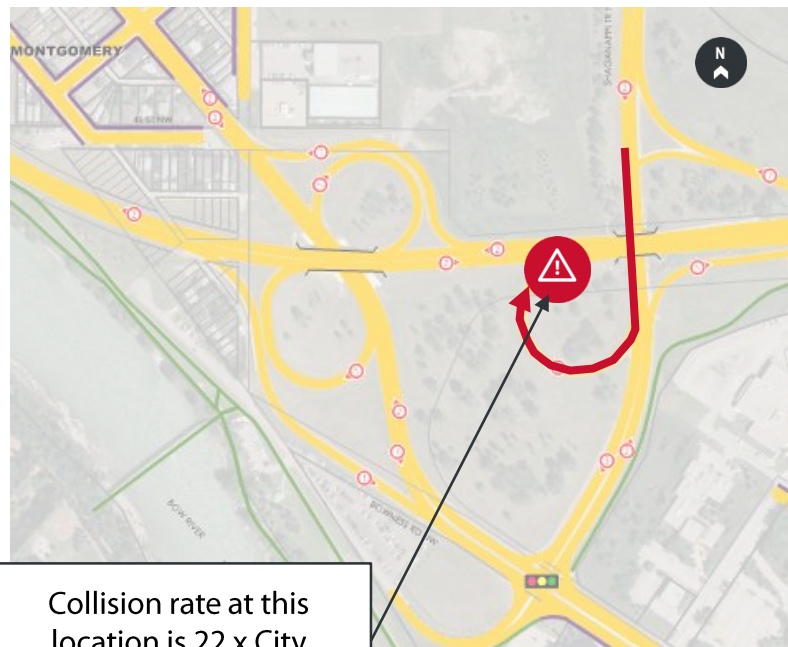


# Idea: Construct a new ramp and acceleration lane from southbound Shaganappi Trail to eastbound 16 Avenue

## Issue Identified



Collision rate at this location is 22 x City Average

## Idea Evaluated



Construct new ramp and acceleration lane

Close existing loop ramp

### Input We Heard

- Would a speed limit reduction and better signage reduce collisions?
- Concern that idea requires a lot of space and the removal of a significant number of trees.

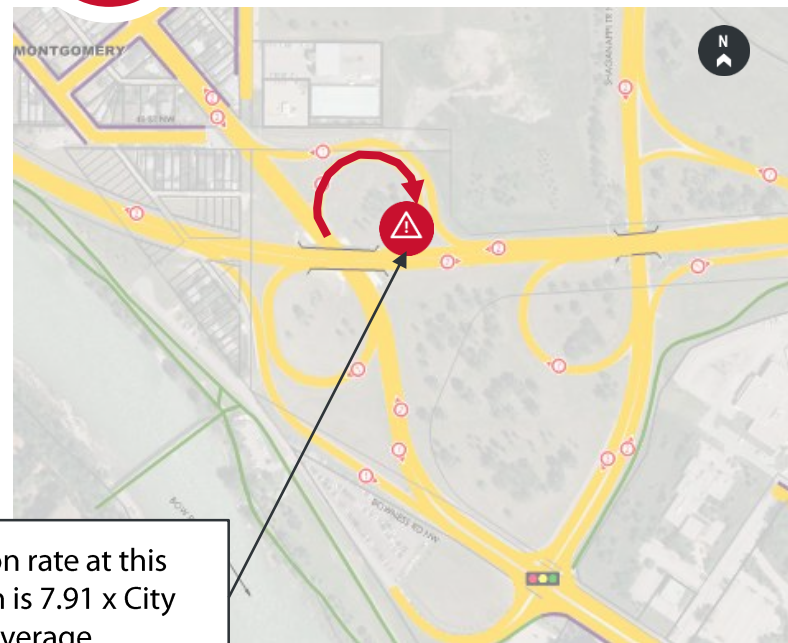
### Technical Analysis

- This addresses the most significant collision history issue within the study area.
- Trees would need to be removed for construction (Future study to review and minimize impacts).

**Idea moves forward to Phase 3**

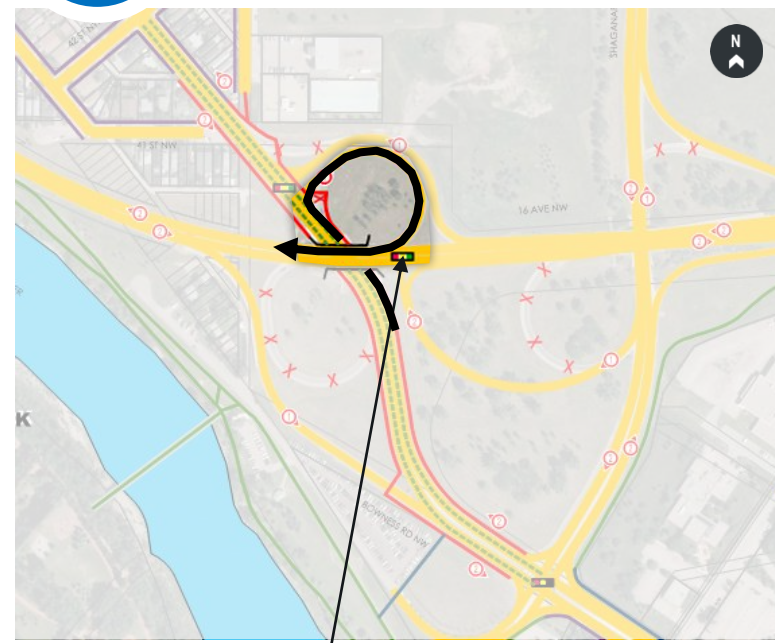
# Idea: New traffic signal to control northbound Bowness Road to westbound 16 Avenue

## Issue Identified



Collision rate at this location is 7.91 x City Average

## Idea Evaluated



New traffic signal

### Input We Heard

- Concern that the traffic signal will create congestion.
- Consider placing dual lanes on the loop ramp.

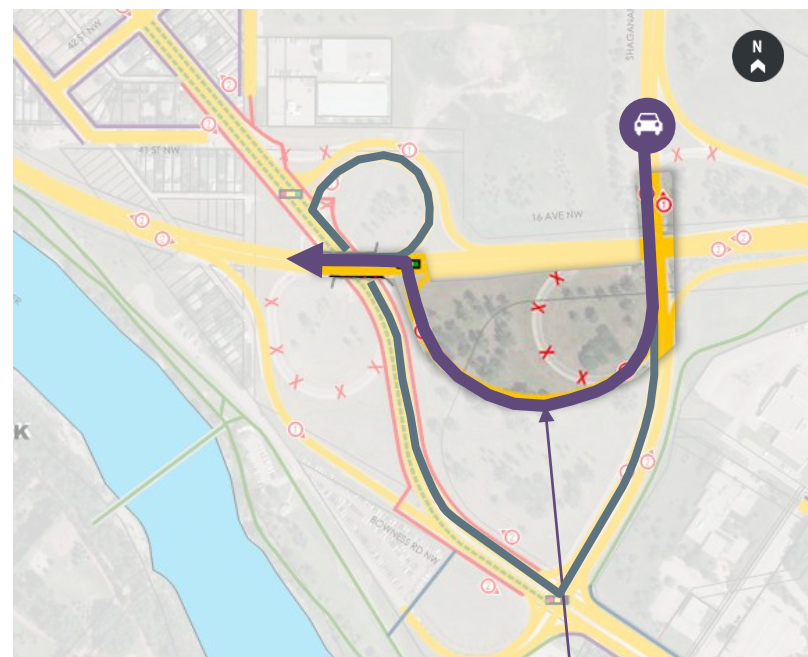
### Technical Analysis

- Idea would minimize collisions at this location.
- A dual lane entrance ramp is feasible, and will improve the operation of this intersection beyond the operation offered by a single lane signalization.
- A two phase signal would control the westbound movement on 16 Avenue and the on-ramp movement from Bowness Road. The eastbound movement on 16 Avenue would remain free flowing.

**Idea moves forward to Phase 3**

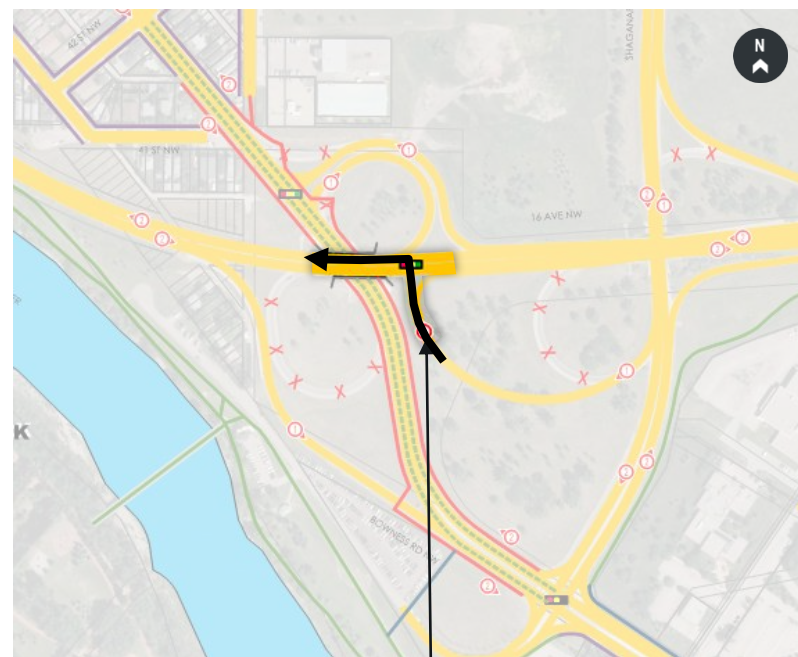
# Idea: Introduce left turn from southbound Shaganappi Trail to westbound 16 Avenue

## Issue Identified



Create a more direct movement for SB Shaganappi to WB 16 Avenue.

## Idea Evaluated



New signal would better provide access

### Input We Heard

- Concerns with increased traffic delays and shortcutting through Montgomery.

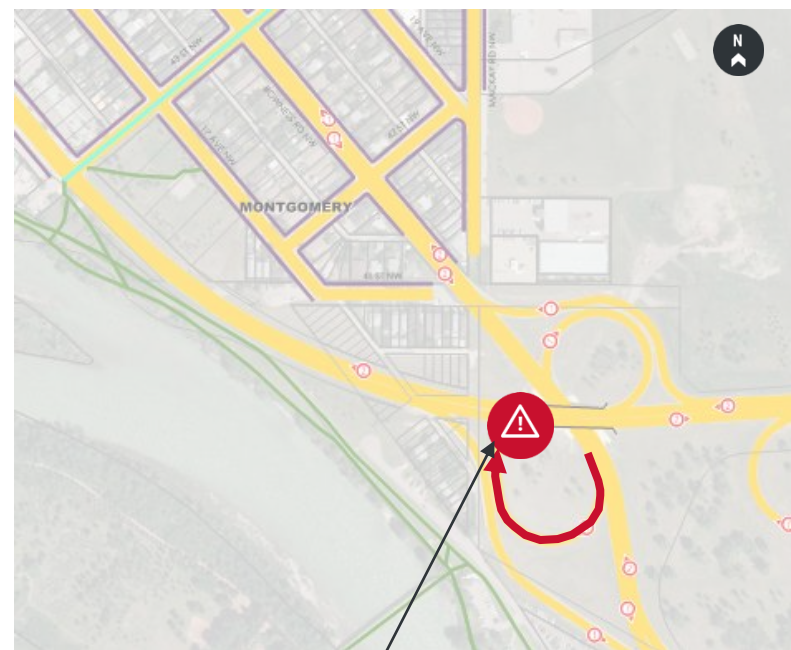
### Technical Analysis

- Impacts to operations of all movements at this intersection.

**Idea not moving forward**

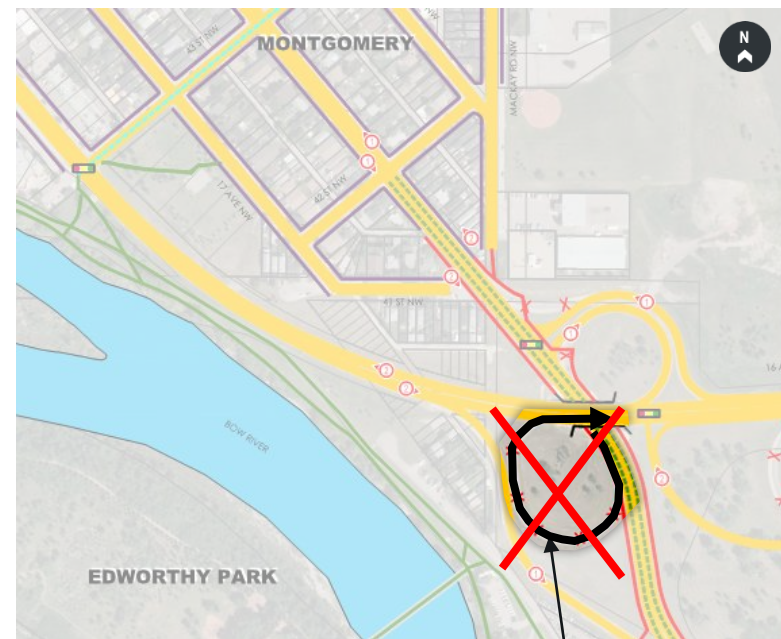
# Idea: Close the existing loop ramp from southbound Bowness Road to eastbound 16 Avenue

## Issue Identified



Collision rate at this location is 7.86 x City Average

## Idea Evaluated



Close existing ramp

### Input We Heard

- Concerns that it will impact the operation of Shaganappi Trail and Bowness Road NW.

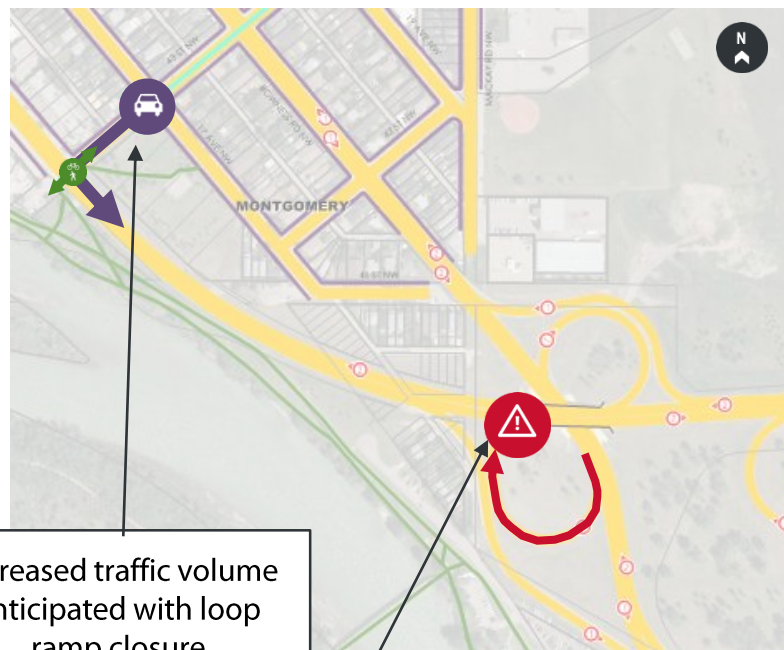
### Technical Analysis

- Based on the detailed safety assessment completed, the benefit to cost ratio of this change is more moderate when considering both the increased collisions elsewhere and cost for construction.
- With no rerouting of traffic on 43 Street NW, there are impacts to the operation of Bowness Road and Shaganappi Trail (with and without the implementation of dual eastbound left turn lanes).

**Idea not moving forward**

## Idea: New traffic signal at 43 Street and 16 Avenue to provide additional capacity for people who drive

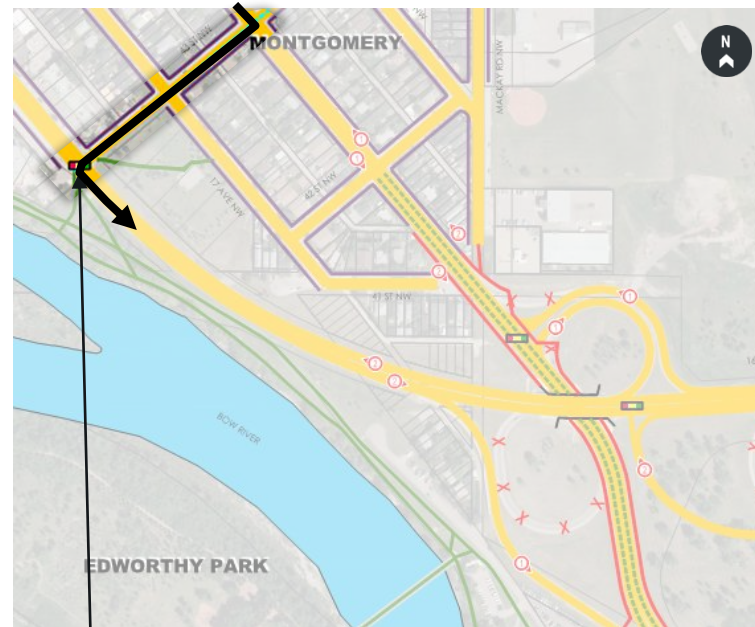
### Issue Identified



Increased traffic volume anticipated with loop ramp closure

Collision rate at this location is 7.86 x City Average

### Idea Evaluated



Introduce a signalized intersection

#### Input We Heard

- Strong opposition due to the additional traffic it may create on a residential street.
- Would be supportive of a traffic control signal for people who walk, and/or to end 43 Street as a cul de sac.

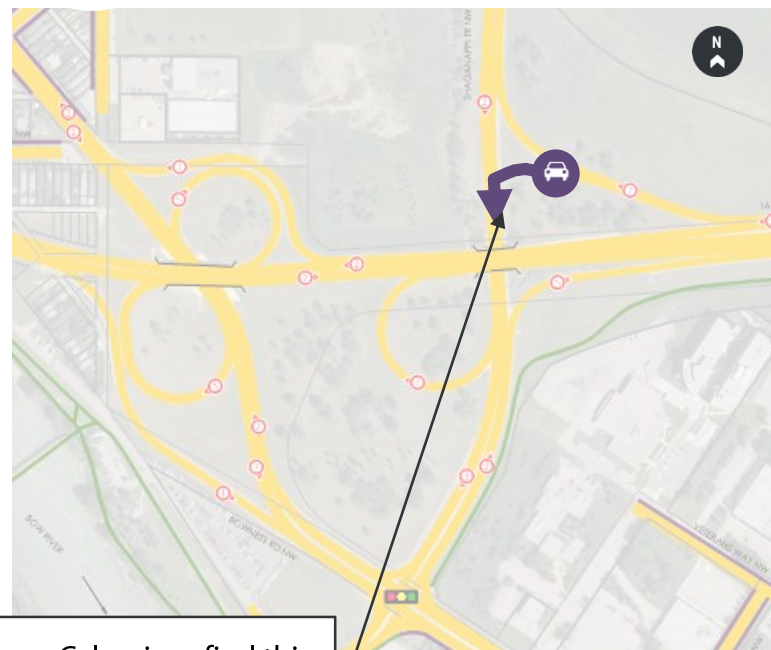
#### Technical Analysis

- Additional traffic on 43 Street will introduce new safety concerns at 16 Avenue and along 43 Street.
- Impacts to traffic operation on 16 Avenue.

**Idea not moving forward**

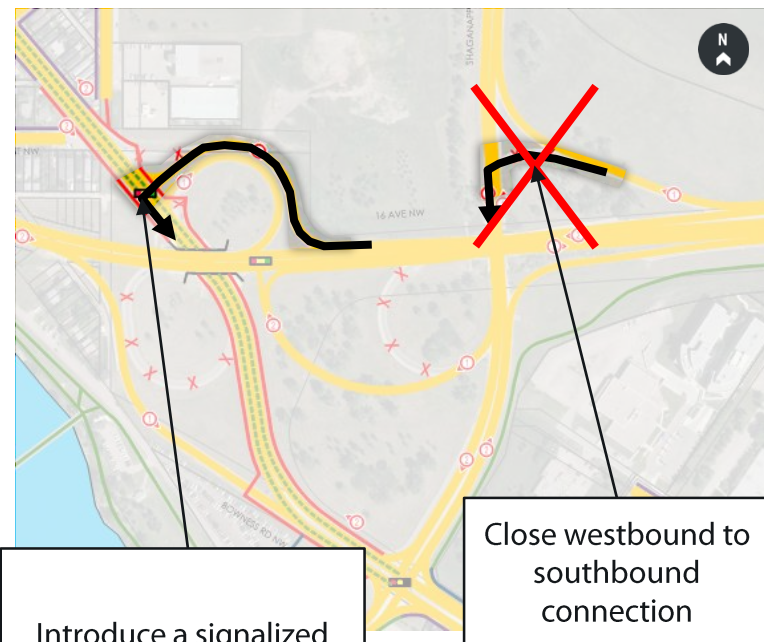
**Idea:** Close existing connection from westbound 16 Avenue to southbound Shaganappi Trail and replace with a new traffic signal at Bowness Road and the 16 Avenue off ramp.

 **Issue Identified**



Some Calgarians find this turn difficult to make because it is stop controlled

 **Idea Evaluated**



Introduce a signalized intersection at Bowness Road and WB 16 Avenue off ramp

Close westbound to southbound connection

**Input We Heard**

- Addressing this issue would be costly and has limited benefits, as people who drive are able to access westbound 16 Avenue from 29 Street.

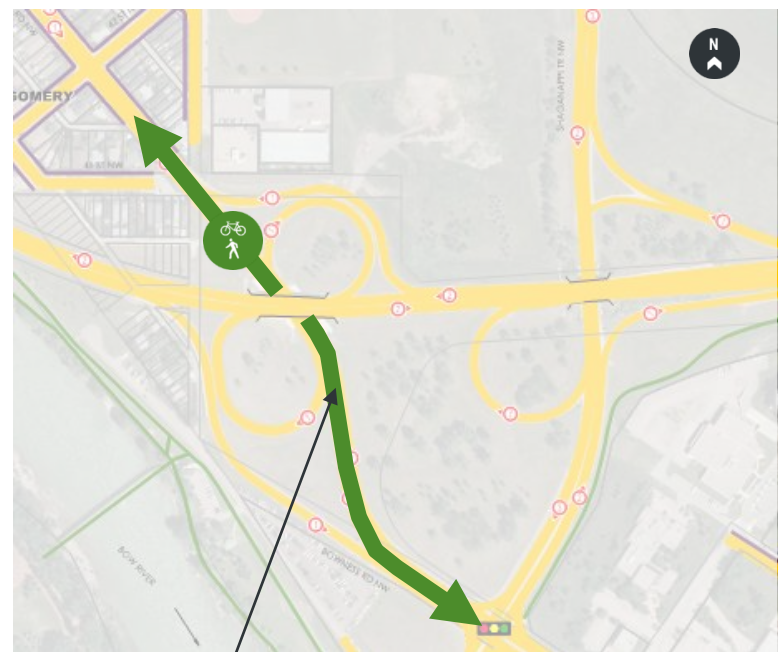
**Technical Analysis**

- Does not address an existing collision history issue
- Alternative access provided at 29 Street

**Idea not moving forward**

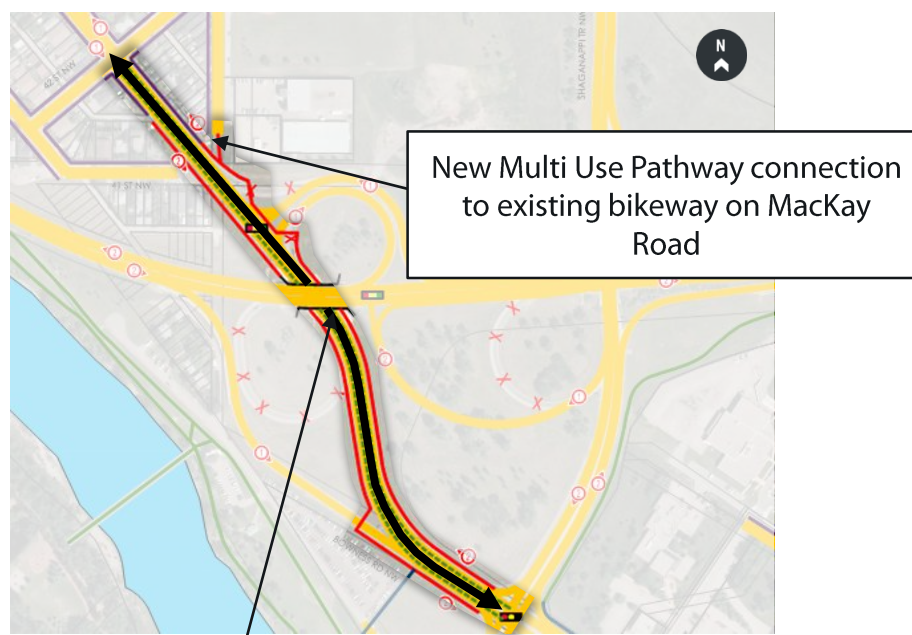
# Idea: Introduce connectivity enhancements along Bowness Road for people who walk and bicycle

## Issue Identified



There is no existing connectivity for people who walk and bicycle on Bowness Road

## Idea Evaluated



New Multi Use Pathway connection to existing bikeway on MacKay Road

Connectivity enhancements along Bowness Road for people who walk and bike

### Input We Heard

- Better connections for people who walk and bike and better access to key destinations is valued.

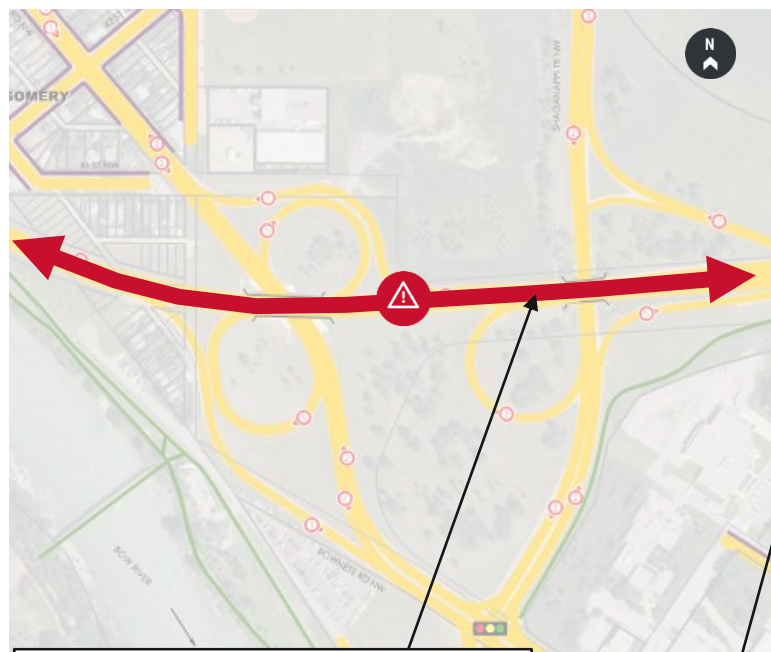
### Technical Analysis

- Marked bicycle lanes and/or separated bicycle lanes are not feasible to introduce under the 16 Avenue Bridge on Bowness Road.
- Identification that the north side curb of Bowness Road requires replacement.
- Assessment of motor vehicle travel lane requirements through the interchange and up to 43 Street.
- Review of desire lines for people who walk and bike in this area.

**Idea moves forward to Phase 3**

## Idea: Reduce the speed limit on 16 Avenue within the study area

### Issue Identified



High travel speeds amplify collision history concerns

### Idea Evaluated



Reduce speed limit on 16 Avenue

### Input We Heard

- A reduced speed limit on 16 Avenue will help address collision history issues.
- Reduced travel speeds entering into Montgomery are desired.

### Technical Analysis

- A speed limit reduction by itself is not sufficient to eliminate collision history concerns.
- A broader review outside the study area is necessary to confirm the feasibility of speed limit changes.

**Idea moves forward to future study**

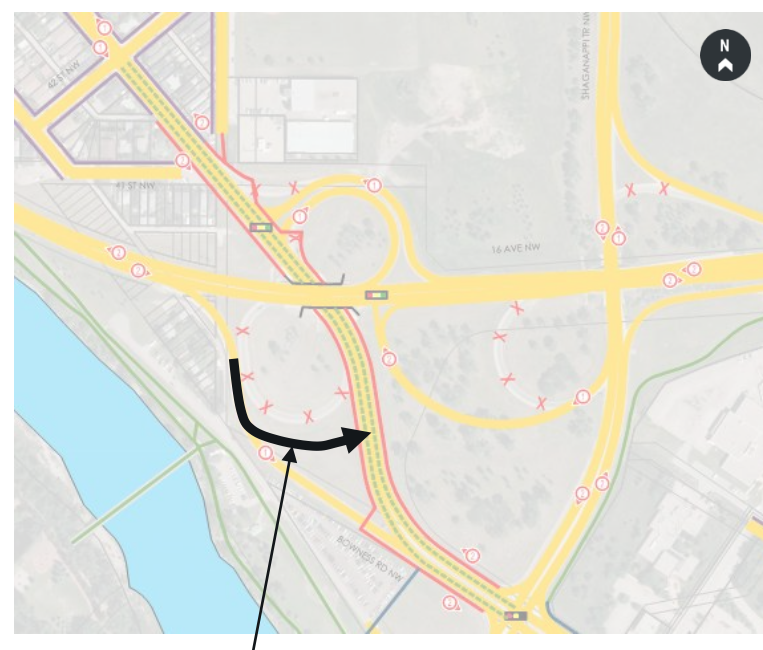


## Idea: Realign the ramp from eastbound 16 Avenue to southbound Bowness Road

### Issue Identified



### Idea Evaluated



Realign ramp to provide a longer weaving distance for people who drive to access the eastbound left turn lane from Bowness Road to Shaganappi Trail

#### Input We Heard

- Accessing NB Shaganappi Trail is difficult from EB 16 Avenue due to the short weaving distance from the ramp.
- This encourages more people to take Home Road instead of Shaganappi Trail

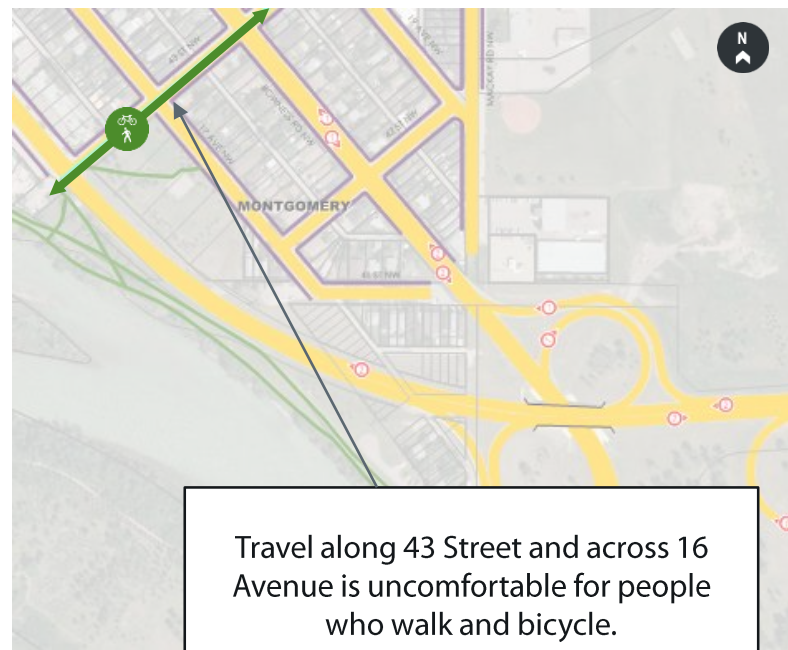
#### Technical Analysis

- Feasibility assessment for realignment of ramp.
- Traffic analysis for reduced ramp entry speed onto Bowness Road.
- Assessment of impacts to Bus Only Lane.

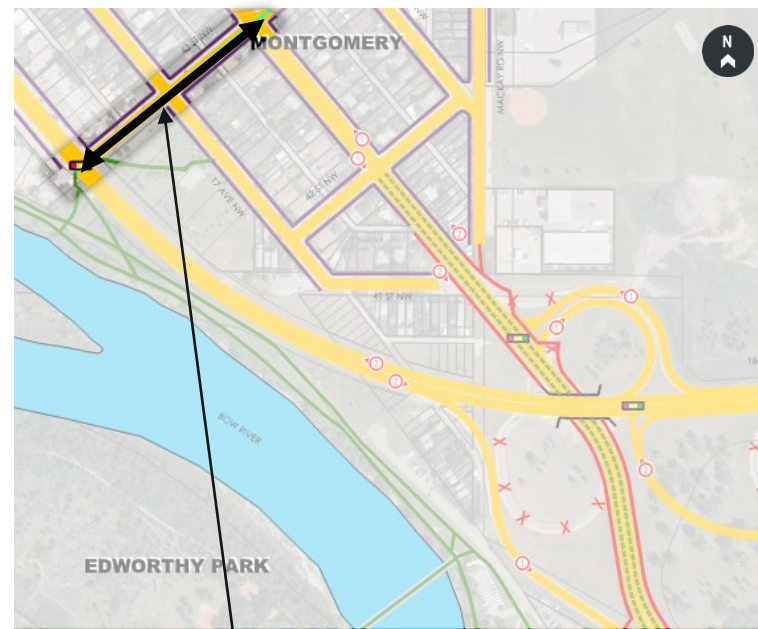
**Idea moves forward to Phase 3**

# Idea: Introduce connectivity enhancements along 43 Street for people who walk and bicycle

## Issue Identified



## Idea Evaluated



### Input We Heard

- An improved connection along 43 Street is needed to enhance comfort for people who walk and bike.
- A pedestrian overpass is desired at this location.
- 43 Street is an important link between the river and Bowness Road.
- Consider an option similar to that at 7 Street and Memorial Drive NW.

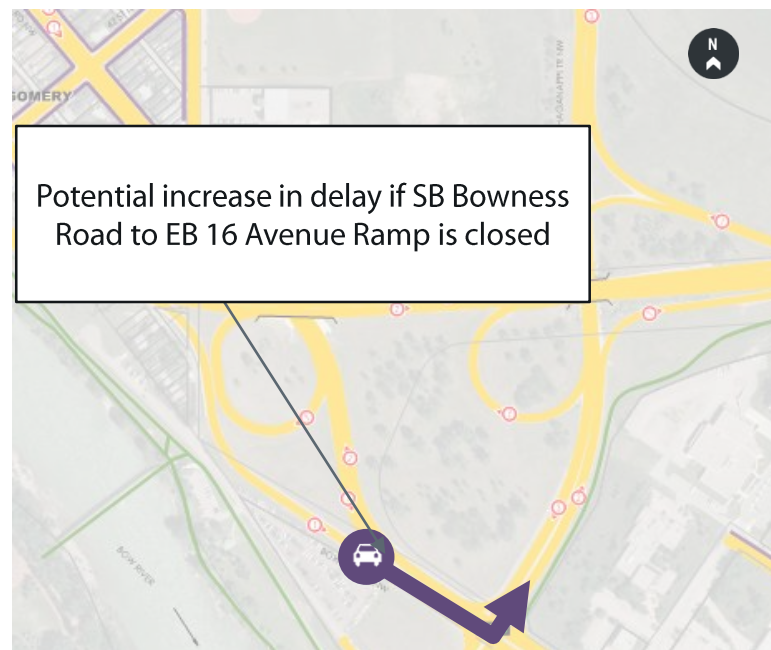
### Technical Analysis

- Review feasibility of different options discussed.
- Identification of impacts to other modes of transportation for each option.

**Idea moves forward to Phase 3**

# Idea: Introduce a dual left turn lane from eastbound Bowness Road to northbound Shaganappi Trail

## Issue Identified



## Idea Evaluated



### Input We Heard

- A second eastbound left turn lane at Bowness Road and Shaganappi Trail should be considered, especially if the SB Bowness Road to EB 16 Avenue ramp is being closed.

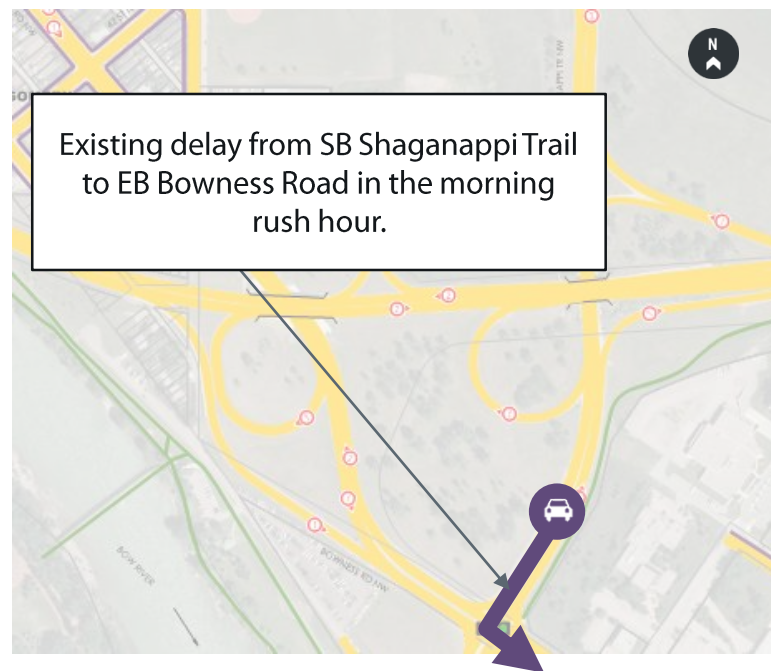
### Technical Analysis

- Traffic analysis of introducing a second left turn lane (with and without closure of SB Bowness Road to EB 16 Avenue ramp).
- Feasibility assessment of the work required indicated a high cost and the potential need to acquire property because it will be necessary to widen Bowness Road between Shaganappi Trail and Point McKay Drive.

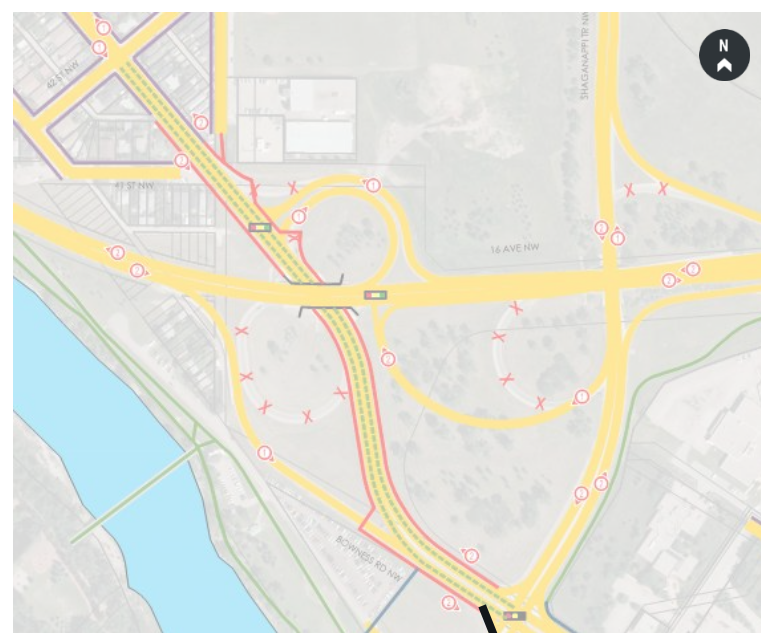
**Idea not moving forward**

## Idea: Close the south leg of the intersection and provide parking lot/residential access elsewhere

### Issue Identified



### Idea Evaluated



Close south leg of intersection and provide parking lot/residential access elsewhere

### Input We Heard

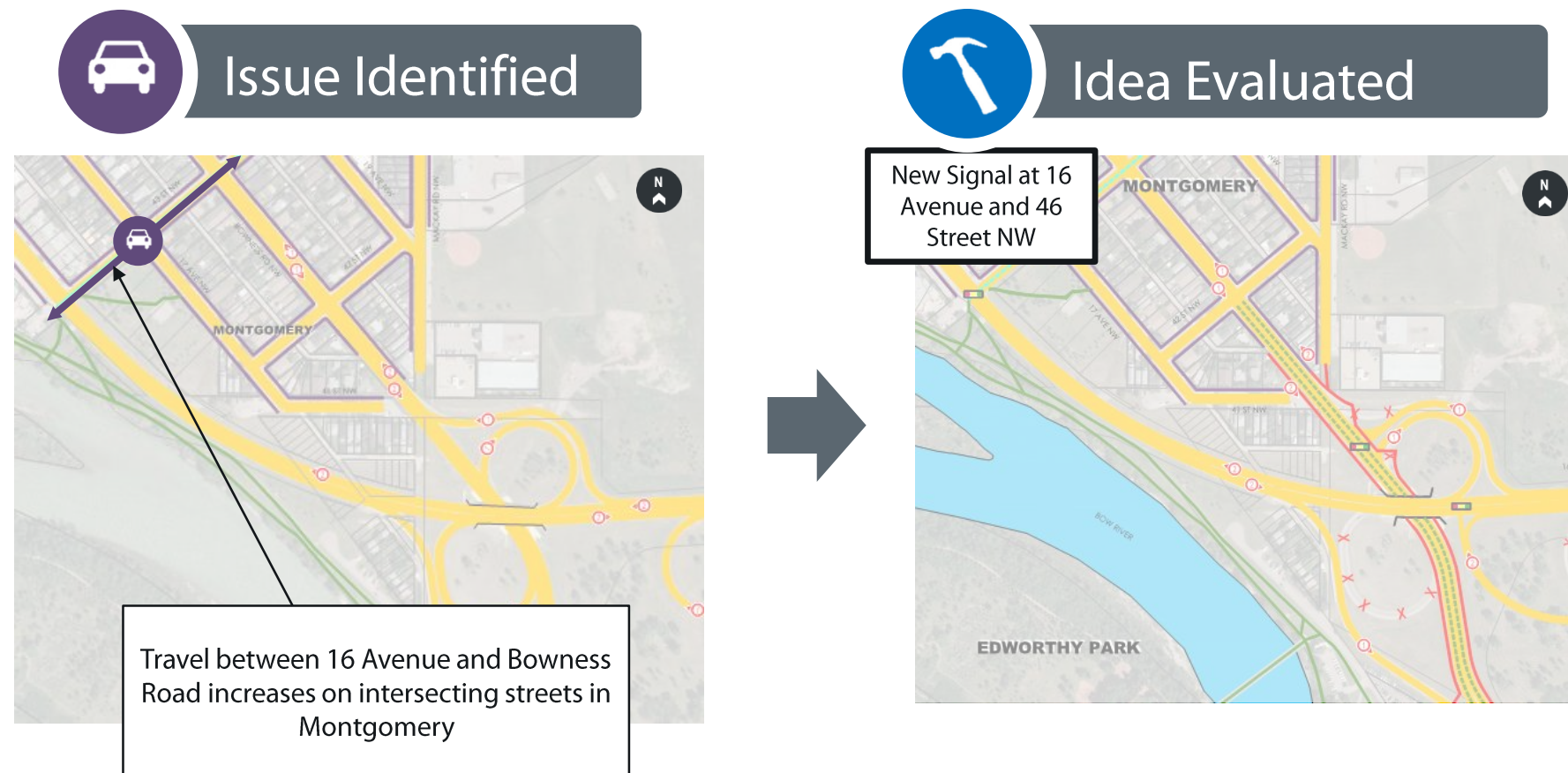
- Closing the south leg of this intersection could potentially improve traffic flow during peak times.

### Technical Analysis

- Traffic analysis indicated that this change does not result in improvement to traffic flow unless the east side crosswalk is closed. This is an important connection for access to the Foothills Medical Centre, and is not recommended for closure.
- Rerouting access to Point McKay Towers and the Edworthy Park parking lot would introduce additional delays elsewhere.

**Idea not moving forward**

## Idea: Introduce a new signal at 16 Avenue and 46 Street



### Input We Heard

- 46 Street was identified as an area of opportunity for redevelopment through the Main Streets Project.
- Additional traffic on 46 Street may be more acceptable.

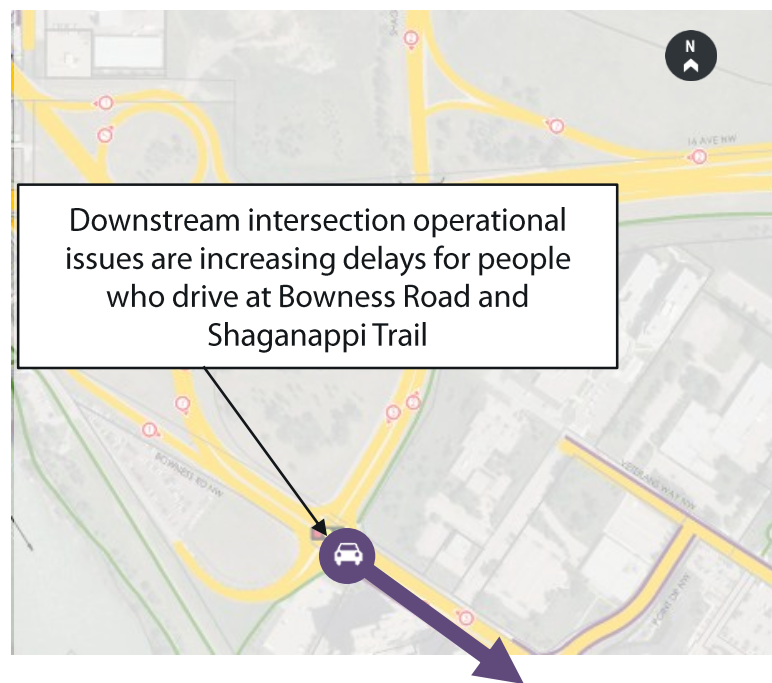
### Technical Analysis

- A detailed review of this intersection was not completed, as a broader understanding of other potential changes on 16 Avenue is necessary.
- Assessment of short and long-term options as part of 16 Avenue Corridor Study recommended.

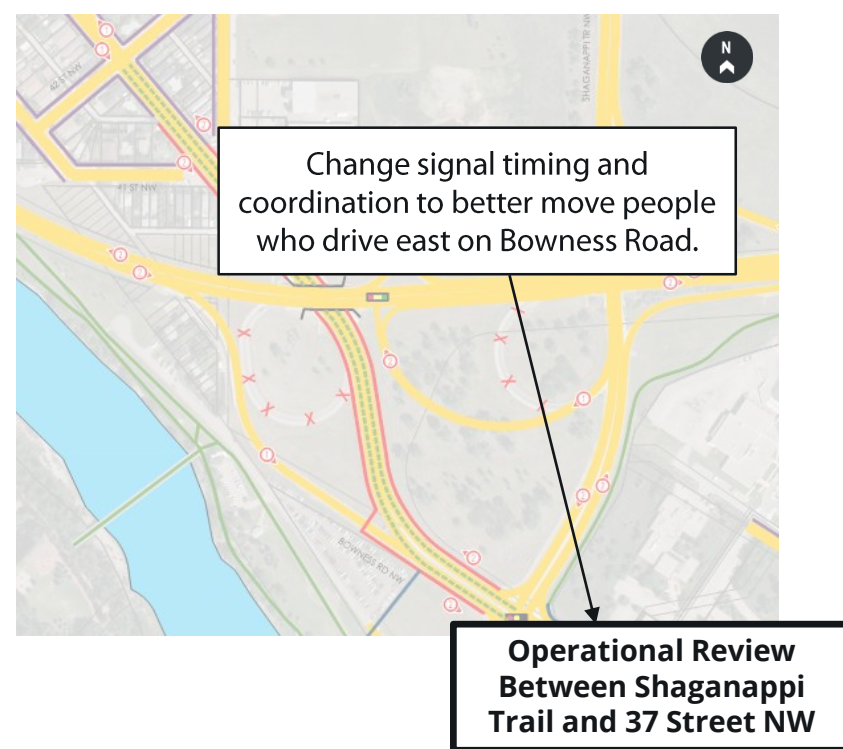
**Idea moves forward to future study**

# Idea: Investigate enhancements to traffic signal operations east of Shaganappi Trail on Bowness Road

## Issue Identified



## Idea Evaluated



### Input We Heard

- The intersection of Bowness Road and Shaganappi Trail seems to operate poorly during the morning rush hour because the signals are not well coordinated further to the east.

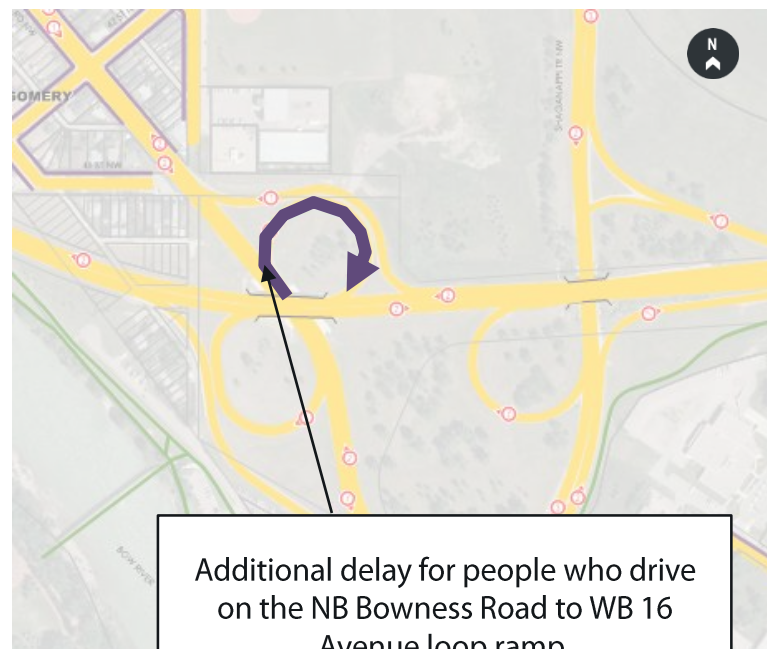
### Technical Analysis

- Confirmation that signals are already optimized with signal cycle lengths and coordination during the rush hour periods.
- Identification that eastbound left turns are creating significant delays at 37 Street during the morning rush hour.
- Confirmation that an eastbound left turn bay will improve traffic flow.
- Planned for construction in 2017.

**Idea moves forward to Phase 3**


# Idea: Introduce a new ramp for people driving from northbound Bowness Road to westbound 16 Avenue

## Issue Identified



Additional delay for people who drive on the NB Bowness Road to WB 16 Avenue loop ramp.

## Idea Evaluated



Close the existing ramp.

Create a new on ramp for NB Bowness Road to WB 16 Avenue Traffic.

### Input We Heard

- Since a signal is being introduced, consider building a new ramp for NB to WB traffic.

### Technical Analysis

- Traffic analysis indicated that this modification would result in significantly increased delays for people who drive in all directions.

**Idea not moving forward**