PFC2020-0075

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Transportation Report to
Priorities and Finance Committee
2020 January 21

Council Innovation Fund Application - Roadside Naturalization Pilot

EXECUTIVE SUMMARY

Mayor Nenshi and Councillor Farrell are sponsoring an application to the Council Innovation Fund (CIF) in partnership with City Administration, represented by Calgary Parks and Roads. The application is seeking \$450,000 to support a pilot project for roadside naturalization initiatives. The proposed Roadside Naturalization Pilot Project explores unconventional landscaping methods on public land along roadways to attain cost savings and create additional value in terms of natural infrastructure, ecosystem services and enhanced biodiversity.

Administration will manage the project and report back to Council with information gained from this initiative. A pilot project is being recommended to determine the efficacy of expanded naturalization efforts that will inform future investment decisions and City policy and practices. This pilot will be rigorously designed and executed to generate the data and feedback needed to support a business case for the broader application of these landscaping methods city-wide.

ADMINISTRATION RECOMMENDATION:

- 1. That Council approve this application to the Council Innovation Fund for the Roadside Naturalization Pilot Project in the amount of \$450,000;
- 2. That Council direct Administration to engage with private sector and philanthropic groups to leverage available private contributions for this project;
- 3. That Council direct Administration to partner with public institutions to optimize the assessment and monitoring program elements of this project; and
- 4. That Council direct Administration to report back to the Priorities and Finance Committee on the outcomes of this project no later than Q2 2023, with interim reports on project progress and return-on-investment as information becomes available.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2019 April 29, Council approved updates to the Council Innovation Fund Terms of Reference. Any Council member can submit an application to the Priorities and Finance Committee for review and consideration and ultimately for Council's consideration and approval. The proposal for funding must demonstrate credibility, fiscal responsibility and good management which will be important considerations in the evaluation of applications.

During the 2019 November 12 (continued November 25-29) Strategic Meeting of Council, a Motion Arising was approved with respect to Report C2019-1052, "That Council direct Administration to prepare a Council Innovation Fund application for an expanded pilot program of boulevard naturalization along selected roadways throughout Calgary for the January 2020 meeting of the Priorities and Finance Committee."

BACKGROUND

Over the last 20 years in Calgary, there have been limited efforts and trial projects undertaken to advance understanding of different techniques and materials for more naturalized landscaping. An expanded pilot project is being pursued to deepen our understanding, test assumptions and assess the applicability in our climate and municipal setting of emerging innovative approaches prior to making any significant shifts in city-wide policy and practice. In

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addition to financial and environmental considerations there are community and aesthetic dimensions to be considered within a triple bottom line assessment framework.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

The naturalization of roadsides has been a topic of increasing attention and discussion in Canada and internationally and has been the focus of several university research centres, scientific conferences, community initiatives and legislation. There has been a growing awareness of scientific findings made public that a combination of various factors including urban development, large scale land uses like agriculture and forestry, pesticide use and climate change have placed enormous pressures on biodiversity generally and on pollinator species like bees, butterflies and insects which are key to life processes.

Currently, Council and Administration are focused on service efficiency and cost-effectiveness, and boulevard maintenance was one of six sub-service areas examined in detail in 2019. A review of alternative approaches and evolving best practices for roadside landscaping and vegetation management practices in other jurisdictions has identified the potential for maintenance cost savings over the longer-term and for achieving an array of environmental benefits, through naturalization. A pilot project completed by Q2 2023 would provide valuable information in time for the next service planning and budget cycle to inform a business case on how these benefits could be realized and provide the basis for a longer-term estimate on the financial impacts of naturalization work across Calgary.

Stakeholder Engagement, Research and Communication

The proposed pilot project would create both a physical space where unconventional landscaping treatments would be applied and monitored, and a virtual "space" where a combination of scientific assessment, research, and internal and external communications would occur on the subject of roadside naturalization.

The project would involve significant engagement with the private sector to explore potential barriers and opportunities for this work applied to both new development and along existing roadways, including possible leveraging of private and philanthropic contributions. The pilot also would be designed to enable participation of citizens and public organizations in hands-on work to create and help maintain pollinator habitat, and in dialogue on the topic of roadside naturalization. Finally, the project presents excellent opportunities to partner with public institutions to optimize the assessment and monitoring elements of this project. Faculty and students from various post-secondary institutions and horticultural specialists are well positioned as partners in taking on certain elements of the pilot as applied science and real-world learning opportunities. Documentation and communication of the scientific basis of this innovation, its costs and benefits and potential for application in various settings including residential will be key for broader engagement.

Strategic Alignment

This project supports Council Priorities by exploring the cost-effectiveness of naturalized landscaping with the aim of minimizing maintenance costs and maximizing the environmental benefits for City-owned land over the long-term.

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The naturalized landscaping and habitat restoration activities and outcomes that are central to this pilot project are well aligned with environment related policies and practices outlined in the Municipal Development Plan, Calgary Transportation Plan, Biodiversity Strategic Plan, Climate Resilience Strategy, and Resilient Calgary Strategy adopted by Council. The pilot project would be designed and executed in conformance with current policy and practices for integrated pest management including weed control under the new Pest Management Policy (2020).

Social, Environmental, Economic (External)

A well-run city that manages its assets and resources with a long-term perspective is well positioned to explore emerging alternatives to the current practices.

Financial Capacity

In 2018 November, Council approved the transfer of \$5 million to the Council Innovation Fund. As of 2020 January 1, the balance of the Council Innovation Fund is \$3.9 million. This application is requesting one-time funding of \$450,000 from the Council Innovation Fund. If Council approves this application, the remaining balance of the Council Innovation Fund would be \$3.45 million.

Current and Future Operating Budget:

There will be no impact on current and future operating budgets as a result of this pilot project.

Current and Future Capital Budget:

There will be no impact on current and future capital budgets as a result of this pilot project and the findings will be used to inform future capital investments.

Risk Assessment

One of the potential risks of proceeding with the application is that in times of budget constraint, the approval of this application may cause negative reputational risks. With The City facing challenging budget considerations, public dollars spent on new innovative projects may not be seen as essential. As the Council Innovation Fund was developed to support innovation projects and is the funding source identified, this risk can be mitigated.

REASON(S) FOR RECOMMENDATION(S):

This application meets the existing Council Innovation Fund Terms of Reference. This pilot project is a one-time funding request that has the potential to have a city-wide impact and helps to advance Council priorities. This project supports Council Priorities as well as the Municipal Development Plan and the Calgary Transportation Plan.

ATTACHMENT(S)

- 1. Attachment 1 Application to The City of Calgary Council Innovation Fund
- 2. Attachment 2 Council Innovation Fund Terms of Reference
- 3. Attachment 3 Project Budget Overview