



**Glenn Highway  
& Hiland Road**  
Interchange Improvements



# Welcome to the Glenn Highway & Hiland Road Interchange

**Open House No. 1**

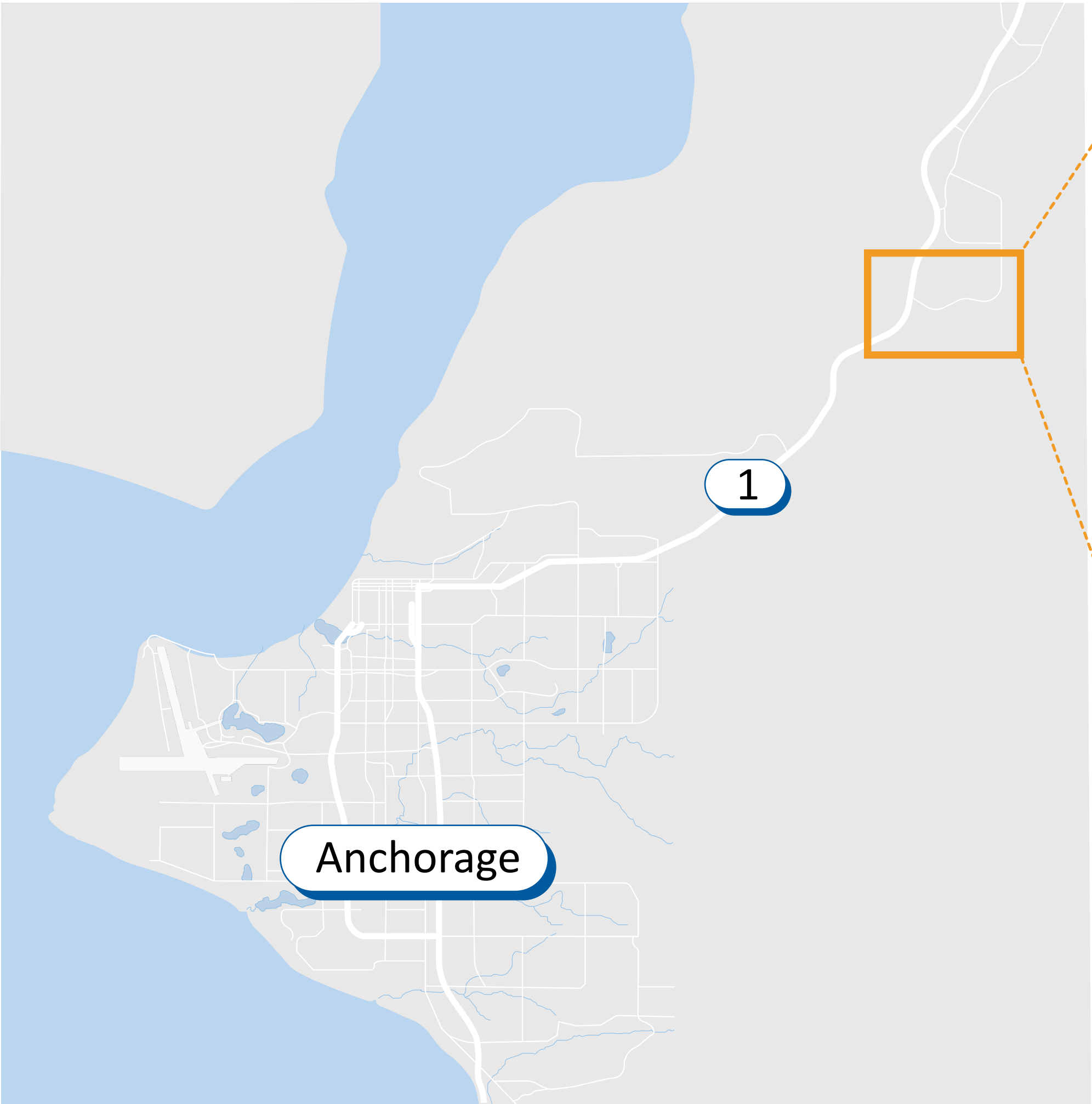
January 23, 2025



# Project Area



**Glenn Highway  
& Hiland Road**  
Interchange Improvements





# Project Purpose & Objectives



**Glenn Highway  
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Interchange Improvements



## Purpose

- Improve Operations
- Improve Capacity
- Improve Safety for Motorized and Non-Motorized Users



## Objectives

- Queuing Issues Mitigation
- Enhance Highway Merging
- Bridge Preservation



# Existing Conditions - Traffic



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## Southbound On-ramp Merge:

- Tapered merge not current design practice
- Operates near capacity during a.m. peak
- Number of vehicles entering Glenn Highway constrained by upstream conditions:
  - Single entrance lane
  - Tight turn





# Existing Conditions - Traffic



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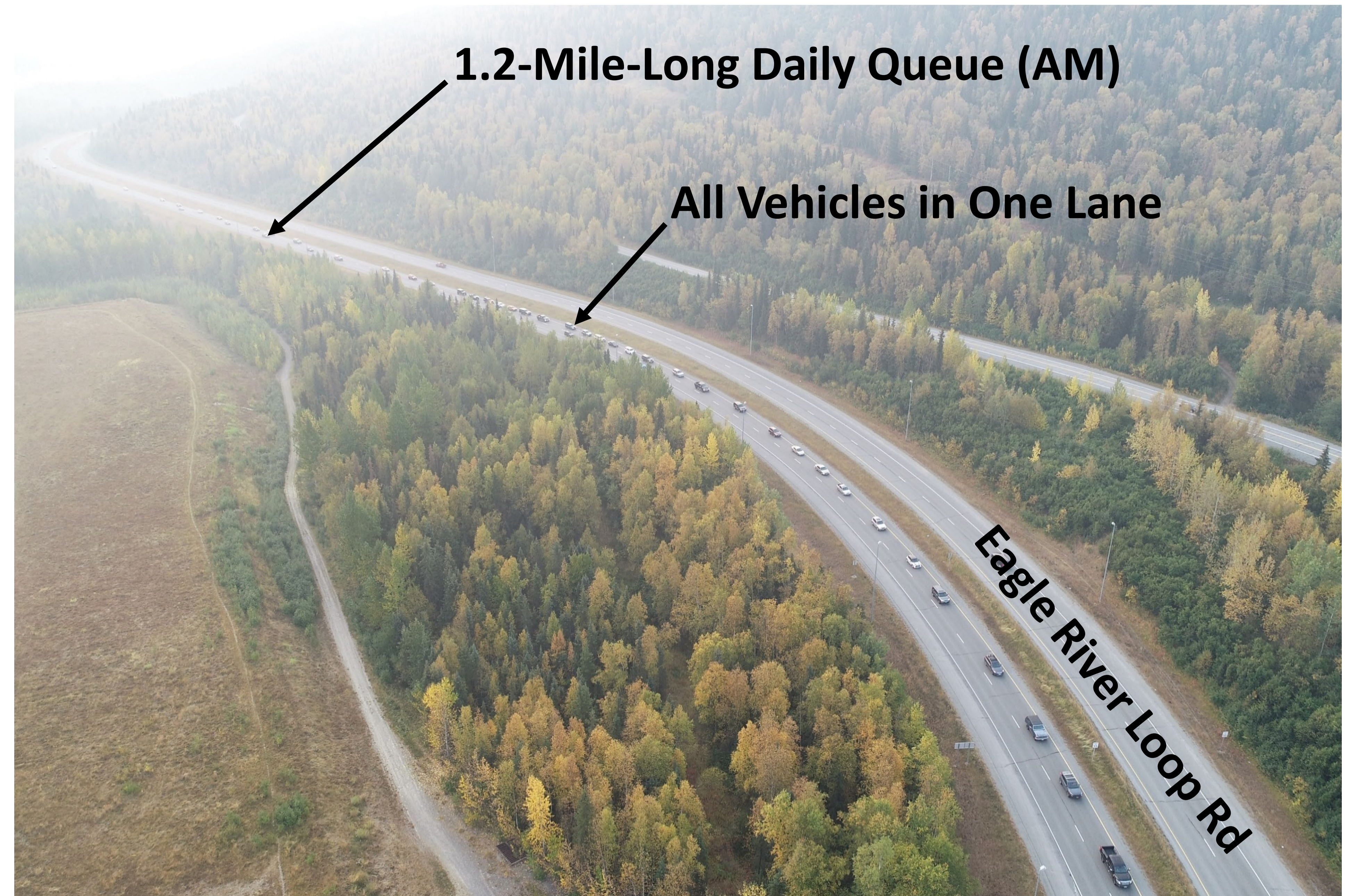
## Westbound lane imbalance at signal causes:

- Long westbound left-turn morning queues can be seen as far as Briggs Bridge (1.9 miles)



## Rolling queue entering southbound on-ramp causes:

- Insufficient gaps in the a.m. peak at ramp terminal intersections and VFW Road





# No Build 2050



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Forecast growth is less than 1% annually to 2050





# Alternative Constraints



## Glenn Highway & Hiland Road Interchange Improvements



The existing bridge must be retained & integrated into proposed solutions



Non-motorized and transit facilities must be maintained or enhanced



Solutions must address each of the traffic operational issues during the morning peak

- Balanced lane volumes on Eagle River Loop Road
- Increase capacity for westbound to southbound vehicles
- Increase southbound entrance ramp capacity





# SB Ramp – Double Left

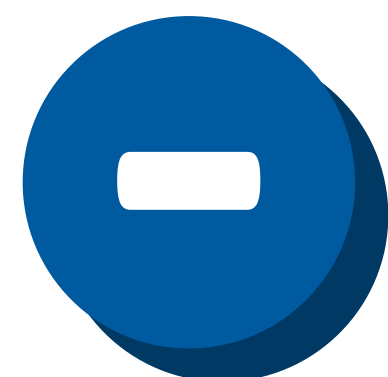


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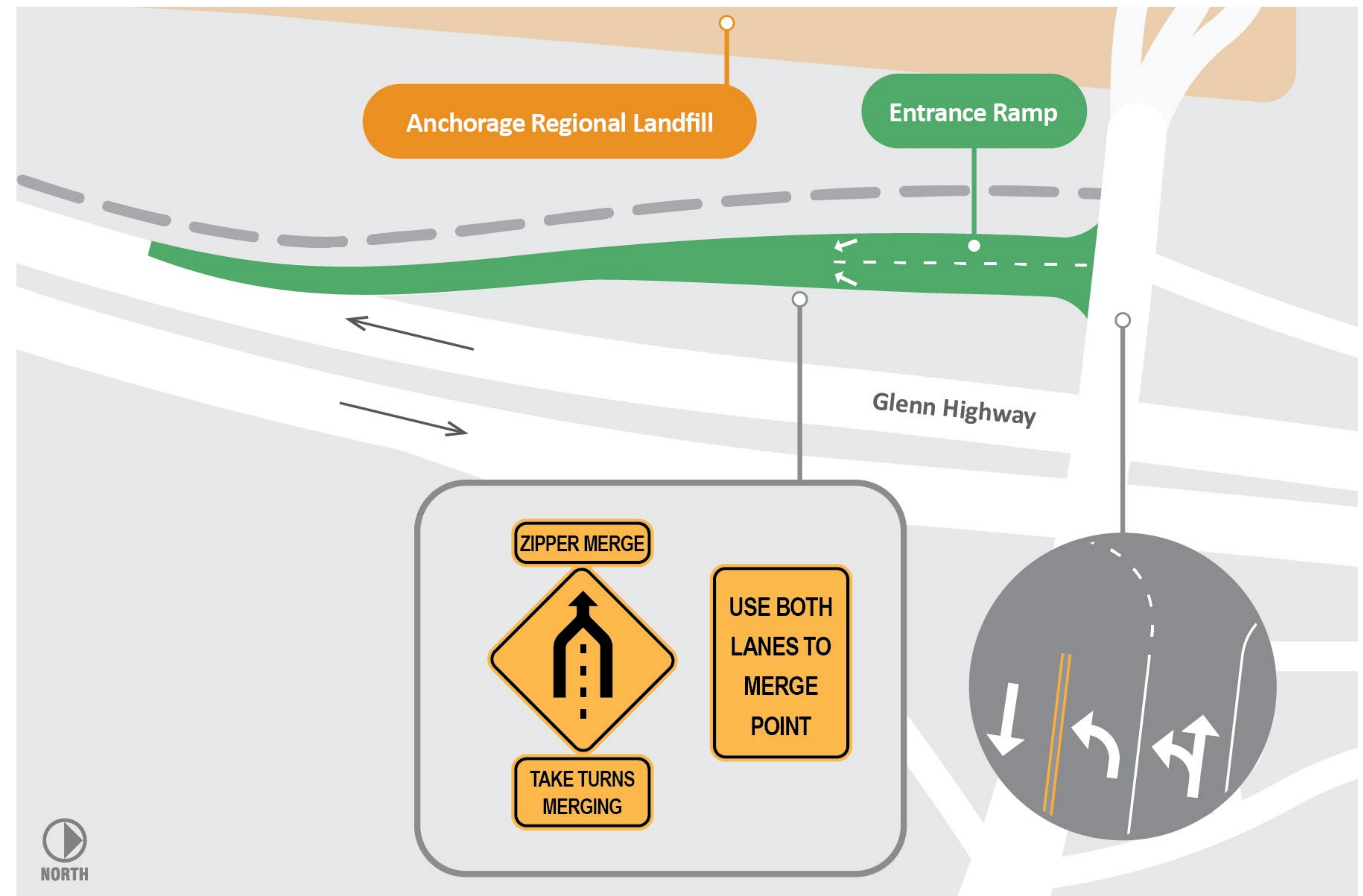
## Positive

- Low impacts; ROW, Utility, Schedule
- Low cost



## Negatives

- Does not fix operational deficiencies at other intersections
- Not favorable to truck operations





# SB Ramp – Dual Loop Ramp

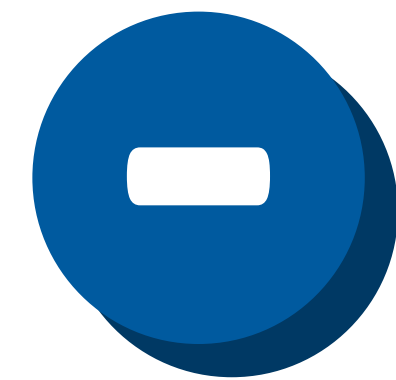


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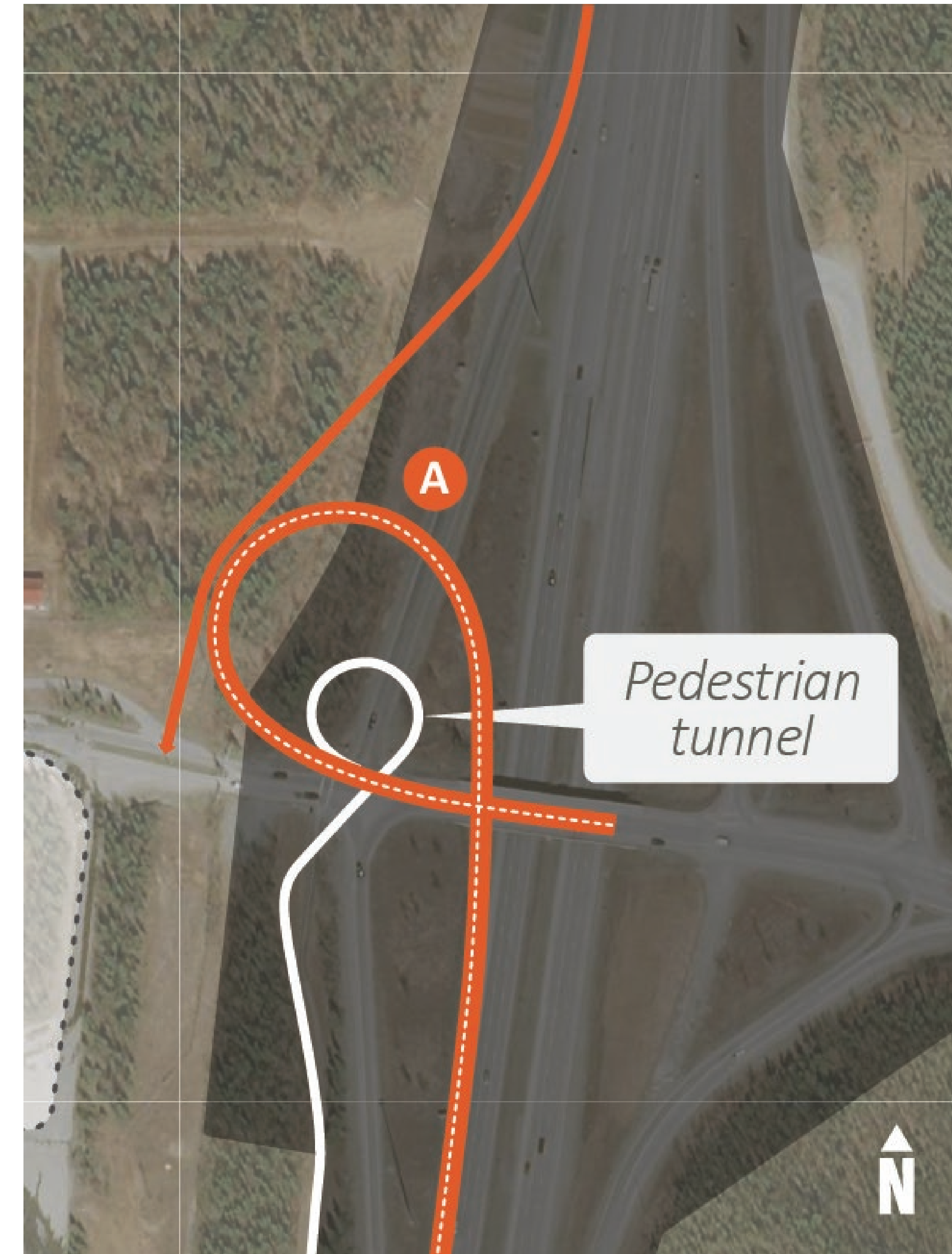
## Positives

- ERLR traffic heading to Anchorage has no conflicts
- Grade separated pedestrian tunnel



## Negatives

- Operations and safety for users on east side of interchange are not improved
- Major utility relocations
- Multiple full and partial acquisitions from JBER and MOA
- Major schedule and budget impacts





# Divergabout



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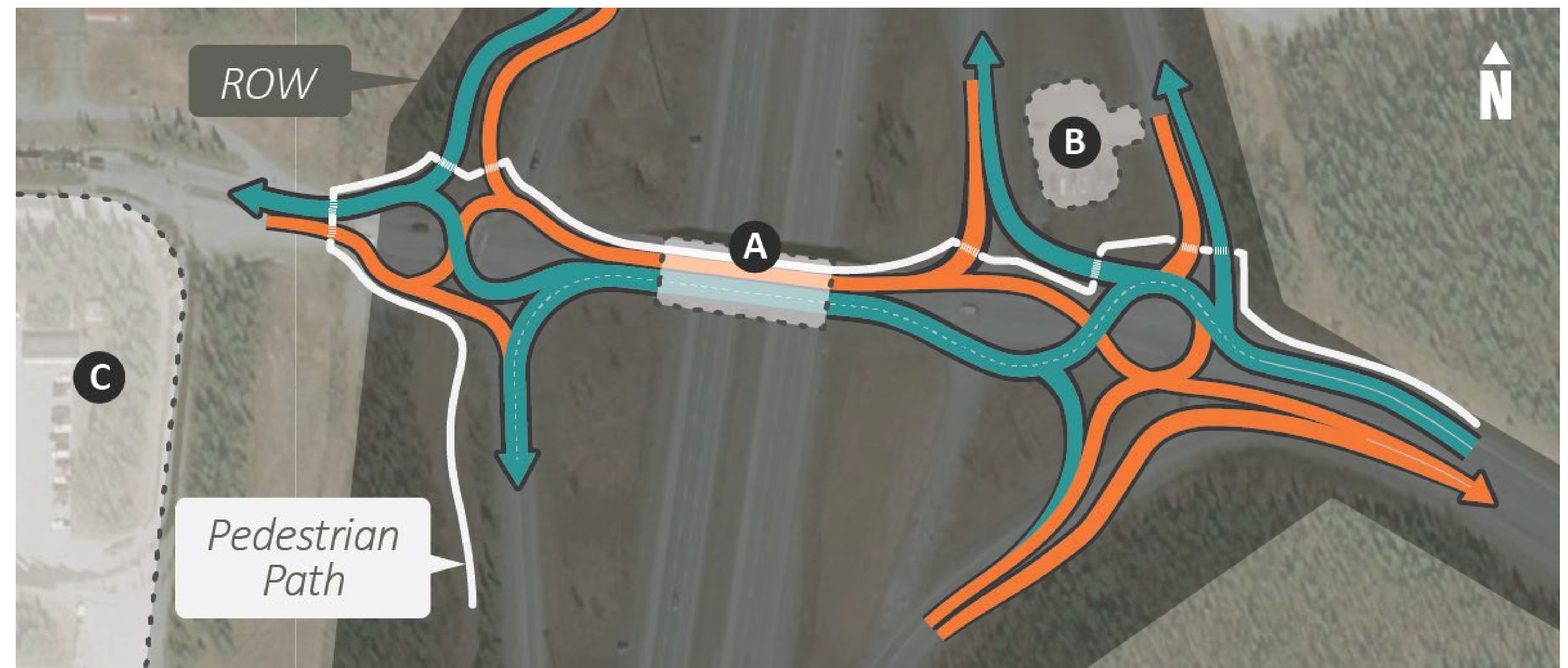
## Positives

- Improves interchange operations and performance
- Pedestrian facilities have refuges and single lane crossings.
- Reduces or eliminates high-cost utility impacts



## Negatives

- Small partial ROW impact at MOA Regional Landfill entrance
- First Diverging Diamond with Roundabout intersections in Alaska



→ Eastbound Traffic Flow  
← Westbound Traffic Flow

- A** Existing Bridge Remains
- B** Park & Ride
- C** Anchorage Regional Landfill



# Comparative Assessment



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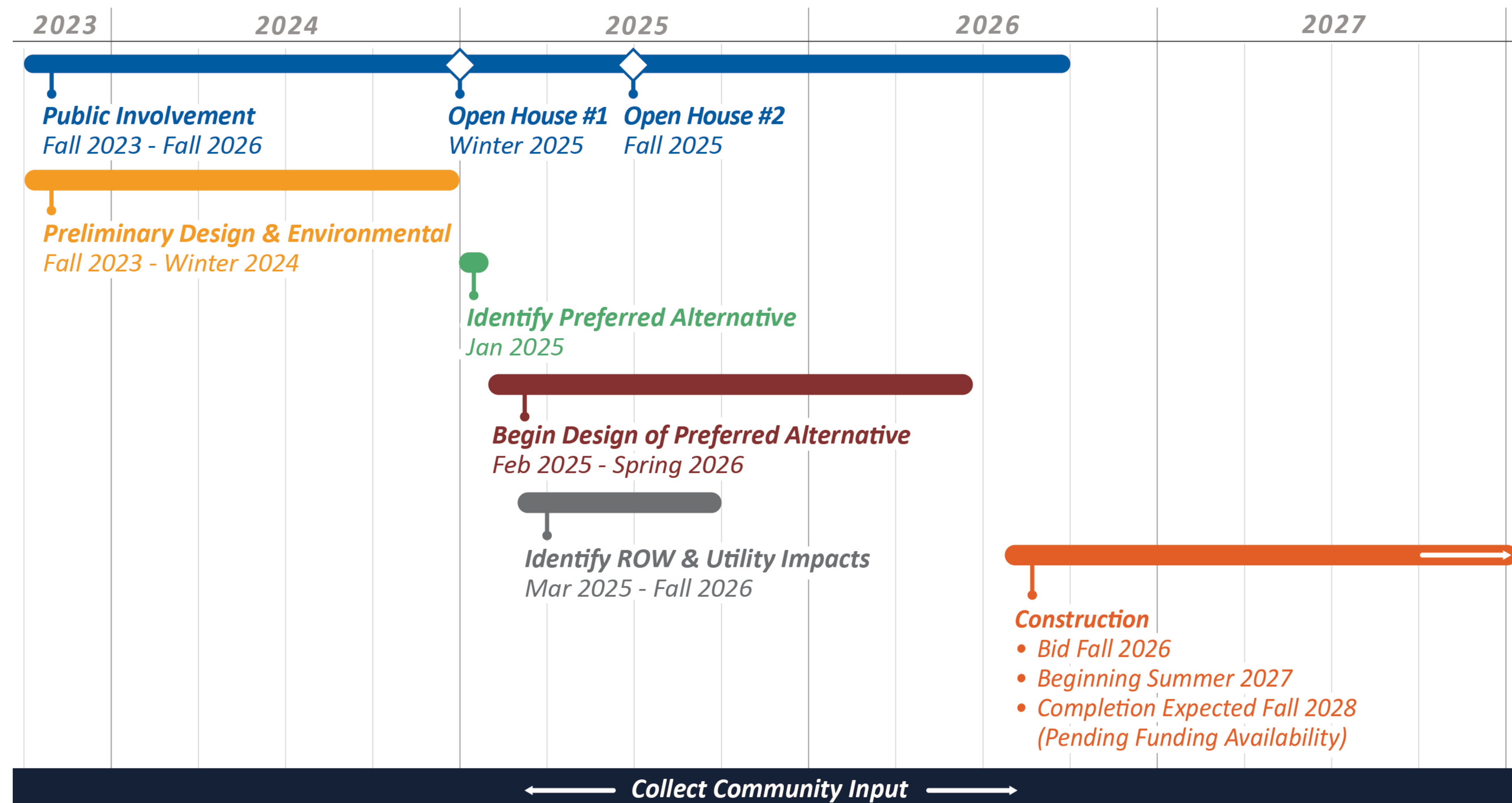
	No Build	Double Left	Loop Ramp	Divergabout
Operations & Capacity				
Lane Utilization	☹️	😊	😊	😊
West Terminal Intersection	☹️	☹️	😊	😊
East Terminal Intersection	☹️	☹️	☹️	😊
ERLR/Wolf Den Intersection	☹️	😐	😐	😐
Truck Operations	☹️	☹️	😊	😊
Safety Performance				
Motorized	😐	😐	😊	😊
Non-Motorized	😐	😐	😐	😊
Impacts				
ROW Impacts	😊	😊	☹️	😐
Utility Impacts	😊	😊	☹️	😊
Environmental Impacts	😊	😊	😊	😊
Schedule Impacts	😊	😊	☹️	😐
Capital Cost	😊	😊	☹️	😐



# Schedule and Next Steps



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# Project Contacts



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**Galen Jones, PE**  
Project Manager



**Kelly Kilpatrick, PE**  
Project Manager  
**Morgan McCammon**  
Public Involvement



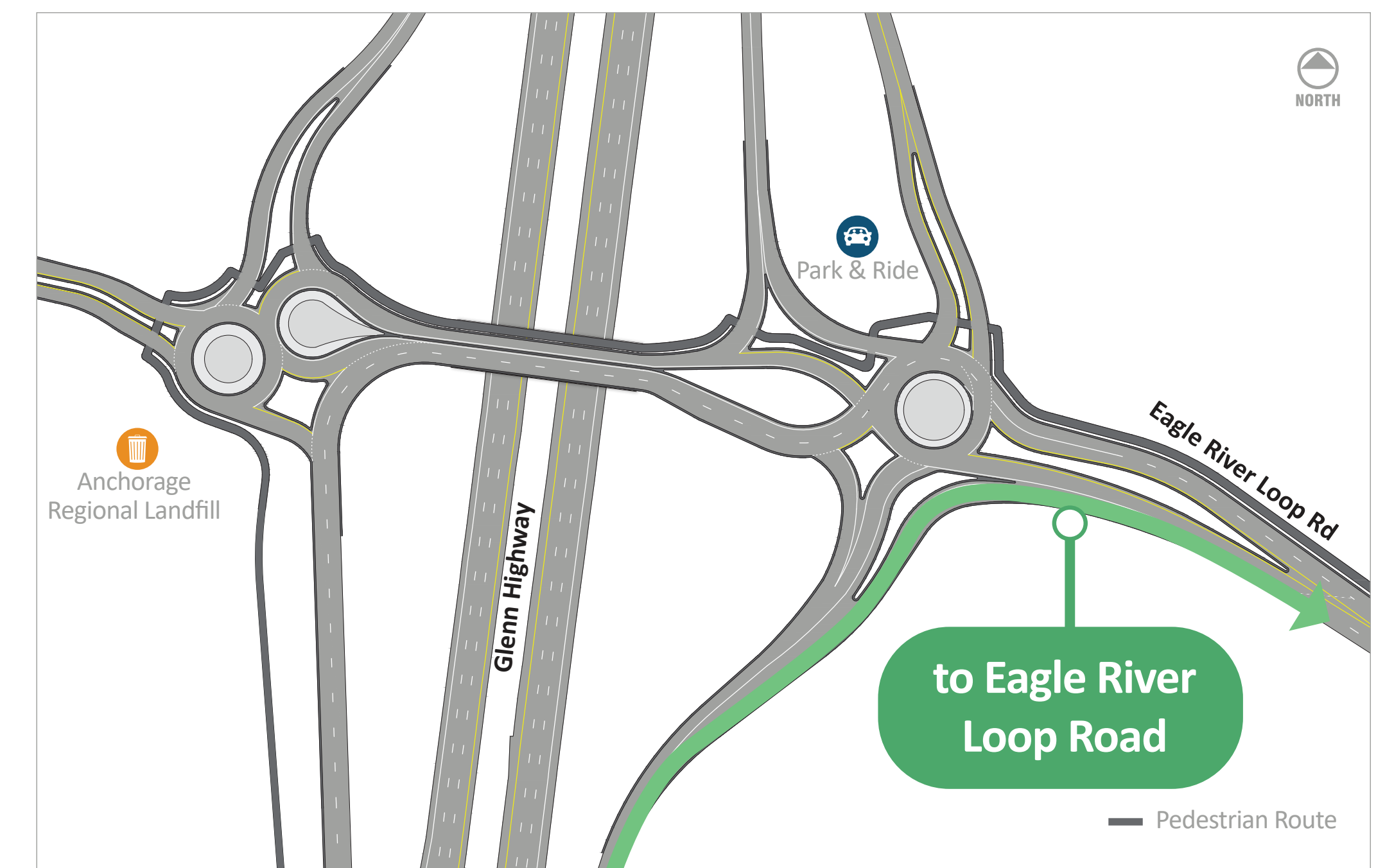
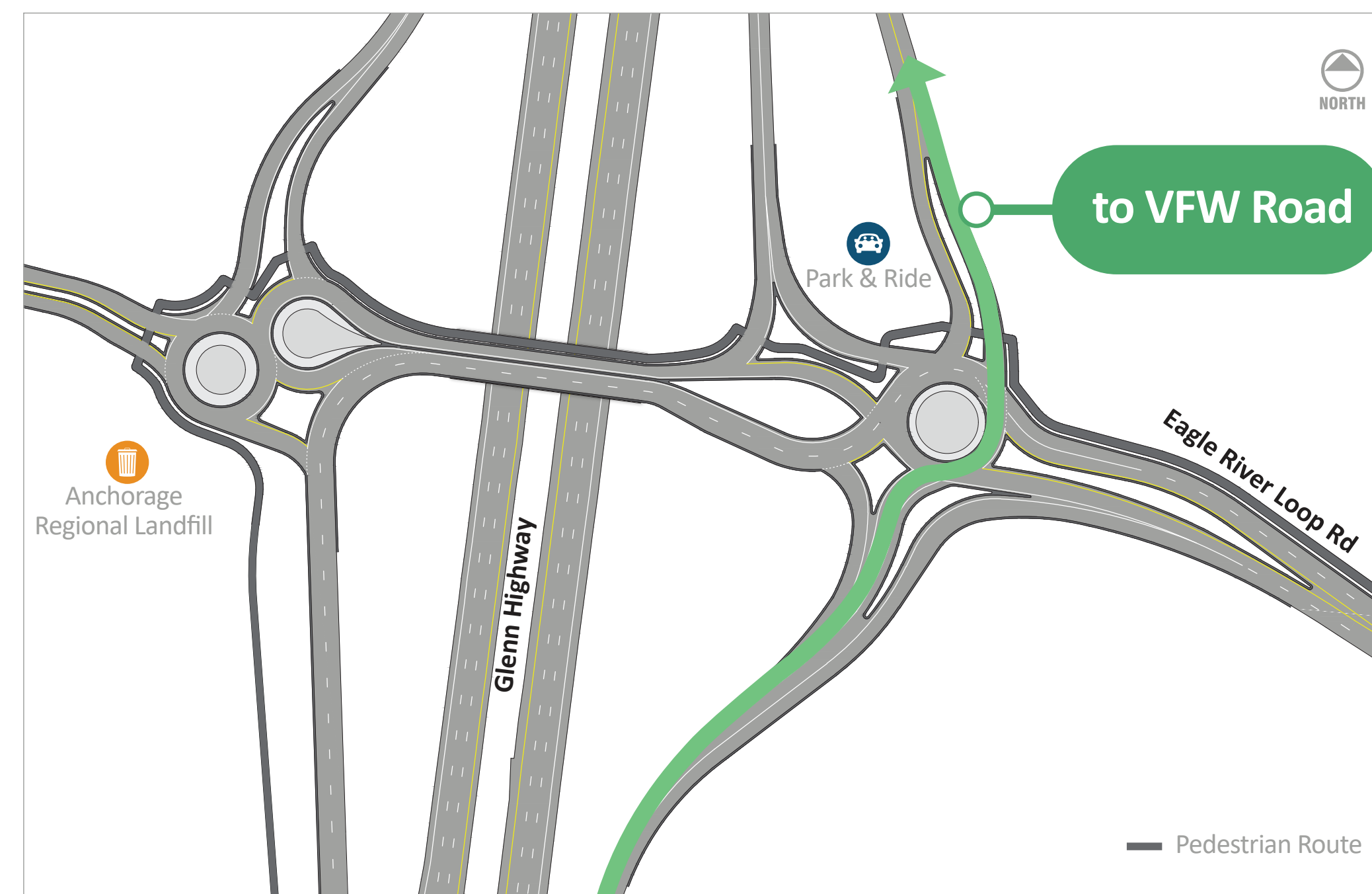
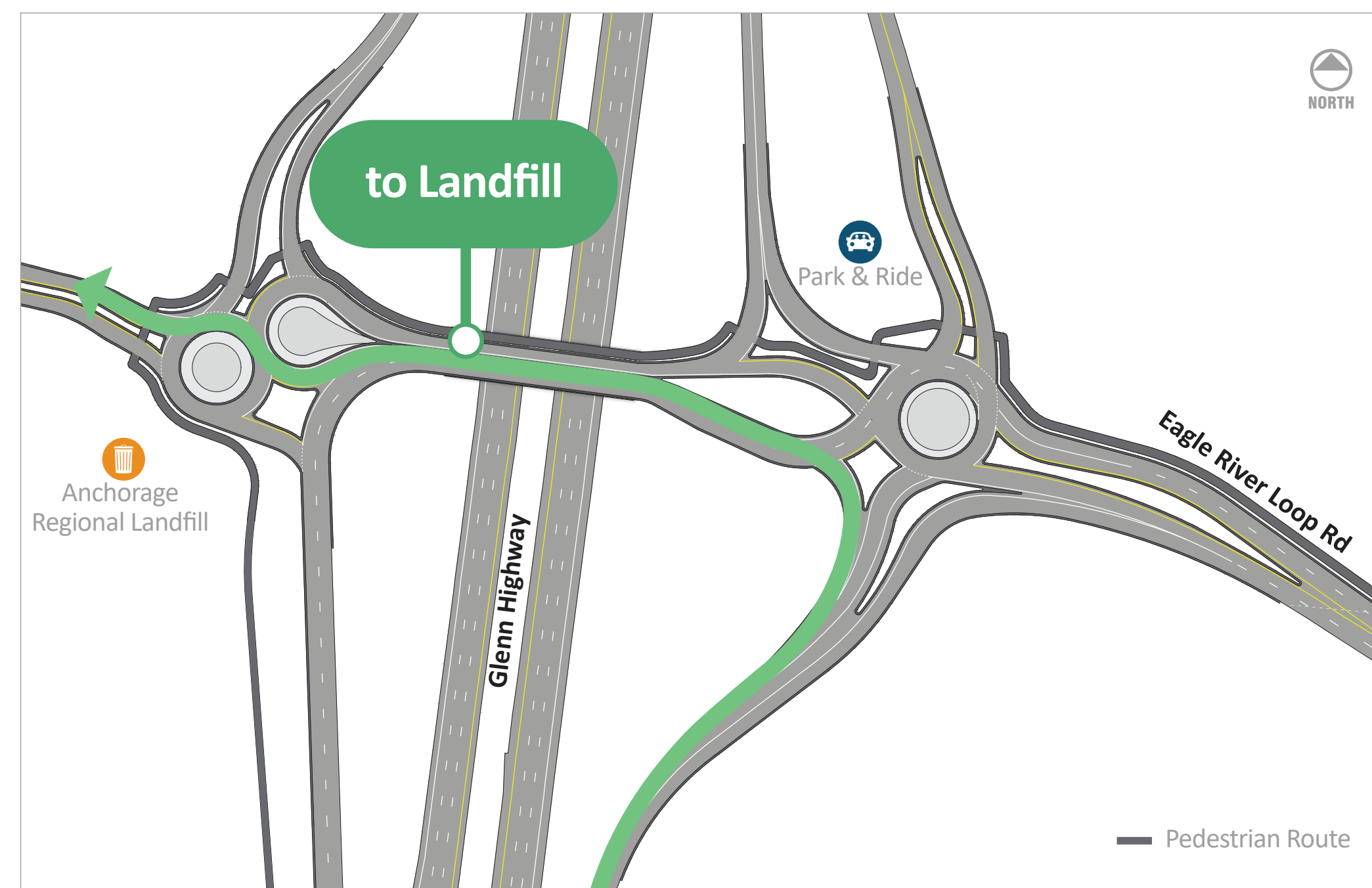
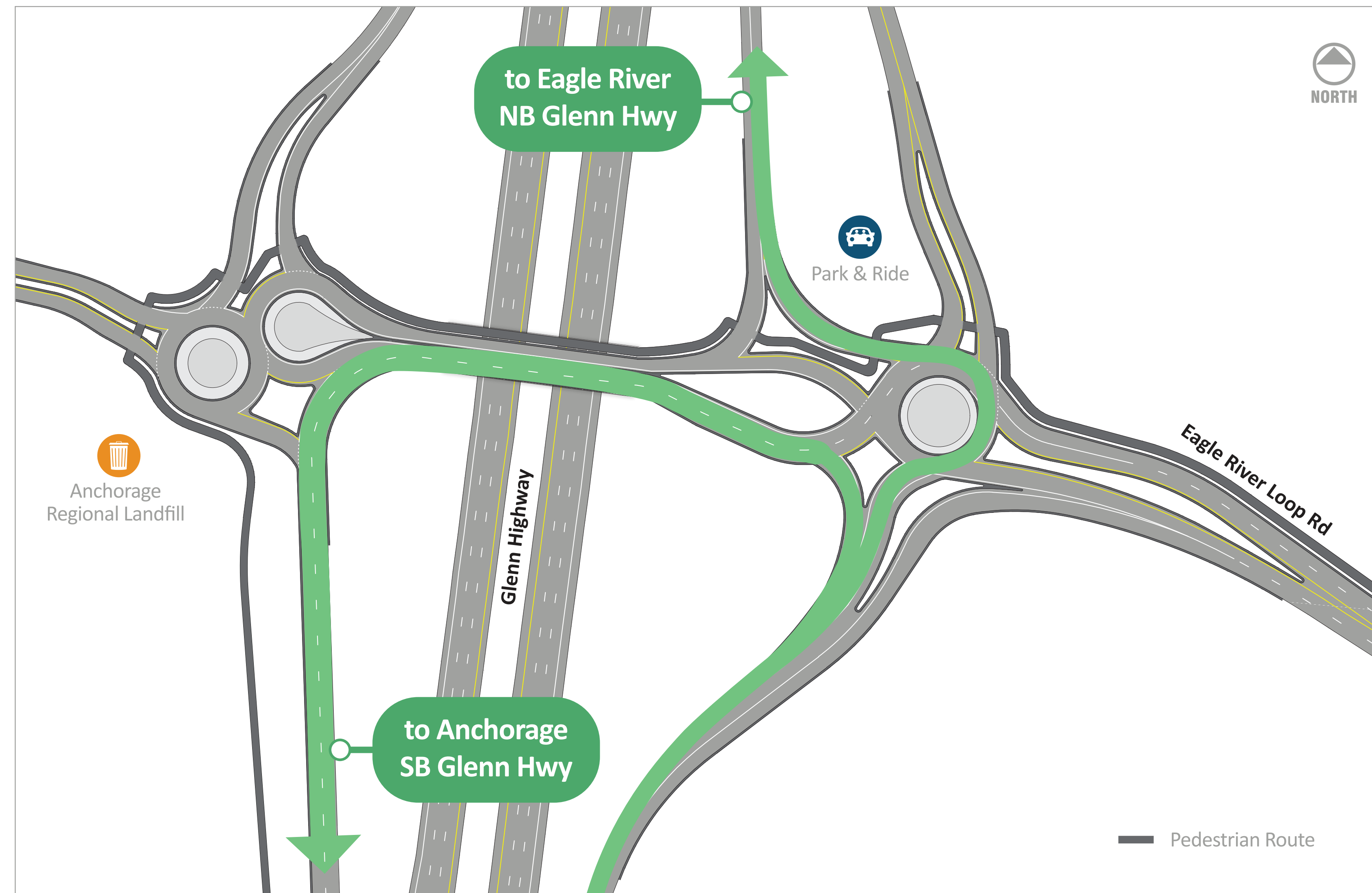
**Project Website:**  
[www.Glenn-Hiland.com](http://www.Glenn-Hiland.com)



**Project Email:**  
[Glenn-Hiland@dowl.com](mailto:Glenn-Hiland@dowl.com)

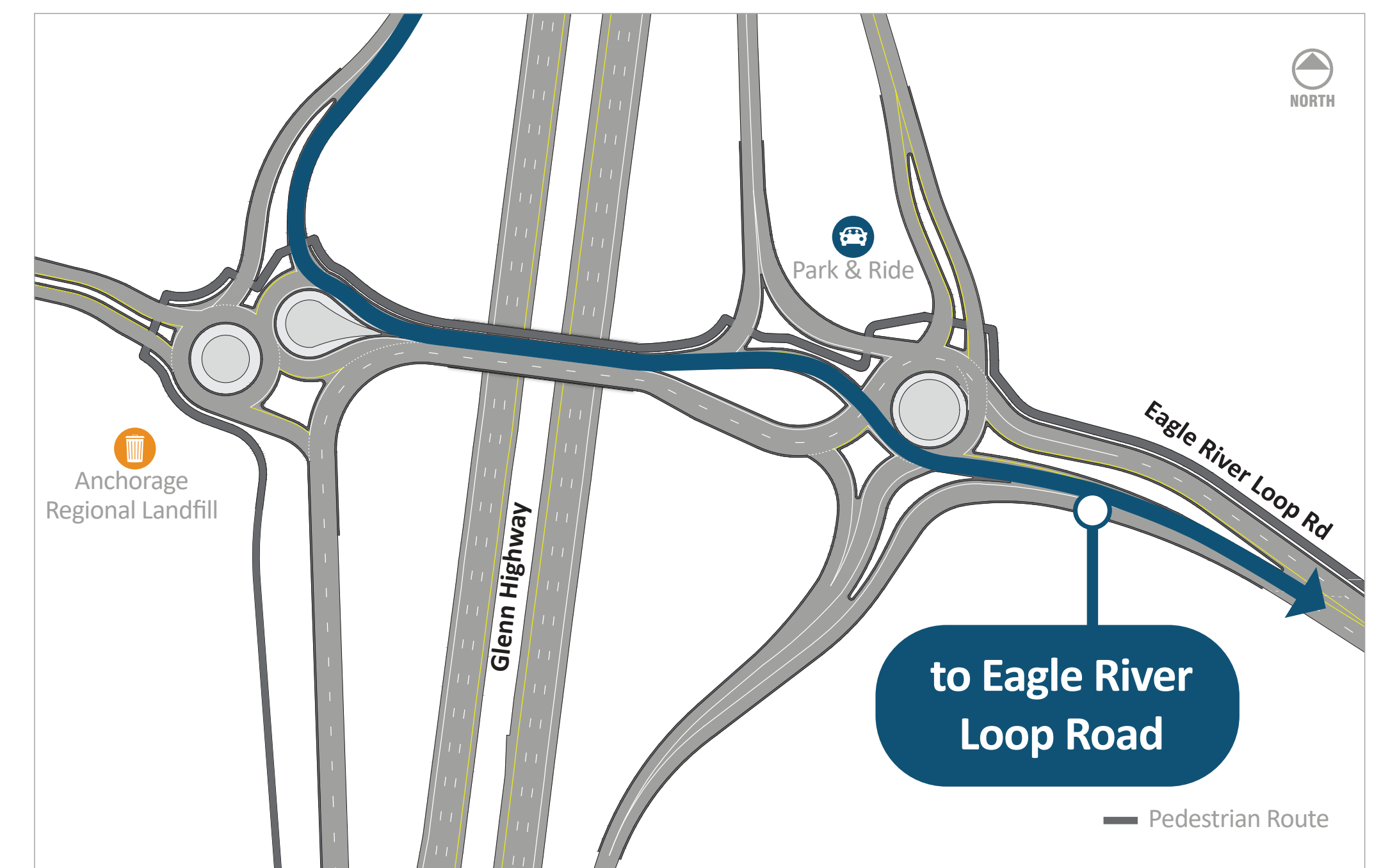
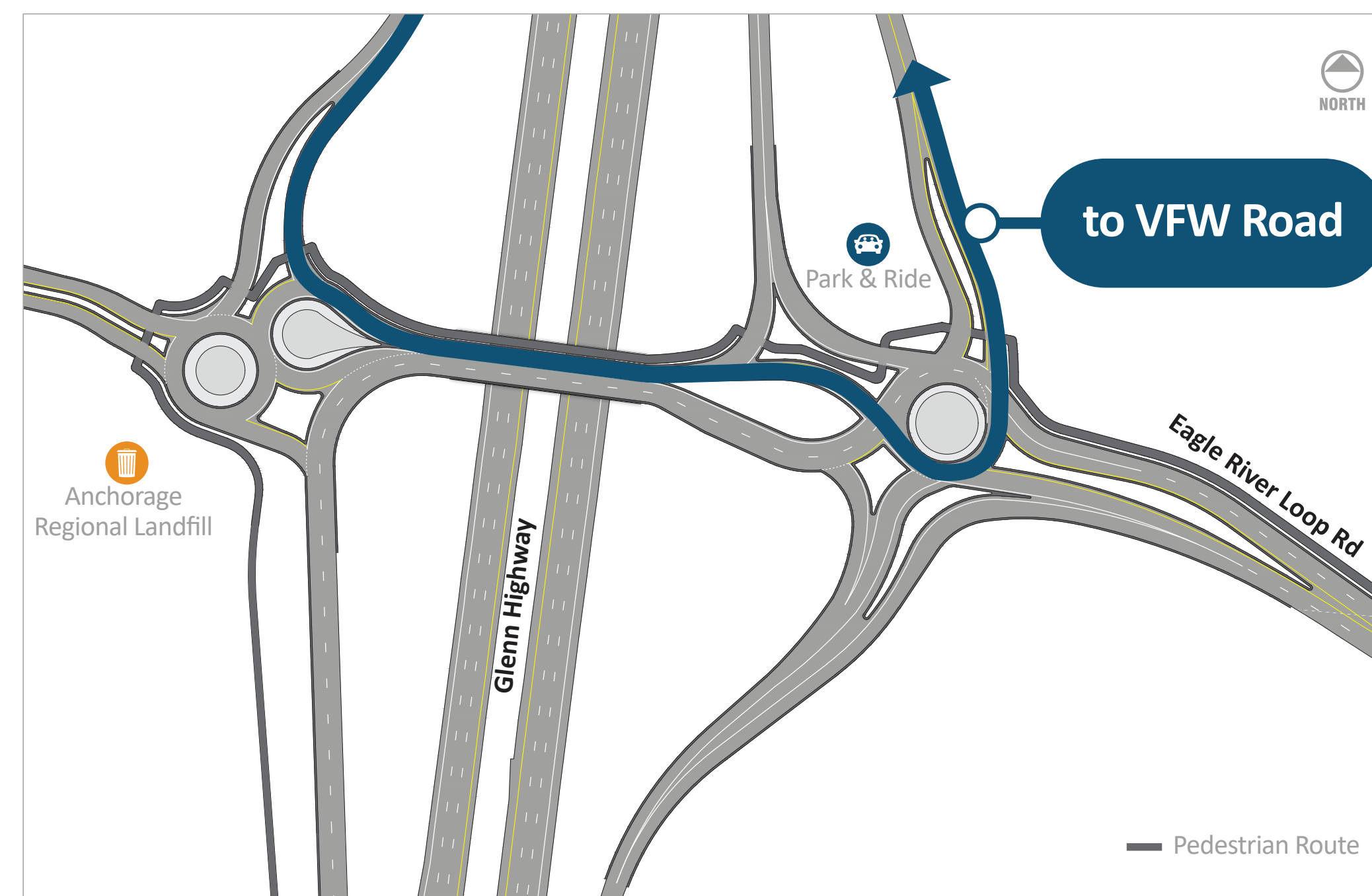
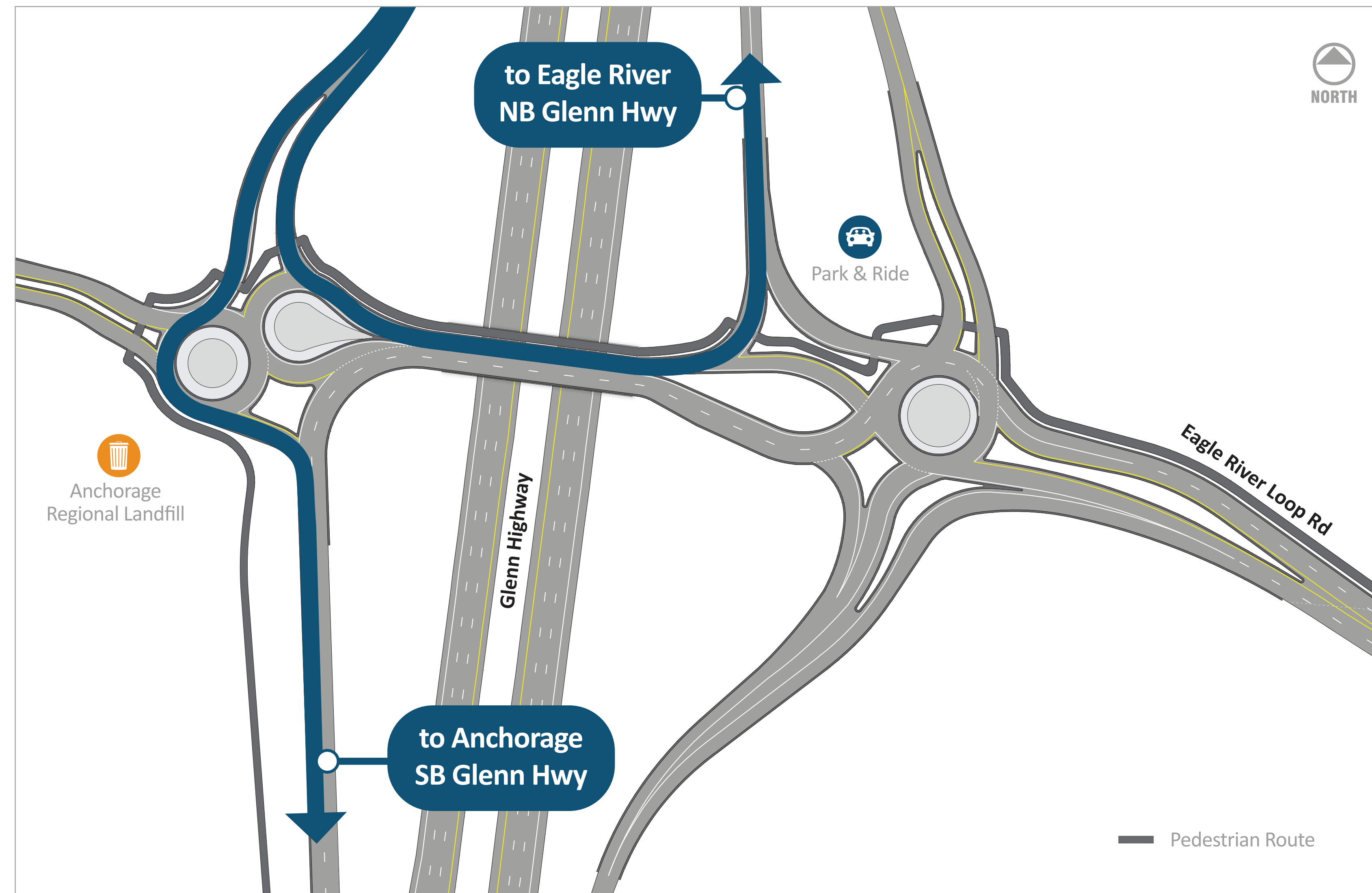


# Turn Movements From Northbound Glenn Highway



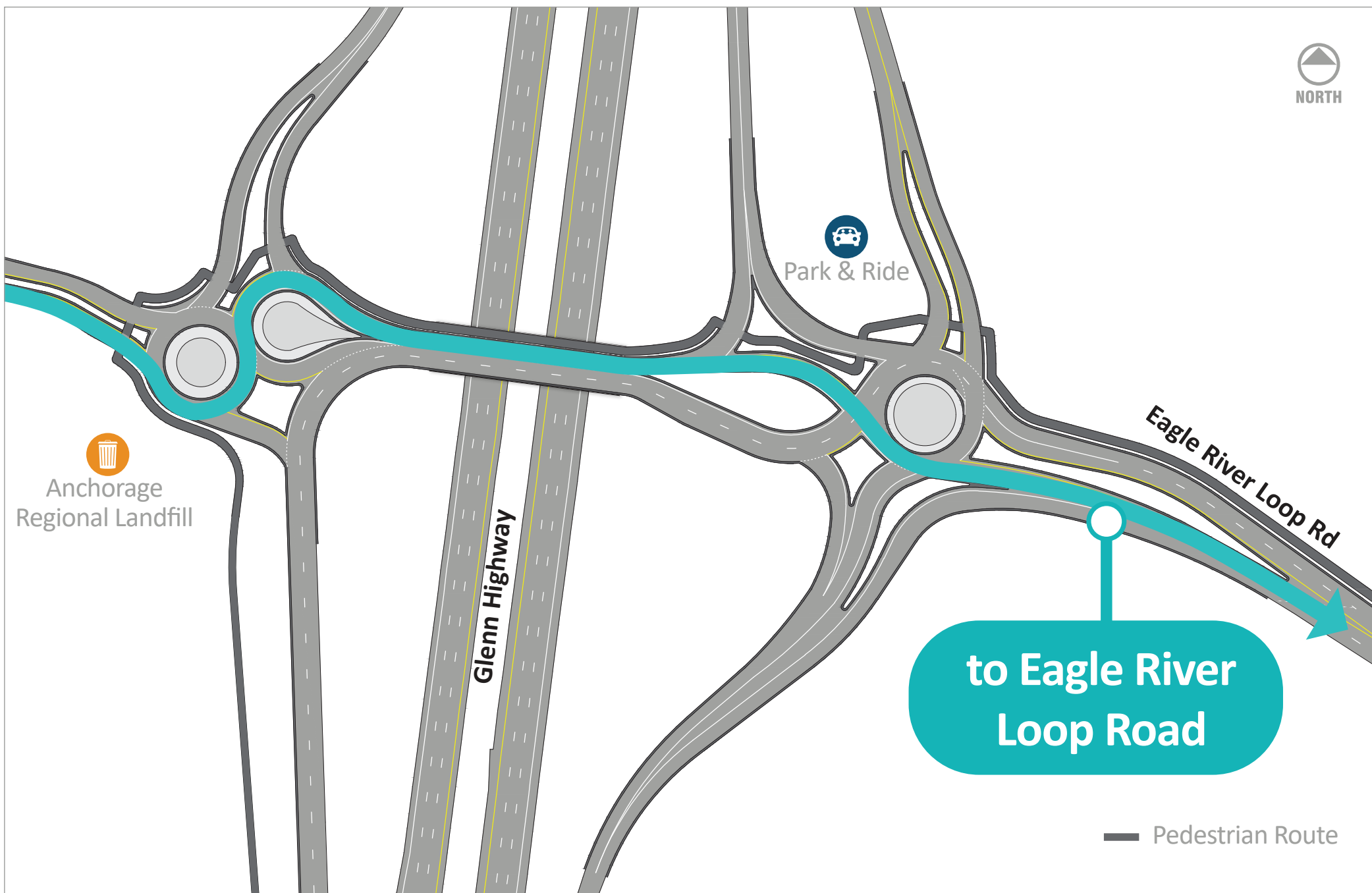
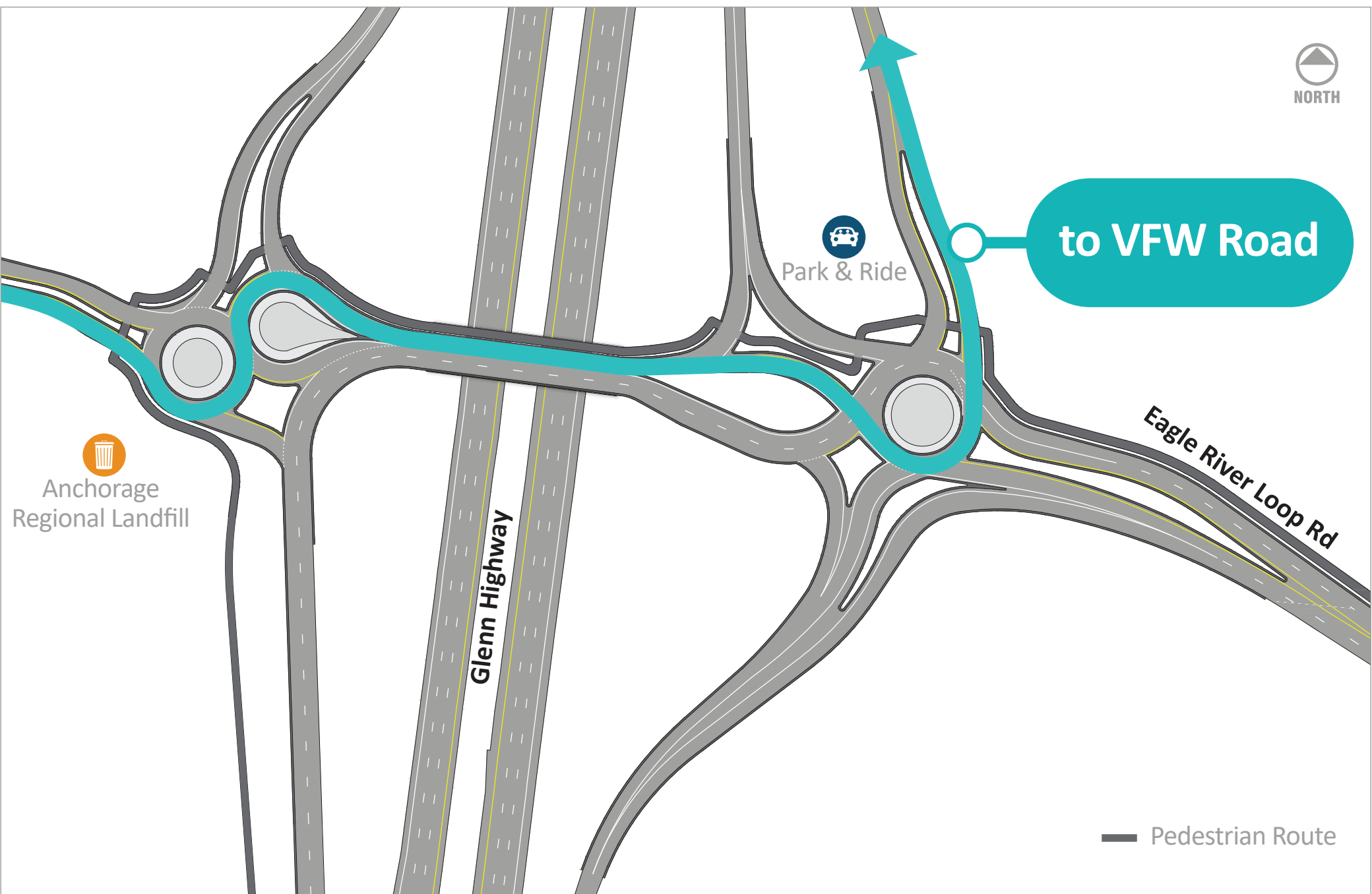
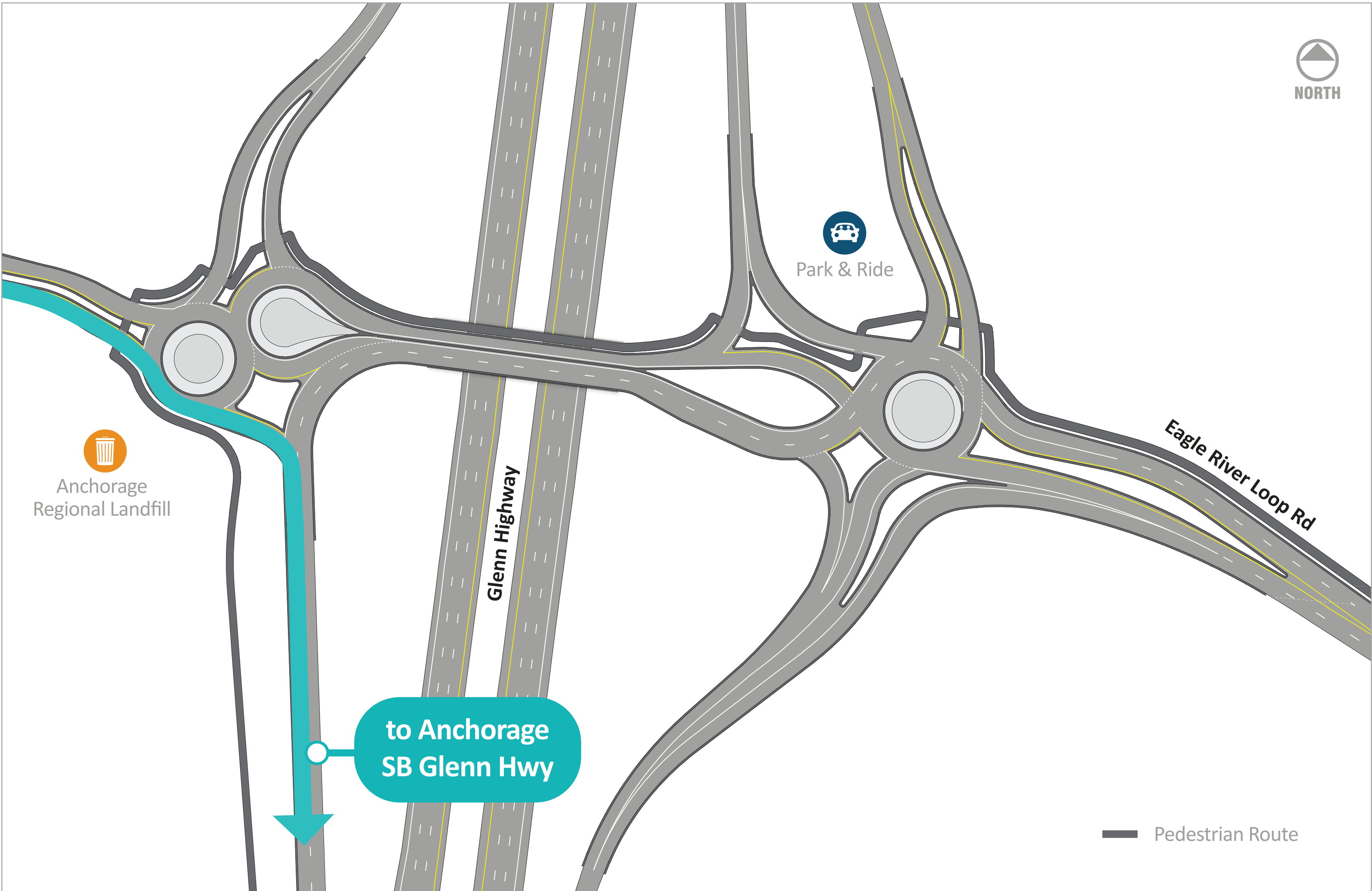


# Turn Movements From Southbound Glenn Highway





# Turn Movements From Anchorage Regional Landfill





# Turn Movements From Eagle River Loop Road

