

April 30, 2018

To: His Worship the Mayor
And Members of City Council

Re: Public Works and Infrastructure Committee: Residential Road Renewal Program 2017
Annual Report

RECOMMENDATION

**RECOMMENDATION OF THE PUBLIC WORKS AND INFRASTRUCTURE
COMMITTEE - APRIL 12, 2018**

That this report be received, filed and remain permanently closed.

PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE - APRIL 12, 2018

The Committee adopted a resolution to concur in the recommendation contained in the report.

Councillors: Sharron Bryce (Chairperson), Lori Bresciani, Jason Mancinelli, Andrew Stevens and Barbara Young were present during consideration of this report by the Public Works and Infrastructure Committee.

The Public Works and Infrastructure Committee, at its meeting held on April 12, 2018, considered the following report from the Administration:

RECOMMENDATION

That this report be forwarded to the April 30, 2018 City Council meeting for information.

CONCLUSION

The City of Regina (City) has completed the fourth year of the Residential Road Renewal Program (RRRP). This program is based on a preventative maintenance strategy that looks to apply the proper treatment at the appropriate time. By addressing roads earlier, costs can be minimized by reducing the deterioration of residential roads and sidewalks in “fair” and “good” condition from becoming “poor”, which are more costly to repair.

Through this program, the City is starting to see improvements in the overall residential road network condition. Since 2014, the RRRP has improved 69.6 km of residential roads with a total investment of \$31.2 million.

In 2017, a total of 68 projects covering 19.4 km of roadways were planned under the RRRP with a budget of \$11.7 million, plus approximately up to \$5 million is allocated annually from the Utility to cover costs related to underground water, sewer and drainage work. In 2018, Administration anticipates that work will take place on 16.1 km of roadways with a total budget of \$14.2 million.

It should be noted that although the funding has increased in 2018, the total road length of the projects has decreased. This is due to the increases in the amount of concrete replacement required on projects and increases in construction costs.

BACKGROUND

Prior to the creation of this program, residential road improvements were funded by an allocation of 25 per cent of the annual Street Infrastructure Renewal Program (SIRP) budget, which has averaged 4.5 million/year for the last three years. This funding was not sufficient to keep up with deterioration rates and the growing number of residential road improvements required.

The RRRP was developed in 2014 to improve the residential road network. This program is funded from a one per cent dedicated mill rate which was approved by City Council, *CM14-16*, to be allocated annually from 2015 to 2019 as well as 25 per cent of the annual SRIP budget. The goal of this program is to achieve a level of service of 85 per cent of the residential road network in “fair” or “better” condition through the preventative maintenance strategy. A detailed summary of residential roads by condition category, as well as statistics on investment by ward, can be found in Appendix A.

A detailed breakdown of the funding allocations, strategy, process for selecting roadways and treatment options can be found in Appendix B.

DISCUSSION

Accomplishments of the 2017 Residential Road Renewal Program:

Fifty-seven projects were fully completed in 2017. Eleven project locations were not fully completed due to weather, scheduling constraints, or increased scope of work. Concrete work for all projects was completed in 2017 and the remaining paving work is anticipated to be completed early in the 2018 construction season. Funding for the completion of the 2017 projects will be through funds carried forward from the 2017 budget.

Twenty-five projects carried forward from 2016 were completed in the 2017 construction season. The 2017 projects list is summarized in Table 1.

Table 1: 2017 Residential Road Renewal Program - Completed and Carry-Forward Projects

Road Treatment	Number of	Number of Projects	Budget Allocation (\$)
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	Kilometres		
Thin-Lift Overlay	6.9	26	\$1.2 M
Rehabilitation	10.6	37	\$7.6 M
Rebuild	1.8	5	\$2.9 M
TOTAL	19.3	68	\$11.7 M*
Deferred to Future Year	1.4	8	-

Information on different road and sidewalk repair methods along with associated costs can be found in Appendix C.

Plan for 2018 Residential Road Renewal Program:

The 2018 RRRP includes 16.1 km of roadway improvements. A detailed list of locations can be found in Appendix D and a map of these locations can be found in Appendix E. Table 2 below, provides a summary of proposed projects and fund allocation for each treatment for the 2018 construction season.

Table 2: 2018 Residential Road Renewal Program

Road Treatment	Number of Kilometres	Number of Projects	Budget Allocation (\$)
Thin-Lift Overlay	5.5	17	\$1.4 M
Rehabilitation	8.8	27	\$9.2 M
Rebuild	1.7	7	\$3.6 M
TOTAL	16.1	51	\$14.2 M

Residential Road Renewal Plan Summary & Proposed Projects

Since implemented, the RRRP has improved 69.6 km of residential roads with a total investment of \$31.2 million. Table 3 provides a summary of budgets and projects for program over its approved duration including this years commitments.

Table 3: Residential Road Renewal Program Summary & Proposed Projects

Year	Mill Rate (\$ To RRRP)	25% of SIRP Budget (\$)	Total Budget (\$)	No. of Projects	Total Road Length (km)
2014	\$1.7 M	*	\$1.7 M	25	11.0
2015	\$3.7 M	\$3.8 M	\$7.5 M	87	19.2
2016	\$5.5 M	\$4.5 M	\$10.0M	66	21.9
2017	\$7.2 M	\$4.5 M	\$11.7 M	68	19.4
2018	\$9.7 M	\$4.5 M	\$14.2 M	51	16.1
Total	\$27.8 M	\$17.3 M	\$45.1M	297	87.6

*In 2014, only one per cent of the dedicated mill rate was added to the program. Beginning in 2015, this also included 25 per cent of the SIRP as a result of Council's approval of the long-term strategy.

The costs in this table do not include costs related to other infrastructure that is upgraded at the same time of some of the road projects, such as replacement of water and sewer mains, storm system upgrades and residential service connections. Approximately, up to an additional \$5 million is allocated from the utility to cover costs related to underground water, sewer and drainage work.

Tentative Plans for 2019, 2020, 2021 Residential Road Renewal Program:

Administration is currently reviewing the allocation of funding for the RRRP as part of the response to motion *MNI6-8*. The projects planned for the 2019, 2020 and 2021 program years will be developed and shared following Council's direction in response to the motion.

Improvements to Residential Road Network by Other Areas

In addition to the dedicated funding for the RRRP, the City continues to invest in the residential roads through other operational maintenance programs and City infrastructure programs, such as Water Works' Infrastructure Programs.

The residential road network receives \$3.5 million annually for routine road treatments funded by operational areas which include pothole patching, crack sealing, restorative and rejuvenating seals and maintenance paves. A description of these treatments can be found in Appendix F.

Streets in "poor" condition that require full rebuild treatments will typically receive temporary repairs including pothole patching and maintenance paves to slow further deterioration and maintain a safe driving surface until they are identified for a rebuild under the RRRP. Pothole patching is typically used as a primary repair method on streets that are rated "poor" but depending on the extend of the distress this treatment may not be efficient and in those situations maintenance paves are applied as a thin asphalt overlay for the entire street.

The projects under the RRRP are coordinated with concurrent infrastructure renewal projects, as well as, other major capital City projects where possible. By coordinating construction efforts, the impact on neighbourhoods is minimized and the investment is maximized. The coordinated programs include the Trench Settlement Remediation, Drainage Infrastructure Renewal and Wastewater Infrastructure Renewal Programs. The annual total budget for these programs is approximately \$20 million of which approximately up to \$5 million has been allocated for the underground improvements associated with residential road work.

RECOMMENDATION IMPLICATIONS

Financial Implications

In 2014, City Council made a decision to increase the budget for residential road renewal through the allocation of a one per cent dedicated mill rate increase. In 2015, City Council approved a longer-term plan for residential road renewal that would continue to dedicate one per cent of the mill rate over the next five years (2015-2019) to a long-term program for residential road renewal. This is in addition to the allocation of 25 per cent of the existing SIRP's annual budget for residential road renewal.

Environmental Implications

There is a positive environmental impact caused by the replacement of deteriorated infrastructure. Well-maintained roads help to reduce fuel consumption and wear on vehicles. Fuel consumption directly impacts the emission of greenhouse gases.

The preventative maintenance strategy helps to reduce the emission of greenhouse gases. Preventative maintenance treatments (thin-lift overlay and rehabilitation) are completed more quickly compared to the more extensive rebuild treatment and have a smaller environmental impact.

Policy and/or Strategic Implications

The recommended preventative maintenance strategy, including a dedicated mill rate allocation, is consistent *The Official Community Plan, Bylaw No. 2013-48 (OCP)*, specifically:

- *Section B, Goal 1 - Financial Policies, "Achieving long-term financial viability."*
- *Section B, Goal 2 - Sustainable Services and Amenities, "Ensure that the City of Regina services and amenities are financially sustainable."*
- *Section D4, Goal 2 - Asset Management and Services "Ensure infrastructure decisions result in long-term sustainability."*
- *Section D4, Goal 2 -Infrastructure Staging, "Build infrastructure in a sequential and coordinated manner."*

The RRRP supports the City's strategic focus to improve the development and maintenance of liveable neighbourhoods while improving the residential road infrastructure condition to a level and quality that is sustainable.

Accessibility Implications

One of the goals of this program is to improve walkability and better accommodate those who use walking as their primary mode of transportation, by implementing pedestrian accessibility ramps where practical and feasible. This is consistent with the OCP, *Section D5, Goal 1 - Land Use and Built Environment, "Enable the development of complete neighbourhoods."*

Other Implications

An improved residential road network will provide residents with improved quality of life due to reductions in frustration, travel delays, fuel consumption and vehicle repairs/maintenance.

All roads and sidewalks in the network were constructed based on the design standards and specifications of that time, which can be substantially different than current standards and specifications. During the RRRP construction, the City endeavours to update these older roads and sidewalks to reflect the most current approved standards and specifications where practical and feasible.

COMMUNICATION

Administration continues to work to enhance the public's understanding about the RRRP through face to face conversations, improving existing communications distributed, updated Service Regina scripts and information on the City's website. Information about the RRRP will be incorporated into the annual Road Construction Communications Strategy along with proactive notifications of the program, one-on-one communications via service requests, letters and emails.

DELEGATED AUTHORITY

The recommendation contained in this report is within the delegated authority of the Public Works & Infrastructure Committee.

Respectfully submitted,

PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE



Kristina Gentile, Secretary