

CEA Transportation Connects Alberta Conference

# Retrofitting Arterial Roads to Expand the Active Transportation Network

February 27, 2023

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# Introductions

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# Agenda

- Project Background & Locations
- Facility Selection
- Corridor Prioritization
- Design Details & Challenges
- Next Steps
- Questions?

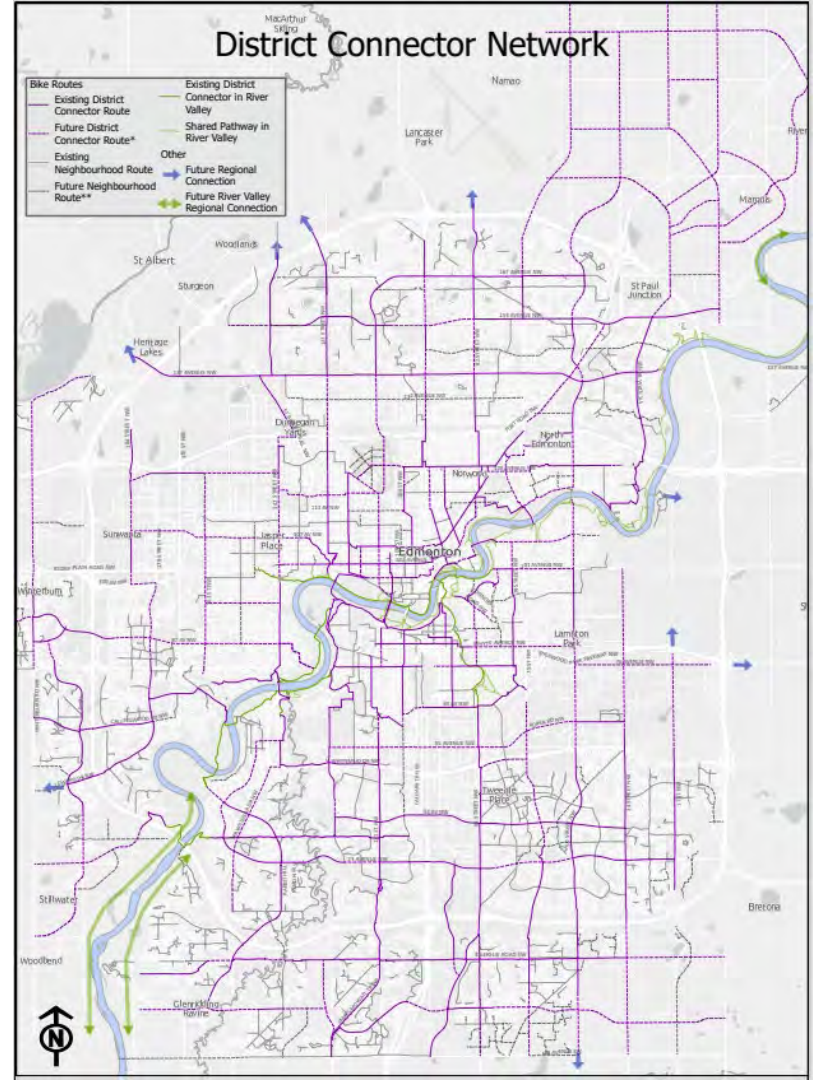
## Project Background

- The City of Edmonton is expected to grow to 2M people
- Safe / convenient transportation options are required for all users (walking, cycling, wheeling, taking public transit and driving)
- Active transportation networks must be enhanced and expanded
- Project scope includes Concept Planning and Preliminary Design of active transportation infrastructure along 5 arterial corridors



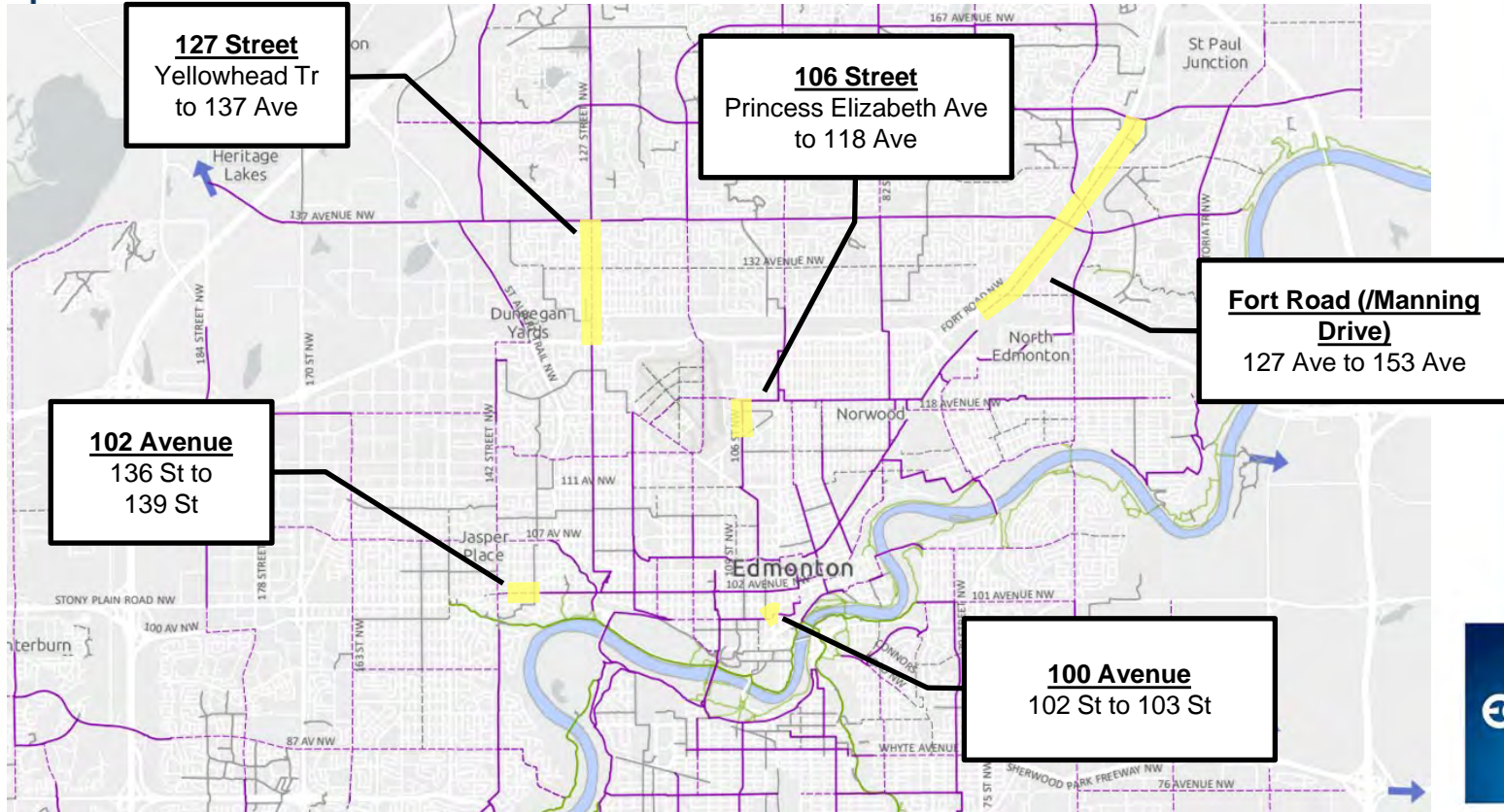
# Project Background

- The Edmonton Bike Plan and the Bike Plan Implementation Guide lay the foundation for a network that is:
  - Accessible and predictable
  - For all ages and abilities
  - All-season
- Future bike network closes the gaps
- Project study corridors are identified as future routes or missing links in the Bike Plan





# Project Locations



# Facility Selection

- Consider facility type and location
- Preliminary screening to assess feasibility of options:
  - Network connectivity
  - Corridor context & adjacent land uses
  - Available right-of-way
  - Traffic, parking, and transit operations
- 4/5 corridors narrowed down to single feasible options
- Detailed assessment required for Fort Road corridor

## Facility Selection – Fort Road Evaluation

- Feasible options included Shared Pathway on the east side, the west side, or both
- Multiple Account Evaluation (MAE) conducted to identify a preferred option.
- Evaluation criteria developed based on Bike Plan Principles:
  - Health and Comfort
  - Connectivity
  - Directness
  - Attractiveness
  - Integration
  - Deliverability



## Facility Selection – Fort Road Evaluation

- Options were scored relative to each other against each criterion on a 3-point scale
- Final score favoured the east side, but only slightly – both sides advanced to concept design

Account	SCORING		
	Option A - East Side	Option B - West Side	Both Sides
Health and Comfort	2.0	2.7	2.7
Connectivity	2.7	1.7	3.0
Directness	2.5	2.5	2.5
Attractiveness	2.0	2.0	1.5
Integration	2.6	2.2	2.4
Deliverability	2.2	2.4	1.4
<b>Total Weighted Score:</b>	<b>2.33</b>	<b>2.28</b>	<b>2.23</b>

## Corridor Prioritization

- Identify the highest priority corridors to advance to preliminary engineering
- Similar approach to facility selection
- Prioritization criteria:
  - Equity
  - Ridership Potential
  - Safety
  - Connectivity
  - Delivery

# Corridor Prioritization

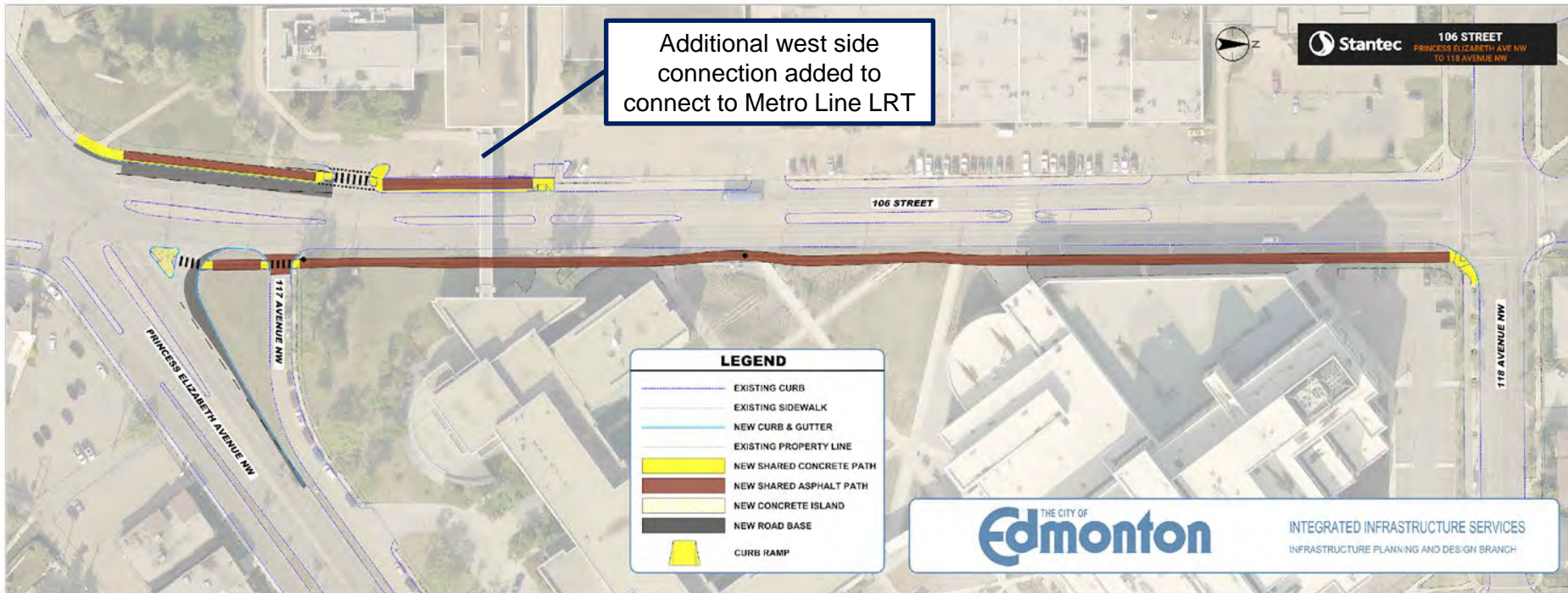
- Scoring results:
  1. 106 Street
  2. 100 Avenue
  3. 102 Avenue / Fort Road
  4. 127 Street – **not advanced to preliminary design**

Criteria	100 Avenue	102 Avenue	127 Street	106 Street	Fort Road
Equity	2	1	2	3	3
Ridership	3	2	1	3	2
Safety	3	1	2	1	3
Connectivity	1.5	2.0	2.0	2.0	2.0
Delivery	2.3	2.7	1.7	2.7	1.3
<b>Scoring</b>	<b>21</b>	<b>20</b>	<b>18</b>	<b>23</b>	<b>20</b>

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# Design Details & Challenges

# 106 Street design



Shared pathway on the east side and south portion of the west side

# 100 Avenue Design

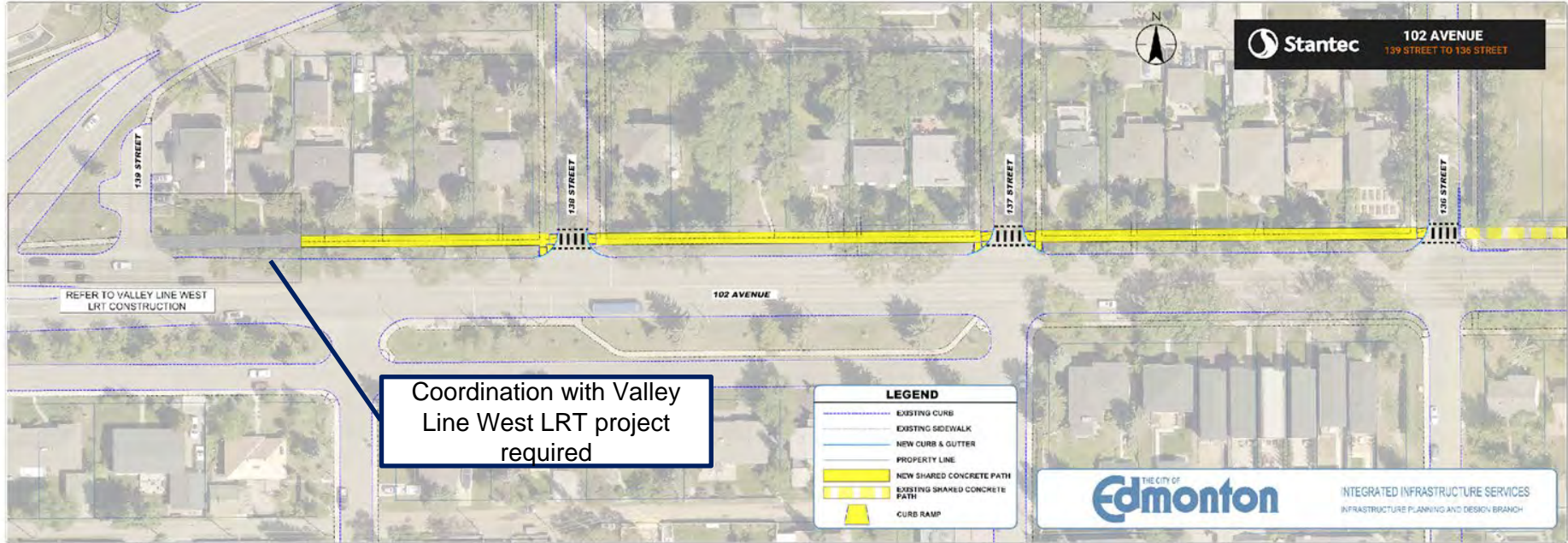


Two-way protected bike lane on the north side





# 102 Avenue Design



Shared pathway on the north side

# Fort Road Design

East side only  
through southern  
portion

Stantec FORT ROAD NW  
43 STREET NW TO 136 AVENUE NW



### LEGEND

- EXISTING CURB
- EXISTING SIDEWALK
- NEW CURB & CUTTER
- EXISTING PROPERTY LINE
- NEW SHARED CONCRETE PATH
- EXISTING SHARED CONCRETE PATH
- NEW SHARED ASPHALT PATH
- CURB RAMP

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INFRASTRUCTURE PLANNING AND DESIGN BRANCH

East-west  
connections  
between pathways

Ditch realignments  
required

Stantec FORT ROAD NW  
136 AVENUE NW TO 151 AVENUE NW



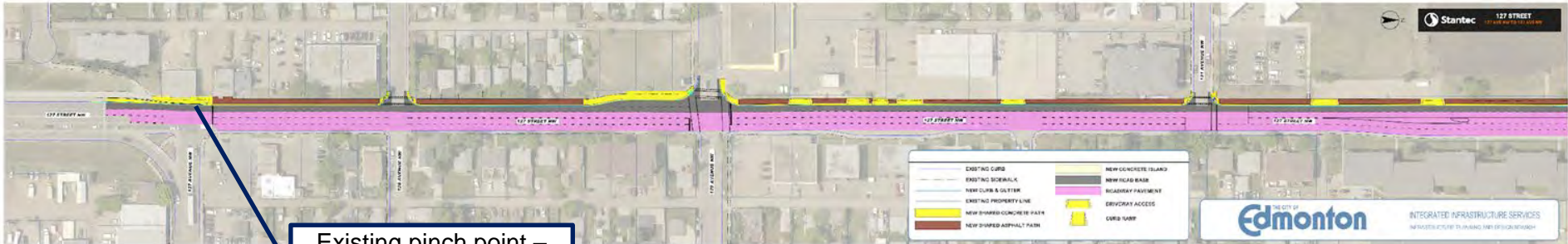
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INTEGRATED INFRASTRUCTURE SERVICES  
INFRASTRUCTURE PLANNING AND DESIGN BRANCH

Shared pathway on the east side and north portion of the west side

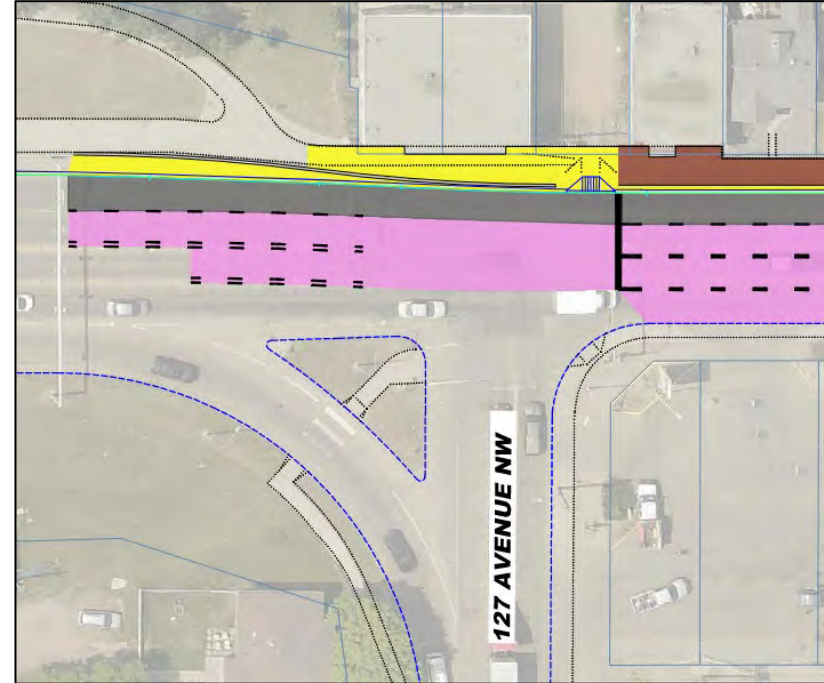


# 127 Street Design



Shared pathway on the west side

# 127 Street Design



## Next Steps

- Timelines for detailed design and construction of the project will be confirmed

Questions?



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Thank you

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