

Bus Rapid Transit Planning

BRT Route B2

Route Options to Connect 109 Street to the University Transit Centre

Table of Contents

Project Overview	2
Route B2 Overview	2
Route Option Details – 109 Street to the University Transit Centre	4
Option 1: Northbound and Southbound Lanes on 112 Street	4
Option 2: Northbound Lane on 114 Street / Southbound Lane on 112 Street	8

Project Overview

As part of the Mass Transit initiative, the City of Edmonton is expanding its transit network by adding Bus Rapid Transit (BRT) routes. BRT will complement current bus and Light Rail Transit (LRT) service, providing a new, efficient, and sustainable travel option as our city and population grows.

Bus Rapid Transit (BRT) typically features:

- + Dedicated bus travel lanes
- + Priority at intersections
- + Bus stations, which provide enhanced services over typical bus stops

BRT service will provide high-speed travel between urban nodes and main corridors, with only key stops along the way. The implementation of BRT in Edmonton may impact traffic lanes (removing a lane of vehicular traffic, where feasible), traffic flow, and some trees and landscaping along the selected routes.

Route B2 Overview

BRT Route B2 will create a key east-west connection between West Edmonton Mall and Bonnie Doon via the University of Alberta.

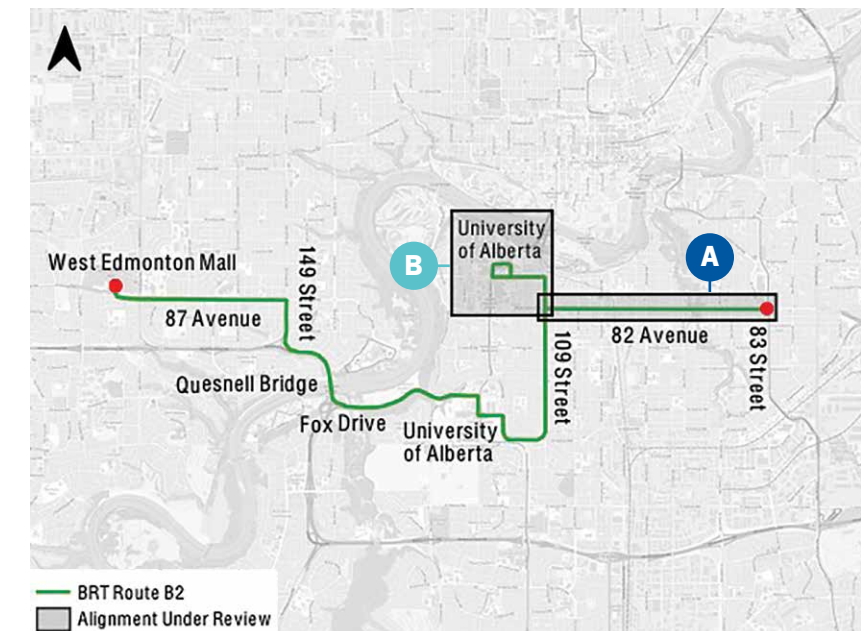
- + West Edmonton Mall to South Campus by way of 87 Avenue, 149 Street, Whitemud Drive, Fox Drive and Belgravina Road. The route crosses the North Saskatchewan River using the Quesnell Bridge
- + South Campus to the University of Alberta
- + University and Garneau areas to 83 Street (Bonnie Doon) by way of 82 Avenue. While the most eastern stop on the route will be at 83 Street (Bonnie Doon Mall), the project team is exploring the feasibility of a bus turnaround in the vicinity of 71 Street.

There are two segments along Route B2 that are being studied further to find the best:

- A. Configuration for 82 Avenue: 109 Street to 83 Street
- B. Route to connect 109 Street to the University Transit Centre

This booklet outlines the options proposed for B: Route to connect 109 Street to the University Transit Centre

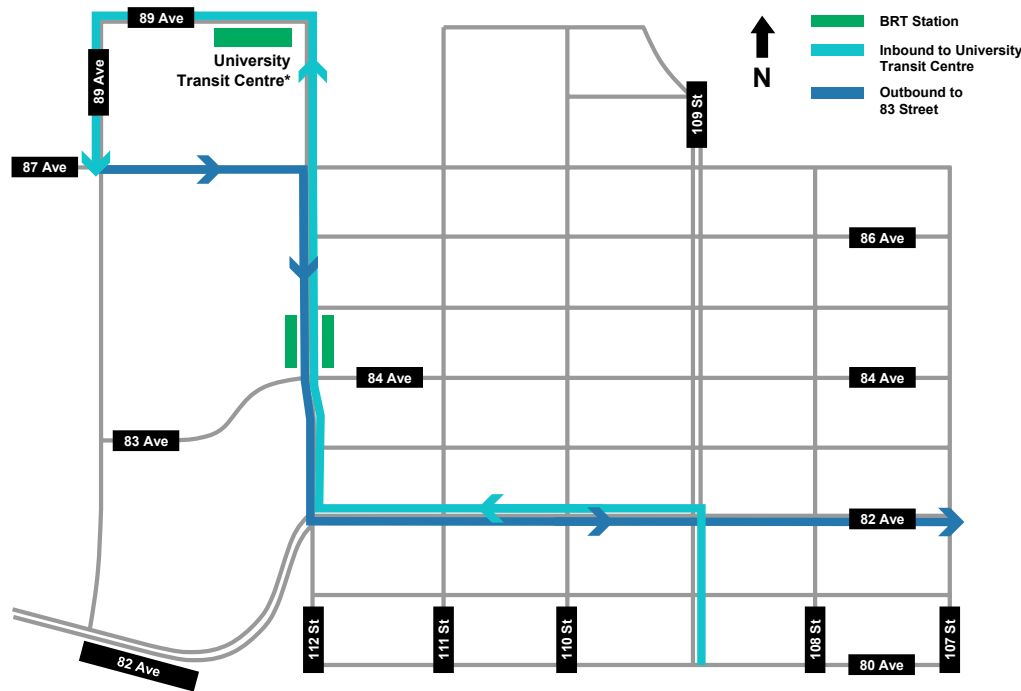
*Review options proposed for A: Configuration for 82 Avenue: 109 Street to 83 Street **here**.



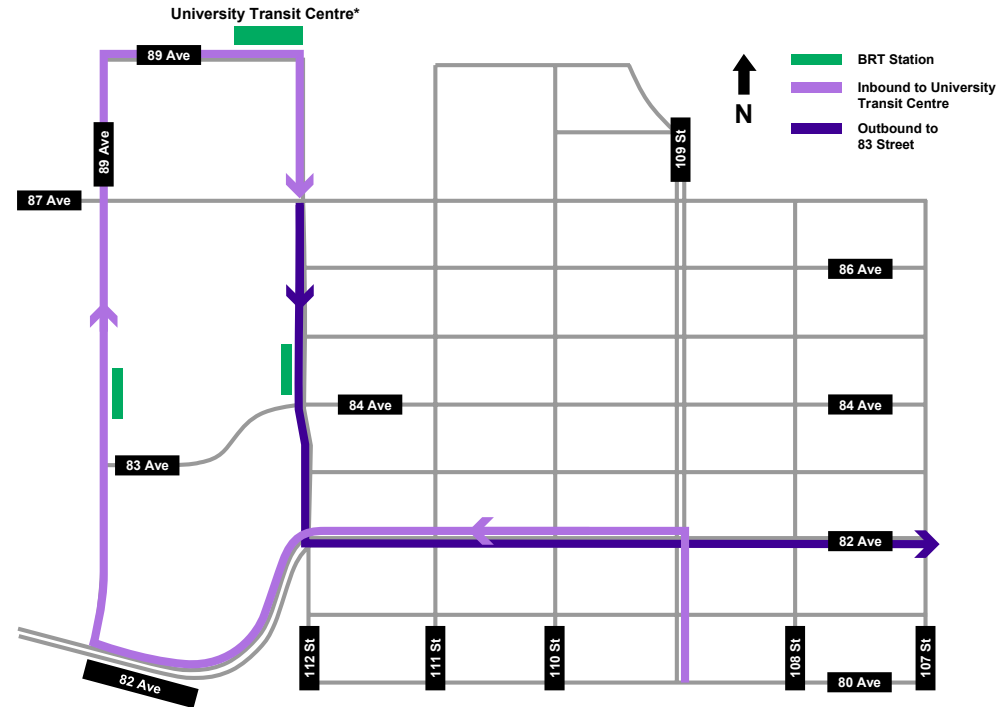
Route Options: 109 Street to University Transit Centre*

The project team is currently reviewing the streets and avenues the BRT will use to connect 109 Street to the University Transit Centre. Two options are proposed:

Option 1: Northbound and Southbound Lanes on 112 Street



Option 2: Northbound Lane on 114 Street / Southbound Lane on 112 Street

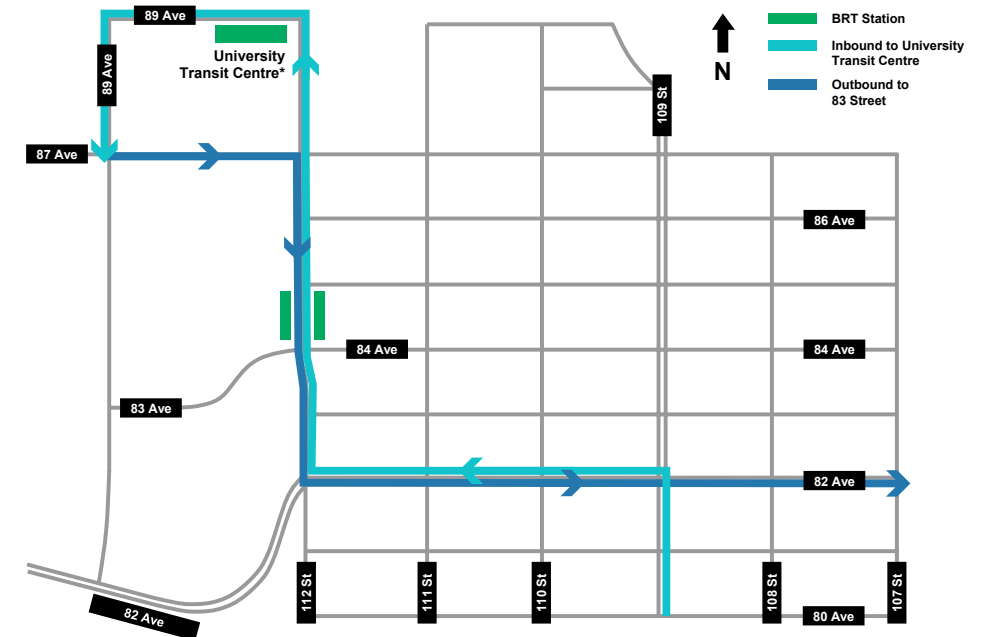


*The integration of BRT Route B2 with the University Transit Centre is subject to further study and collaboration with the University of Alberta.

Route Option Details

Option 1: Northbound and Southbound Lanes on 112 Street

Route Segment	Alignment
82 Avenue westbound from 109 to 112 Street	Dedicated BRT lanes (option for <i>curbside</i> or <i>centre-running</i>)
112 Street northbound	Primarily dedicated curbside BRT lanes
89 Avenue westbound/southbound	University of Alberta Transit Loop
87 Avenue eastbound	Shared travel lanes with general traffic
112 Street southbound	Primarily dedicated curbside BRT lanes
82 Avenue eastbound from 112 to 109 Street	Dedicated BRT lanes (option for <i>curbside</i> or <i>centre-running</i>)



Overview

- + BRT uses 112 Street for northbound and southbound travel
- + Has mix of shared and dedicated BRT lanes
- + Three proposed BRT stations at:
 - + 112 Street/84 Avenue – northbound
 - + 112 Street/84 Avenue – southbound
 - + University Transit Centre*

Highlights

BRT Operations will include:

- + Northbound and southbound BRT travel consolidated on 112 Street
- + BRT station locations that maximize easy access and convenient connections to mass transit

Drivers will notice:

- + Removal of two lanes of traffic (one northbound, one southbound) on 112 Street
- + All on-street parking removed from 82 Avenue
- + Emergency vehicles can use the dedicated BRT lanes to facilitate access to and from the hospital

Public spaces/Active Transportation users will notice:

- + Existing pedestrian crossings are retained
- + Existing median and median trees are retained on 82 Avenue

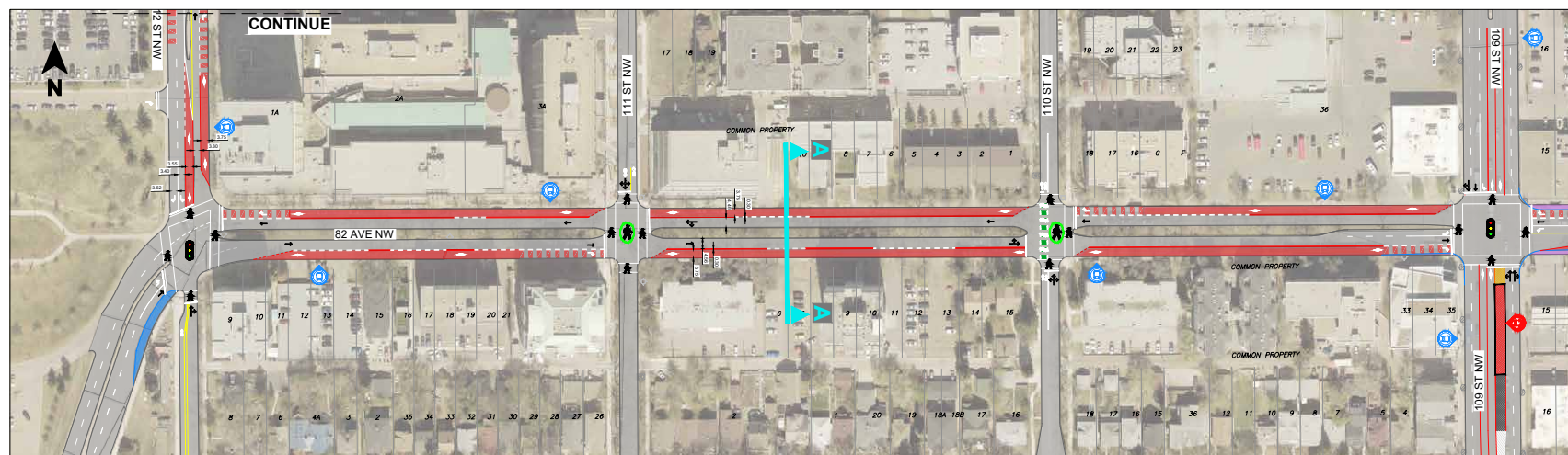
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Option 1 Route Details

82 Avenue: 109 Street to 112 Street (curbside option showing)

Highlights

- + 112 Street / 82 Avenue intersection includes westbound right turn and dedicated southbound left-turn bay
- + Existing median and median trees retained
- + Retains westbound left at 111 Street and eastbound left at 110 Street
- + All on-street parking removed from 82 Avenue
- + Maintains existing bike infrastructure on 110 Street and 111 Street



This segment for 82 Avenue between 109 Street and 112 Street can also be designed as centre-running with the following differences:

- + Centre-running BRT lanes (109 Street to 112 Street) reduce conflicts with turning traffic and driveway accesses
- + Removal of left turn at 110 Street

(For a visual of the Centre-running option see page 9)

View A



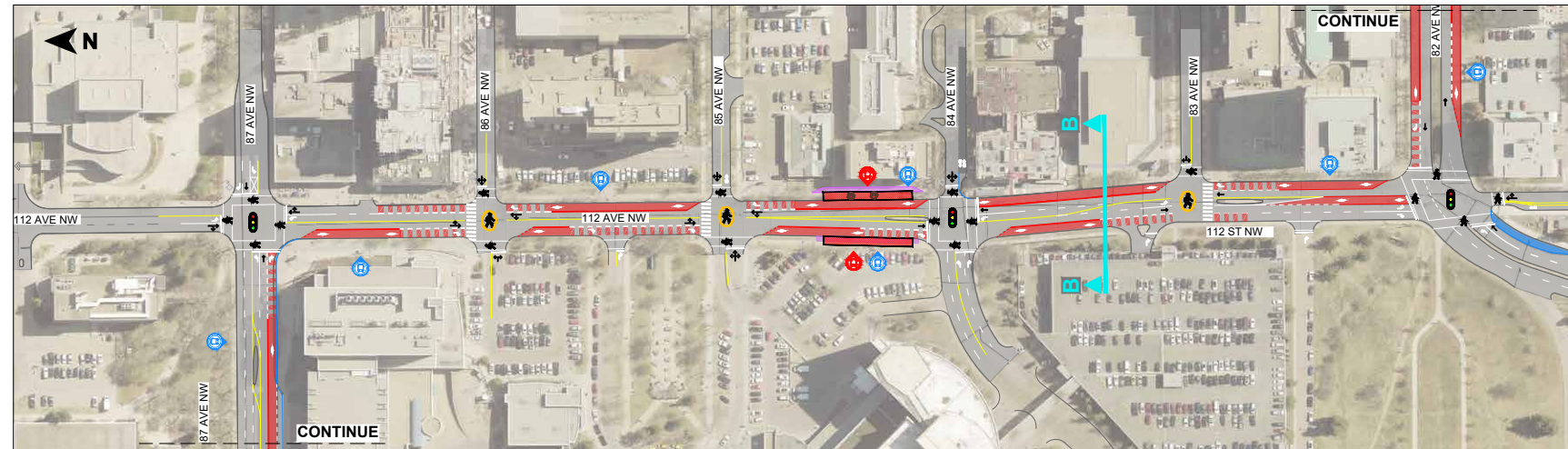
LEGEND

- | | |
|-----------------------------|----------------------------|
| BRT STATION PLATFORM | DEDICATED BRT LANE |
| BRT LANE | PAINTED ARROWS |
| PEDESTRIAN RAMP | TRAFFIC MOVEMENT |
| STATION MAINTENANCE PARKING | EXISTING BIKE LANE |
| NEW CURB / MEDIAN | NEW TRAFFIC SIGNAL |
| NEW SIDEWALK | EXISTING TRAFFIC SIGNAL |
| NEW VEGETATION | NEW PEDESTRIAN SIGNAL |
| LOADING ZONE | EXISTING PEDESTRIAN SIGNAL |
| PATIO | PEDESTRIAN AMBER SIGNAL |
| PATIO REMOVAL | PEDESTRIAN CROSS WALK |
| BRT STATION | NEW TREE |
| EXISTING BUS STOP | TREE REMOVAL |
| RELOCATED BUS STOP | |
| NO PARKING | |
| NO LEFT TURN | |
| POTENTIAL ACCESS CLOSURE | |

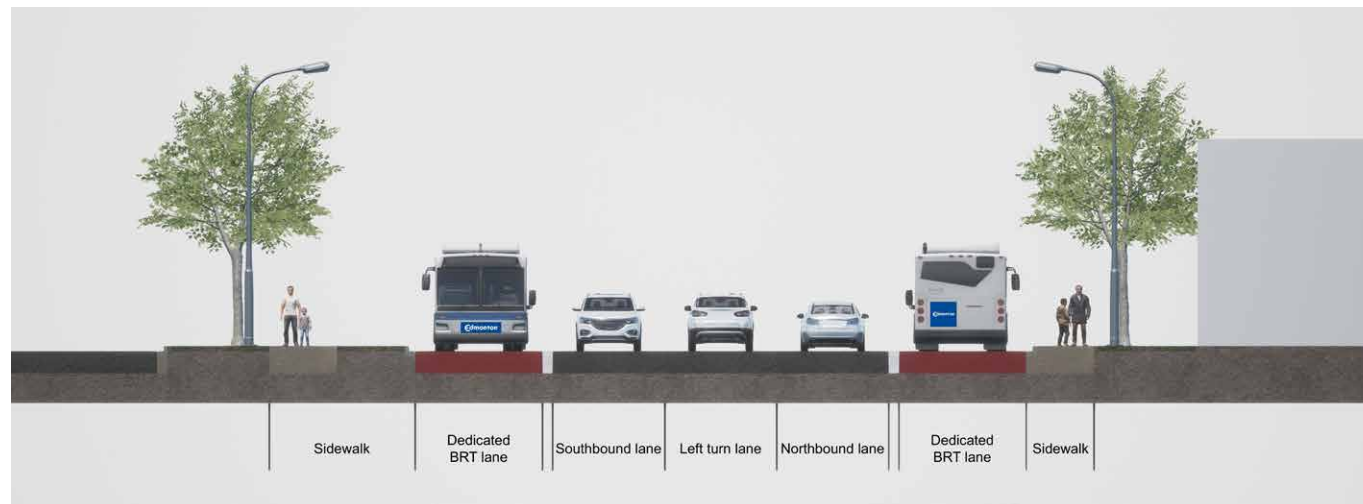
112 Street: 82 Avenue to 87 Avenue

Highlights

- + BRT stations on east and west sides of 84 Avenue
- + Existing left turns retained



View B



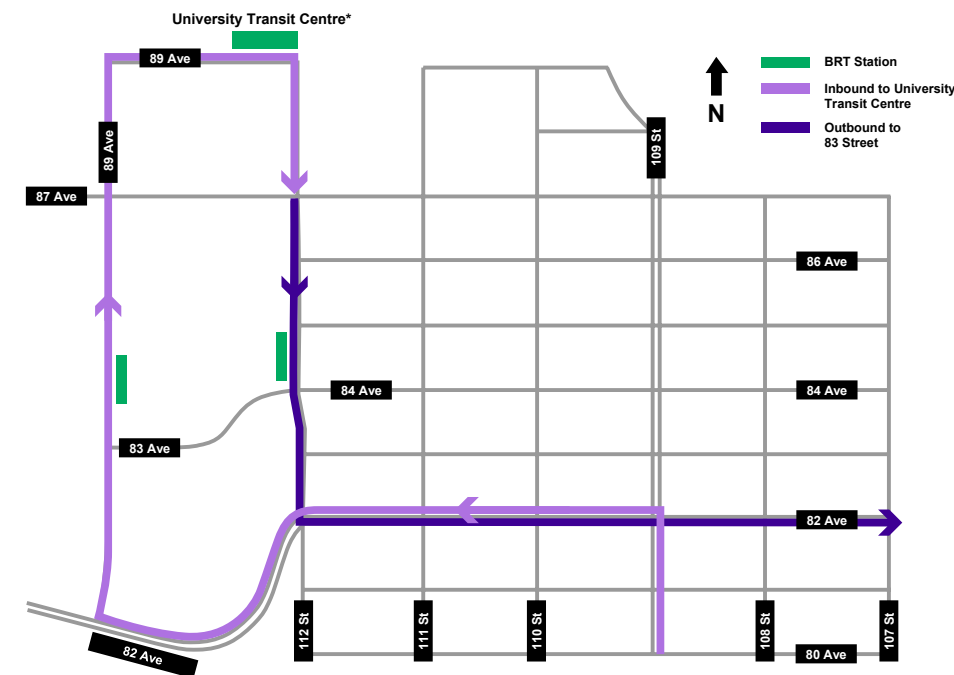
LEGEND

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|-----------------------------|--------------------------|----------------------------|
| BRT STATION PLATFORM | BRT STATION | NEW TRAFFIC SIGNAL |
| BRT LANE | EXISTING BUS STOP | EXISTING TRAFFIC SIGNAL |
| PEDESTRIAN RAMP | RELOCATED BUS STOP | NEW PEDESTRIAN SIGNAL |
| STATION MAINTENANCE PARKING | NO PARKING | EXISTING PEDESTRIAN SIGNAL |
| NEW CURB / MEDIAN | NO LEFT TURN | PEDESTRIAN AMBER SIGNAL |
| NEW SIDEWALK | POTENTIAL ACCESS CLOSURE | PEDESTRIAN CROSS WALK |
| NEW VEGETATION | DEDICATED BRT LANE | NEW TREE |
| LOADING ZONE | PAINTED ARROWS | TREE REMOVAL |
| PATIO | TRAFFIC MOVEMENT | |
| PATIO REMOVAL | EXISTING BIKE LANE | |

Route Option Details

Option 2: Northbound Lane on 114 Street/ Southbound Lane on 112 Street

Route Segment	Alignment
82 Avenue - 109 Street to 112 Street westbound	Dedicated BRT lane (option for <i>curbside</i> or <i>centre-running</i>)
82 Avenue - 112 Street to 114 Street	Dedicated curbside lane
114 Street northbound	Dedicated curbside lane
89 Avenue northbound/eastbound	University Transit Loop
112 Street southbound	Dedicated curbside lane
82 Avenue - 109 Street to 112 Street eastbound	Dedicated BRT lane (option for <i>curbside</i> or <i>centre-running</i>)



Overview

- + BRT travels northbound on 114 Street and southbound on 112 Street
- + Predominantly uses dedicated BRT curbside lanes
- + Three proposed BRT stations at:
 - + 114 Street/North of 83 Avenue (northbound)
 - + 112 Street/84 Avenue (southbound)
 - + University Transit Centre*

Highlights

BRT Operations will include:

- + Different corridors for northbound (114 Street) and southbound (112 Street) BRT travel
- + BRT station locations that maximize easy access and convenient connections to mass transit

Drivers will notice:

- + Removal of one lane of northbound traffic on 114 Street and one southbound on 112 Street
- + All on-street parking removed from 82 Avenue
- + Emergency vehicles can use the dedicated BRT lanes to facilitate access to and from the hospital

Public spaces/Active Transportation users will notice:

- + Existing pedestrian crossings are retained
- + Existing median and median trees are retained on 82 Avenue

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82 Avenue: 109 Street to 114 Street (centre-running option showing)

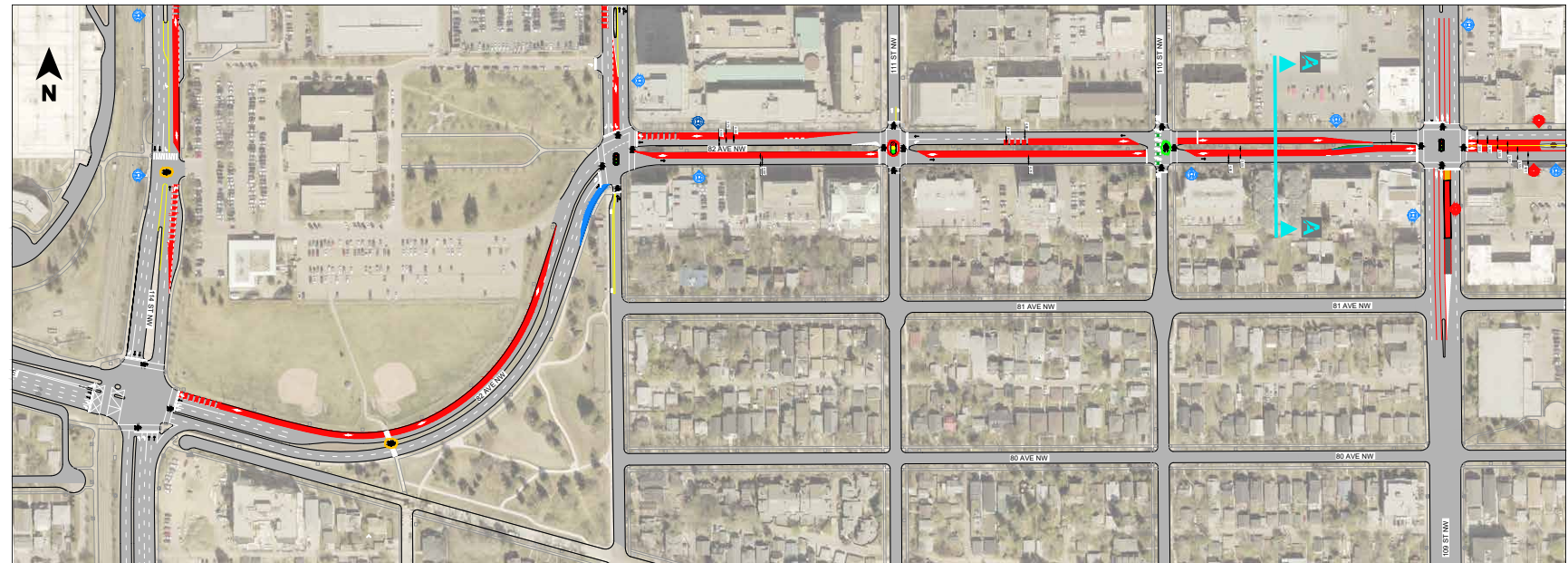
Highlights

- + Centre-running BRT lanes (109 Street to 112 Street) reduce conflicts with turning traffic and driveway accesses
- + Dedicated westbound to southbound left turn lane at 111 Street; eastbound left turn removed at 110 Street
- + All on-street parking removed from 82 Avenue
- + Maintains existing bike infrastructure on 110 Street and 111 Street

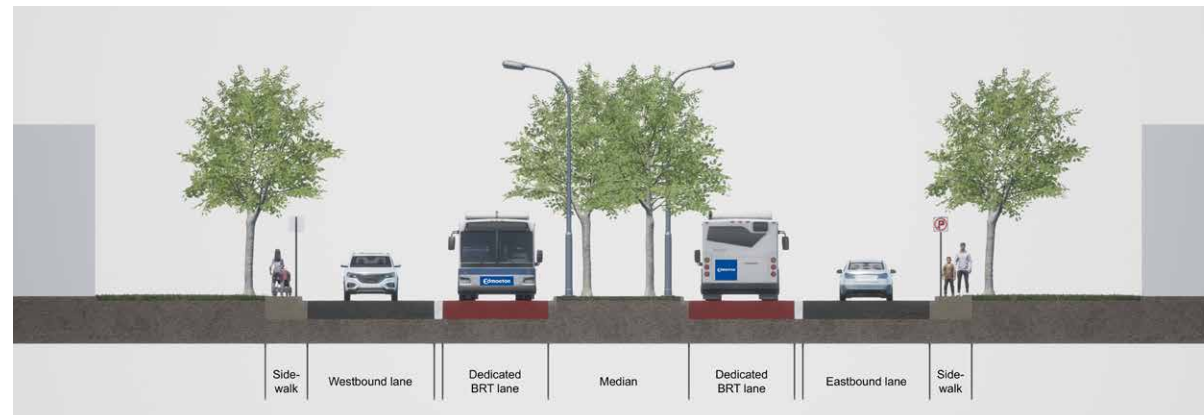
The segment for 82 Avenue between 109 Street and 112 Street can also be designed as curbside with the following differences:

- + Conflicts with turning traffic and driveway accesses
- + Maintains left turn at 110 Street

(For a visual of the curbside option see page 5.)



View A



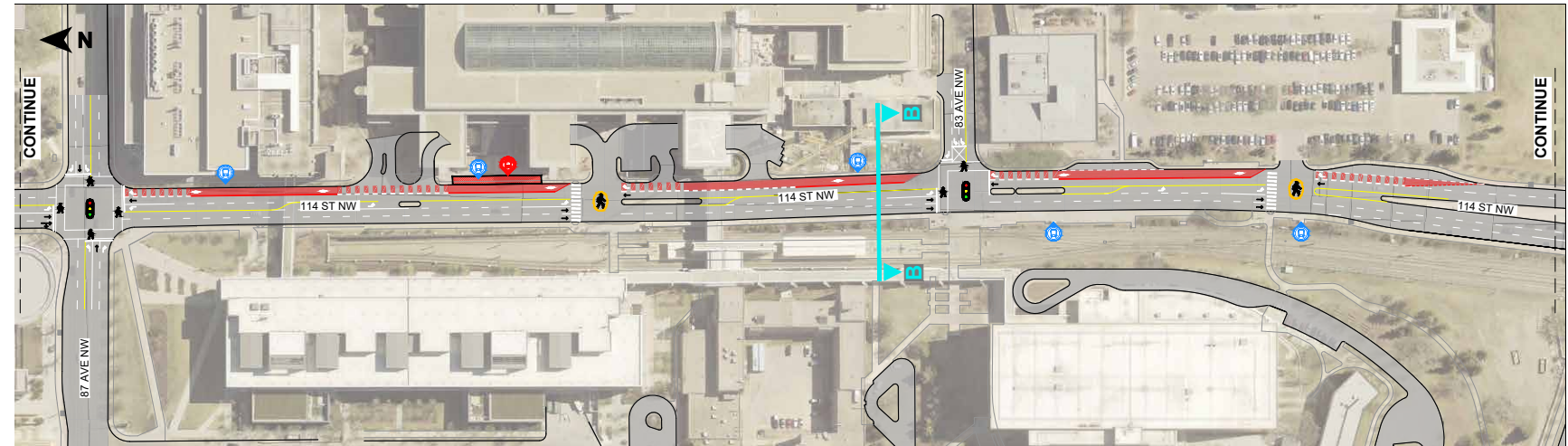
LEGEND

- | | |
|-----------------------------|----------------------------|
| BRT STATION PLATFORM | DEDICATED BRT LANE |
| BRT LANE | PAINTED ARROWS |
| PEDESTRIAN RAMP | TRAFFIC MOVEMENT |
| STATION MAINTENANCE PARKING | EXISTING BIKE LANE |
| NEW CURB / MEDIAN | NEW TRAFFIC SIGNAL |
| NEW SIDEWALK | EXISTING TRAFFIC SIGNAL |
| NEW VEGETATION | NEW PEDESTRIAN SIGNAL |
| LOADING ZONE | EXISTING PEDESTRIAN SIGNAL |
| PATIO | PEDESTRIAN AMBER SIGNAL |
| PATIO REMOVAL | PEDESTRIAN CROSS WALK |
| BRT STATION | NEW TREE |
| EXISTING BUS STOP | TREE REMOVAL |
| RELOCATED BUS STOP | |
| NO PARKING | |
| NO LEFT TURN | |
| POTENTIAL ACCESS CLOSURE | |

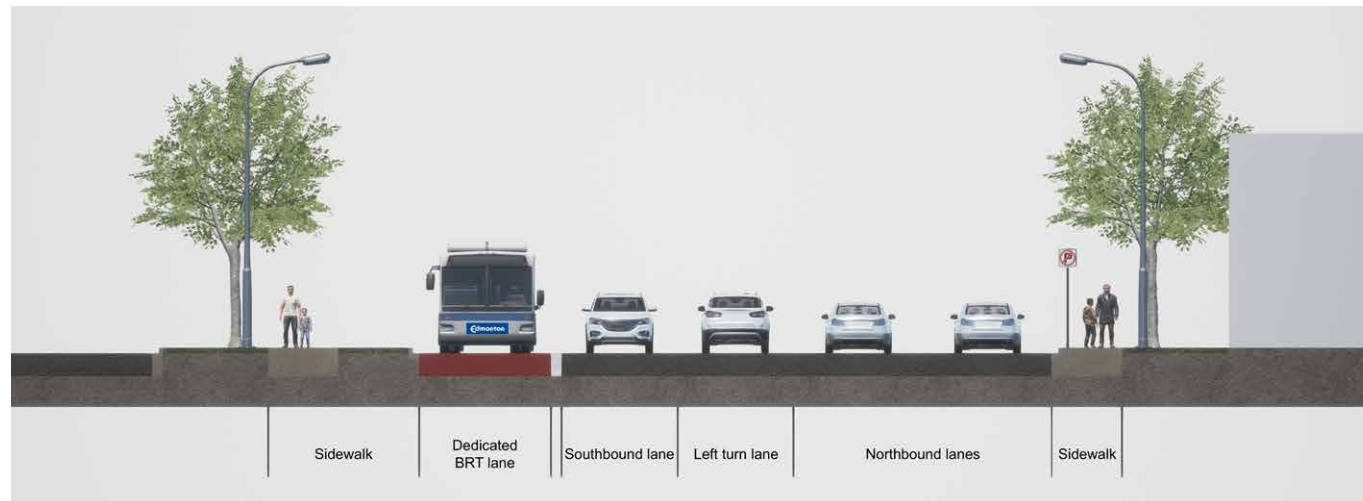
114 Street: 82 Avenue to 87 Avenue

Highlights

- + Existing turn lanes retained at 82 Avenue, 83 Avenue and 87 Avenue
- + Existing northbound right turn and southbound left turns into hospital retained at 83 Avenue



View B



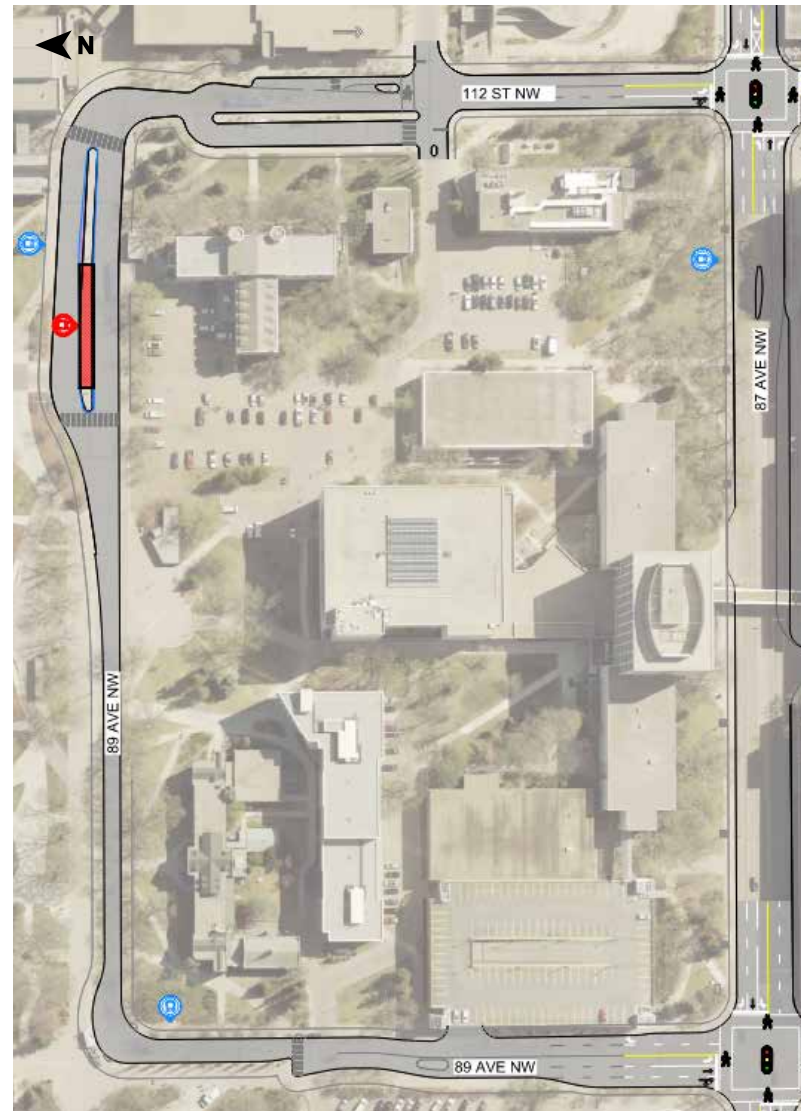
LEGEND

BRT STATION PLATFORM	BRT STATION	NEW TRAFFIC SIGNAL
BRT LANE	EXISTING BUS STOP	EXISTING TRAFFIC SIGNAL
PEDESTRIAN RAMP	RELOCATED BUS STOP	NEW PEDESTRIAN SIGNAL
STATION MAINTENANCE PARKING	NO PARKING	EXISTING PEDESTRIAN SIGNAL
NEW CURB / MEDIAN	NO LEFT TURN	PEDESTRIAN AMBER SIGNAL
NEW SIDEWALK	POTENTIAL ACCESS CLOSURE	PEDESTRIAN CROSS WALK
NEW VEGETATION	DEDICATED BRT LANE	NEW TREE
LOADING ZONE	PAINTED ARROWS	TREE REMOVAL
PATIO	TRAFFIC MOVEMENT	
PATIO REMOVAL	EXISTING BIKE LANE	

University Transit Centre*

Highlights

- + BRT Station combined with University Transit Centre at 89 Avenue
- + Potential to enhance pedestrian safety, alongside other potential changes to the transit centre*



LEGEND

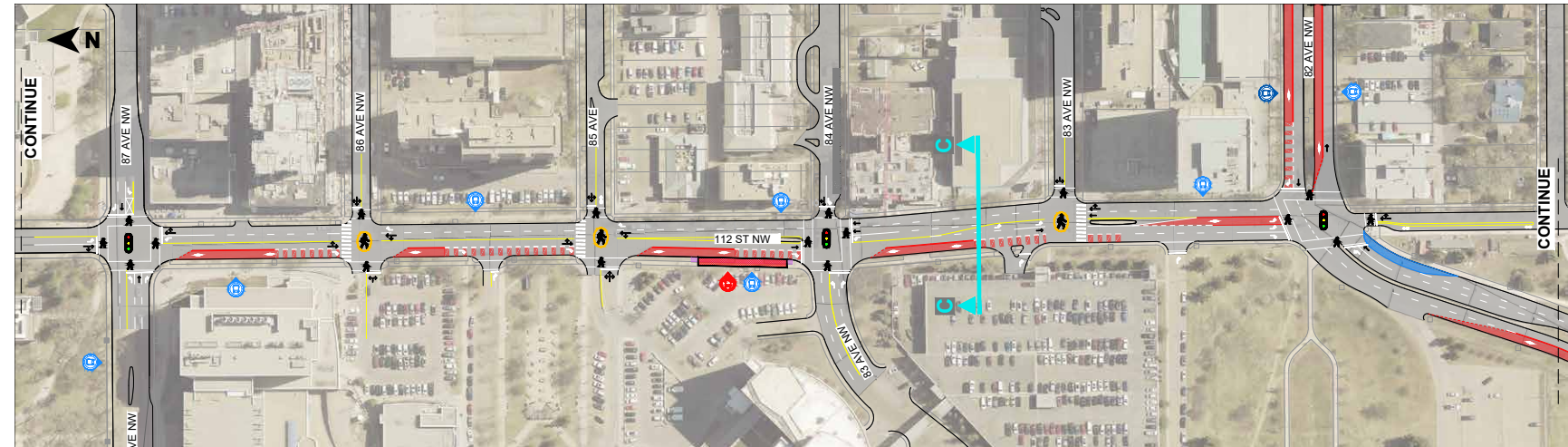
	BRT STATION PLATFORM		DEDICATED BRT LANE
	BRT LANE		PAINTED ARROWS
	PEDESTRIAN RAMP		TRAFFIC MOVEMENT
	STATION MAINTENANCE PARKING		EXISTING BIKE LANE
	NEW CURB / MEDIAN		NEW TRAFFIC SIGNAL
	NEW SIDEWALK		EXISTING TRAFFIC SIGNAL
	NEW VEGETATION		NEW PEDESTRIAN SIGNAL
	LOADING ZONE		EXISTING PEDESTRIAN SIGNAL
	PATIO		PEDESTRIAN AMBER SIGNAL
	PATIO REMOVAL		PEDESTRIAN CROSS WALK
	BRT STATION		NEW TREE
	EXISTING BUS STOP		TREE REMOVAL
	RELOCATED BUS STOP		
	NO PARKING		
	NO LEFT TURN		
	POTENTIAL ACCESS CLOSURE		

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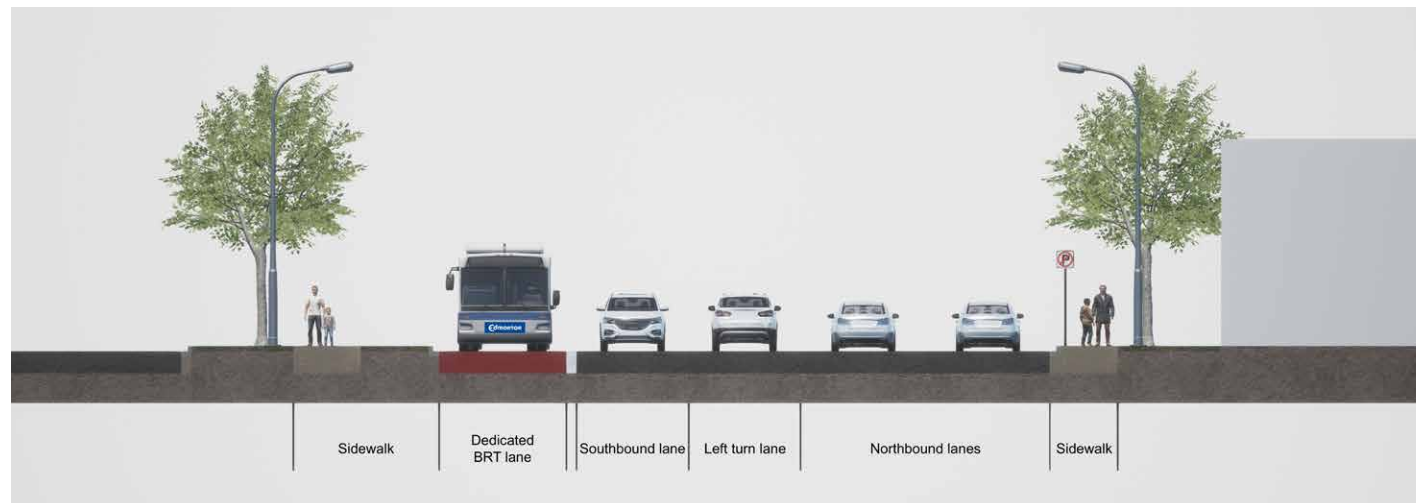
112 Street: 87 Avenue to 82 Avenue

Highlights

- + Dedicated curbside lanes (southbound)
- + Three general traffic lanes retained (one travel lane southbound and two lanes northbound)



View C



LEGEND

- | | | |
|-----------------------------|--------------------------|----------------------------|
| BRT STATION PLATFORM | BRT STATION | NEW TRAFFIC SIGNAL |
| BRT LANE | EXISTING BUS STOP | EXISTING TRAFFIC SIGNAL |
| PEDESTRIAN RAMP | RELOCATED BUS STOP | NEW PEDESTRIAN SIGNAL |
| STATION MAINTENANCE PARKING | NO PARKING | EXISTING PEDESTRIAN SIGNAL |
| NEW CURB / MEDIAN | NO LEFT TURN | PEDESTRIAN AMBER SIGNAL |
| NEW SIDEWALK | POTENTIAL ACCESS CLOSURE | PEDESTRIAN CROSS WALK |
| NEW VEGETATION | DEDICATED BRT LANE | NEW TREE |
| LOADING ZONE | PAINTED ARROWS | TREE REMOVAL |
| PATIO | TRAFFIC MOVEMENT | |
| PATIO REMOVAL | EXISTING BIKE LANE | |