Introduction

• The City of Saskatoon is planning future arterial road and expressway connections to the provincial highway system.
• Study will review if road connections should be interchanges or at-grade intersections.
• The future arterial road and expressway transportation network is a key component of Saskatoon’s Transportation Strategy

Goals

• Improve roadway access and connectivity to landowners and businesses in the area.
• Transportation network is consistent with Official Community Plan and Saskatoon Freeway alignment.
• Traffic flow throughout the city is safe and optimal.
• Public funds are used efficiently and effectively in alignment with City expectations.
North Saskatoon Network Planning Study: Process

- Confirm Future Land Use Plan
- Develop Transportation Network Scenarios
- Develop Evaluation Criteria
- Identify Preferred Scenario
- Identify Short-Term Improvements

Where we are in the process
# North Saskatoon Network Planning Study: Evaluation Criteria

## Category of Criteria

<table>
<thead>
<tr>
<th>Category of Criteria</th>
<th>Criteria</th>
<th>Measures</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacts to landowners, businesses and road users</td>
<td>• Safety</td>
<td>Identify high volume vehicle conflict points at each intersection. Can these be mitigated within option? Identify any other specific collision exposure points added by option.</td>
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<td></td>
<td>• Impacts to adjacent landowners and businesses</td>
<td>Does requirement affect existing development? Does requirement limit options for future development (leave undevelopable parcel shapes or sizes)?</td>
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<tr>
<td></td>
<td>• Impacts on active transportation and public transit connectivity</td>
<td>Are required pedestrian crossing locations protected (traffic signal, grade separated crossing)? Are Multi-Use Pathways, sidewalks, transit stop waiting space and amenities (shelters) available/feasible within option?</td>
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<tr>
<td>Network Wide Mobility</td>
<td>• Accessibility to/from land</td>
<td>Increase travel distance for parcels. Routes important to access that will have AM or PM peak capacity deficiencies expected with future conditions.</td>
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<td></td>
<td>• Intersection performance</td>
<td>Overall intersection Level of Service (A to F). Individual movement volume to capacity ratio, delay/Level of Service and queue length (within acceptable range, near capacity, over acceptable range).</td>
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<td></td>
<td>• Travel time along Idylwyld Drive</td>
<td>Travel time, including accounting for intersection delays: • Southbound during AM peak hour • Northbound during PM peak hour</td>
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<tr>
<td>Cost</td>
<td>• Construction cost</td>
<td>Estimated capital cost</td>
<td></td>
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<td></td>
<td>• Land acquisition</td>
<td>Area ownership (private vs. public)</td>
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Consists of:
- Five interchanges
- One flyover
- One access closure

Shortest travel time along Idylwyld Drive

Some peak hour delays exist but are partially mitigated

Highest cost to construct

Spacing between the Saskatoon Freeway and two interchanges on the New Road would require modified interchanges with collector-distributor roadways (cost not captured in this study)
- Consists of:
  - Eight signalized intersections
  - Removal of Highway 12 flyover
  - Additional east-west roadway
- Lowest capital cost, impacts to adjacent landowners and businesses
- Highest accessibility to/from land
- Peak hour delays exist at:
  - Idylwyld Drive & Marquis Drive
  - Highway 16 & Marquis Drive
  - Highway 12 & New Road
HYBRID SCENARIO

- Consists of:
  - Two interchanges
  - Six signalized intersections
  - Removal of Highway 12 flyover
  - Additional east-west roadway
- Highest accessibility to/from land
- Some peak hour delays exist but are partially mitigated
## North Saskatoon Network Planning Study: Evaluation Matrix

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<thead>
<tr>
<th>Category of Criteria</th>
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<th>Interchange Scenario</th>
<th>Intersection Scenario</th>
<th>Hybrid Scenario</th>
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North Saskatoon Network Planning Study: Next Steps

• Gather stakeholder feedback
• Identify short-term improvements
  – Short-term improvements will focus on existing intersections (i.e. Idylwyld Drive & Marquis Drive)
  – New infrastructure (planned roads and new intersections) needs will be triggered by land development in the area and the construction of the Saskatoon Freeway
• Report to council

➢ This becomes our transportation network plan for the area