



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: February 26, 2025

From: Lloyd Bie, P.Eng.
Director, Transportation

File: 10-6450-10-01/2025-
Vol 01

Re: Review of Roads Near the South Dyke Trail

Staff Recommendation

That staff monitor the traffic operations and community feedback regarding vehicle speed on Dyke Road as described in the staff report titled "Review of Roads Near the South Dyke Trail", dated February 26, 2025 from the Director, Transportation.

Lloyd Bie, P.Eng.
Director, Transportation
(604-276-4131)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Parks Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Climate and Environment	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

At the May 28, 2024 Parks, Recreation & Cultural Services Committee, staff received direction to:

Investigate the feasibility and cost to establish a single or bi direction cyclist lane from the Dyke on No. 3 Road, north to Finn Road, east on Finn Road to Garden City Road, south on Garden City Road to Dyke Road with the current speed limit of 50 km/hr and at the proposed reduced 30 km/hr speed limit; and

Investigate the process to reduce the motor vehicle speed to 30km/h along Dyke Road from No.2 Road to No.5 Road

This report addresses this referral.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous city.

This report supports Council's Strategic Plan 2022-2026 Focus Area #6 A Vibrant, Resilient and Active Community:

Vibrant, resilient and active communities supported by a wide variety of opportunities to get involved, build relationships and access resources.

Analysis

Review of Cycling Facilities near the Bark Park

The cycling facilities near the Bark Park offer a mix of off-and on-street cycling routes. The South Dyke trail provides a gravel off road path for recreational cyclists near the waterfront. The adjacent road network via No. 3 Road, Finn Road and Garden City Road provides a shared roadway for cyclists as a bypass around the Bark Park (Figure 1).



Figure 1: Cycling Facilities near the Bark Park

Cycling data¹ indicates that the roads around the Bark Park (No. 3 Road, Finn Road and Garden City Road) are popular amongst road cyclists and cycling clubs. An average of 150 cyclists use these roads daily. In comparison, the off-road path through the Bark Park experiences approximately 25 cyclists a day.

A traffic assessment of these roads does not warrant any operational changes. The latest 5-year ICBC collision data does not indicate any collisions on these roads and a speed study did not identify any speeding issues.

Review of Potential On-Street Cycling Facilities

The sections of No. 3 Road, Finn Road and Garden City Road near the Bark Park are all classified as local roads designed to rural standards. Cycling upgrades to these sections of No. 3 Road, Finn Road and Garden City Road are not identified in the City’s Cycling Network Plan Update as a 15-year priority. As well, upgrades to these roads, including cycling facilities are not part of the Roads DCC program. From a transportation capacity perspective, the current operation of these roads do not warrant geometric alterations due to the low traffic volumes.

The addition of cycling facilities would require road widening as the existing pavement width of these roads is narrow and does not facilitate the delineation of bikes lanes. The considerations of implementing dedicated cycling facilities by widening No. 3 Road, Finn Road and Garden City Road (2.3 kilometres) were studied and are described below.

¹ Data was obtained from fitness tracking service 2020 Strava.

Riparian Management Area Considerations

These sections of No. 3 Road, Finn Road, and Garden City Road are adjacent to channelized watercourses that are part of the City's Riparian Management Areas network. Although there is space for potential road widening, this would require infilling of the existing watercourses. Any infilling activities require federal and provincial approvals, including compensating for the loss of habitat. Any proposed changes and impacts within these watercourses need to be further analyzed and understood through additional studies. The additional costs associated with environmental permitting and compensation for infilling would need to be pursued as part of any further consideration of cycling facilities adjacent to these roads. To assess these costs, a detailed investigation of the existing habitat assets, including identifying potential compensation sites, would need to be undertaken. An environmental study was not included as part of this conceptual review.

Multi-Use Pathway

The provision of a three metre multi-use pathway installed adjacent to the roadways (Figure 2) was considered. This type of facility would permit two-way cyclists on a shared pathway with pedestrians.

The pathway would be separated from traffic running along one side of the roadway. The major components of construction include watercourse infill, pavement widening, lighting, fire hydrant and utility pole relocations. The estimated cost for this work is \$12M (excluding watercourse permitting and compensation).



Figure 2: Concept of Typical MUP Section

Bike Lanes

Dedicated 1.8 metre wide bike lanes adjacent to each direction of travel were considered (Figure 3).

The major components of construction would include watercourse infill on both sides of the road, pavement widening on both sides of the road, lighting and fire hydrant relocations. The estimated cost for this option is \$21M (excluding watercourse permitting and compensation).



Figure 3: Concept of Typical Bike Lane Section

Status Quo

The traffic assessment conducted on No. 3 Road, Finn Road and Garden City Road does not warrant any operational or geometric changes to these roads.

Staff recommend maintaining the existing road configuration and speed limit of 50 km/h for the roads around the Bark Park. Cycling enhancements for No. 3 Road, Finn Road and Garden City Road are not identified as a 15-year priority in the City's Cycling Network Plan Update. Road

widening to facilitate dedicated cycling facilities will have significant cost and environmental considerations.

Review of Speed Limits

Travel speeds are the main factor in how serious a crash will be and whether a crash occurs at all. The faster a vehicle travels, the less time a driver has to react to the unexpected.

Reductions in vehicle speeds can have a very significant influence on the severity of crashes and injuries, particularly those involving vulnerable road users (VRUs) such as pedestrians and cyclists. Research indicates that vulnerable road users suffer much more serious injuries when struck by high-speed vehicles than when struck by vehicles travelling at 30 km/h or slower. This is consistent with the recommendations of Transport 2050 and Vision Zero which advocate for a reduced speed limit of 30km/h on local streets. A lower posted speed limit on local streets is also considered to make the streets more comfortable for pedestrians and cyclists.

Changing driver behaviour by reducing posted speed limits on neighbourhood roads is undertaken through a community driven process. In 2024, a 30 km/h speed limit was introduced in the Hamilton and Steveston neighbourhoods based on resident support. Staff continue to engage with residents regarding speed management on residential neighbourhood streets on a request basis.

Speed Limit on Dyke Road

The posted speed limit on Dyke Road (No. 2 Road to No. 5 Road) is 50 km/h which is the default speed limit of roads in Richmond (Figure 4). Dyke Road is classified as a local road designed to rural standards. The road is also part of the City’s cycling network identified as a shared roadway.

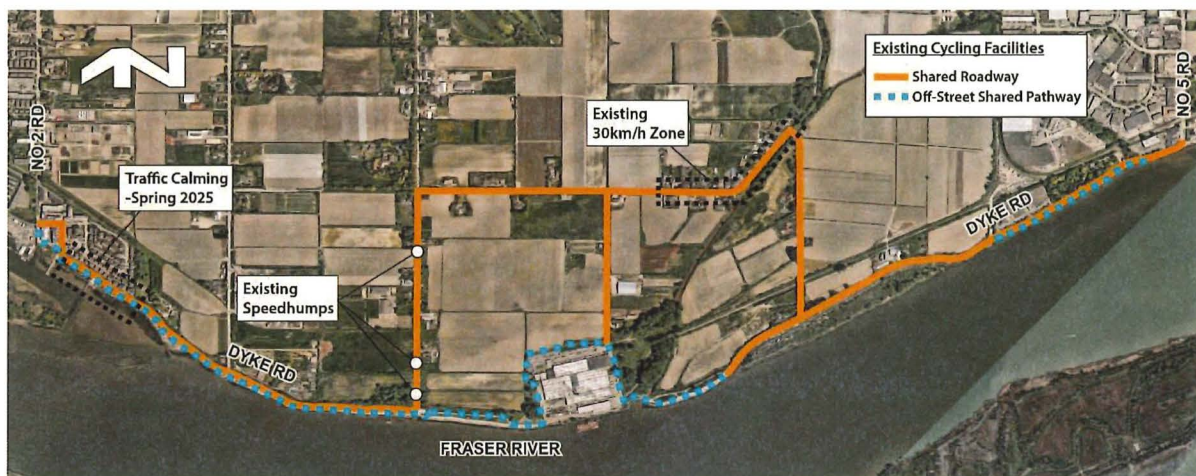


Figure 4: Dyke Road (No. 2 Road to No. 5 Road)

Dyke Road – London Road to No. 3 Road

Staff engaged with the London/Princess neighbourhood to address resident concerns regarding speeding on Dyke Road. The recommended speed mitigation measures based on community support were considered at the Regular Council Meeting of January 27, 2025.

The posted speed limit reduction from 50 km/h to 30 km/h on London Road, Princess Lane and Princess Street and the implementation of traffic calming measures on Dyke Road were endorsed by Council. The recommendation to reduce the speed limit on Dyke Road from London Road to No. 3 Road, as supported by area residents, was referred back to Public Works and Transportation Committee.

The traffic calming measures on Dyke Road near London Landing and the 30km/h posted speed limit signs within the neighbourhood will be implemented in Q2 2025.

Recommendation: Monitor vehicle speeds post installation of the traffic calming measures on Dyke Road. This will also allow opportunity to receive any feedback from the community regarding changes to vehicle speeds on Dyke Road.

Dyke Road – No. 4 Road to No. 5 Road

Other than the London/Princess neighbourhood, staff have not received requests from the public regarding speeding concerns on the eastern section of Dyke Road. A traffic assessment of this section of Dyke Road does not warrant changing the speed limit. There were 8 collisions identified in ICBC's latest 5-year collision record and no collisions involved vulnerable road users. The speed study indicates 85% of the traffic is travelling below 59 km/h on this section of Dyke Road.

Recommendation: Maintain the existing 50 km/h speed limit on the section of Dyke Road from No. 4 Road to No. 5 Road.

Review of No. 2 Road – Moncton Street to London Road

The section of No. 2 Road south of Moncton Street is road is classified as a collector road. Existing traffic calming measures include the provision of three raised crosswalks (Figure 5).

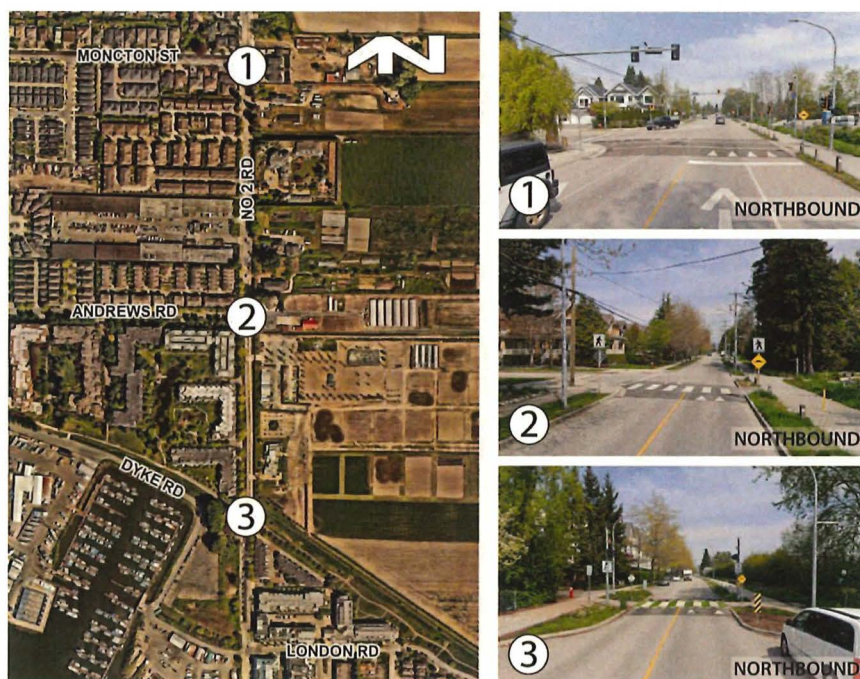


Figure 5: No 2 Road (South of Moncton Street)

A speed and collision study did not indicate any operational or safety concerns on this road with 85% of vehicles travelling at or below 46 km/h.

Recommendation: Should Council wish to pursue lowering the posted speed limit on this section of No. 2 Road, staff recommend engaging with the area residents to seek the level of support.

Financial Impact

None.

Conclusion

Staff assessed the feasibility of installing dedicated cycling facilities by widening the roadways surrounding the South Dyke Trail: No. 3 Road, Finn Road and Garden City Road. Implementing a multi-use pathway or separated bike lanes would cost an estimated \$12M and \$21M, respectively. In addition, there would be significant Riparian Management Area implications and habitat compensation related to changing the nearby watercourses. As upgrades to these roads were not identified in the City Cycling Network Plan Update and no operational concerns have been identified, staff do not recommend implementing changes.

Implementation of speed mitigation measures on local streets is a community driven process. A traffic assessment was conducted on Dyke Road, No. 3 Road, Finn Road and Garden City Road and No. 2 Road. The speed and collision data do not warrant any changes to the existing speed limit on these roads.

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Traffic calming measures on the section of Dyke Road near London Landing as supported by area residents and approved by Council in January 2025 will be implemented this spring. Monitoring of vehicle speeds and community feedback post installation will be undertaken to receive any comments from the London Landing neighbourhood regarding vehicle speeds on Dyke Road.

Should Council wish to pursue a lower speed limit on No. 2 Road, staff will engage with area residents to seek the level of support.



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