

Road Safety Audit – College Drive and Wiggins Avenue

ISSUE

This report provides a summary of the Road Safety Audit for College Drive and Wiggins Avenue and its recommendations.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council that the Administration continue with implementation of recommendations 1, 2, 3, 4, 5, 6, 7, 11, 12, 13, and 14.

BACKGROUND

City Council, at its Regular Business Meeting held on June 28, 2023, considered the Councillor C. Block – Cycling Safety motion and, resolved in part, that:

- “1. The Administration commission a third-party road safety audit at the intersection of College Drive and Wiggins Avenue.
2. That the 2023 operating budget transfer to the Reserve for Capital Expenditures be reduced by \$30,000 and reallocated to Transportation to complete a third-party road safety audit at the intersection of College Drive and Wiggins Avenue and report back with the results and any recommendations.”

DISCUSSION/ANALYSIS

Current Status

The Administration retained an engineering consulting firm to complete a Road Safety Audit at the intersection of College Drive and Wiggins Avenue (Appendix 1).

The scope of the Road Safety Audit included a review of background data such as City standards, five-year collision data (2018-2022), 2023 traffic counts, multi-modal operational analysis, and public inquiries.

Site observations were completed in the morning, afternoon, and evening period as well as after sunset on October 17 and 18, 2023. In addition to observing the site, auditors drove through all approaches and movements, and navigated the intersection as pedestrians and cyclists.

The draft Bus Rapid Transit (BRT) functional designs for College Drive were provided to the consultant for consideration in development of the proposed recommendations.

Safety Audit Recommendations

The recommendations made by the consultant have been grouped into the following themes:

Road Safety Audit – College Drive and Wiggins Avenue

Theme	Recommendation	Justification
Traffic Signals	1. Leading pedestrian intervals. (Facilitates pedestrians entering the crosswalk at an intersection 3 to 7 seconds before vehicles are given a green light.)	Pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn right or left.
	2. Exclusive pedestrian phase. (Stops all vehicular movement and allows pedestrians access to cross in any direction at the intersection, including diagonally.)	To separate vulnerable road user movements from vehicle movements by prioritizing pedestrians.
	3. Adjust audible pedestrian signals (APS) to ensure that the cuckoo sound is used to indicate that a pedestrian can cross north/south and the chirp (or Canadian melody) is used to indicate pedestrians can cross east/west. Confirm that the APS can be heard above the volume of passing vehicles.	To improve accessibility.
Road Geometry	4. Reduce the existing curb radius on the northeast corner. Curb radius reduction could involve a mountable curb if large trucks must be accommodated. Temporary measures could be considered to reduce the curb radius to accelerate the safety benefits prior to permanent construction.	To slow vehicles turning right, reduce the pedestrian crossing distance, and increase pedestrian visibility.
	5. Remove the channelized island and consider a curb radius reduction on the northwest corner.	To slow vehicles turning right, reduce the pedestrian crossing distance, and increase pedestrian visibility.
Pedestrian Infrastructure	6. Adjust pedestrian accessible curb ramps to provide direct crossings and include appropriate texturing for people with low vision. Adjust retaining wall on the southeast corner.	To improve accessibility and provide adequate landing areas.
Cycling Infrastructure	7. Widen the existing shared-use pathway on the north side of College Drive to meet City standards.	To meet design standards and accommodate the high number of users.
	8. Install bike box pavement markings, a northbound painted bike lane on Wiggins Avenue between College Drive and Elliott Street and right turn on red restrictions.	To clearly establish cyclist right-of-way approaching the intersection and reduce the possibility of right-hook collisions.
	9. Modify lane assignment to create a one-way street northbound on Wiggins Avenue, double left turn lanes southbound leaving the University of Saskatchewan and a fully protected cycling facility on Wiggins Avenue for one block.	To provide a fully protected cycling facility on Wiggins Avenue from College Drive to one block south.
	10. Accelerate the 'Connecting Campus' study to assess the preferred north-south cycling route to the University of Saskatchewan through the Varsity View, Haultain, and Adelaide-Churchill neighbourhoods and identify the appropriate type of cycling infrastructure for the preferred route.	To identify the preferred route and appropriate infrastructure for a north-south cycling connection to campus.

Road Safety Audit – College Drive and Wiggins Avenue

Theme	Recommendation	Justification
Signage	11. Remove or relocate the residential parking permit sign on eastbound College Drive at the Wiggins Avenue intersection.	To reduce sign clutter and driver workload at the intersection.
	12. Review sign bylaws and the permit process for signs on private property.	To reduce driver workload and distraction at the intersection.
Access Management	13. Remove private driveways on the south side of College Drive.	To increase the usage of the curb lane.
University of Saskatchewan Collaborations	14. Discuss on-site queuing issues with the University of Saskatchewan north of College Drive on Wiggins Avenue. The University of Saskatchewan may wish to explore queue management solutions such as park-and-rides, additional drop-off loops or electronic systems to notify drivers of lot vacancy.	To reduce queue spill back onto College Drive.

Recommendations Completed or In Progress

Several of the consultant's recommendations have already been completed, can be implemented through standard operations, or can be addressed through upcoming projects, as summarized below.

Recommendations	Cost Estimate	Status
1. Leading pedestrian intervals		In progress. To be completed in May 2024.
2. Exclusive pedestrian phase	\$2,100	If leading pedestrian intervals are inadequate to address vehicle-pedestrian conflicts based on an assessment (fall 2024), an exclusive pedestrian phase will be studied further.
3. Adjust audible pedestrian signals.		Completed.
4. Reduce the existing curb radius on the northeast corner.		Included in the Bus Rapid Transit project.
5. Remove the channelized island and consider a curb radius reduction on the northwest corner.		Included in the Bus Rapid Transit project.
6. Adjust pedestrian accessible curb ramps and adjust retaining wall on the southeast corner.	\$27,000	Design work to begin in 2024.
7. Widen the existing shared-use pathway on north side of College Drive to meet City standards.		Included in the Bus Rapid Transit project.
11. Remove or relocate the residential parking permit sign on eastbound College Drive at the Wiggins Avenue intersection.	\$150	In progress. To be completed in May 2024.
12. Review sign bylaws and the permit process for signs on private property.		For Planning and Development consideration in future Zoning Bylaw – Sign Regulations updates.
13. Remove private driveways on the south side of College Drive.		To be considered through future development applications.
14. Discuss on-site queuing issues north of College Drive on Wiggins Avenue with the University of Saskatchewan.		University of Saskatchewan is aware of the issue.

Recommendations Not Supported at This Time

Recommendations 8, 9, and 10 are not supported at this time. Details are as follows:

Recommendation 8:

- Limiting the right turn on red, requires driver adherence at a specific 'one-off' location in the City.
- May provide a false sense of safety as pavement markings can be driven over, or difficult to see in winter.

Recommendation 9:

- The Administration could consider recommendation 9 provided the unknowns and additional information required to confirm impacts and implications to the City is reviewed and assessed. For example:
 - Saskatoon Transit has indicated preliminary issues with only having northbound traffic:
 - Impact to transit riders on Route 81 from Luther Tower;
 - Additional time and impacts to riders for transit departing the University of Saskatchewan destined south, as buses will no longer be able to continue directly south but need to re-route to Cumberland Avenue or Clarence Avenue.
 - Would most likely require re-routing of Route 81.
 - Coordination with the University of Saskatchewan, specifically the lane configuration changes required on the north side of the intersection.
 - The appropriate length of the facility. The recommendation and cost only considers one block between College Drive and Elliot Street.
 - Based on current traffic volumes on Wiggins Avenue, a continuous protected cycling facility to 8th Street would most likely be preferred.
 - Identifying additional resources. Staffing resources are fully committed in 2024 and 2025 to deliver other active transportation projects funded through the Active Transportation Fund grant provided by the federal government. Funding would be required to complete a design, even for a rapid deployment type design.
- The Rapid Deployment for Safety Improvements for Cycling report being considered at this Standing Policy Committee on Transportation has identified an opportunity for rapid deployment of active transportation facilities on Munroe Avenue rather than Wiggins Avenue.

Recommendation 10:

- Not feasible in 2024 or 2025 given current staffing resourcing.

FINANCIAL IMPLICATIONS

The total estimated cost to continue with implementing the recommendations in the report supported by Administration is \$49,250. The continued implementation would be funded through Capital Project P.02288 Transportation Safety or Capital Project P.02328 Transit Implementation Plan.

OTHER IMPLICATIONS

There are no environmental, privacy, or legal implications.

NEXT STEPS

If approved, next steps would include continued implementation of the report recommendations supported by Administration.

APPENDICES

1. In-Service Road Safety Review College Drive and Wiggins Avenue

Report Approval

Written by: Katie Sapieha, Senior Transportation Engineer

Reviewed by: Nathalie Baudais, Engineering Manager, Transportation
Jay Magus, Director of Transportation

Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Road Safety Audit – College Drive and Wiggins Avenue.docx