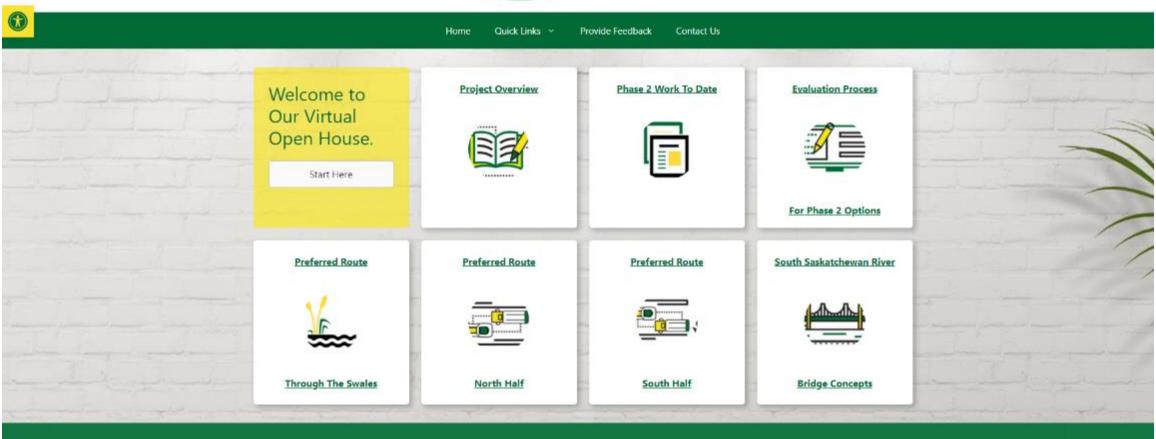
PHASE 2 – WINTER 2022 UPDATE (saskatoonfreewayvoh.ca) https://phase2.saskatoonfreewayvoh.ca/







Welcome

Welcome to the second public online information session for Phase 2 of the Ministry of Highways' functional planning study on the Saskatoon Freeway, which ran from February 14 to February 27, 2022.

The Saskatoon Freeway is expected to be a 55-kilometre divided highway, with a minimum of four lanes, that begins at Highway 11 south of Saskatoon, passes around the east and north sides of the City, and connects with Highway 7 west of the city. Construction is not expected for at least 15 years.

Public feedback provided at our winter 2021 online information session has helped us prepare the preferred route and interchange configurations for Phase 2.

We invite you to learn more about the preferred alignment and interchange concepts for Phase 2.

Project Overview

Phase 2 Work to Date

Evaluation Process for Phase 2 Options

Preferred Routes

South Saskatchewan River Bridge Concepts



- Preferred North Half Route
- Preferred South Half Route





Project Overview

The Saskatoon Freeway Functional Planning Study began in 2019. When completed, it will have identified the preferred route for a freeway around Saskatoon, including concepts for interchanges and service roads.



Participate

If you have questions, please use the Contact Us button to email us a question.

Contact Us

<u>Learn More</u>

Home Quick Links Provide Feedback Contact Us Project Overview Phase 2 Work to Date Evaluation Process for Phase 2 Options Preferred Route through the Swales Preferred North Half Route Preferred South Half Route South Saskatchewan River Bridge Concepts

Sign-up for Updates

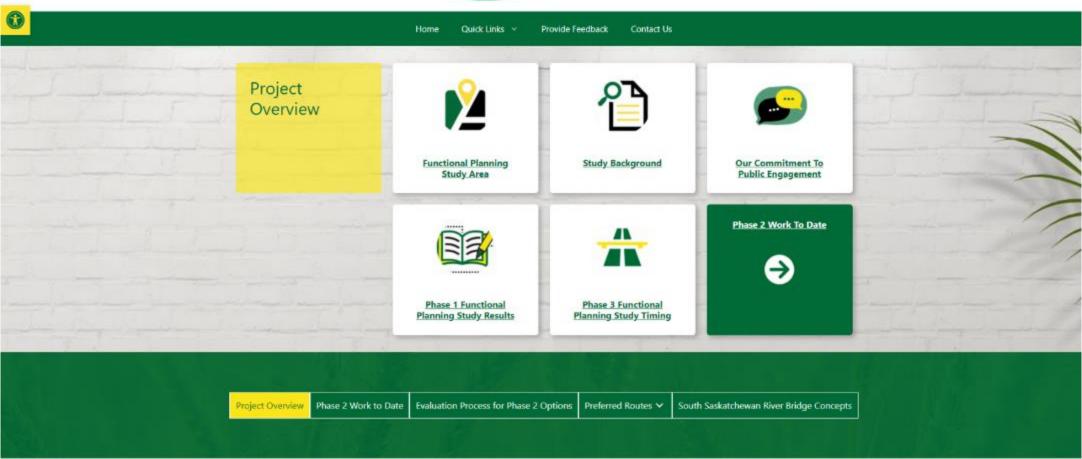
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Project Overview



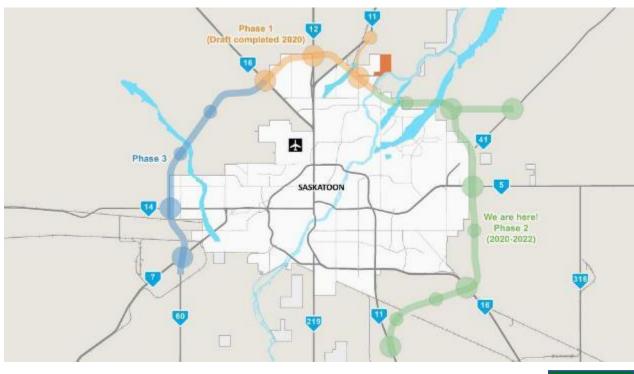


Functional Planning Study Area

Phase 1 of the functional planning study began in 2019 and finished in 2020. Phase 2 will be completed in 2022. Phase 3 will be deferred into the future.

Study Background

Construction of the Saskatoon Freeway is not expected for at least 15 years. We are considering a freeway to address the following:







Alleviate higher traffic volumes on existing roadways resulting from population growth.



Improve driver safety by removing highway traffic from local roads.



Reduce congestion by diverting large trucks from city roads.



Improve efficiency for producers, shippers, and truckers moving goods to markets.



Reduce greenhouse gas emissions by improving traffic flow around Saskatoon.

Our Commitment to Public Engagement

Engaging with a wide range of stakeholders - and answering their questions - has been a big part of our work since we started the functional study in 2019.

The Learn More button takes you to our project website, where you can learn more about early feedback we received during Phase 2, which influenced the preferred route and interchange configurations.



Learn More

Phase 1 Functional Planning Study Results

Phase 1 of the Saskatoon Freeway covered the following areas:



Highways 11, 12, and 16



Wanuskewin Road



Penner Road



Rock Ridge Road/Range Road 3053



Public engagement work for Phase 1 began in the spring of 2019 and was completed in February 2020.

You can see the materials presented at both public information sessions by clicking on the link below.

Learn More

Phase 3 Functional Planning Study Timing

The Ministry of Highways has paused planning for Phase 3. The existing 500m corridor will remain.



Partners

The functional planning study is being led by Saskatchewan's Ministry of Highways, the City of Saskatoon and the Rural Municipality of Corman Park, with support from AECOM, SNC-Lavalin and Praxis Consulting.





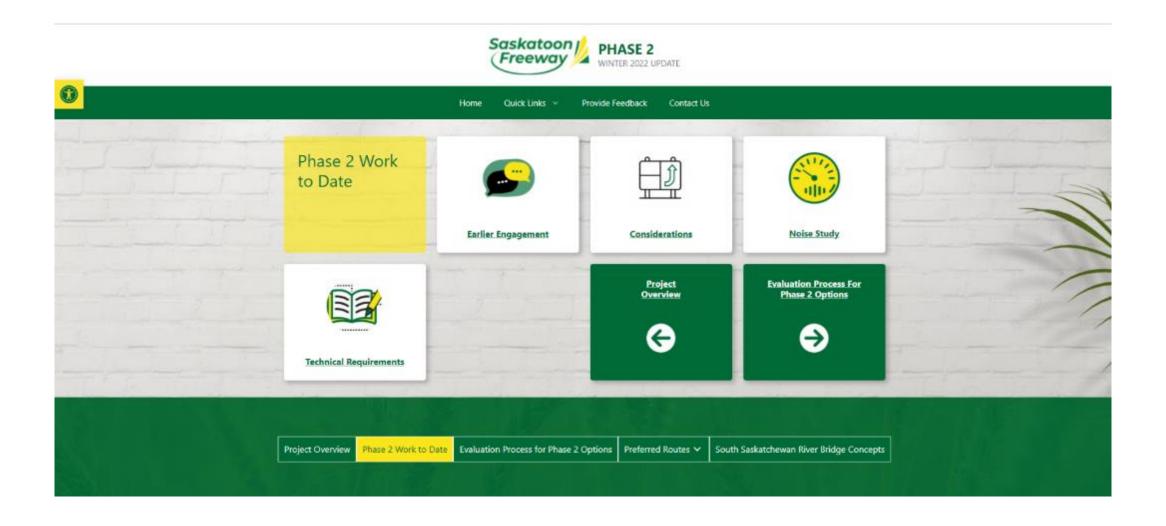








Phase 2 Work to Date – PHASE 2 (saskatoonfreewayvoh.ca)



Earlier Engagement

In the summer and fall of 2020, technical experts and stakeholders joined members of the public in three focus group sessions and a workshop that focused on determining how the freeway could cross the Small and Northeast Swales. That work is reflected in the alignment and interchange configurations selected for Phase 2.

In the winter of 2021, the functional study team held its first public online information session. We presented a number of roadway concepts and used surveys to gather input from residents, Indigenous rights holders, and local businesses.

LEARN MORE

LEARN MORE

Considerations

In addition to public input, the team has been guided by the following:



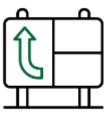
Avoid, reduce, or minimize environmental impact, especially in the Small and Northeast Swales.



Include walking and bicycling options for City of Saskatoon and RM roads crossing the freeway, as well as plans for paths along the river and near the Swales.



Maintain existing drainage patterns and minimize intrusion into wetlands and other land.



Ensure safe and efficient access to the freeway.



Accommodate railways and their expansion plans.

Noise Study

An evaluation of the traffic noise potentially generated from the proposed Saskatoon Freeway occurred in the fall of 2021.

Computer modelling of the 2063 traffic levels was used to estimate the noise generated by the Saskatoon Freeway driving lanes. The study compared noise levels expected from the Saskatoon Freeway to the <u>City of Saskatoon's Traffic Noise Sound Attenuation policy</u>, which has a 65 decibels threshold.

The map to the right shows where the 65 decibels threshold occurs. Locations outside of the pink contour line would be below the 65-decibel threshold.

The study will help guide future development around the Saskatoon Freeway and the consideration of noise reduction measures for existing development at the time when detailed freeway design occurs.



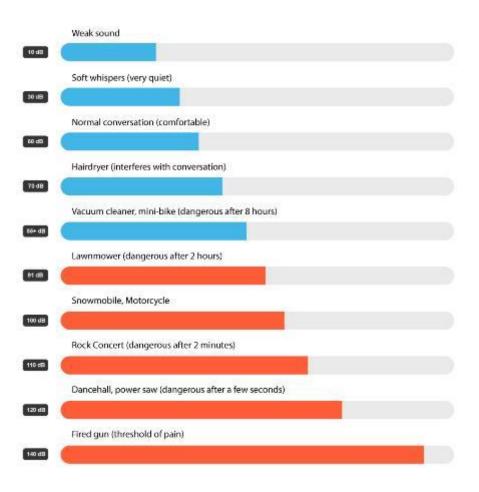
Legend

- Intersection
- Roundabout
- Bridge
- Freeway Roadway / Ramp
- SaskPower High Voltage Corrido
- Proposed Property Line
- Cul-de-sac
- Municipal Roadway / Future Ramp

Click anywhere on the map to enlarge. Then click in a specific area to zoom in. Use the Back button on your browser to return to the site.

Learn more about: Common Noise Decibels

Urban environments are subject to various sound types and levels, such as that created by traffic, which can impact homes and businesses.



Technical Requirements

The design team also had to consider a wide range of technical requirements:



National Highway System (NHS)

The Saskatoon
Freeway design
must support
inter-provincial
and international
trade and travel on
Canada's NHS. The
Saskatoon
Freeway includes
Highways 11, 16
and 7, which are
all part of the NHS.



Geometric Design

The design team uses established standards to guide how they position elements of the roadway.



Interchange Standards

The design team's work must meet established technical standards.



Speed

The design must allow for a maximum speed of 110 km/hr.



Travel Demand Model (TDM)

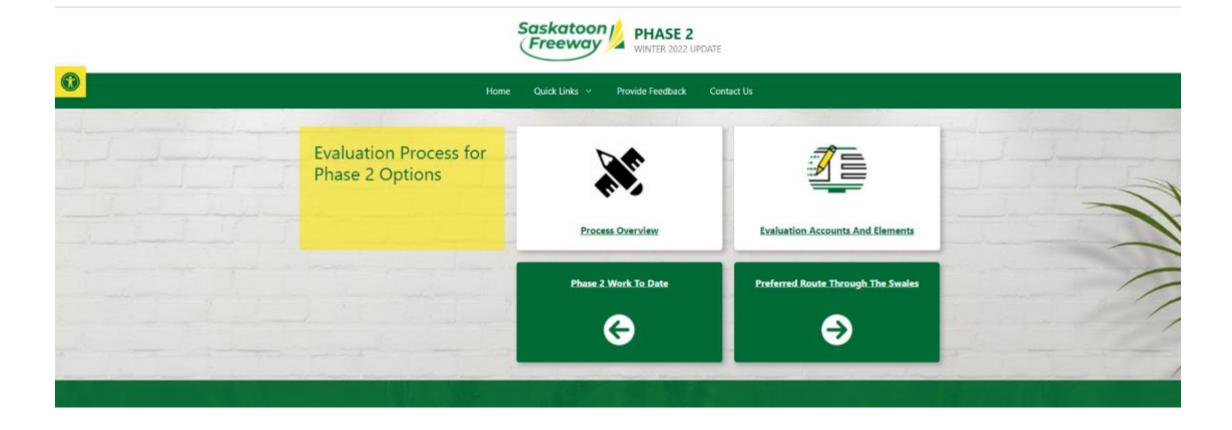
The design considers future development around the Saskatoon Freeway and any increases in traffic.



Level of Service (LOS)

The design team must ensure the Saskatoon Freeway is capable of maintaining specific traffic flow standards.

Evaluation Process for Phase 2 Options – PHASE 2 (saskatoonfreewayvoh.ca)



Evaluation Process for Phase 2 Options

The Saskatoon Freeway team used a Multiple Account Evaluation process (see more details below) to choose the preferred alignment and interchange configurations for Phase 2.

Members of the team weighed a wide range of elements that were grouped into accounts.

Where scores for different options were close, the team used a consensus approach to choose a preferred route.

Beside members of the Saskatoon Freeway functional design team, the RM of Corman Park and City of Saskatoon participated in this process.



Road User Account

- Travel time cost (delay time)
- Vehicle operating cost (congestion, start/stop)
- Safety cost (at-grade intersections, Level Of Service/congestion)
- Construction impacts to road users (detours, delays)
- Maximized benefits related to construction schedule



Environmental Account

- Greenhouse Gas (GHG) costs (construction/operation)
- Landscape (native habitat/grasslands)
- · Impact to ecologically sensitive areas
- Impact to other wetlands (outside of the Swales)
- Impact to breeding and migratory birds
- Impact to Species of Conservation Concern (SOCC)
- Impact to Species at Risk (SAR)
- Impact to wildlife movement/connectivity (to existing wildlife crossings)
- · Impact resulting from habitat fragmentation
- Lighting illumination impact
- Traffic noise impact
- Surface runoff/water quality
- Impact to heritage resources



Social Account

- City of Saskatoon road network (alignment)
- Rural Municipality of Corman Park road network plans (alignment)
- First Nations road network plans (alignment)
- Public information session feedback/acceptance
- Landowner impacts/access
- Business impacts/access
- Multi-use paths (connectivity)





Economic Account

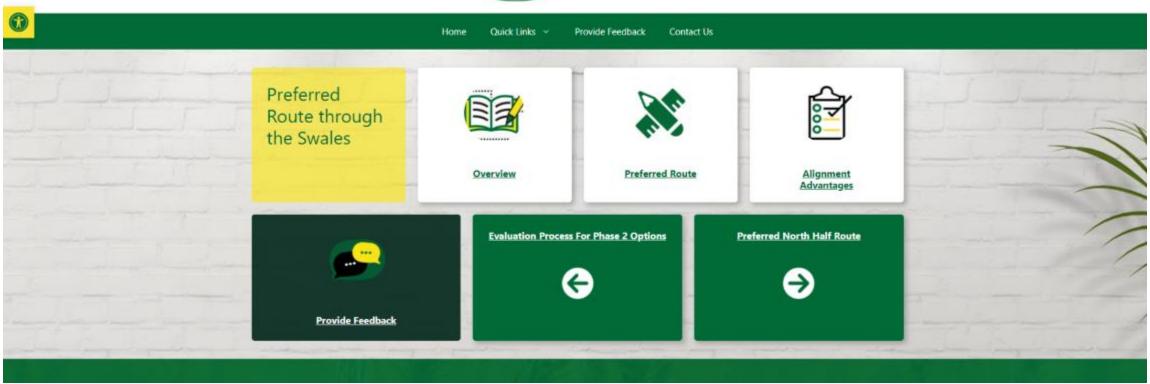
- Employment during construction
- Development opportunities (land access availability)
- Local resource availability

Financial Account

- Capital cost (excluding utility costs)
- Operating cost
- Maintenance cost
- Utility cost/impacts

Proposed Route through the Swales – PHASE 2 (saskatoonfreewayvoh.ca)





Preferred Route through the Swales

Significant work was undertaken through 2021 to better understand how the Freeway's impact to the Northeast and Small Swales could be minimized.

Based on what we learned, it became apparent any crossing of the Swales had to allow for movement of water, wildlife, pedestrians, and cyclists, while also preserving as much wildlife habitat as possible.

Pedestrians and Cyclists

Walking, running and cycling paths will cross the freeway at multiple locations, including at the South Saskatchewan River. Paths would align with Meewasin Valley Authority's long-term trail network plans and Master Plan for the Swales.



Multi-use Trail

Wildlife Crossings

Two types of wildlife underpasses were considered; an open slope span bridge and vertical wall short span bridge



Open slope short span bridge



Vertical wall short span bridge.

Based on the topography of the area, wildlife underpasses have been selected to ensure the safe movement of wildlife species through the northeast and Small Swale areas.

Underpasses will be built so natural light is present in the crossing; this will require space between the freeway's eastbound and westbound lanes so that crossings remain well lit and are attractive to wildlife species.

The resulting proposed design includes an open slope short span bridge.

Fencing

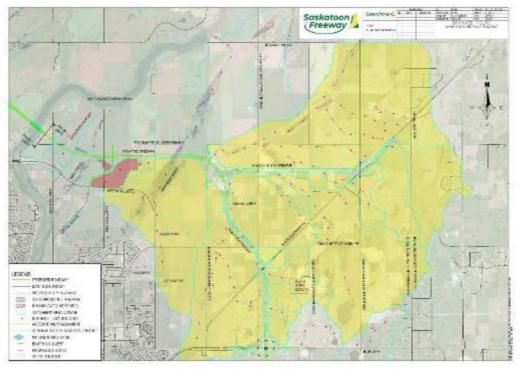
Fencing will be used to direct wildlife to these safe crossing locations.



Drainage Design

The design team modelled existing drainage patterns as a component of the functional planning study. Drainage patterns were taken into account in the preliminary designs of the preferred concept.

- The drainage design ensures that flows through environmentally sensitive areas are preserved and don't result in changes to the overall function of these areas (i.e. the flow into these areas is not cut off)
- Drainage designs also minimize the risk of flood of the roadway and reduce flooding of adjacent lands during extreme weather events (e.g. high precipitation)
- The drainage design passes existing flow without diverting it from it's natural path.



Two types of drainage structures were considered to maintain water movement across the freeway: a causeway and multiple large diameter culverts.





Causeway

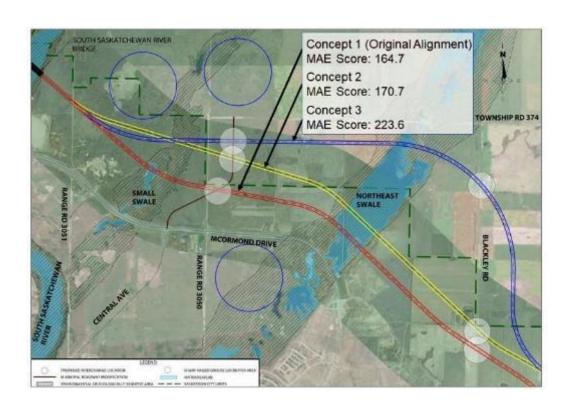
Multiple large diameter culverts

The resulting proposed design includes multiple large diameter pipes for the Northeast and Small Swale crossings.

Preferred Route

The preferred route was selected based on feedback received during a workshop which included environmental and technical experts and stakeholders. The workshop focused on evaluating Northeast and Small Swales concepts for the Saskatoon Freeway that resulted in the least environmental impact.

A Multiple Account Evaluation (MAE) used for evaluation of three separate alignments. The blue route received the greatest score from the MAE and was chosen as the preferred route, as shown in the map on the right.





This alignment has many advantages

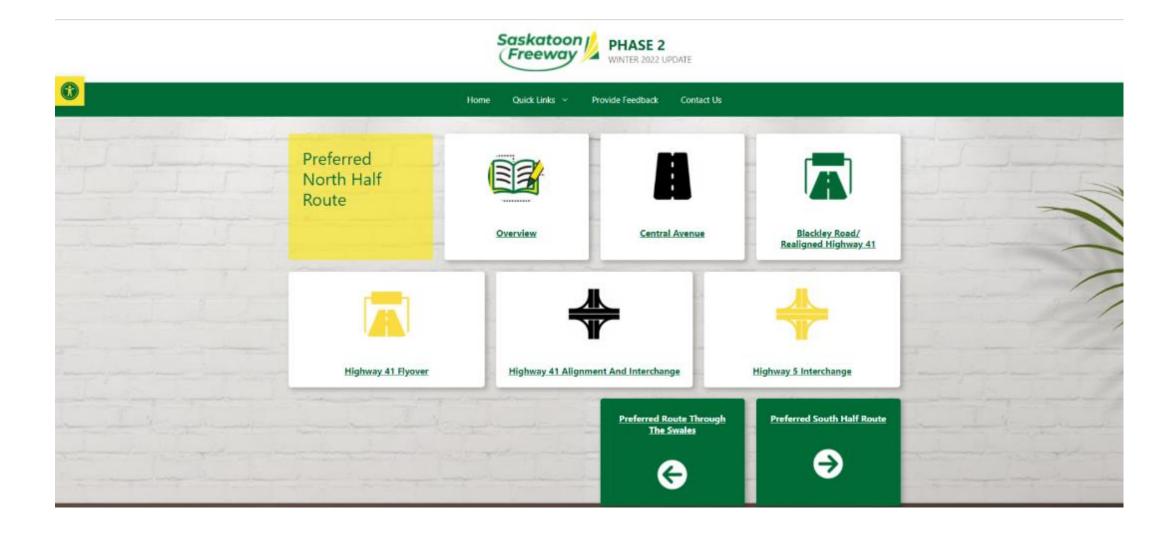
- Minimizes open water crossing.
- Crosses the Small Swale in a previously disturbed area.
- · Reduces disturbance in the Northeast Swale.
- Results in a narrower crossing of the Small Swale.
- Provides ample buffer from the Aspen Ridge neighbourhood.
- Leaves a larger habitat area between McOrmond Drive and the freeway, which is better for wildlife.
- Crosses primarily cultivated lands.
- Avoids a site where common nighthawks were seen.

Two underpass-style crossings will allow wildlife to move safely around the freeway. Multiple culverts will provide safe crossing areas for small mammals. Fencing will direct wildlife to these locations.

Walking, running and cycling paths will cross the freeway at multiple locations, including at the South Saskatchewan River. Paths would align with Meewasin Valley Authority's long-term plans.

Because this area has not been extensively studied, we completed additional work in 2021 to identify potential habitat that may need to be protected.

Proposed North Half Route – PHASE 2 (saskatoonfreewayvoh.ca)



Overview

The north half of the Saskatoon Freeway runs from the South Saskatchewan River to Highway 5.

All preferred concepts reflect public input, as well as the <u>Multiple Account</u>
<u>Evaluation process</u> completed by the design team and other key stakeholders.



Legend

- Intersection
- Roundabout
- Bridge
- Freeway Roadway / Ramp
- SaskPower High Voltage Corridor
- Proposed Property Line
- Cul-de-sac
- Municipal Roadway / Future Ramp

Central Avenue

The preferred concept relies on a diamond interchange and reflects the fact that Central Avenue will be a primary access/crossing to accommodate increased development north of the freeway. This also reduces the impact on the Small Swales.



https://vimeo.com/648993683

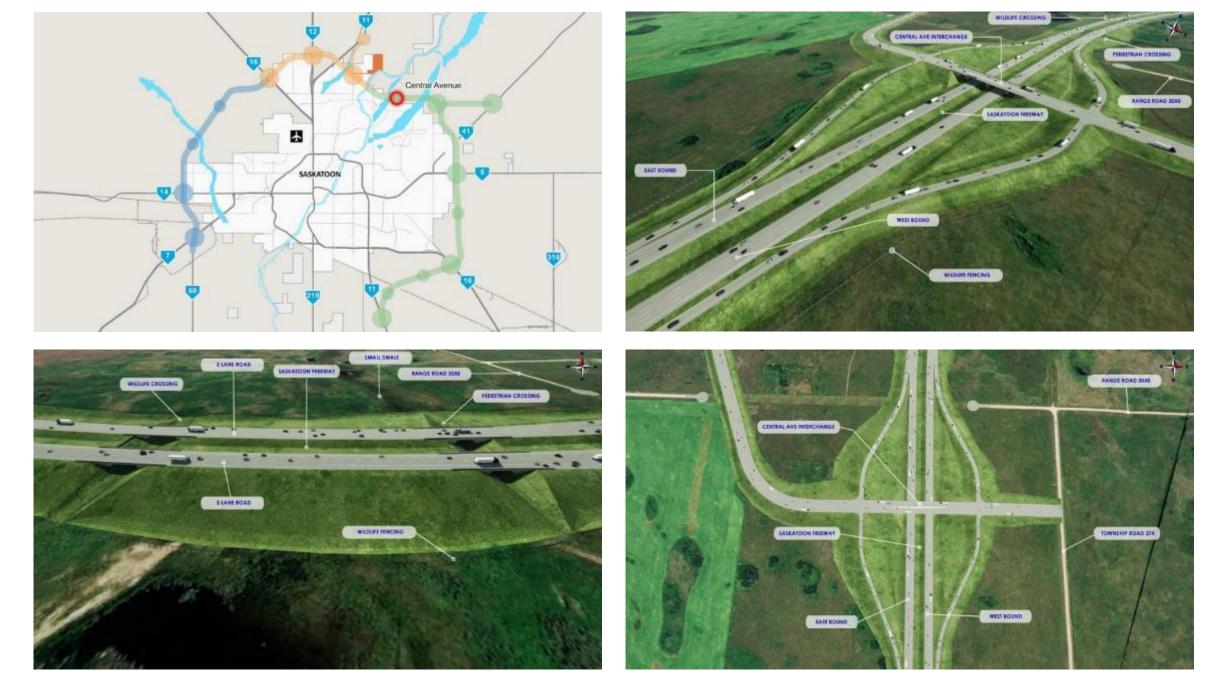
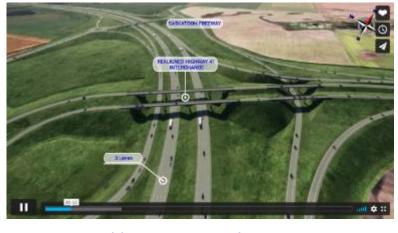


Image Carousel (clock-wise)

Blackley Road/Realigned Highway 41

The preferred option combines Blackley Road and the realigned Highway 41 into a single interchange that allows traffic movement in all directions. This allows more free-flowing traffic and uses traffic signals only on lower-speed roads.



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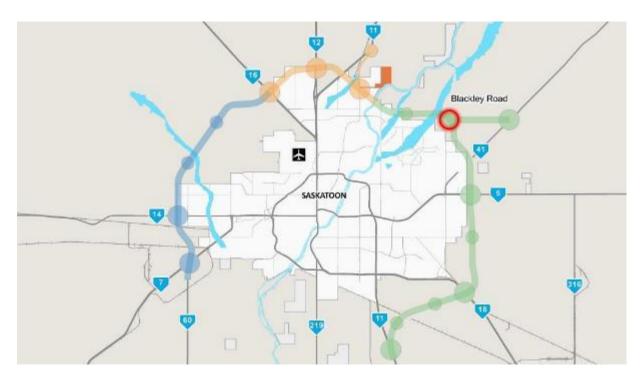




Image Carousel









Image Carousel

Highway 41 Flyover

This interchange was not included in the concepts presented in the winter 2021 online information session, but was developed in response to the realignment of Highway 41. This interchange ensures continued free flow into and from Saskatoon, as well as free flow to and from the freeway using a realigned route.





https://vimeo.com/656076504



Image Carousel

Highway 41 alignment and interchange

A configuration that relocates Highway 41 north of its current position is the preferred option, primarily because it meets Ministry standards for spacing between interchanges and allows better traffic flows.



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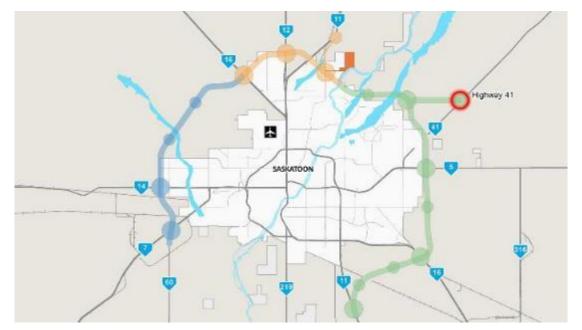






Image Carousel (clock-wise)

Highway 5 Interchange

The preferred concept allows traffic movement in all directions between Highway 5 and the Saskatoon Freeway and uses higher speed ramps. This allows for the potential twinning of Highway 5.



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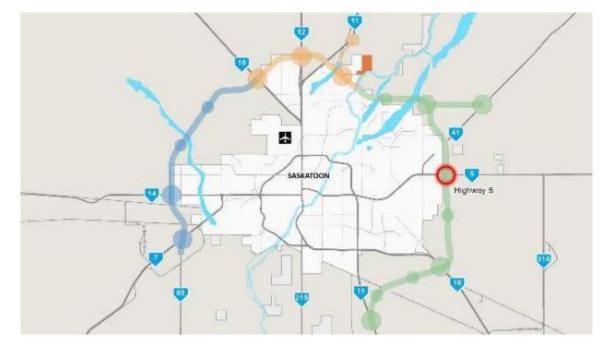
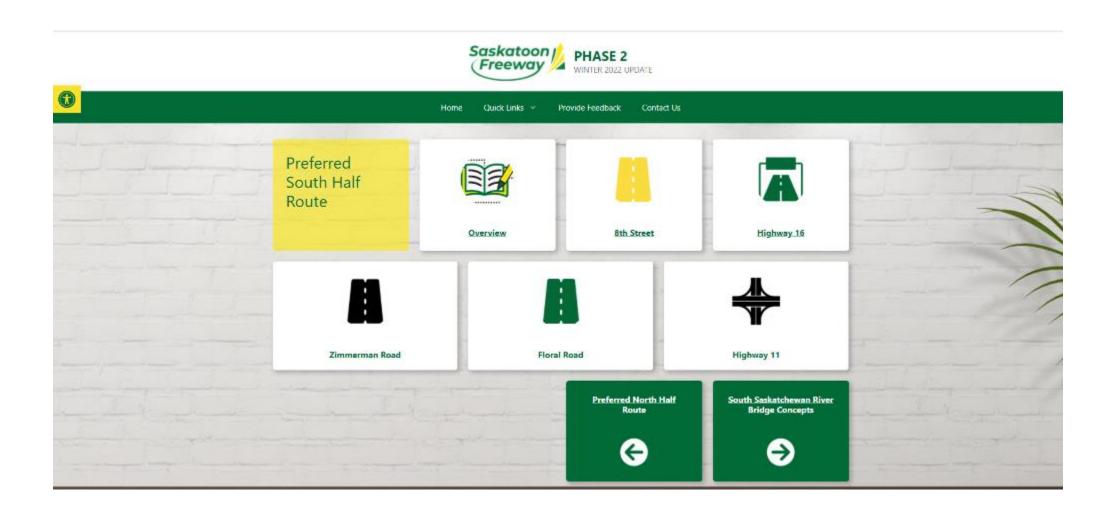






Image Carousel (clock-wise)

Proposed South Half Route – PHASE 2 (saskatoonfreewayvoh.ca)



Overview

The north half of the Saskatoon Freeway runs from the South Saskatchewan River to Highway 5.

All preferred concepts reflect public input, as well as the <u>Multiple Account</u>
<u>Evaluation process</u> completed by the design team and other key stakeholders.



Legend

- Intersection
- Roundabout
- Bridge
- Freeway Roadway / Ramp
- SaskPower High Voltage Corridor
- Proposed Property Line
- Cul-de-sac
- Municipal Roadway / Future Ramp

8th Street

The preferred configuration includes a diamond interchange that accommodates higher traffic volumes. It minimizes impact on existing developments and wetlands.



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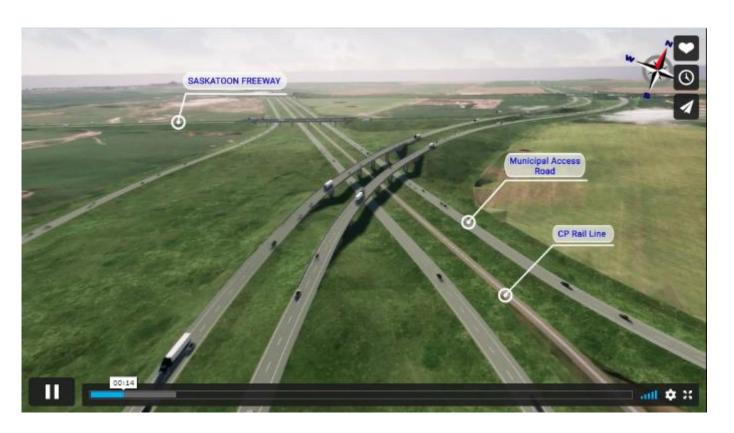
Image Carousel (clock-wise)

Highway 16

Two options were presented at the winter 2021 online information session; based on feedback, a third concept was developed as the preferred option.

This interchange minimizes the footprint while reducing the need for higher embankment bridges. Highway 16 has been realigned so it curves over the tracks. Adjacent wetlands are avoided.

This preferred option does not provide direct access to the Saskatoon Freeway from Patience Lake Road, Range Road 3044, or Range Road 3045.



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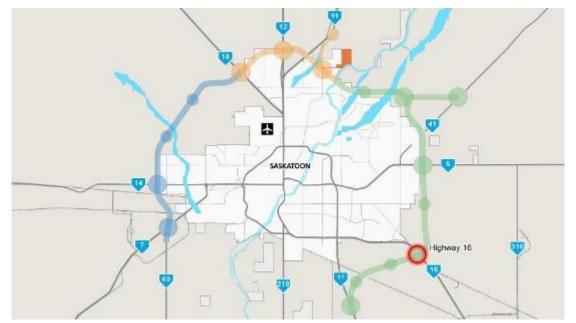






Image Carousel (clock-wise)



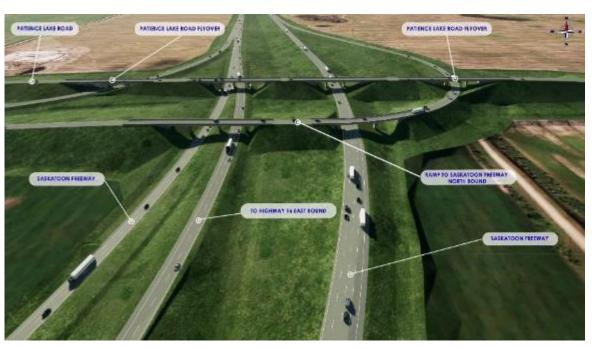






Image Carousel

Zimmerman Road

The preferred configuration is a simple diamond interchange that allows traffic movement in all directions.



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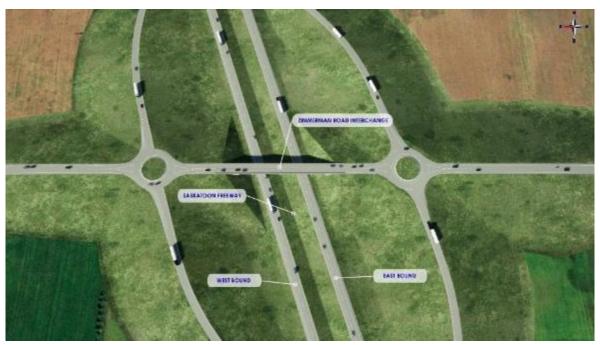


Image Carousel (clock-wise)

Floral Road

The preferred option is a partial interchange at Floral Road that will support traffic movement to and from the Grasswood area.



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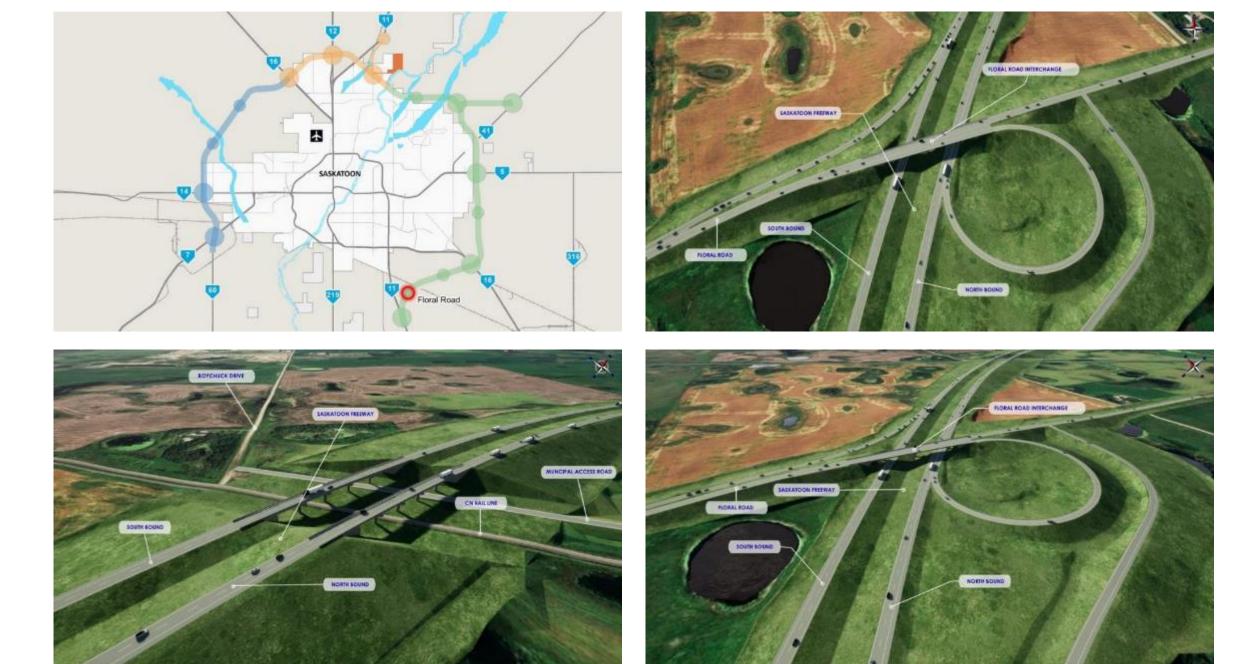


Image Carousel (clock-wise)

Highway 11

The preferred configuration has northbound traffic routed directly to the Saskatoon Freeway.

Traffic continuing into Saskatoon will exit to the right. Southbound traffic from Saskatoon Freeway will stay at ground level and connect to Highway 11.



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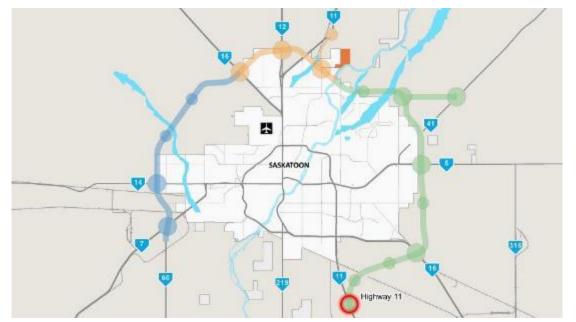
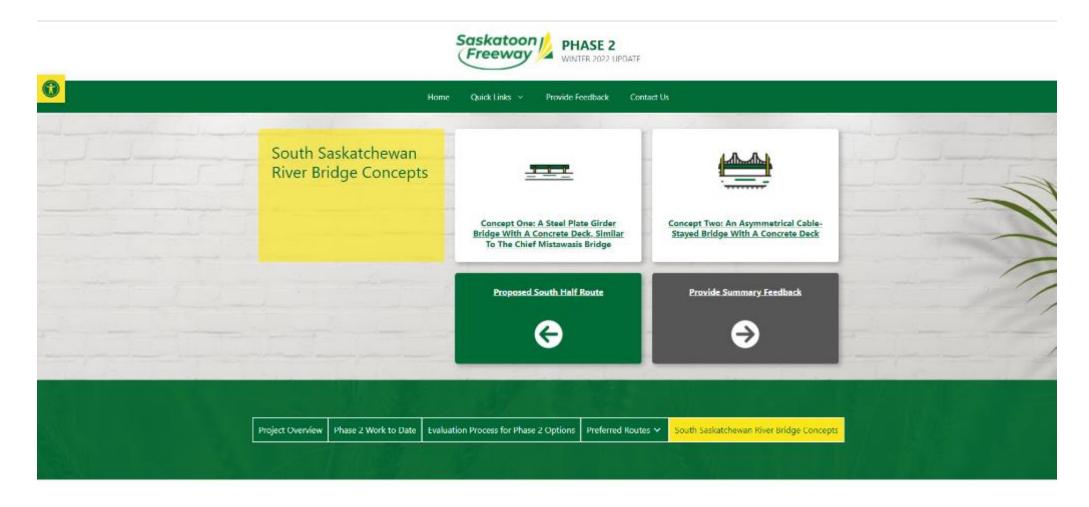






Image Carousel (clock-wise)

Proposed Route through the Swales – PHASE 2 (saskatoonfreewayvoh.ca)



Preferred Configurations

Public feedback and direction from the Ministry of Highways led to two bridge concepts:

Concept One: A steel plate girder bridge with a concrete deck, similar to the Chief Mistawasis Bridge





Concept Two: A steel plate girder bridge with a concrete deck, similar to the Chief Mistawasis Bridge





You can find details **here** on the evaluation process that led to two bridge concepts.

The functional planning study is carrying forward both bridge types. A final decision on the bridge concept will be made through a competitive bidding process once a decision has been made to proceed with construction of the Saskatoon Freeway.

Tell us what you think

(survey embedded)

Provide Feedback – PHASE 2 (saskatoonfreewayvoh.ca)





Engaging with a wide range of stakeholders - and answering their questions - has been a big part of our work since we started the functional study in 2019.

During the engagement period, February 14-27, 2022, opportunities to provide feedback about specific interchange locations along the Saskatoon Freeway were incorporated in the preferred route pages.

Thank you to everyone who took the time to provide feedback. Your input is important!

