Agenda – Executive Policy Committee – September 17, 2024

Report – Standing Policy Committee on Public Works – September 12, 2024

Moved by Councillor

That Rule 10(3) of The Procedure By-law No. 50/2007 be suspended in order that the following item, which was received less than four business days preceding the committee meeting, be considered by Committee.

Item No. 4 Updating the Transportation Standards Manual and Design of Streets

STANDING COMMITTEE RECOMMENDATION:

On September 12, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service, as amended, and recommended to Council:

1. That the definition of the Strategic Municipal Infrastructure Research Fund be expanded to include the development of design guidelines and standards such as the Transportation Standards Manual.

2. That, pending of approval of Recommendation 1, the Public Service report back in September, 2026, with the updated draft Transportation Standards Manual for Standing Policy Committee's approval.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Agenda – Executive Policy Committee – September 17, 2024

Report – Standing Policy Committee on Public Works – September 12, 2024

DECISION MAKING HISTORY:

On September 12, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service, with the following amendment:

- In Recommendation 2, add the words "in September, 2026," after the words "report back"

and submitted the matter to the Executive Policy Committee and Council.

STANDING COMMITTEE RECOMMENDATION:

On April 9, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service, as amended, and granted an extension of time of 120 days for the Winnipeg Public Service to report back on:

1. An update of the Transportation Standards Manual and design of streets, taking into consideration Traffic Calmed Street Design.

2. The inclusion of new design standards and construction specifications in the next updated Development Agreement Parameters review.

On October 10, 2023, the Standing Policy Committee on and Public Works concurred in the recommendation and granted an extension of time of 120 days for the Winnipeg Public Service to report back on the matter.

On November 29, 2022, the Standing Policy Committee on and Public Works granted a further extension of time of up to 270 days for the Winnipeg Public Service to report back on the matter.

Romeo Ignacio, President Business Agent, Amalgamated Transit Union 1505, submitted a communication with respect to the matter.

On March 8, 2022, the Standing Policy Committee on Infrastructure Renewal and Public Works granted a further extension of time to its November 29, 2022 meeting for the Winnipeg Public Service to report back on the matter.

Report – Standing Policy Committee on Public Works – September 12, 2024

DECISION MAKING HISTORY (continued):

STANDING COMMITTEE RECOMMENDATION (continued):

On November 5, 2021, the Standing Policy Committee on Infrastructure Renewal and Public Works granted a further extension of time of 120 days for the Winnipeg Public Service to report back on the matter.

Steve Snyder submitted a communication dated November 3, 2021 in support of the matter.

On February 11, 2021, the Standing Policy Committee on Infrastructure Renewal and Public Works granted an extension of time of 240 days for the Winnipeg Public Service to report back on the matter.

On July 7, 2020, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Assiniboia Community Committee, with the following amendment:

- Replace the words "City's Standard Construction Specifications" with "Transportation Standards Manual"

and directed the Winnipeg Public Service to report back within 180 days.

The following persons submitted communications:

- Steve Snyder submitted a communication dated July 4, 2020, in support of the matter
- David Grant submitted a communication dated July 6, 2020, with respect to the matter
- Councillor Lukes, Waverley West Ward, submitted a communication in support of the matter

COMMUNITY COMMITTEE RECOMMENDATION:

On June 22, 2020, the Assiniboia Community Committee passed the following motion:

WHEREAS street design determines vehicular speed;

Report – Standing Policy Committee on Public Works – September 12, 2024

DECISION MAKING HISTORY (continued):

COMMUNITY COMMITTEE RECOMMENDATION (continued):

AND WHEREAS the City of Winnipeg's Development Agreement Parameters directs developers to construct streets in accordance with the City's Standard Construction Specifications;

AND WHEREAS the Development Agreement Parameters were approved by Council in 2006, and street designs were based on late 1990's design and engineering standards;

THEREFORE BE IT RESOLVED that the Standing Policy Committee on Infrastructure Renewal and Public Works be requested to direct the Winnipeg Public Service to update the City's Standard Construction Specifications and design of streets, and include the new design standards and construction specifications in the next updated Development Agreement Parameters review.

ADMINISTRATIVE REPORT

Title: Updating the Transportation Standards Manual and Design of Streets

Critical Path: Standing Policy Committee on Public Works - Executive Policy Committee - Council

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P.Eng.	J. Berezowsky	T. Graham	S. Armbruster Interim CAO

EXECUTIVE SUMMARY

At its July 7, 2020, meeting, the Standing Policy Committee on Infrastructure Renewal and Public Works directed the Public Service to update the Transportation Standards Manual (TSM). This manual is used by engineers and planners to determine how to select, design, and implement the correct type of roads. The disposition also included direction to include street design in the next update of the development agreement parameters.

This report outlines work done on the update to the TSM to date.

Progress has been slow due in part to resource constraints, but the update is urgently required. The City would be unable to meet goals identified in the Council-approved OurWinnipeg policy framework if the update does not happen soon.

The Public Service is now in the process of engaging a consultant to undertake research, engagement, and development of the update. It is estimated the update will take approximately two years once the consultant is hired. This estimate is based on initial discussions with other municipalities and consultants who have recently undertaken similar updates.

The Public Service would like to fund the consulting assignment using the Strategic Municipal Infrastructure Renewal Fund (SMIR). However, the SMIR definition does not include development of design guidelines; therefore, the Public Service is recommending that Council expand the definition to include development of design guidelines.

RECOMMENDATIONS

1. That the definition of the Strategic Municipal Infrastructure Research Fund be expanded to include the development of design guidelines and standards such as the Transportation Standards Manual.

2. That, pending of approval of Recommendation 1, the Public Service report back with the updated draft Transportation Standards Manual for Standing Policy Committee's approval.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

At the July 7, 2020, meeting, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation by the Assiniboia Community Committee and directed the Winnipeg Public Service to update the Transportation Standards Manual and design of streets to be included in the next updated Development Agreement Parameters, and report back in 180 days.

Subsequent extensions of time to report back were granted by the Standing Policy Committee.

Council approval is required to expand the definition of the Strategic Municipal Infrastructure Research fund to include the development of design guidelines.

IMPLICATIONS OF THE RECOMMENDATIONS

Concurrence with the recommendation would allow the Public Service to fund the development of the design standards using SMIR. It would also enable the City to meet the goals identified in the Council-approved OurWinnipeg policy framework.

Provided Council approve an expanded scope for the SMIR fund, it is anticipated that approximately $800,000 will be required for the consulting assignment. There are unallocated funds within SMIR that could accommodate this request.

If the recommendations are not concurred with, an alternate funding source would need to be identified before proceeding.

HISTORY/DISCUSSION

On July 7, 2020, the Standing Policy Committee on Infrastructure Renewal and Public Works directed the Public Service to update the City of Winnipeg's Draft 2012 Transportation Standards Manual (TSM). The intent was to include the updated TSM in the City's next Development Agreement Parameters. The Development Agreement Parameters were subsequently updated (effective May 30, 2023); however, an update to the TSM is still required to align it with current policy framework and industry best practices. Updates and enhanced clarity within the TSM are expected to foster a deeper understanding among the Public Service, stakeholders, and residents regarding the process and criteria used for development and renewal within the City's Right of Way (RoW).

The intent of the TSM is to set technical standards for the built environment within the City RoW to achieve the goals set by the City through the existing policy framework while ensuring engineering technical guidance and best practices are adhered to. The TSM influences the

design of all new roads, all roads within the regional and local street renewal programs, and any street improvements that are undertaken.

Many stakeholders utilize the TSM including, but not limited to, developers, utilities, engineering consultants, the Planning Property and Development Department, the Water and Waste Department, Winnipeg Transit Department, and the Public Works Department.

Historically, the TSM has primarily focused on design standards for vehicle infrastructure. However, Council has approved policies that direct the Public Service to balance the needs of all users and design streets to incorporate the Complete Communities vision. The TSM update must incorporate additional design guidance for all modes of transportation including pedestrians, cyclists, transit, commercial trucks, and passenger vehicles while taking into consideration operational and financial implications.

Failure to complete an update will result in our inability to enforce goals set out by Council in the policy framework. The Development Agreement Parameters requires that RoWs be established utilizing the latest version of the Transportation Standards Manual. Establishing RoW at the onset of a new community is paramount to establishing a transportation network that is operationally and financially sustainable. In addition, an update will allow the Public Service to incorporate best practices in use today in a consistent and predicable way throughout the industry and strengthen our relationships with stakeholders. Building these relationships through the TSM update will allow us to evaluate emerging best practices that consider different viewpoints.

History of the Manual

The first iteration of the TSM was completed in 1983. This manual was primarily focused on new vehicle infrastructure and greenfield development. It included guidance on street classification, geometric design by facility type, utility corridors/placement in the RoW, and guidance on access management.

The second iteration of the TSM was completed in 1991. This manual incorporated minor updates relative to the 1983 manual.

The third iteration of the TSM was completed in 2012 as a draft document (The City of Winnipeg Draft Transportation Standards Manual – 2012 Update). This document built upon the 1991 version by incorporating additional elements as follows:

- Policy guidance on accessibility, active transportation, and complete streets;
- Geometric design standards for developing trends in the industry at the time such as roundabouts, smart channels, and curb extensions;
- Design standards for bridge cross sectional elements; and
- The introduction of roadside safety guidance.

In the absence of an approved updated version, this draft iteration is accepted within the Public Service as *de facto* primary design standards document for several use cases including new developments, new transportation facilities, renewal of transportation facilities and implementation of transportation improvements.

Limited progress on an update has been made since.

Key Target Updates
The TSM provides guidance for two primary scenarios: unconstrained or greenfield corridors and constrained locations.

Unconstrained or greenfield corridors typically include new developments and new regional facilities where establishing the RoW is considered fundamental to achieve necessary goals. The design standards for unconstrained corridors should generally be firm to ensure the City's policy objectives are met.

Constrained locations typically include existing streets where RoW has been established. Standards here would guide road renewals where only minor property acquisitions are feasible. The existing TSM does not provide guidance on what process should be undertaken to guide renewal of existing streets. The update must incorporate priorities based on street type, articulate a decision-making process for reconfiguring existing streets, and develop flexible design criteria to balance the needs of each mode. Minimum design criteria are required in all instances to ensure the safe operations for each mode.

The Public Service has identified the following requirements based on gaps within the existing TSM:

- Align the TSM with the existing City policy framework and regulatory requirements;
- Align the TSM with the Winnipeg Road Safety Strategic Action Plan and incorporate actions items where applicable;
- Align the TSM with the Pedestrian and Cycling Strategies and introduce active transportation design standards and additional standard cross sections for new streets;
- Introduce additional accessibility design standards to improve consistency in design related to cycling and pedestrian conflicts;
- Improve access management standards, including access density by street type and managing access near intersections;
- Provide requirements for sight line analysis;
- Modify design standards for local and collector streets to be consistent with adopted recommendations from the Reduced-Speed Neighbourhood Pilot;
- Work with key stakeholders to establish requirements for sidewalk on existing and new local streets;
- Incorporate additional traffic calming tools on existing local and collector streets and integrate traffic calming into the design of new local and collector streets; and
- Review available green infrastructure tools that have been used locally and adopted within other jurisdictions. If feasible, incorporate them into the TSM update.

Additional priorities may be identified through engagement with stakeholders.

TSM Update Strategy
The Public Service has faced challenges updating the TSM due to resource constraints. To ensure a successful update, a consultant will need to be engaged for necessary research, engagement, and development of the update. The Public Service has identified the Strategic Municipal Infrastructure Research Fund (SMIR) as a potential funding source to undertake the update. Additional discussion on the use of SMIR to fund engaging a Consultant is included below.

The Public Service has initiated informal discussions with other municipalities to better understand the resources and schedule required to undertake the update. A formal scan of various municipalities will be completed to garner additional information. In addition, the Public Service will engage with internal stakeholders in the City to identify existing issues and future goals that can potentially align with the update.

Stakeholder engagement is crucial in ensuring the final product balances the views of various RoW users. The update will utilize engineering best practices and guidelines with input from stakeholders to incorporate equity principles, accessibility, and Council-approved policies. To accomplish this, a stakeholder strategy will be developed with the Office of Public Engagement. Stakeholders will include both internal departments and external organizations. The stakeholder engagement process will clarify which aspects of the document are open for feedback and how feedback will be considered and incorporated. The project team will keep stakeholders updated throughout the project and endeavour to bring different perspectives together to find common ground and improve understanding. The update will need to balance the feedback from stakeholders with policy, safety, operational and feasibility considerations and therefore stakeholders' perspectives on the final TSM may vary.

Once the municipal scan, internal scoping, stakeholder engagement plan has been refined, a schedule and budget for the project will be developed and a formal request to utilize SMIR will be made to the Director of Public Works. Upon approval, a Request For Proposal (RFP) for Professional Consulting Services including a schedule will be developed and a consultant retained to commence the update.

Based on initial discussions with other municipalities and consultants who have undertaken updates to their Transportation Standards recently, it is anticipated that from the initiation of a Professional Consulting assignment, it will take approximately two years to complete. Pending confirmation of the scope and funding for the hiring of an external consultant, the Public Service anticipates a tentative timeline as shown in Figure 1.

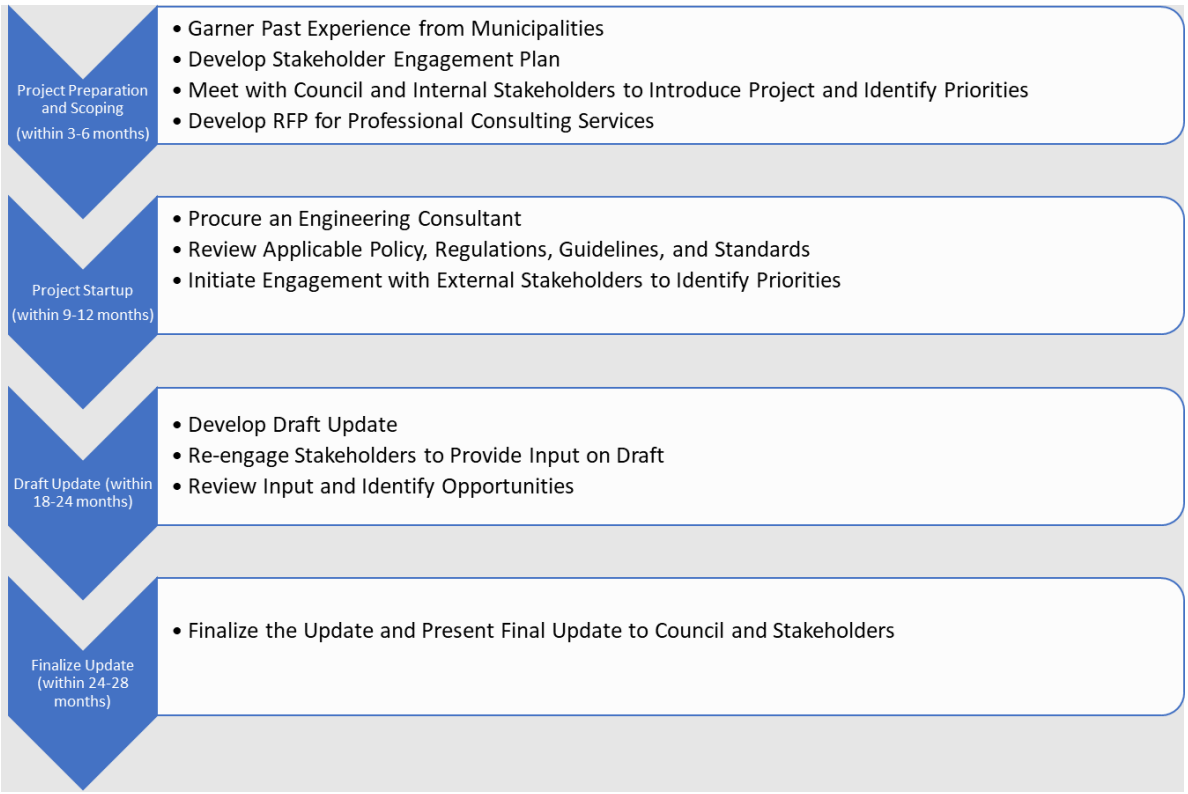

Figure 1: Tentative Update Schedule

Strategic Municipal Infrastructure Renewal Fund

The Public Service is proposing the use of SMIR to engage a consultant to assist in the development of the TSM Update. To accommodate this request, the Public Service is recommending that the scope of the SMIR fund be increased to permit the use of the fund for developing design standards and guidelines.

On April 30, 2003, Council adopted the following:

> "That 0.5% of all Capital Budgets for projects is identified for strategic municipal infrastructure research and innovative partnership projects."

The associated report submitted to the Standing Policy Committee on Public Works on April 15, 2003, indicated that the fund was intended to:

> Commit Foremost to the Maintenance and Renewal of Existing Infrastructure. Specifically part (iii) "(by) applying advanced techniques, new technology, best practices, better materials, and innovative products in all infrastructure renewal, rehabilitation, construction, and preventive maintenance programs to maximize return on infrastructure investment"

Historically, the fund has been utilized to fund research conducted by the University of Manitoba with a focus on improving material standards and developing standards for emerging pavement renewal techniques. In addition, the funding has been utilized to support our partnerships with the Transportation Association of Canada (TAC). The partnerships with TAC typically include a pooled fund from multiple Provincial and Municipal sources. The pooled fund would be utilized

by TAC committees to undertake research to update or develop new design guidelines and standards.

The use of the SMIR funding has not typically been utilized to directly contract with Consultants, but has allowed the City to directly engage with University of Manitoba/Industry partners to undertake research. The TSM update will include a significant research component to review existing and emerging best practices in a number of areas. Given the scope of the TSM, it is not realistic to undertake this research with in-house resources and requires the assistance of a Consultant. If the SMIR fund is not utilized to fund the update, an alternative funding source will be required which may include submitting a business case for future budget planning considerations, or utilizing the Local or Regional street budgets. Neither of these options are desirable as it would require that funding be reprioritized within the roads program reducing the number of renewal locations, or deferring the project to a future date.

Since there is a large research component required for the TSM which is consistent with the intent of the SMIR fund, the Public Service recommends expanding the scope of SMIR to permit funding to develop future standards and guidelines associated within the RoW.

Provided Council approve an expanded scope for the SMIR fund, it is anticipated that approximately $800,000 will be required for the consulting assignment. The Public Service identified several other jurisdictions who have recently updated similar documents to derive the estimated cost. The SMIR fund currently has the necessary reserves and no additional budget is required at this time.

Per Council direction, 0.5 percent of Public Works capital roads projects budgets are used to fund the SMIR program. While the amount of SMIR funding will vary from year to year, this is expected to amount to approximately $450,000 per year. Projects are then approved by the Director of Public Works. Once approved, the projects are disclosed in the Capital Expenditures Monthly Report (CEMR) which is posted to the City website on a monthly basis (i.e. – projects are fully transparent), see Appendix A for an example of the SMIR projects disclosed in the CEMR. Unallocated SMIR funding at the time of this report is $1,310,000.

Post-completion

The new TSM needs to be a living document and should be regularly updated so that new best practices, policy changes, and opportunities for improvement are regularly incorporated. These updates would be shared with all users of the document (Public Service, consultants, developers, etc.). The Public Service does not have the necessary resources to complete regular updates. It is anticipated additional Full Time Equivalents will be required following the completion of the TSM; this will be presented to Council for consideration at a later date.

FINANCIAL IMPACT

Financial Impact Statement

Date: August 26, 2024

Project Name:

Updating the Transportation Standards Manual and Design of Streets

First Year of Program **2024**

	2024	2025	2026	2027	2028
Capital					
Capital Expenditures Required	$ 800,000				
Less: Existing Budgeted Costs	800,000				
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Capital expenditures of $800,000 in 2024 represent the estimated cost to engage a consultant to update the Transportation Standard Manual which is intended to be funded through the Strategic Municipal Infrastructure Research Fund (SMIR) subject to the approval of the recommendations of this report. Annual SMIR amounts will be subject to the expanded definition of SMIR on an ongoing basis per recommendation one(1) of this report. The annual amount of SMIR funding will vary from year to year and is expected to amount to approximately $450,000 per year.

A. Fischer CPA,CA *2024-08-15*

for J. Ruby CPA, CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

- Office of Public Engagement

OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with OurWinnipeg2045 as per:

Goal: Environmental Resilience

Policy 2.5 Climate Resilient Growth: Actively explore innovative approaches to city building, an integrated and sustainable transportation system and related infrastructure capacity enhancements that mitigate the impact of climate risk on infrastructure; leverage targeted densities as detailed in Complete Communities; and minimize conflict between different street functions and users.

Policy 2.6 Integrated Regional Planning: Enable a collaborative and integrated solution to sustainable transportation system connectivity and efficiency on a regional scale, in a manner that addresses infrastructure costs, promotes public health benefits, and reduces greenhouse gas emissions.

Policy 2.9 Reduce Road Congestion: Increase the efficiency, convenience, and usage of the active and public transportation system to improve air quality, provide a viable alternative to the automobile, and reduce current and future road congestion.

Goal: Economic Prosperity

Policy 3.17 Sustainable Transportation Connectivity: Prioritize enhancement to the integrated and sustainable transportation system that improve its viability and access to places such as educational institutions, employment opportunities, recreation and library facilities, providers of essential goods and services and health providers, especially for children, and for neighbourhoods most impacted by poverty.

Goal: Good Health and Well-Being

Policy 4.10 Transportation Safety: Design, construct, maintain, and regulate an integrated and sustainable transportation system and related infrastructure that optimize safe, connected and reliable mobility, and minimize severe injuries and fatalities for all road users.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This report is in accordance with the Winnipeg Climate Action Plan (WCAP) as per Directions 3.4 Increase Active Transportation Rates. Relevant actions include: Prioritize capital investments in active transportation to establish connected and integrated corridors for walking and cycling.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

The recommendations within this report support *Goal 5: Transportation System Equity is Enhanced* through *Strategy 8: Transportation Infrastructure*.

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: Andrew Condon, P.Eng., Transportation Facilities Planning Engineer
Date: August 15, 2024

Attachment:

Appendix A - Strategic Municipal Infrastructure Research (SMIR) fund project disclosures in the Capital Expenditures Monthly Report example