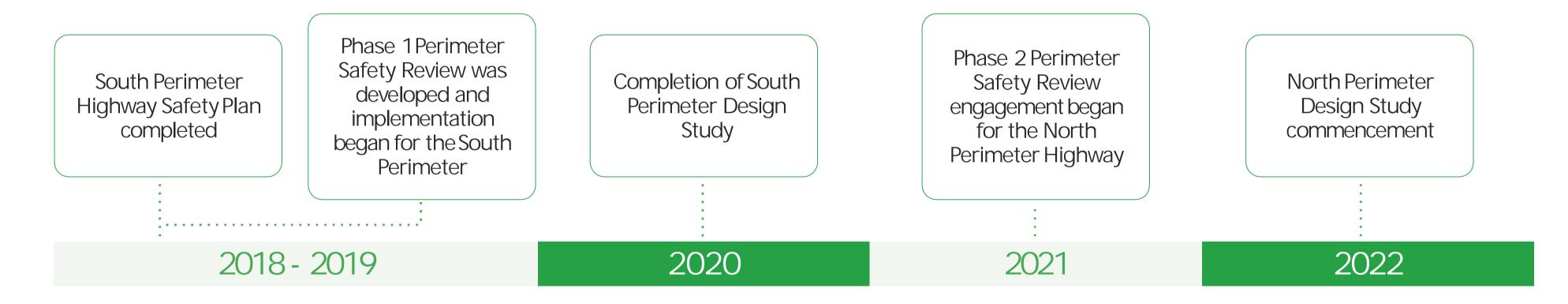


The final design will provide highway access via grade separated interchanges with service roads at certain locations to accommodate access to fronting developments.

### Perimeter Safety Review

As a separate project, Manitoba Transportation and Infrastructure has been conducting a Safety Plan Review for the Perimeter Highway with a focus on addressing the access points and intersections where there is the greatest risk of severe collisions. The review was divided into two phases: Phase 1 South Perimeter and Phase 2 North Perimeter.

#### Below is a summary of the project to date:



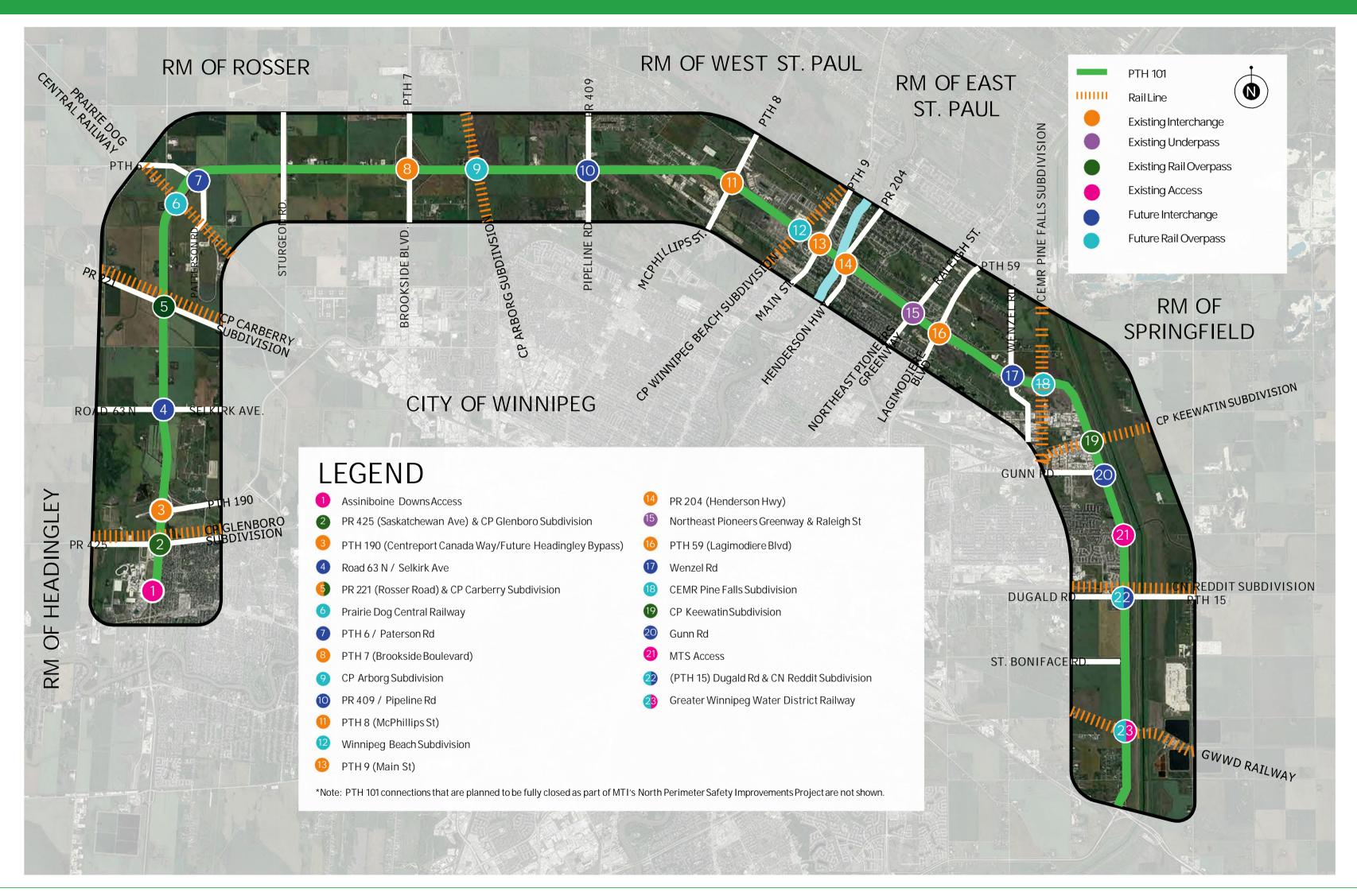


For more information on the Perimeter Safety Review, please visit:





### Study Area





### Timeline

FALL/WINTER 2022

Review Existing Condition and Design Requirements

SPRING/SUMMER 2023

Develop Highway and Interchange Alternatives

FALL 2023/ SUMMER 2024

Evaluation and Selection of Preferred Alternative Functional Design

SPRING 2024/ WINTER 2025

Finalize Functional Design

WE ARE HERE

**WINTER 2023** 

Public Engagement Phase 1
Present project scope,
background information
and collect feedback

SUMMER/FALL 2023

Public Engagement Phase 2

Collect feedback on highway and interchange alternatives

SUMMER/FALL 2024

Public Engagement Phase 3

Collect feedback on proposed design

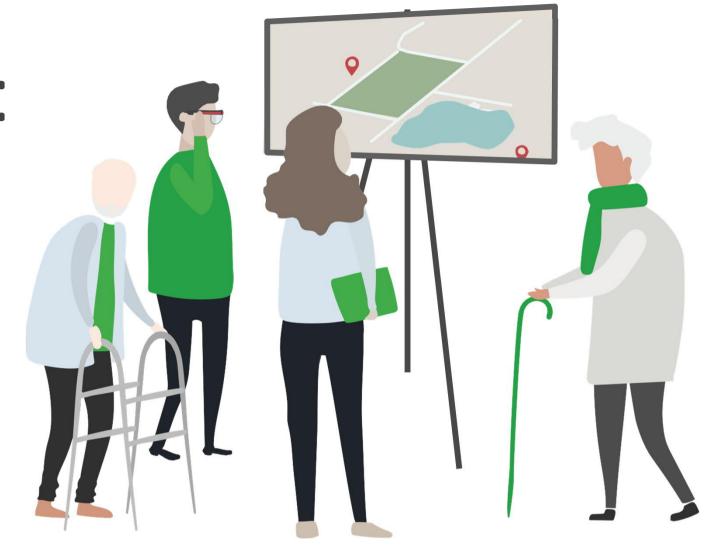
The functional design study will take approximately two years to complete.

A functional design study is an early phase of the design process in which the road right-of-way and roadway layout are established based on projected travel patterns and demand. Functional Designs are informed by both technical studies and public input and feedback throughout the process.

### Public Engagement

### Public Engagement will consist of:

- » A project webpage and online surveys
- » Group stakeholder meetings
- » Use of EngageMB and in person public open houses in Phases 2 and 3
- » Project newsletters



Phase 1 is focused on group stakeholder meetings and the project website.

#### Feedback

All comments/feedback will be summarized and presented to the project team.



#### Property Impacts

If you believe that any portion of your property may be impacted, please contact a member of the study team.



### Future Access Control

#### PTH 101 – Freeway Conditions

Access will be limited to interchanges at major cross-roads, with no at-grade intersections, railway crossings, or property access connections.

#### Other Roads

Access control for all other roads shall be based on the standards of the traffic authority for the road (Manitoba Transportation and Infrastructure for Provincial highways; City of Winnipeg and Rural Municipalities for roads in their respective jurisdictions).



### Existing Conditions



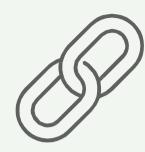
### PROPERTY BOUNDARIES AND LAND OWNERSHIP

This information was collected and reviewed for the studyarea



# LAND DEVELOPMENT INFORMATION AND PLANS

Existing and proposed for the six municipalities



# EXISTING CONNECTIONS TO PTH 101

Including location and type



#### ROADWAY CONDITIONS

Inventory of existing roads in the study area, including an assessment of pavement condition



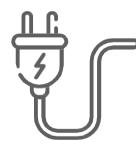
### TRANSPORTATION PLANS

City of Winnipeg, municipalities and Capital Region



### PEDESTRIAN AND CYCLING FACILITIES

Available current activity data and planned facilities that may influence activity in the future



### EXISTING AND PLANNED UTILITIES

Underground and above ground utility crossings, and any running along the highway



### EXISTING ACCESS PERMITS

Review permit conditions against field conditions

### Existing Conditions



#### LAND DRAINAGE

Existing facilities, areas of concern, and flood protection information



#### RAIL CROSSINGS

Type of crossings and train activity levels for CN, CP, CEMR, GWWD, PDCR, and Transport Canada



#### TRAFFIC DATA – EXISTING AND PROJECTED DATA

Forecasts will be prepared for 10, 20 and 30 years into the future



#### **COLLISION HISTORY**

Develop collision rates by intersection and roadway segments



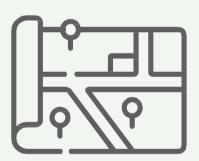
#### **BRIDGE STRUCTURES**

Review general arrangement drawings for existing structures



#### PROPOSED DESIGN CRITERIA

Roadways, structures, active transportation, and drainage criteria will be prepared



#### AVAILABLE RELEVANT REPORTS FOR THE STUDY AREA

A number of past studies undertaken at various locations along the study area



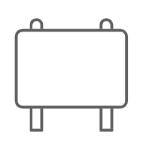
### TOPOGRAPHIC STUDIES

Confirm Lidar information such as top of rail, location of utilities, roads and miscellaneous structures

### Existing Conditions



Review background information including mineral resources and dispositions



### EXISTING PERMANENT GUIDE SIGNING

Review of existing conditions and supports



SCHOOL BUS PATTERNS

In the study area



**ACCESSIBILITY** 

of Emergency vehicles

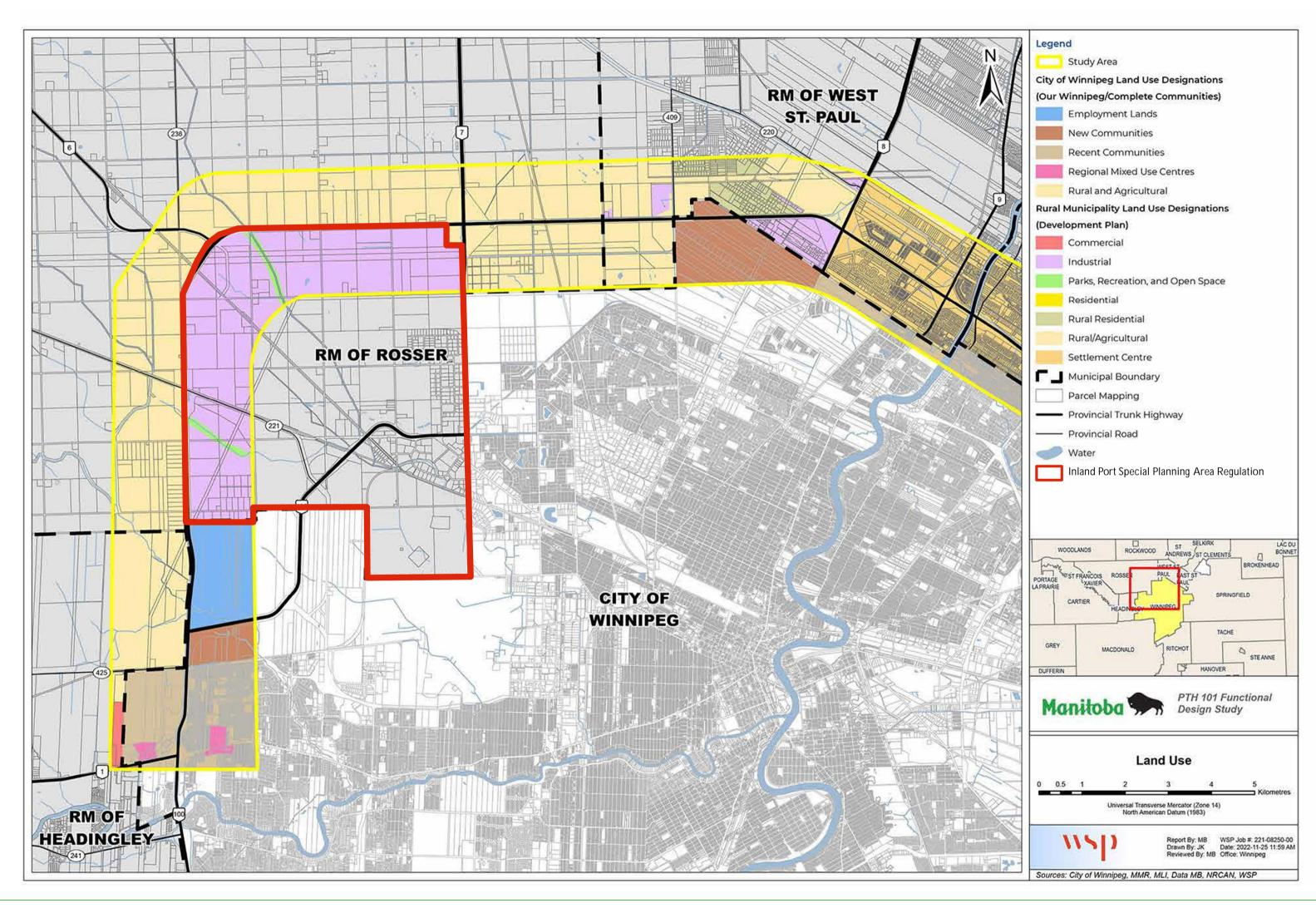


#### ENVIRONMENTAL CONSIDERATIONS

Related legislation, ecological classification, climate conditions, noise considerations, soils and terrain, terrestrial environment, vegetation, wildlife, species of conservation concern, heritage resources, aquatic systems, parks and protected areas, and designated flood areas

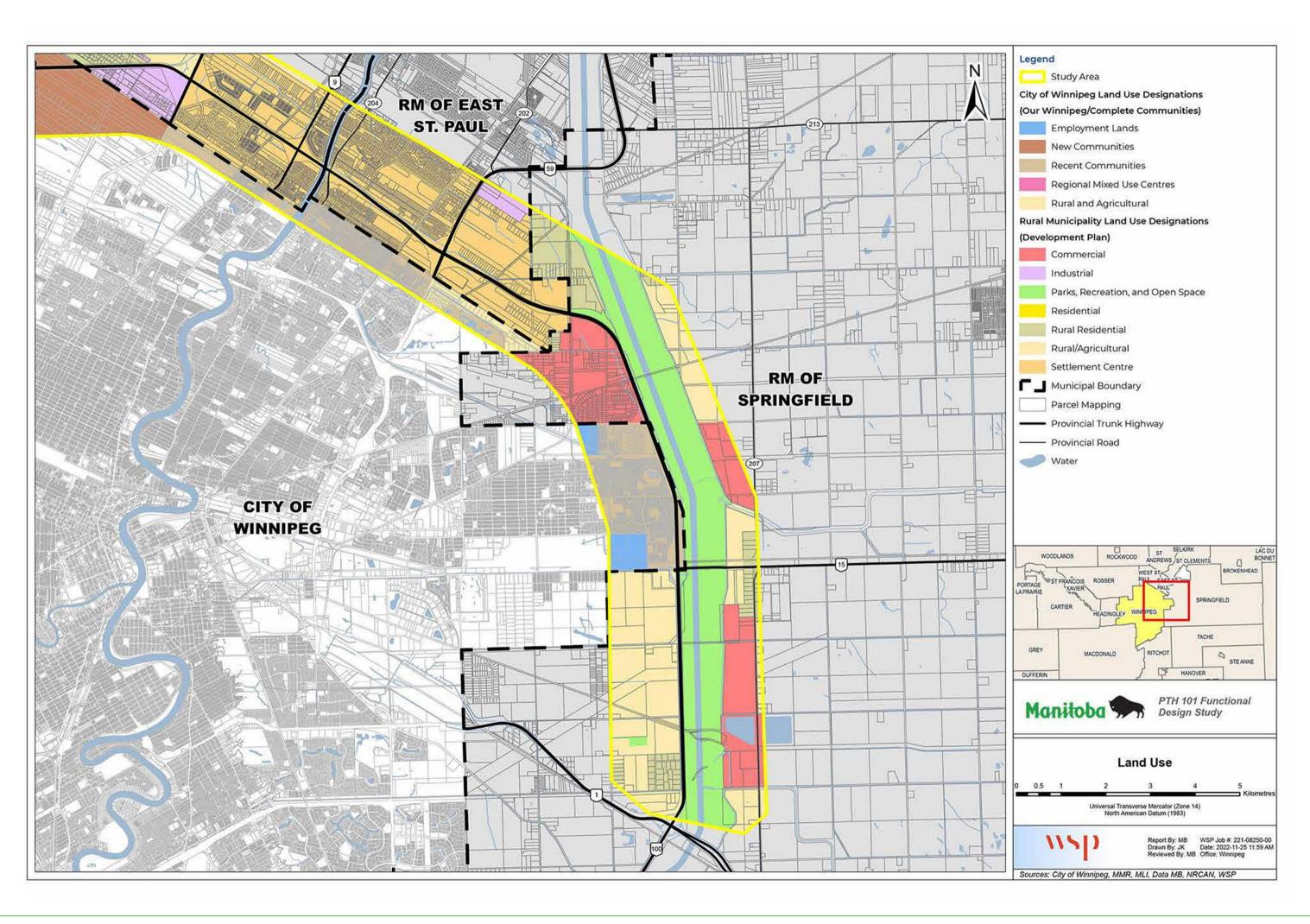


### Land Use Designations



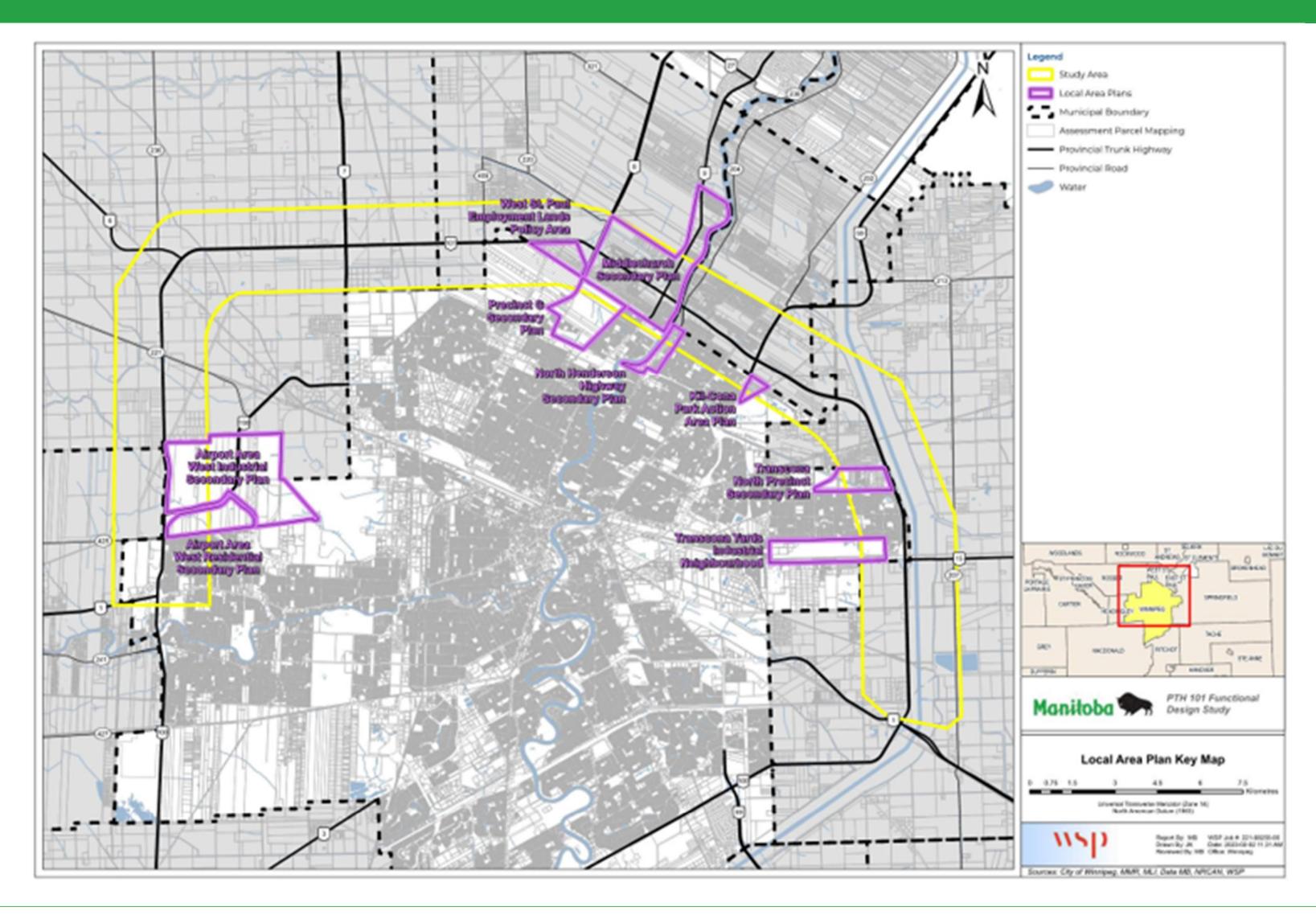


### Land Use Designations





### Local Area Plans





### Technical Evaluation Criteria

The project team will design and evaluate interchange alternatives based on the following criteria:



## Engineering and Transportation

#### CRITERIA

- Safety
- Geometry
- Utilities
- Ease of Construction and Staging
- Traffic Operations



# Community/Social Economic Impacts

#### CRITERIA

- Minimize Land Acquisition/ Severance
- Impact on Businesses
- Impact on Access
- Pedestrian/Cycling Accommodation



Cost Factors

#### CRITERIA

- Cost of Construction
- Right-of-Way Acquisition Cost



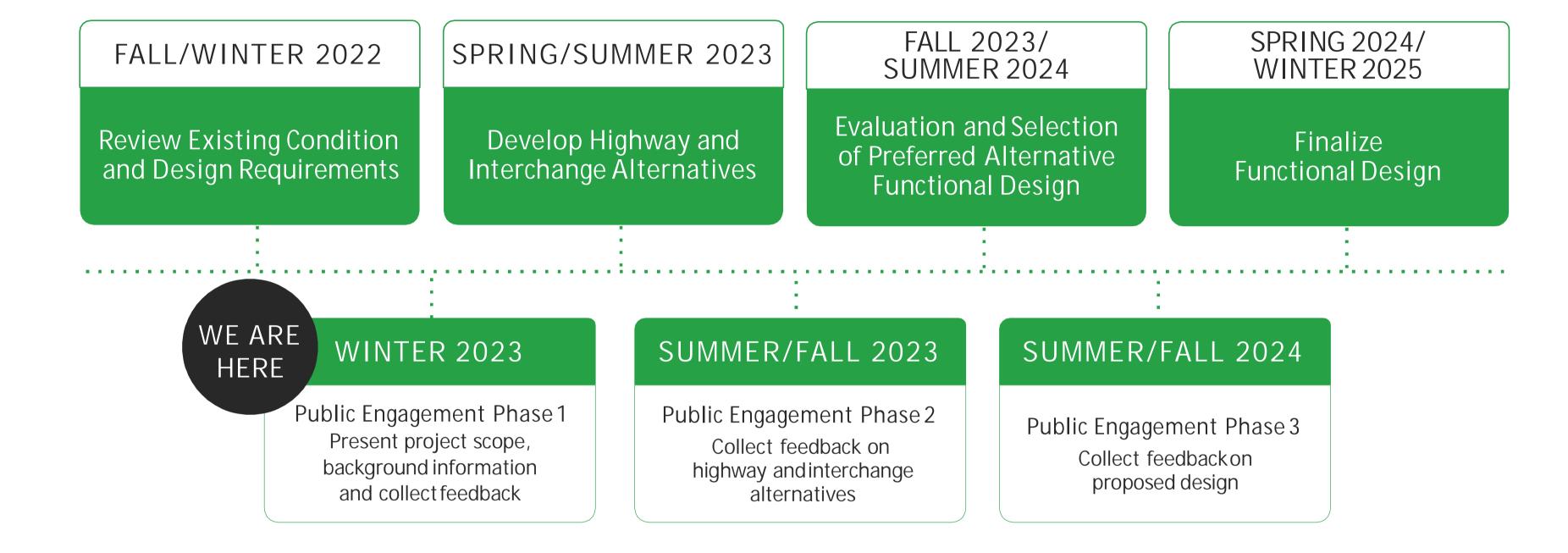
# Environmental Impacts

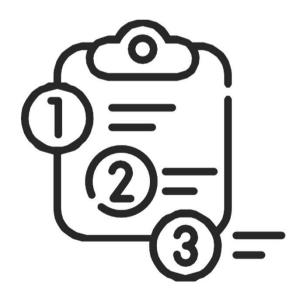
#### CRITERIA

- Noise Impacts
- Natural Environment
- Habitat Impact
- Heritage Resources Impact



### Next Steps





After completion of Phase 1 Engagement, the project team will focus on developing highway and interchange alternatives.

Phase 2 Engagement will include presentation of any proposed access closures, roadway, and interchange alternatives for PTH 101.

# Thank you

Thanks for participating in Phase 1 Engagement for the North Perimeter (PTH 101) Highway Design Study.

For additional information, please contact:

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