

The City of Calgary, Application for Council Innovation Fund

Executive Committee Report Number: EC2022-0563

Anticipated Date for Executive Committee Report: July 20,2022

Date of Submission: May 25, 2022

Name of Project:

- *Operation Social Enterprise: Urban Agriculture Pilot* (the “**Project**”)

Supporting Councillor(s):

- Mayor Gondek
- Carra (Ward 9)
- Wong (Ward 7)

Applicant Name:

- Arsheel Hirji, Leader, Sustainable Infrastructure on behalf of Fresh Routes, Sunspring Farms, and Ward 7/9 Offices

Applicant Contact Number (include area code):

- (403) 650-2742

Applicant Business Unit or Name of Organization:

- Corporate Analytics & Innovation

Affected or Supporting Business Units and/or Departments:

- Facility Management
- Downtown Strategies
- Real Estate & Development Services
- Environmental & Safety Management
- Affordable Housing
- Calgary Neighbourhoods

Amount of Funds Requested (please include your budget breakdown details, in attachment):

- One time funding upwards of \$250,000.00 CAD

See a budget breakdown in Appendix A. Budget will be for eligible operating expenses on a refund basis only and will be overseen by a Project Lead in Administration.

Draft EC cover report attached?

- Yes (EC2022-0563)

Please list supporting documents provided:

- Detailed project presentation that includes Financial Overview and Project Timeline

Provide a summary description of the project:

Recognizing that households struggle to put food on their table and that all Calgarians deserve dignified food access, Fresh Routes and Sunspring Farms have come together to collectively pilot a program to address food security, sustainability, and hyper-local food production in Calgary. Building on the historic work completed by Fresh Routes in working with City of Calgary social workers to provide access to food for those in Calgary's affordable housing communities, the Project will continue the Mobile Markets work with a pilot vertical farming social enterprise.

Fresh Routes is a not-for-profit social enterprise that is focused on creating new, innovative ways of providing healthy and affordable food to as many Calgarians as possible—especially those who need it most. Fresh Routes ensures that everyone has access to affordable, nutritious food through the Mobile Market Program. With a mission to make the healthy choice the easy choice, Fresh Routes transforms decommissioned city buses and trucks into grocery stores on wheels, providing under-served communities with a reliable solution to fresh and affordable food. Fresh foods are sold at a 24-46% discount rate in comparison to retail, made possible by purchasing food at or below wholesale cost from local suppliers and rescue-food donations of dry goods from community donors.

Vertical farming is the practice of growing crops using vertically stacked layers and often incorporates soilless farming techniques such as hydroponics, making it ideal for indoor and urban agriculture. By growing fresh produce such as lettuce, herbs, microgreens, and vegetables vertically, it will allow urban farms to produce comparable yields to traditional farming methods, but with using 0% soil and pesticides, 70% - 95% less water, 10% the physical footprint, and resulting in 90% of crops planted being harvested.

Sunspring Farms' mission is to help Calgary's underserved populations support themselves and their families by growing safe, healthy, and hyper-local produce using the latest in indoor vertical farming technology. Sunspring Farms' social impact model works to reinvest profits back into the community through subsidizing access to affordable produce, creating inclusive work environments for the underserved populations (e.g., persons with cognitive and physical disabilities) and integrating farms with affordable housing developments.

A social enterprise is any organization or business that uses market-oriented production and sale of goods and/or services to pursue a public benefit mission. This covers many organizational forms – ranging from charities, non-profits and cooperatives to social purposes businesses, which are for-profit businesses designed to fulfil a social mission.¹

The Project intends to validate the applicability of a social enterprise model in supporting financially, socially, and environmentally sustainable access to affordable, convenient, inclusive, and culturally appropriate food options for all Calgarians.

Through a tri-sector partnership between The City of Calgary, Fresh Routes, and Sunspring Farms, the Project includes three components making up the simplified model illustrated below:

1. Hyper-local production of fresh produce using a containerized vertical farming solution within a vacant storage garage owned by The City of Calgary;

¹ Source: 2010 Canadian Task Force on Social Finance

2. The sale of the produce via multiple sales channels, including at local retailers and directly to consumers via community and mobile markets around Calgary;
3. The reinvestment of profits to subsidize the costs of available produce for the Fresh Routes Mobile Market Program and for purchase from local residents within the community the food is being grown within.

- Project Details (See attached Timeline Illustration in Attachment X):

Over a 24-month period spanning August 2022 through July 2024, the Project will focus on the following key deliverables:

Part 1 (August 2022 - January 2023): The purchase and installation of a containerized vertical farming solution in a vacant storage garage located adjacent to the Armour/Reliance Block Affordable Housing Building. This site is advantageous for multiple reasons, including, but not limited to:

- a) A central location that aligns with Fresh Routes' current distribution nodes;
- b) Adjacent to multiple affordable housing projects within walkable distance;
- c) Within a building that presents limited risk to the City of Calgary given it's a vacant storage garage;
- d) Adjacent to a location of interest for a potential expansion facility that would utilize the vacant commercial space in the Armour/Reliance Block.

Part 2 (February 2023 - July 2024): Validation of the social enterprise model. The validation period will confirm multiple aspects of the social enterprise model and other social benefits, including:

- a) The ability to provide employment opportunities to underserved Calgarians (e.g., persons with cognitive and physical disabilities), including partnership opportunities with Calgary social service organizations such as Vecova²;
- b) The willingness of the market to pay a premium for produce that can demonstrate local triple bottom line benefits, including the types of produce that generates the most significant margin;
- c) The amount of profit that can then be reinvested into subsidizing available produce for the Fresh Routes Mobile Market and residents in the local community;
- d) The potential impacts an integrated, vertical farming facility may have on the ability to attract grants and incentives from other levels of government for future affordable housing developments (i.e., as part of a sustainable/climate resilient building and/or heritage buildings preservation);
- e) What The City of Calgary can do to further support vertical farming facilities in Calgary in terms of permitting, access to underutilized commercial spaces, and community integration;

² Vecova is a leading edge, registered and accredited charitable organization that has been meeting the lifelong and changing needs of persons of all abilities and the community since 1969 through its programs and services, social research and innovation and enterprises.

- f) The role that Community Partners like Fresh Routes and Sunspring Farms can play in provision of community supports and benefits at integrated civic facilities alongside The City of Calgary.

Part 3 (Mid 2024 and Onward):

REPORTING: A detailed report will be generated outlining the lessons learned, including an assessment of qualitative and quantitative metrics (noted in the section below).

PROGRAM DESIGN: The City of Calgary recognizes the importance of food security and sustainability. With the ongoing shift to support and buy local, The City of Calgary wants to make it easier for vertical farming companies to establish their operations in Calgary. Based on the lessons learned and a validated social enterprise model, City Administration may also investigate an expansion of the successful Urban Agriculture Project to invite other potential community partners to adopt and apply the lessons learned from the Project at other City-owned facilities.

EXPANSION: With a validated model, the Project may proceed to a broader-scale deployment with Fresh Routes/Sunspring Farms working with The City of Calgary to identify additional commercial spaces that mutually address the goals and requirements of both parties.

Funding Use: The funding requested would be used to support the operating costs of the Project, including, but not limited to:

- a) Utilities;
- b) Labour;
- c) Consumables (seed, nutrients, etc.);
- d) Packaging;
- e) Accounting and legal fees;
- f) Distribution;
- g) Insurance;
- h) Maintenance;
- i) Reporting;
- j) Waste disposal;
- k) Decommissioning;
- l) Vehicle lease costs;
- m) Marketing and sales.

Identify how this project meets the criteria as outlined in the Terms of Reference for the Council Innovation Fund (please attach additional information as required):

1. The Project directly meets the innovation definition as set out in the Terms of Reference as the Project will be executed through a partnership between The City of Calgary and a community-based non-profit organization (Fresh Routes), to translate ideas into new and improved services and products that will create value for the community;
2. The Project supports Council's priorities as identified in the Resilient Calgary Strategic Direction 2023-2026, contributing to social, environmental, and economic resilience concurrently. Specifically, the Project addresses the following Focus Areas:
 - a. Equity: The Project aims to elevate those trapped in poverty;

- b. Downtown Revitalization: The Project will validate a method to attract private and public investment into underutilized commercial spaces, including those in the City Centre;
 - c. Global Positioning & Reputation: The Project will demonstrate that we value opportunity, talent attraction and retention, and our actions show we value each other, while demonstrating that we value the environment;
 - d. Modernizing Government: The Project will involve reviewing policies and processes for innovative improvements and promoting financial resiliency in collaboration with federal and provincial governments while identifying an option for partnering with the community in service delivery to Calgarians.
3. The Project has the potential to change city-wide policies and procedures based on the lessons learned, with a potential to expand the Urban Agriculture Program;
4. The Project will build on a Program that has already demonstrated long-term viability and sustainability (Fresh Routes Mobile Market Program), while trying to demonstrate that the social enterprise model is viable and sustainable;
5. The Project is fiscally sound, as validated by Administration and will support Private Sector investment in urban agriculture;
6. The Project will be managed well, with oversight from qualified subject matter experts and will be supported by a community of innovators and grants; and
7. The Project and associated partners have not previously received a Council Innovation Fund grant.

Outline the proposed timeline for this project, including the final report back date:

- The Project would span the period of August 2022 through July 2024 with a final report due to Council in September 2024. Additional information may be reported on the progress of the Project as part of the Climate Strategy regular updates. See the attached timeline for greater details.

Identify what success looks like, and how it will be measured (specific measures TBD):

- **Win:** Implementation of a vertical farming system in an urban Calgary community
- **Measure:** Total kilograms of produce grown per year in alignment with the containerized solution design expectations
- **Win:** Established distribution model for the Project
- **Measure:** \$ of gross revenue earned
- **Win:** Validation of the food subsidization program
- **Measure 1:** Total amount of profits reinvested as a food subsidy
- **Measure 2:** Total kilograms of food made accessible for Fresh Routes and direct community purchasing
- **Win:** Phase 2 Expansion
- **Measure:** Mutually agreeable lease agreement for expansion at a desirable location if reached, including the Armour/Reliance Block or equivalent alternative.

Appendix A - Budget Breakdown

Category	Pilot Project
Use of Funds (CAD)	
Capital Expenditures (CAPEX) – Vertical Farming Equipment	\$350,000
Operating Expenses (OPEX) – Food Production & Sales Activities	\$230,000
Marketing & Communications Plan Development	\$20,000
Employment Model Development ¹	\$10,000
Legal Fees ¹	\$10,000
Total Use of Funds	\$620,000
Sources of Funds (CAD)	
Co-Founders' Investment ²	\$20,000
The City of Calgary Council Innovation Fund Grant ³	\$250,000
Social Enterprise Fund	\$350,000
Total Sources of Funds	\$620,000

¹ \$20,000 co-founders' investment will cover the costs for the employment model development and pilot project legal fees.

² Co-founders' investment is in addition to initial investment of \$25,000.

³ Assumes \$250,000 funding from Council innovation Fund to cover OPEX (less food subsidy and loan payments) and Marketing & Communications Plan Development.