

Off-site Levies Bylaw Infrastructure & Costs: Transit & Transportation

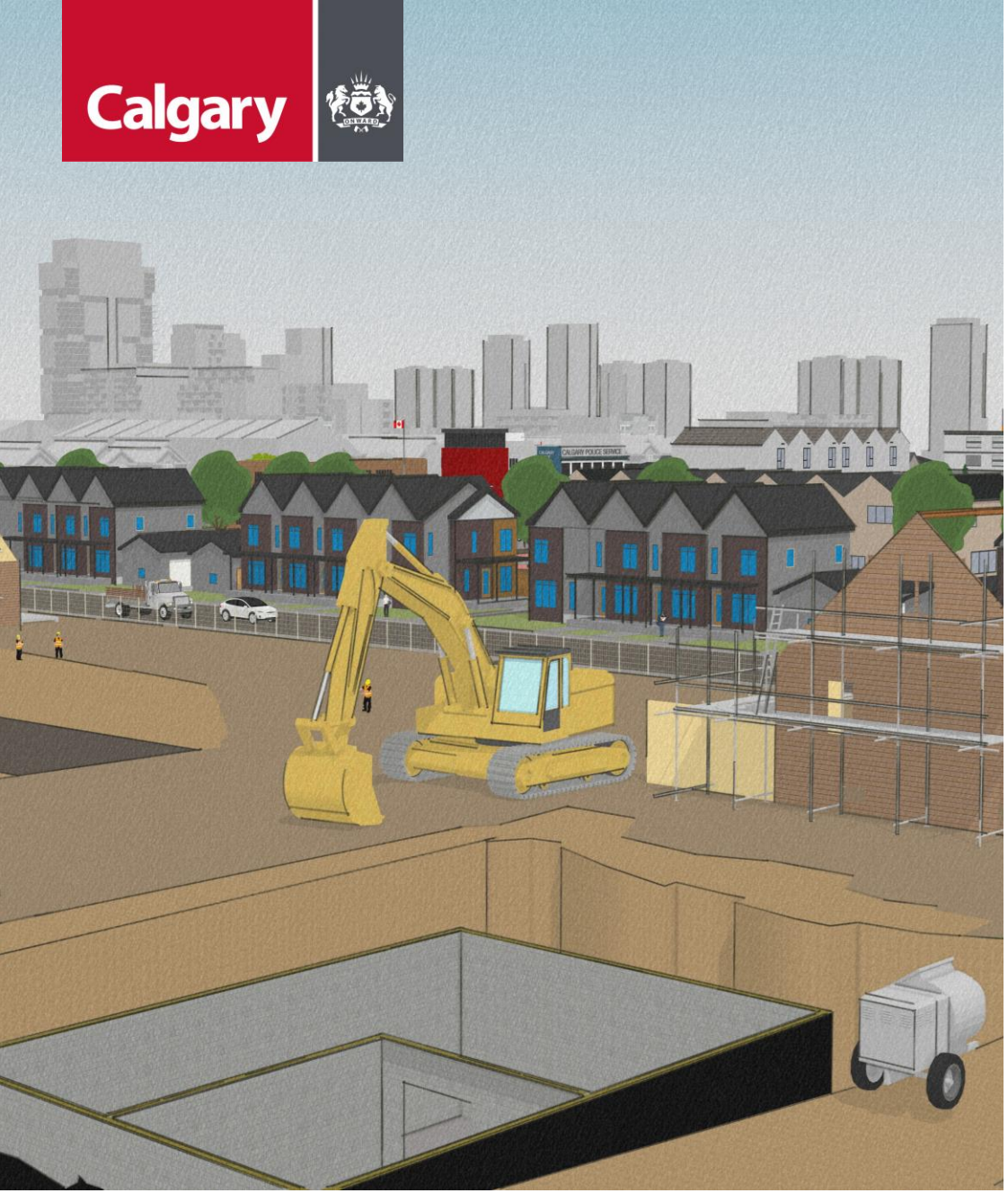
March 12, 2026

DRAFT FOR DISCUSSION



Agenda

1. Transit Buses, 5A & Traffic Signals
2. Follow-up Items
3. Questions and Feedback



Purpose and Objectives

1. Provide updates for specified infrastructure
2. Provide update regarding follow-up items
3. Discuss with industry



Transit Buses, 5A Network & Traffic Signals

Overview
Transit Buses, 5A & Traffic Signals

	Item	2024	2025	Comments
Transit Buses	Cost	$732K/bus	$950K/bus	• Limited market competition, global supply chain pressures
	Quantity	237	243	• Additional leviable land (ASPs)
	Level of Service	1 bus per 1,763 people	1 bus per 2,075 people	• Citywide population-to-fleet ratio
	Forecast population served	416,991 (2023 – 2055)	447,456 (2026 – 2055)	• Additional population (ASPs)
5A Network	Cost (Greenfield) Cost (Shared)	$44M ($911/m) $35M ($456/m)	$43.5M ($900/m) $99.8M ($1,300/m)	• Market rates show increased pricing
	Quantity (Greenfield) Quantity (Shared)	49KM 77KM	49KM 77KM	• Estimated quantity same as in OSL 2024 bylaw
Traffic Signals	Cost	$300K/location $162M	$514K/location $277M	• Based on construction cost actuals
	Quantity	539	539	• Estimated quantity same as in OSL 2024 bylaw

Transit Buses
Number of Buses Needed

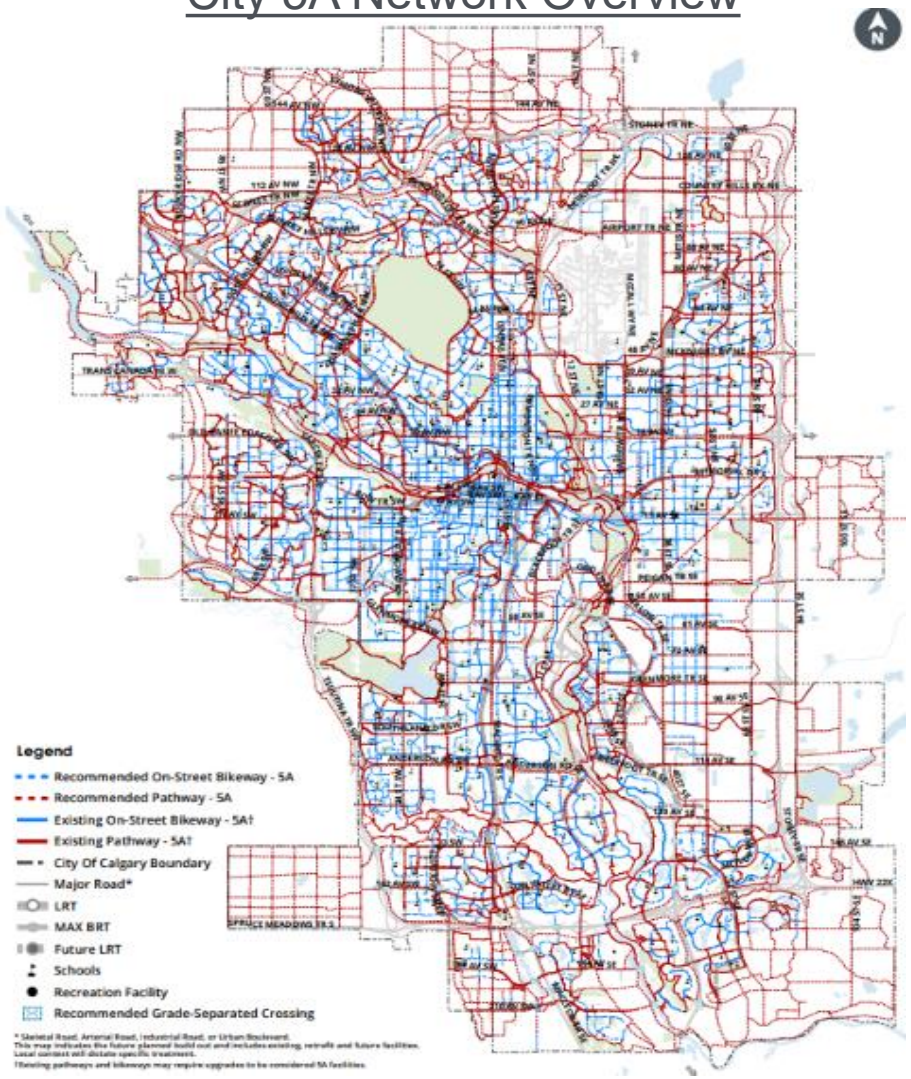
Row	Item	2016	2019	2022	2025	Average
A	# 40’ buses in fleet	732	744	742	753	**743**
B	# of people	1,235,171	1,285,344	1,389,200*	1,562,595*	**1,368,078**
C = B / A	# of people per 1 bus	1,687	1,728	1,872	2,075	**1,842**
D	Forecast population in leviable ASP lands (Dec 2022):					416,991
	Forecast population in leviable ASP lands (Dec 2025):					**447,456****
E = D / C	# of buses needed (2022) = Forecast population / # people per bus =					237
	# of buses needed (2025) = Forecast population / # people per bus =					**243****

* Calgary & Region Economic Outlook 2025-2030: Fall 2025

** Final number review ongoing.

5A Network
Scope and Cost

City 5A Network Overview



Leviable 5A Network Routes



- Scope: 5A network scope remains the same as stated in 2024 Off-site Levies Bylaw
- ~30 Routes located in all four quadrants of the city.
- 2025 Cost Estimate:
  - 5A Greenfield
    49KM
    $43.5M ($900/m)
  - 5A Shared
    77KM
    $99.8M ($1,300/m)

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Traffic Signals
2024 Off-site Levies Bylaw

Category	Count
ASPs:	
Greenfield Arterials, Parkways, and Boulevards	376
Plus 6.9% at collector-collector intersections	26
ASP Subtotal:	**402**
Future ASPs:	
North of Glacier/Keystone	31
South of Belvedere	31
Southeast	43
Providence	23
Plus 6.9% at collector-collector intersections	9
Future ASP Subtotal:	**137**
TOTAL	**539**

Methodology (Current OSL bylaw):

- Major/arterial roads: every intersection
- Urban/neighborhood boulevards, and parkways: every intersection
- Collector/collector intersections: citywide rate (7% of all signals)
- Plus extension to future ASPs, assuming similar # of signals as adjacent greenfield areas

2025 Cost Estimate:

Construction Cost	$	393,360
City Cost (12%) = City Cost % * Construction Costs	$	53,640
Engineering Cost (5%) = Engineering Cost % * Construction Cost	$	19,668
Subtotal	$	466,668
Contingency (10%) = Contingency % * Subtotal	$	46,667
Traffic Signal Total Build Cost	$	513,335

Cost Update Summary (March 12, 2026)

Infrastructure Type	# of projects (Old + New)	2024 OSL Bylaw (2021 Costs + inflation)	2025 Costs (Existing projects only)	2025 Additional Project Costs (New projects only)	2025 Updated Costs (Total)
BRT Infrastructure	10 + 1	$487M	$937M	$42M	$978M
Pedestrian Overpasses	30 + 2	$380M	$471M	$30M	$501M
Road Structure over Rail/Creek	9 + 1	$341M	$416M	$46M	$462M
Interchange	41 + 4	$2,958M	$3,727M	$403M	$4,130M
Road Widenings	14 + 1	$919M	$997M	$18M	$1,015M
Transit Buses	Program: 237 + 6	$174M	$225M	$6M	$231M
5A Network	2 Programs	$79M	$144M	None	$144M
Traffic Signals	Program: 539	$162M	$277M	None	$277M
Total	104 + 9 + 4 Programs	$5,324.8M	$6,970.2M	$538.6M	$7,508.8M

Number rounding occurring. Hence, numbers may not add up as typical.

Blue text: Recent cost update areas. Purple text: Projects included in update.



Follow-Up Items

(1) 144 Ave N. (East Route), (2) 128 Ave NE, (3) 88 St Infrastructure (4) Lumpsum Value, (5) Cost Updates

Project alignment and related information are based on currently available data. Maps are draft versions to support visualization only.

144 Ave N.

Functional Planning Study in progress (2026)

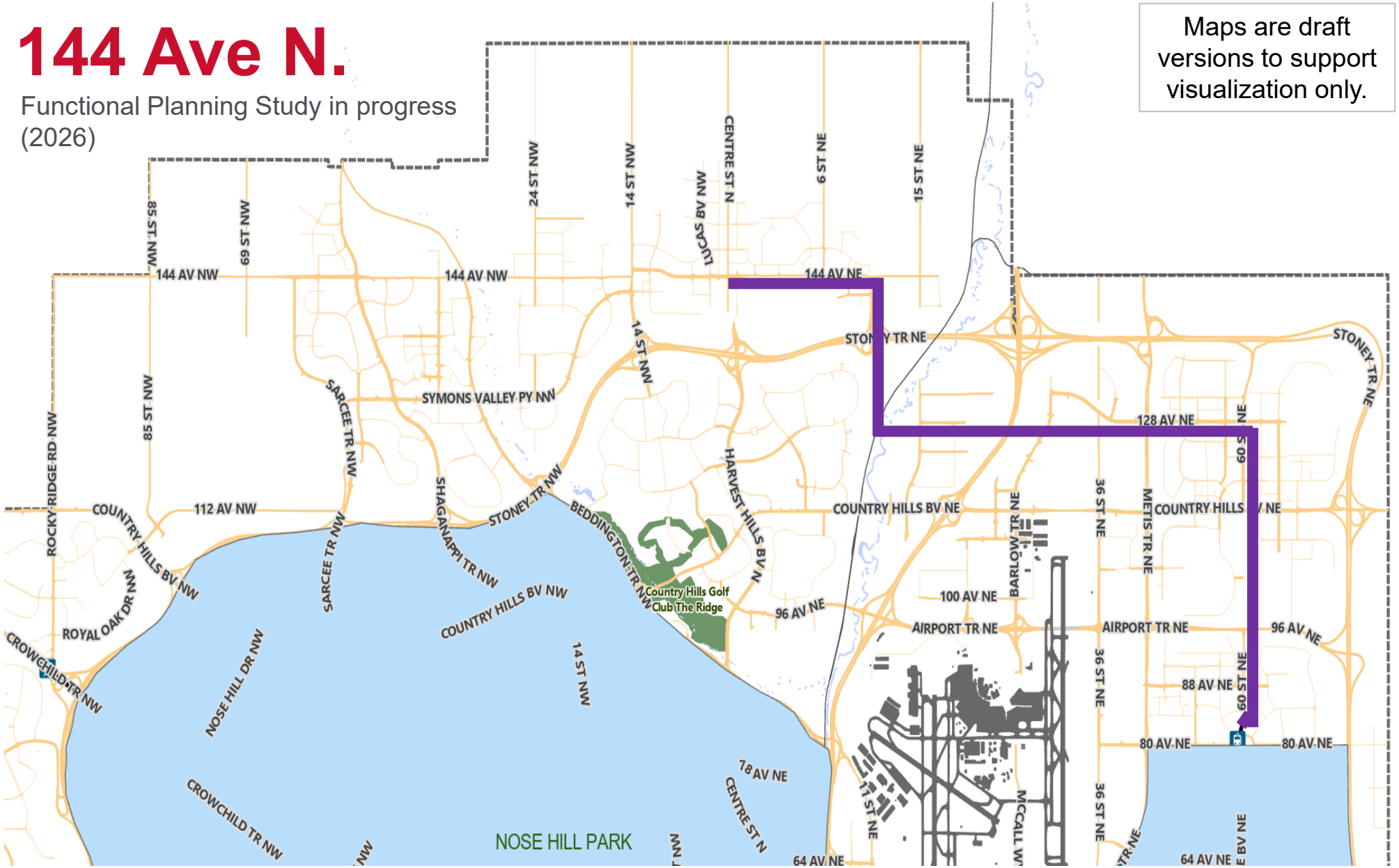
Maps are draft versions to support visualization only.

Legend

- Greenfield
- Established Area

Bus Rapid Transit

144 Ave N. BRT Route (**East**) from Keystone to Blue Line



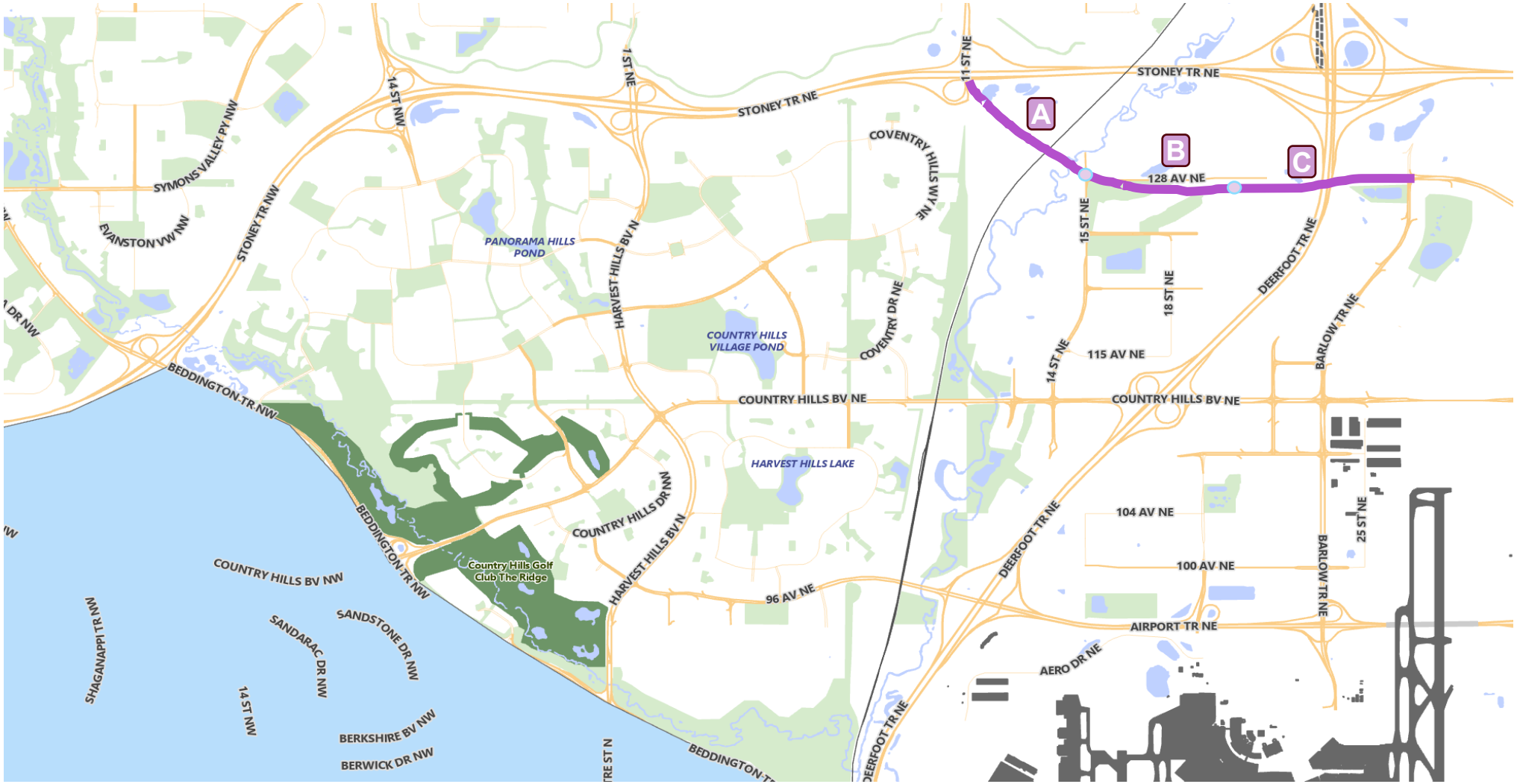
[Link: 144 Avenue North Bus Rapid Transit Study | Engage]

128 Ave NE (Map 1 of 2)
3 Segments (A, B & C)

	Segment A Road Widening	Segment B Road Widening	Segment C Interchange
Current OSL bylaw	$150M		$53M
Current update	$116M	$18M	$131M

Legend

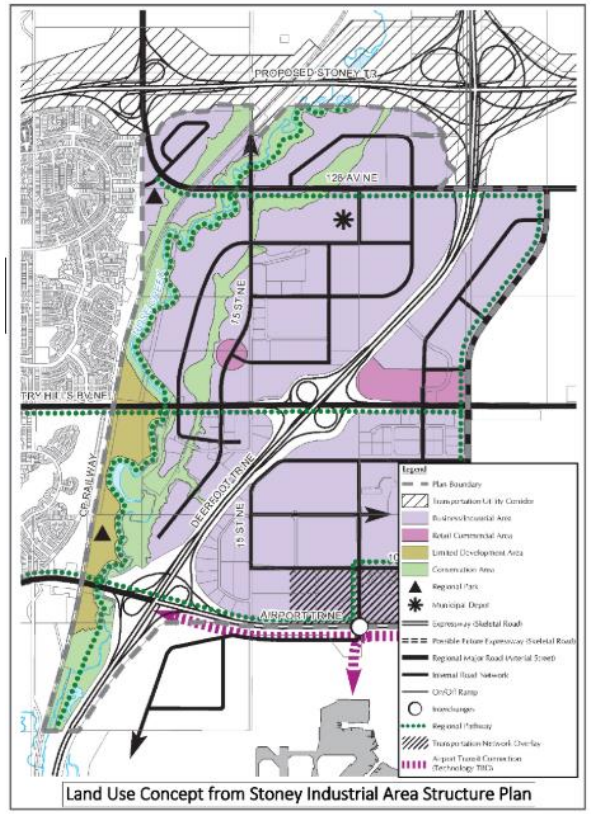
- Greenfield
- Established Area
- Project alignment
- A — Segment A (Has 2 bridges)
- B — Segment B
- C — Segment C
- Segment End



128 Ave NE (Map 2 of 2)

128 Ave NE Functional Planning Study

The City is creating functional plans to improve connections through Stoney Industrial Area at 128 Ave. to meet mobility & growth needs.



Land Use Concept from Stoney Industrial Area Structure Plan



Link: Functional Planning Study

88 St Infrastructure



- Ongoing corridor planning and monitoring of available information
- Support area growth
- Enable safe and efficient mobility

Lump Sum Values

- Lump Sum Unit Rate of $1,281,473 (Source: Third-party consultant)
  - $1M in Year 2020 → Adjusted for inflation

Categories	Unit of Measure	Quantities	Unit Rates	Totals
Asphalt - General	LS		$ 1,281,473	$ -
Asphalt - Pathway	m2	4,800	$ 61	$ 292,389
Asphalt - Roadway	m2	17,840	$ 129	$ 2,301,360
Cast-in-Place Barrier	m	200	$ 312	$ 62,458
Common Excavation	m3		$ 13	$ -
Concrete - General	LS		$ 1,281,473	$ -
Curb and Gutter	m	5,040	$ 159	$ 800,238
Earthworks - Export	m3		$ 26	$ -
Earthworks - Import	m3	200,000	$ 26	$ 5,109,110
Grading - General	LS		$ 1,281,473	$ -
Landscaping	LS	0.50	$ 1,281,473	$ 640,737
Other	LS	5.00	$ 1,281,473	$ 6,407,365
Removals	LS	0.50	$ 1,281,473	$ 640,737
Signage	LS	0.75	$ 1,281,473	$ 961,105
Stormwater	LS	2.00	$ 1,281,473	$ 2,562,946
Streetlights	LS	1.00	$ 1,281,473	$ 1,281,473
Structures - Roadway	m2	3,124	$ 10,726	$ 33,506,944
Traffic Signals	LS	2.00	$ 429,026	$ 858,052
Utilities	LS	1.00	$ 1,281,473	$ 1,281,473
Construction Costs = Unit Rates and Project Quantities				$ 56,706,386
Contingency (30%) = Contingency % *Construction Costs				$ 17,011,916
Subtotal = Construction Costs + Contingency				$ 73,718,302
Engineering Costs (10%) = Subtotal * Engineering Costs %				$ 7,371,830
City Costs (12%) = Subtotal * City Costs %				$ 8,846,196
Final Total Costs Based on Unit Rates and Project Quantities				$ 89,936,329
			Rounded up	**$ 90,000,000**

16 Avenue N.E. / 68 Street N.E. Interchange (Shared Benefit)

Legend

Lump sum (LS) from third-party consultant plus inflation

Recent City tender rates (average values)

Year	NRBCPI Inflation	Lump Sum
2020	Initial Value	1,000,000
2021	4.988%	1,049,881
2022	9.389%	1,148,455
2023	4.033%	1,194,774
2024	4.274%	1,245,843
2025	2.860%	1,281,473

- Use of lump sums in cost estimation:
  - Early estimate classes
  - Limited design detail
  - Consistent treatment of projects
  - Avoids false precision

Cost Estimate Updates

Infrastructure Project	Cost Update
Mountain View Road over West Nose Creek (Road Structures over Rail/Creek)	• Updated from **$60M to $42.9M** • Based on engineering assessment and applying inflation • $39M in OSL 2024 Bylaw using 2023 costs → $41M (2024) → $42.9 (2025)
Sarcee Trail S.W./Bow Trail Interchange	• Updated from **$184.5M to $301.74M** • Based on recent 2025 functional study
Macleod Trail/210 Avenue S.E. Interchange	• Updated from **$110M to $130M** • Based on revised engineering assessment
5A Network (Greenfield & Established Area)	• Greenfield 5A Network: Updated from **$44M** to **$43.5M** • Shared 5A Network: Updated from **$66M** to **$99.8M** • Based on quantity assessment and increased unit rates (shared 5A)



Closing

- Transportation & Transit Levies:
  - 113 Infrastructure Projects
  - 4 Infrastructure Groups
  - Regular reviews, discussions, feedback, refinement and updates keep the levy aligned to City planning and market conditions
  - The levy models also support alignment with City 10-year planning



Thank You & Question Period