

TO: CHIEF ADMINISTRATIVE OFFICER **DATE:** 2022 Nov 16

FROM: ACTING GENERAL MANAGER **FILE:** 94000 20
ENGINEERING *Reference: Lakefield Drive*

SUBJECT: LAKEFIELD DRIVE ACTIVE TRANSPORTATION IMPROVEMENT PROJECT – PREFERRED OPTION

PURPOSE: To present a new option for the proposed Lakefield Drive Active Transportation Improvement Project, and to seek Council direction to proceed with detailed design.

RECOMMENDATIONS:

1. **THAT** Council direct staff to advance the project to detailed design based on the preferred design concept (Option 3) as described in the report; and
2. **THAT** Council direct staff to maintain the existing access on Lakefield Drive/4th Street for all modes.

REPORT

1.0 INTRODUCTION

As per Council direction from the July 25th, 2022 Council Meeting, the project team developed a new design concept to improve accessibility and safety for active transportation users along Lakefield Drive and 4th Street between Nursery Street and Edmonds Street. The new design concept takes into account the existing road conditions, traffic patterns and feedback from the public, as well as balancing the needs and safety of all road users.

2.0 EXISTING CONDITIONS

Lakefield Drive is classified as a Local Road north of Reigate Drive and a Minor Collector Road south of Reigate Drive, which continues through to 4th Street. The approximate length of this corridor is 1.7 km with the curb-to-curb pavement width at 8.5m. The vertical grade varies along Lakefield Drive/4th Street and goes up to 14% between Reigate Road and Elwell Street with sharp horizontal curves that also limits sightlines along this segment. Street lights are located on the northern/eastern side of the road and there is an existing sidewalk along the south side of this corridor. On-street parking is permitted on both sides of the street along the majority of the project corridor with the exception at

the Robert Burnaby Park Baseball Field, which has restricted no-stopping along the curbside frontage.

3.0 DESIGN CONSIDERATIONS

Lakefield Drive/4th Street is identified in the Priority Cycling Network in the Burnaby's Transportation Plan. Based on the road classification as a Local Road, relatively flatter topography, and the density of existing mature trees, a shared on-street neighborhood bikeway, north of Reigate Road, is appropriate. Due to the road classification as a Minor Collector Road, steep grades, sharp horizontal curves that limits sightlines, and potential higher traffic exposures near the Robert Burnaby Park Baseball Field, a physically separated cycling facility is required south of Reigate Road.

4.0 PUBLIC INPUT

Phase 1 public engagement took place between May 24 and June 14, 2022, comprising of an online survey and popup events. Option 1 concept design (**Attachment 1**) for the project corridor was shared with the community to solicit feedback on areas where there are opportunities for new public spaces with street design modifications. Based on feedback received, Option 2 (**Attachment 2**) was developed and presented to Council on July 25th, 2022 along with Option 1. Overall, residents expressed support for active transportation improvements; however, concerns were raised regarding elements of the proposed street redesign.

Based on the feedback received during the Phase 1 public engagement and Council direction from the July 25th Council Meeting, the project team developed a new design concept, Option 3 (**Attachment 3**) that was the focus of the Phase 2 public engagement, which took place between October 17 and October 30, 2022 comprising of an online survey. In the same online survey, earlier options were shared to provide context. A summary of the survey responses is provided in **Attachment 4**. After staff review of the feedback received and based on technical design considerations, the preferred design concept (Option 3) is summarized below.

5.0 PREFERRED DESIGN CONCEPT (OPTION 3)

This option provides a combination of on-street and off-street cycling facility while maintaining vehicular access. The proposed cycling facility includes:

- **Nursery Street to Reigate Road:** Neighborhood bikeway where cyclists share the road with motor vehicles. This segment of the project corridor is relatively flat with a high density of mature trees along the north side of the street and existing speed humps as traffic calming measures. Based on these characteristics, as well as the Local Road designation, a shared on-street neighborhood bikeway is appropriate with the removal of on-street parking along the north side of the street that will provide additional street width to improve the safety of all road users.

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- **Reigate Road to Edmonds Street:** An off-road multi-use pathway is proposed along the north side and transition onto a neighborhood bikeway at Edmonds Street. This segment of the project corridor consists of steep grades of up to 14% with sharp horizontal curves that limits sightlines between Reigate Road and Elwell Street, and due to the potential higher traffic exposures near the Robert Burnaby Baseball Field, a physically separated cycling facility is warranted. Approximately 50 trees could be impacted.

Staff are recommending Option 3 for further detailed design as this option focuses on providing a safe and comfortable active transportation facility consistent with Burnaby's Transportation Plan, *Connecting Burnaby*. Option 3 is currently estimated at \$1.7 Million for construction. As part of the detailed design process, Staff will review existing traffic operations at the intersection of Lakefield Drive and Reigate Road to assess opportunities for any safety improvements. Staff is committed to maintaining and enhancing the neighbourhood liveability; therefore, future decisions to help further balance the needs and priorities of road users could be assessed further through the development of the upcoming City traffic calming policy.

6.0 RECOMMENDATIONS

It is recommended that Council direct staff to advance the project to detailed design for Option 3, and to maintain the existing access on Lakefield Drive/4th Street for all modes.



Jozsef Dioszeghy, P.Eng.
ACTING GENERAL MANAGER ENGINEERING

ALC/sla
Attachments (4)

Copied to: General Manager Planning and Development
General Manager Community Safety
General Manager Parks, Recreation and Cultural Services
Director Legislative Services

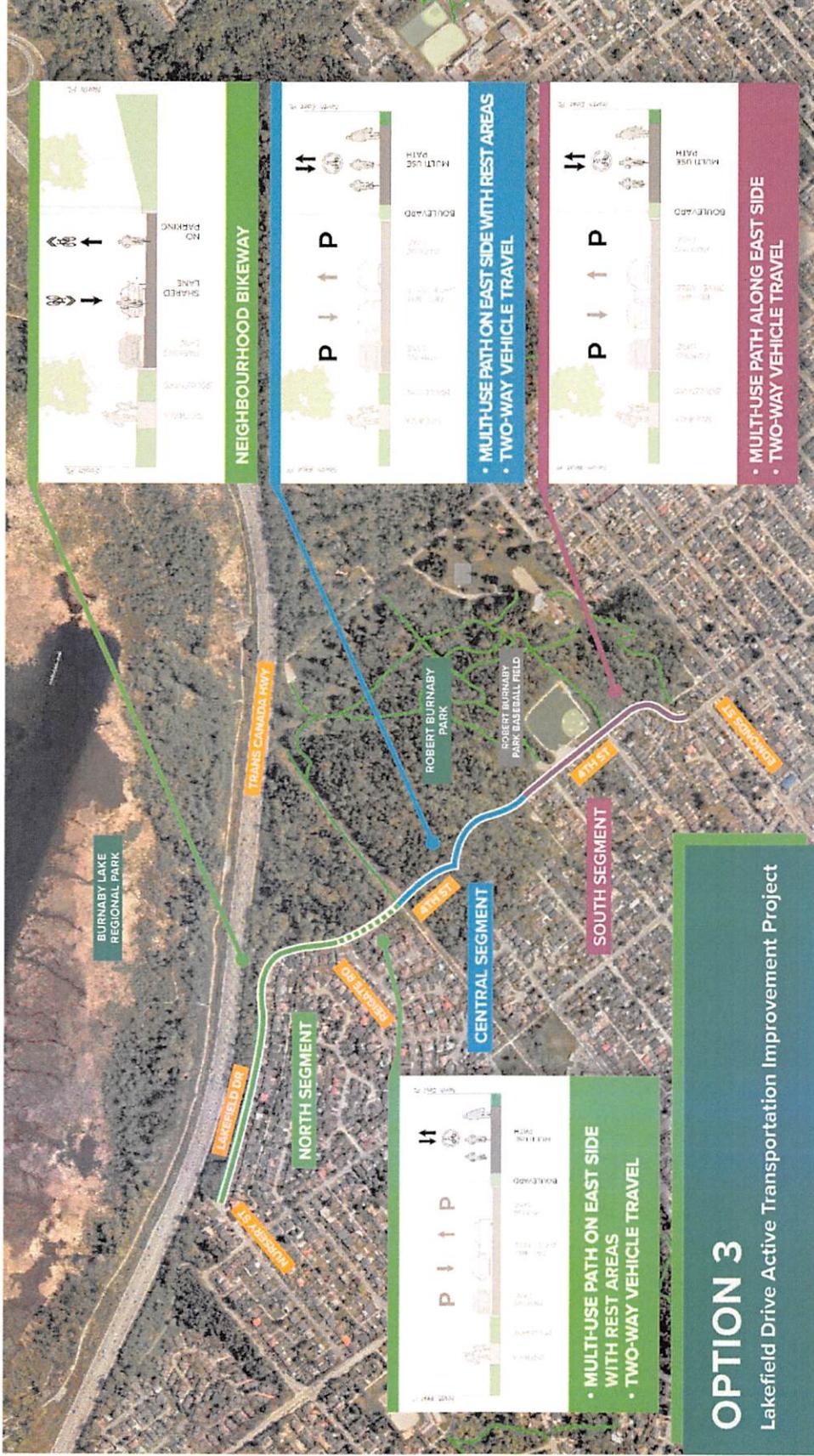
ATTACHMENT 1 – Option 1 Concept Plan



ATTACHMENT 2 – Option 2 Concept Plan



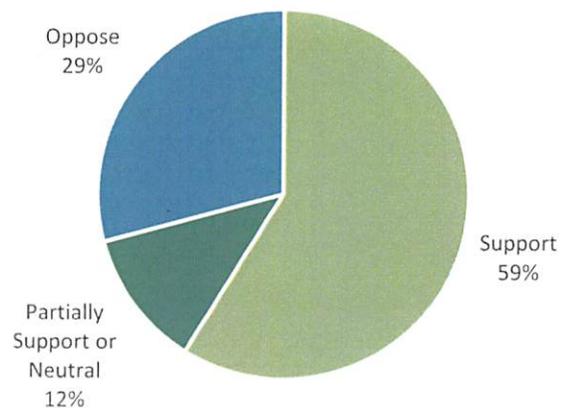
ATTACHMENT 3 – Option 3 Concept Plan



ATTACHMENT 4 – Online Survey Results (October 2022)

What do you like or dislike about Option 3? (487 responses)

Respondents were asked what they like or dislike about Design Option 3. The majority of respondents (59%) expressed support for the option with an additional 12% of respondents expressing partial support (i.e., comments detailed both likes and dislikes of the design option). The remaining 29% of respondents expressed a lack of support for this option.



Respondent comments were further reviewed, and the following themes emerged in support and opposition for Option 3:

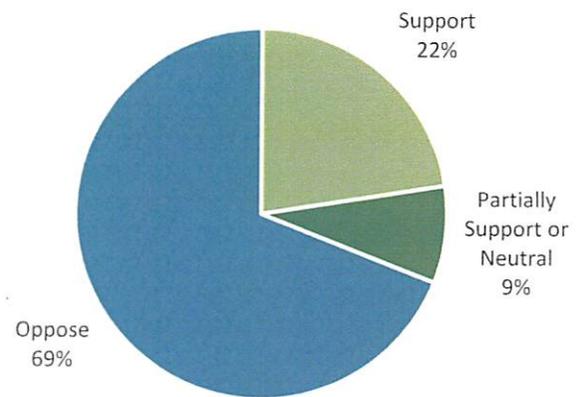
Comments in Support	Comments in Opposition.
Like that the road is open to vehicles (84 responses)	Dislike pedestrian and cyclists sharing MUP/Concerned about pedestrian and cyclist collisions (steep grade, fast bike speeds, impedes commuter bike route) (59 responses)
General comment of support (75 responses)	Dislike that the street is open to cars (30 responses)
Like that street parking is retained (27 responses)	General comment of Opposition (15 responses)
Like the MUP (27 responses)	Dislike amount of parking (too much) (14 responses)
Like the separated, bi-directional bike lanes (24 responses)	Dislike shared bike/vehicle lane (10 responses)
Supports all modes (21 responses)	
Like that 2-way vehicle access is allowed (19 responses)	
Like that pedestrians and cyclists are separated from vehicles (11 responses)	

Note: Only themes with 10 or more responses have been included. 'General Comments of Support' and 'General Comments of Opposition' includes comments that did not specify what respondents like or dislike about the design option (i.e. OK, Best Option, Preferred Option, No, Dislike, Do not like this option).

Several respondents also specifically mentioned the diverter at Lakefield Drive and Reigate Road. Of the 64 comments that referred to the diverter, 94% of them (60 responses) were in opposition of the diverter.

*What do you like or dislike about Option 1?
(494 responses)*

Respondents were asked what they like or dislike about Design Option 1. The majority of respondents (69%) expressed dislike for the option. 22% of respondents expressed their support of the option with an additional 9% of respondents expressing partial support (i.e., comments detailed both likes and dislikes of the design option).



*What do you like or dislike about Option 2?
(461 responses)*

When asked what they like or dislike about Design Option 2, 50% of respondents expressed their support, and 15% expressed partial support (i.e., comments detailed both likes and dislikes of the design option). 35% of respondents were opposed to Design Option 2.

Many respondents who partially support this design option specified that they like the design except for the reduced on-street parking.

