CONNECT**YXE**

SmartCitiesChallenge

City of
Saskatoon

City of
Saskatoon

OUR MISSION:

To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity.
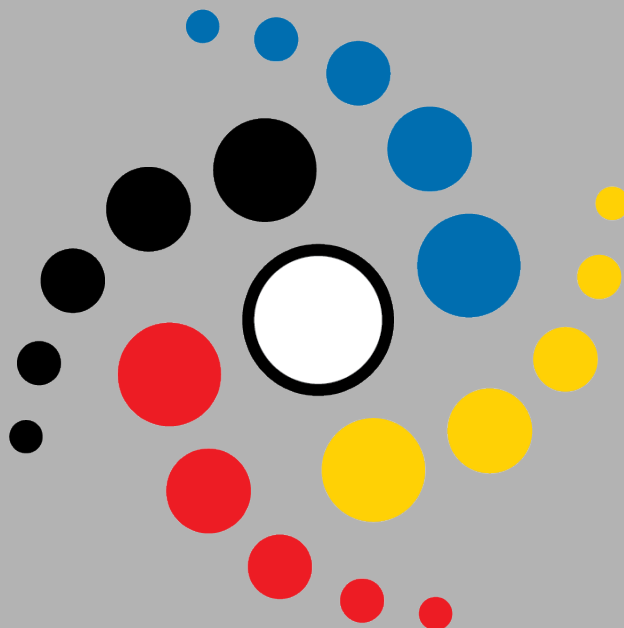
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00 Executive Summary

Our Challenge Statement is to be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity.

We worked closely with an Indigenous Youth Advisory Group and with community allies and institutional partners who provide programs and services to Indigenous youth. Understanding and incorporating the experiences and ideas of Indigenous youth is at the centre of this challenge.

The insight that emerged was that the cycle of incarceration begins with a series of harmful decisions. These decisions were often the result of preventative programs and services being too difficult, or unknown to the youth, for them to access in the moment they needed it. By contrast, a series of well-made decisions can give youth a plan and a path to a healthy cycle.

A smart city enables its citizens to use technology to make smart decisions.

The ConnectYXE program described in this proposal uses technology to connect people with programs and services, and to make decisions that will improve their lives. It is a program that supports empowerment, strengthens collaboration and harnesses innovative technology.

Empowerment of Indigenous youth and their families: providing real time information and options for how to access services throughout the city, every day, all day. For example, when a youth finishes school for the day, ConnectYXE will give that youth the information to plan out their afternoon and evening: play pick-up basketball in a community gym, have a meal, find a place to sleep, connect with an Elder, and find the public transportation options to reach their destinations.

This information, or the "front-end" of ConnectYXE, will be accessed through a variety of venues ranging from interactive kiosks and public touch screens in malls, stores, and even main transit stops located throughout the city, to a phone app, to a website at a school, or a public library computer. Targeted locations throughout the city will have free Wi-Fi, to ensure ConnectYXE is as available as possible for those critical decision-making moments.

Collaboration among partners: creating a repository of data of all relevant programs and services available throughout Saskatoon. Community-based Organizations (CBOs) have been operating in an environment of resource scarcity and fragmented information. Those who participate in ConnectYXE will be provided coordination support and technological capacity to input their activity data into

a data hub, the "back-end" of ConnectYXE. They will be able to access real-time services on an individual use-basis.

Harnessing innovative technology: connecting systems, sharing data and leveraging artificial intelligence. The collective data in ConnectYXE will provide a city-wide picture of what is available and the demands on those supports at any time. This enables CBOs, institutional partners, and decision-makers to regularly analyze and to identify gaps, trends, and better ways to respond.

The foundation of ConnectYXE is authentic and on-going engagement with Indigenous youth, community allies and institutional partners. This priority has been built into the governance model of ConnectYXE, with working groups engaging with each other and feeding into a decision-making Council comprised of youth, allies, institutional and technology partner representatives.

A whole-of-community approach, with youth at the centre, is needed to address the complex challenges that urban Indigenous youth face. These challenges are rooted in historical injustices, intergenerational trauma, and racism. And the cycle of family disruption, crime, and incarceration is both a human and economic tragedy that affects the entire city.

Cities across Canada are facing these same challenges, resulting in specific Truth and Reconciliation Commission Calls to Action that address them. Call to Action 38 is: We call upon the federal, provincial, territorial, and Aboriginal governments to commit to eliminating the overrepresentation of Aboriginal youth in custody over the next decade.

The challenge in Saskatoon is profound. Youth incarceration is double the national average. As youth move into the incarcerated adult population, 92 percent are Indigenous men and 98 percent are Indigenous women. The loss in human potential is immeasurable.

ConnectYXE can begin to transform the cycle of Indigenous youth incarceration into a healthy cycle. There is too much at stake if a new cycle is not created.

> *If I had ConnectYXE*
> *I would have been free*
> *Instead I spent three*
> *Wasted in a life that truly wasn't me*
> *Hoping for the best in the future*
> *I believe this is the true cure*
> *This is the seed to grow*
> *a community tree.*

- MARIO, SMART CITIES YOUTH ADVISORY MEMBER

Our vision is to transform Saskatoon into a city where Indigenous youth lead lives with purpose, belonging, security and identity. Our mission is to reduce the incarceration rate of Indigenous youth in Saskatoon to no higher than the rate in the nonindigenous population. Our approach is to empower Indigenous youth, their families and their communities to make smart decisions by accessing critical information in the moment they need it most.

> " *If I had ConnectYXE*
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1.1 Challenge Statement

Our challenge statement is to be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity.

Saskatoon is a growing city with a diverse population. On Treaty 6 Territory and Homeland of the Métis, it is the economic hub of Saskatchewan. As in all cities, growth and overall prosperity mask major inequities in both opportunity and outcome. Urban Indigenous youth face challenges rooted in historical injustices, intergenerational trauma, and racism. It is difficult to maintain cultural and spiritual traditions in the contemporary urban setting. Combined, these realities and experiences can deeply affect their sense of identity, purpose, belonging and security.

Among the consequences is an escalating cycle of family disruption, crime, incarceration, and alienation. This is both a human and economic tragedy that affects the entire city. Human potential is wasted. Children are forced to grow up too fast and navigate an often dangerous and hostile environment. Many lack the support or skills to make good choices. The programs and services meant to address these challenges are largely reactive. The criminal justice system warehouses young people in prisons at huge public expense, where they are more likely to become hardened career criminals than rehabilitated citizens.[1]

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1   Government of Canada. Office of the Correctional Investigator. Backgrounder: Aboriginal Offenders – a Critical Situation.

Community-based organizations (CBOs) do their best but the system remains fragmented; there are critical gaps in the capacity to respond to needs in real time, and most of the money is spent on repairing the damage rather than creating opportunities. The cycle becomes normalized and perpetuates itself through generations.

All cities want to solve these problems; in Saskatoon it is an urgent priority.

No one – not the youth and their families, the police and judicial system, CBOs, Indigenous leaders, business leaders – thinks the system is working now. To have different outcomes, we need a new approach. The adverse impact is enormous and will worsen over time. The gap between where we are and what we could be is wide. Therein lies the challenge and the opportunity.

Tragic statistics have spurred the Truth and Reconciliation Commission Calls to Action. Our ConnectYXE program would enable Saskatoon, and many other communities, to make direct progress on the following specific Calls to Action:

30. We call upon federal, provincial, and territorial governments to commit to eliminating the overrepresentation of Aboriginal people in custody over the next decade, and to issue detailed annual reports that monitor and evaluate progress in doing so.

38. We call upon the federal, provincial, territorial, and Aboriginal governments to commit to eliminating the overrepresentation of Aboriginal youth in custody over the next decade.

These formative experiences replicate in the older adult population, where incarceration rates are at least five times higher than in the non-Indigenous populations.[2]

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2   Estimates in this section are based on the following calculation: In Saskatchewan about 22% of the on-reserve Indigenous population is aged 10 to 19, of whom 60% are aged 12 to 17, our target population. Applying these figures to Saskatoon's 31,000 Indigenous population yields an estimate of (31,000 x .22 x .6) or 4092 Indigenous youths aged 12 to 17 for 2016.

4,100
Indigenous youth in Saskatoon.[3]

1,721
Youth incarcerated in Saskatchewan
(Youth are ages 12-17).[4]

3.8x
Saskatchewan's youth incarceration
rate is 3.8 times the national average.[5]

6x
Likelihood of incarceration of an
Indigenous Youth as compared with
non-Indigenous Youth.[6]

Indigenous Population[7]
- 4.9% Canada
- 11.3% Saskatoon
- 20% Projected for Saskatoon in 2035

Youth Incarceration Rates
- 2.3% Saskatchewan
- 0.44% Canada

Indigenous youth admitted to custody in 2016-2017[8]
- 92% Male
- 98% Female
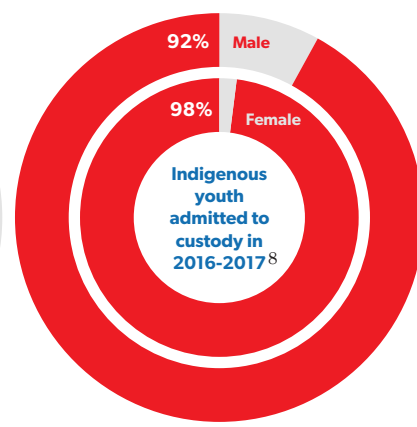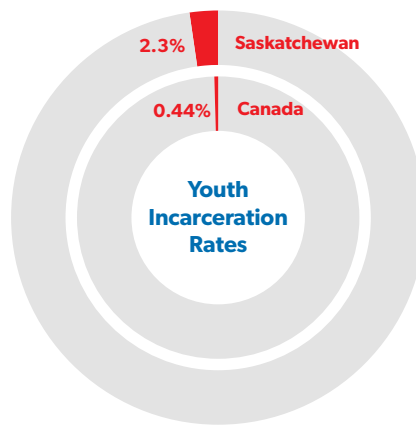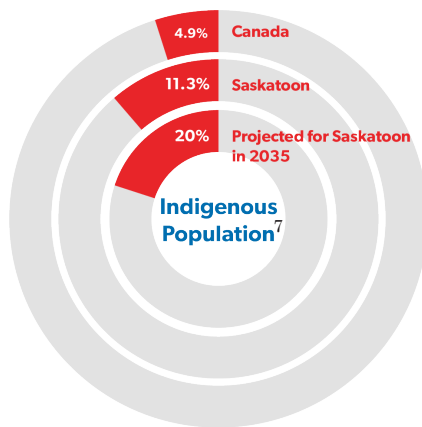
3   Saskatchewan Aboriginal Peoples 2016 Census ((http://publications.gov.sk.ca/documents/15/104388-2016%20Census%20Ab-
original.pdf)

4   Saskatchewan stat source: Statistics Canada, Table 11, Admissions of youth to correctional services, by type of supervision
and jurisdiction, 2016/2017
National Incarcaration Rate for Youth (.44 https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54972-eng.htm)

5   Saskatchewan rate of youth incarceration is 195 per 100,000 population. Canada is 50 per 100,000, making Saskatchewan 3.8
times the national average. (https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54972/tbl/tbl09-eng.htm)

6   Jamil Malakieh, Adult and youth correctional statistics in Canada, Statistics Canada. 2016/2017. June 19, 2018. https://
www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54972-eng.htm

7   Statistics Canada, Census Profile, 2016 Census, Saskatoon City, Aboriginal Peoples.
(https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=4711066&Geo2=PR&C
ode2=01&Data=Count&SearchText=saskatoon&SearchType=Begins&SearchPR=01&B1=Aboriginal%20peoples&TABID=1)

8   Statistics Canada. Table 13 - Admissions of youth to custody, by Aboriginal identity, sex and jurisdiction, 2016/2017
https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54972/tbl/tbl13-eng.htm

1.2. The Approach

A smart city enables its citizens to use technology to make smart decisions.

The core of our approach is empowerment: equip Indigenous youth, families and allies with the information and the support networks to make smart decisions. This means that youth and Indigenous culture are central in how we build the technological solution. At our first meeting, the Elder we had invited said we need to find a way to bridge tradition and technology. Doing this will create an environment that enhances the opportunities and outcomes we aim to change.

The complexity of Indigenous youth incarceration cannot be solved by a simple solution. Listening to the voice of youth and their families was our first step. We invited CBOs and institutions who represent and provide services to at-risk youth to work with us. This became a committed coalition of partners. We worked together and with the youth to understand where to start and what could make a difference.

The insight that emerged was that the cycle begins with a series of harmful decisions. These decisions were often the result of preventative services being too difficult, or unknown to the youth, to access. By contrast, a series of well-made decisions can give a youth a plan. As one of the youth advisory members stated, "When we don't have information about where else we could go or what else we could do, we choose Plan A. With infor-

mation, we could choose Plan B. B is for better."

It is in these moments of decision that the cycle of Indigenous youth incarceration can be broken. And based on this, we developed ConnectYXE.

> *ConnectYXE is not a provider of front-line services, it is a connector of those services to the youth, families, and allies who need them. It is like an Amazon.ca of services. Through Amazon, you can purchase a product that Amazon does not produce – rather Amazon connects you to the company that produces that service. ConnectYXE will connect people to the services being offered by CBOs and institutions in the city.*

ConnectYXE connects youth, their families and community allies with real-time information on services that are being offered, and the logistics they need to access those services. For example, when a youth finishes school for the day, ConnectYXE will give that youth the information to plan out their afternoon and evening: play pick-up basketball in a community gym, have a meal, find a place to sleep, or connect with an Elder or mentor. ConnectYXE will also provide information on public transportation options to reach their destinations. This information, or the "front-end" of our technology, can be accessed through a variety of venues ranging from interactive kiosks located throughout the city, to an app, to a website at a school or public library computer. Targeted locations throughout the city will have free Wi-Fi, to ensure ConnectYXE is as available as

possible for those critical decision-making moments. Self-determination and self-actualization are critical in supporting youth to make their own decisions.

ConnectYXE also provides coordination support and technological capacity to CBOs who have been operating in an environment of resource scarcity and fragmented information. CBOs who are part of ConnectYXE will provide their activity data into a data hub, the "back-end" of our technology. They will be able to access real-time services on an individual use-basis. In addition, the collective data will provide a city-wide picture of what is available and the demands on those supports at any time. This enables organizations and decision-makers to regularly analyze and to identify gaps, trends, and better ways to respond.

A "Use Case" – a step-by-step narrative that describes user's interactions with a system – illustrates how ConnectYXE might function.

1.2.1 An illustrative Use Case: Youth is looking for short term housing

This illustrates the planned functionality of ConnectYXE using a scenario that emerged from the Youth Engagement Workshops. In this scenario a youth finds for one reason or another that he or she cannot sleep at home for that night.
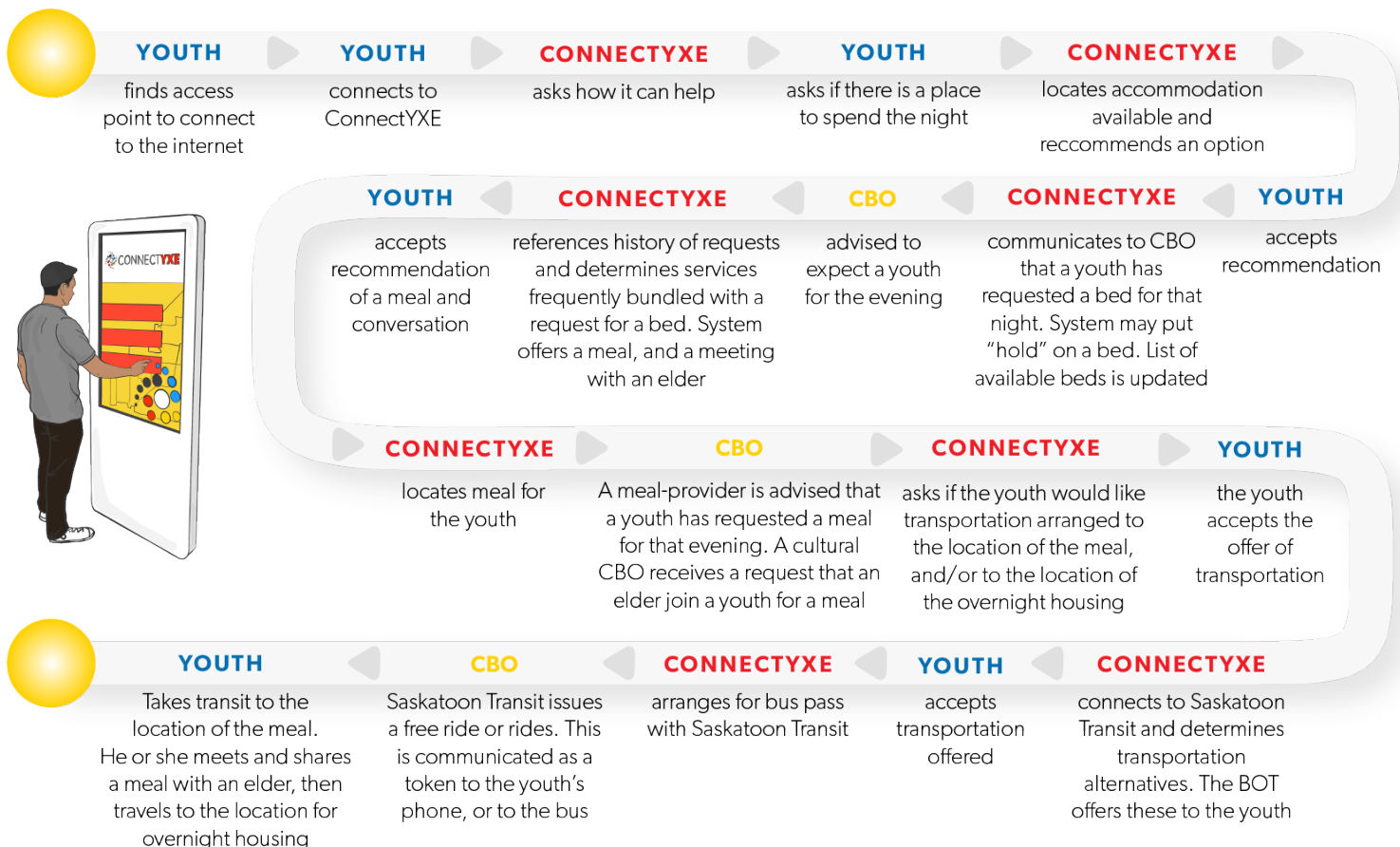
Our strategic approach is grounded in the following three outcomes. Examples of outputs are included below; a complete picture of how we are measuring outcomes is in the Performance Measurement section.

1. Empowerment of Indigenous youth and their families. This includes providing real time information and options on how to access services; ensuring information is available throughout the city, every day, all day. These will be measured by outputs such as: number of queries to the system from public kiosks or websites; number of users; and level of uptake of services.

In the finalist phase, significant progress has been made through consultation with youth to identify what information and services, would make the most difference to how they make decisions.

2. Collaboration between partners. This includes creating a repository of data of all relevant services available throughout Saskatoon. Outputs will include: number of CBOs, programs and services in the database, number of partnerships with CBOs, number of trend reports produced.

In the finalist phase, we have developed and strengthened partnerships with both CBOs and institutional partners who have agreed to provide data, participate in our governance, and assist in implementation of ConnectYXE. Their commitments are described in their Letters of Support in Appendix Five. We have also worked with them and the

youth to identify the preferred order of onboarding of services, based on the priority given by youth and the readiness of the partners involved.

3. Harnessing of innovative technology. This includes connecting systems, sharing data and leveraging artificial intelligence to:

> a. Enhance understanding of support-seeking behaviours and have insight into patterns to improve service coordination;

> b. Enable continuous refinement of programs and services in response to real-time insights generated by ConnectYXE;

> c. Identify critical gaps in programs and services that create barriers to better outcomes.

Outputs include number of community needs reports produced and number of trend reports produced

1.3 Implementation Plan

The ConnectYXE Program has a five-year plan. We will first develop our governance structure and processes followed by a detailed analysis of the systems and infrastructure of our CBOs and institutional partners. From this, we will build our core system (the back-end) and the interfaces to connect to and incorporate our CBOs and institutional partners. In a parallel track, we will initiate the projects that deliver the User Interface to youth, their families and allies (the front-end). Real benefits will

begin to multiply as youth are then able to use to the system to connect to a growing set of options and services, and as our partners will be able to perform analyses and gather insights based on aggregation of the data. We will build this program to transition to an independent sustainable organization. This figure demonstrates the multiple streams of our plan and the mix of technical and non-technical projects.

| 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |

CONNECTYXE GOVERNANCE

ONGOING GOVERNANCE AND REPORTING

CONNECTYXE SUSTAINMENT GOVERNANCE

DETAILED PLANNING

CORE SERVICES

CBOs AND INSTITUTIONAL PARTNERS

END USER INTERFACE

ACCESS (WI-FI, KIOSKS)

REPORTING, ANALYTICS, Bi

IT OPERATIONS (incl. DATA GOVERNANCE)
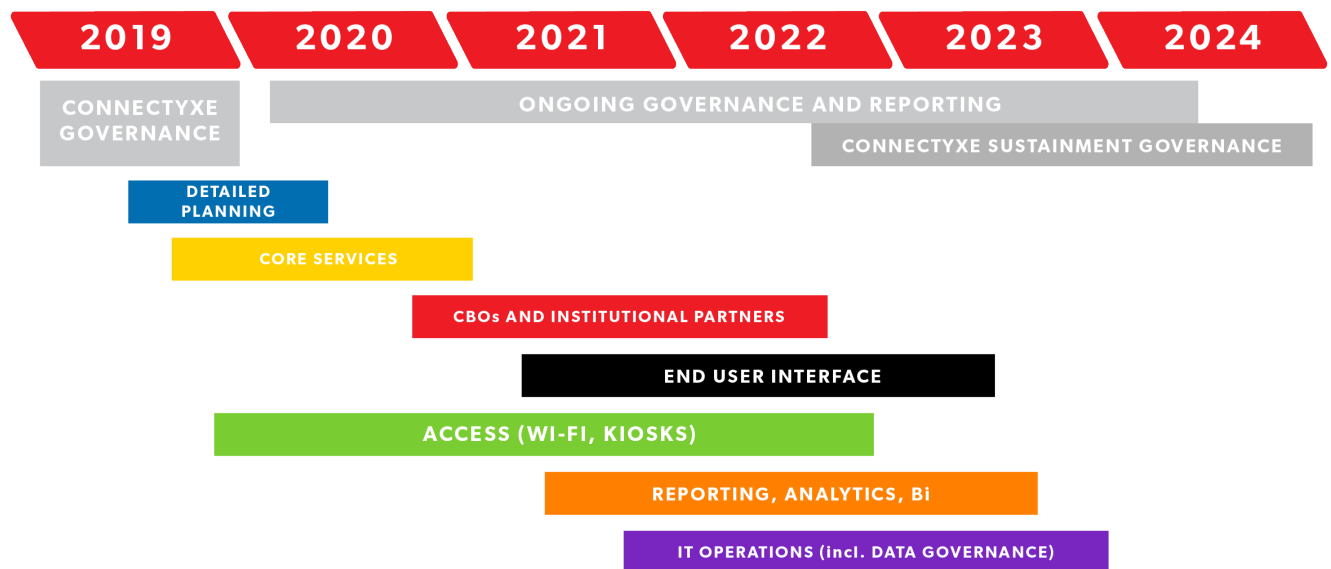
FIVE-YEAR IMPLEMENTATION PLAN

1.4 Years of Collaboration Is Our Foundation

This program is not the starting point; it is the culmination of years of deliberation, community engagement, collaboration, and mobilization. The history of our engagement is detailed in Section 2, "Community Engagement Journey."

To frame and develop the challenge statement for this program, we designed engagement workshops to identify and prioritize issues and to fuse the narrative of at-risk Indigenous youths with rigorous thinking about pathways to improvement. Over the course of eight workshops we refined the challenge statement into four pillars, developed by the youth and their allies.

Embedded in each pillar is mentorship and culture. Youth recognized that positive adult support, both on a regular basis and in crisis situations, is critical to building capacity to make good decisions. They also expressed a desire to connect with their cultural traditions to strengthen their sense of self and develop a sense of belonging.

Security: The overall top priority for the youth. Within that, the main priorities are housing security and public safety. Security also includes food, financial, family security, and accessibility (transportation) to services.

Purpose: Helping individuals feel motivated and comfortable, and empowering those individuals to help themselves and others make life better.

Belonging: A genuine sense of attachment to important elements of community and how it positively shapes their understanding of self and their place in society. Belonging can refer to any or all of the home, family, community, workplace, and other structures.

Identity: Knowing who they are, where they came from; a foundation for self-mastery and pride, expressed in values, personality, sense of autonomy; the product of historical culture, place, inherited and discovered elements; a source of inspiration and strength.

1.5 ConnectYXE Program is Transformative, Scalable and Replicable

Our ambition is to change relationships, systems and outcomes. We have designed a program that will be transformational. It is built upon an underlying logic, experience-based learning, and co-design by a diverse and committed partnership. Our approach is both ambitious yet cognizant of the multi-faceted challenges that are part of reducing Indigenous youth incarceration rates.

ConnectYXE program will be scaled up to include more communities, increased CBOs, programs and services, and additional technological advances as we progress. Particularly related to technology, predictive analytics and artificial intelligence are already being used for many commercial purposes and in everything from health care to transit planning. They are powerful tools for dealing with complexity over time, where effects have multiple causes, key factors interact to magnify socio-economic risks, and individual circumstances can vary greatly from day to day. Scaling our program towards incorporating these technology tools will magnify and expand our impact.

Our challenge is tragically one that many communities across Canada struggle to address. ConnectYXE has the potential to be expanded or adapted to other communities, and to include other related issues.

Among the main innovations of the program are:

1. It is grounded by the insight that success comes from empowered youth making good decisions in critical moments. This respects the agency of Indigenous youth.

2. It addresses problems defined and described by the people we are aiming to help: Indigenous youths, their families and allies.

3. It targets an outcome that improves the quality of life for at-risk individuals and their families, and the entire city. Reducing incarceration changes lives, increases safety and well-being for everyone, and reduces costs from the program level up to provincial and federal budgets.

4. It envisions a systems approach to systemic problems. All partners recognize the need to change. They are committed to informed experimentation, evaluation, and agile adaptation.

5. It aims to unleash the power of information at all levels:

a. Create a network of access points that provide vital information for Indigenous youth to get the help they need when they need it.

b. Integrate data to identify at-risk youth, tailor supports to individual needs, and identify what works, what doesn't, and in what circumstances.

c. Enhance understanding of how Indigenous youth use programs and services to inform decisions about how they might be better organized and deployed.

d. Record and analyze patterns to identify risks, coordinate services, reduce inconvenience and redundancy, and stimulate new approaches. Collaboration and coordination are currently thwarted by the absence of information and connectivity.

6. It is financially feasible and sustainable. It does not require transformational success in a short time period to produce a return on investment.

The Economic Costs of Failure

Continuing the over-representation of Indigenous people in the justice system instead of investing in education and alternative measures will cost Saskatchewan alone as much as $13 billion over twenty years.[9]

Every youth who gets caught in the cycle of despair and crime costs society an enormous amount of money. **Incarcerating one youth costs the province approximately $75,000 per year.**[10]

1.6 Turning Around Unrealized Economic Potential

The costs of dealing with the consequences of criminal behaviour are sub-

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9   Estimates in this section are based on the following calculation: In Saskatchewan about 22% of the on-reserve indigenous population is aged 10 to 19, of whom 60% are aged 12 to 17, our target population. Applying these figures to Saskatoon's 31,000 indigenous population yields an estimate of (31,000 x .22 x .6) or 4092 indigenous youths aged 12 to 17 for 2016.

10   http://publications.gc.ca/collections/collection_2018/dpb-pbo/YN5-152-2018-eng.pdf

stantial, but the economic impact does not stop there. Far more significant is the lost opportunity to participate in and contribute to the broader economy, which has a direct impact on a youth's sense of purpose, identity, belonging and security. Yet the current trend sees the general population unemployment rate at 5% while the Indigenous unemployment rate is 15.1%.[11]

There is a great deal to do. The Indigenous youth high school graduation rate hovers around 50%. Lifetime earnings double for Indigenous high school graduates.[12] It is estimated that the educational gap between Indigenous and non-Indigenous people costs Saskatchewan over a billion dollars a year in lost economic productivity.[13]

Even a small investment can generate enormous returns. An incarcerated youth conservatively costs approximately $73,632 a year, and once incarcerated, the likelihood increases that the criminal youth will become a criminal adult. The lifetime costs of further incarceration, addiction services, income support, and other supports reach into the millions. If the program empowers only 3 or 4 of the 4,100 youths each year to choose to complete high school and avoid crime, the combination of reduced costs and positive economic contributions to

society over a lifetime will produce a net benefit in the millions of dollars for each one.

The workforce of tomorrow will have to be significantly Indigenous if the province is to prosper. The problem cannot be quarantined; **the future of Saskatoon, and this nation, is inextricably linked to the future of Indigenous youth.**

The Case Study of Nanna

The Province of Saskatchewan and our technology partner, Information System Management (ISM), did an analysis of the program usage of one family and the impact on costs. This case study is focused around 'Nanna' who is in her late 50s, has four children, 19 grandchildren and one great-grandchild. Nanna and her children have never been employed. Nanna received support from six different community-based organizations, suffers from depression, addiction, was a victim of abuse and was apprehended as a child. Her family continually struggles with alcohol and drug abuse, domestic violence, child neglect, gang activity and other issues.

The Province and ISM estimate that program costs to support Nanna's family range from $5-7 million annually and forecasting forward to the next generation this number increases to $17-19 million. There are 2,500 families like Nanna's in Saskatchewan. This case study emphasizes the urgency of breaking the generational cycle of trauma, both because the costs to sustain people being supported to this extent are significant, and more importantly, the costs to the family in lost opportunity are devastating.

11   http://publications.gov.sk.ca/documents/15/100460-lfsJuly2016.pdf

12   Howe, Eric C. Mishchet aen kishkayhtamihk nawut ki wiichiihtonaan : Bridging the Aboriginal education gap in Saskatchewan. Saskatoon: Gabriel Dumont Institute, 2011.

13   Soonias, S., H. Exner-Pirot, M. Salat and A. Shah. City of Bridges: First Nations and Métis Economic Development in Saskatoon & Region. SREDA: Saskatoon. April 2016.

1.7 Bringing ConnectYXE to Our Community

We began our Smart Cities journey knowing we wanted to find a way to address safety and community well-being. Over the past year, we have been inspired by the courage and generosity of the Youth Advisory Group, the dedication shown by the front-line organizations and community allies, and by the commitment of the institutional partners who are prepared to break out of silos and make systemic change. We have built relationships over this past year that will weather the challenges of the future, a future that includes moving forward to build a new cycle of identity, purpose, belonging, and security for Indigenous youth.

> *Had ConnectYXE been available a few years back, perhaps my decisions as a teenager wouldn't have been so misguided. I would have had direct access to mentorship, recreation, or even that art class I always wanted to take. Instead of sneaking my friends through the window so they had somewhere to sleep, we could have found a better solution. This technology is going to answer questions we all as youth, struggling or not, need an answer to. It'll guide us places we deserve to be.*

- MORGAN, SMART CITIES YOUTH ADVISORY MEMBER

ConnectYXE Will Be Built

The experience of the past year with the youth and partners has convinced the community of the important need for ConnectYXE. There has been a commitment made by many organizations in the community to work with the City of Saskatoon in finding a way to deliver ConnectYXE, in all or part, regardless of the Smart Cities Challenge final result.

02 Community Engagement Journey

2.1 Introduction

Engagement has been and will continue to be at the heart of the ConnectYXE program. We developed our challenge statement as the result of comprehensive community and stakeholder engagement. The success of our program will depend on how well community members are engaged in both the design and implementation. Key objectives are that program and platform models are evidence-based, informed by stakeholder input, and address the barriers and needs of the youth, youth supporters, and community-based organizations (CBOs). Achieving this will require a deep and

Community Engagement increases community cohesion and allows for the community to have ownership over the outcomes that will ultimately impact them.

-TAMARACK INSTITUTE

sustained level of community engagement throughout the program lifespan. The governance model as shown in Section 6 "Governance" provides a clear picture of these relationships, and their role in decision-making. This engagement process will continue to involve building relationships, establishing trust and understanding, and continuing communication.

2.2 Where We Have Been

The table below outlines key elements of the engagement process to date.

Stakeholder Group	Sessions	Engagement Techniques
Youth Advisory Group	5	• **Sharing Circle:** Elder leading a smudge, opening & closing the circle; sharing life stories • **Scenario Mapping:** describing day to day routines in detail to pinpoint and identify gaps and opportunities Priority Identification: arriving at key project priorities, desired purpose and impacts, and key constraints • **Design Thinking:** exercises to encourage creative thinking, and tactile activities such as building their ideal neighbourhood and creating user personas

Institutional Partners Table	4	• Input meetings
		  • Discussion around current progress of the program
		  • New ideas and feedback on where ConnectYXE activities could be helpful
		  • Identifying which administrative units would be appropriate to help out in certain sections
		• Governance Planning session to provide input on governance model design

Community Allies Advisory Group (including CBOs)	2	• **Feedback Forums:** sharing youth feedback, providing a chance to ask questions and share current work, activities to identify gaps and opportunities, and share new ideas for the challenge • **Scenario Mapping Workshop:** built upon the youth maps, adding comments, questions, and ideas

Technology Advisory Group	2	• Input meetings
		  • Reviewed and built upon the ideas developed in the Youth Advisory workshops
		  • Added in comments, ideas, questions regarding scenario maps and what types of solutions could be implemented
		• Brainstorming session

TABLE 1: ENGAGEMENT PROCESS TO DATE

The program team also conducted eight meetings with individual institutional partners to identify areas of support and collaboration and convened a group of 50 staff and volunteers from 20 different CBOs in the housing and food sector for a presentation and discussion about the project.

To ensure that Indigenous youth with lived experience had a central voice, the team reached out to community groups and agencies. These organizations identified youth with whom they had established relationships and invited them to join the Youth Advisory Group. The youth represented a range of age, backgrounds and in-crisis experiences. From the beginning, the Youth Advisory Group has involved an Elder and traditional approaches through teachings, sharing circles, and continued support through the process. This intentional approach has built trust between participants and has created a safe space for exploration.

2.3 What we have learned

Over the course of the engagement, we identified several key insights that have shaped the current proposal.

Key Insights	Source	How they shaped the proposal
Dependence of youth on several key services – ex.transportation	Youth Advisory Group	Helped to prioritize services and what we should be onboarding first
Importance of traditional knowledge and culture	Youth Advisory Group	Led us to see identity not as a separate pillar but interwoven
Importance and impact of positive adult support for youth	Youth Advisory Group	Reinforced the importance of mentorship as key part of the project strategy
Importance of ongoing communication and relationship building	Institutional Partners	More consistent engagement approach with clear roles, expectations, and responsibilities based on capacity
Need to focus not just on youth as individuals but working with their families and allies	Youth Advisory Group and Community Allies	Important to involve community allies and support systems when working with youth. Our focus went from being simply on youth to understanding the importance of youth supports and allies and how they will also use the technology.
Role of CBOs and differing levels of capacity and technological maturity	Community Allies	Important to respect and reinforce the work of CBOs and their importance to the solution; Created a 3-tiered technology maturity strategy to ensure CBOs are on boarded easily.
Collaboration between technology and community worlds	Technical	To bring the two areas together at an earlier stage to understand the social complexities from the community view and the technological complexities and possibilities from the other side.

TABLE 2: INSIGHTS LEARNED FROM ENGAGEMENT ACTIVITIES

Our team has learned that the different stakeholder groups approach the program from different perspectives, which impacts how we engage them. For example, institutional partners are most focused on big picture strategy, while community allies are most focused on operations, and the youth tend to focus on immediate use and current situations. To address this with CBOs, we started acknowledging their operational realities and shorter-term needs before moving into strategy and vision conversations. We are now customizing our approach to each group. By portraying how everyone contributes to the whole, we have also seen more ownership and empowerment among participating groups

We must continue to build trust with partners so that they are willing to be candid about their challenges and processes and areas that need improvement. This is essential to design services that will truly work for all users and espouse confidentiality.

2.4 Where We Are Headed

2.4.1 Guiding Principles

We have identified seven guiding principles that will be embedded in the engagement approach. These values will assist in creating meaningful participatory processes and in building ownership within the community.

1. **Inclusivity and Diversity:** Ensuring that all affected and interested groups are involved, with proactive inclusion of groups that may be marginalized or facing barriers.

2. **Honouring Treaty Responsibilities:** Bridging the distance between Indigenous and settler worldviews on wellness of the individual, family, and community. (see Section 11.1 for full description)

3. **Transparency:** Open and consistent communication about the program. Commitment to explaining decisions, why they were made and how input was used.

4. **Deliberation:** Creating environments that encourage sharing, vulnerability, and provide opportunities for participants to shape solutions and work toward consensus.

5. **Influence:** Engagement must inform and shape decisions. Participants understand their level of influence and are involved in the decisions that most affect them.

6. **Accommodation:** Using approaches that will welcome a diversity of voices and ensure convenient, accessible methods of participation.

7. **Ongoing and Iterative:** Engagement continues throughout the project lifespan and will be adapted based on feedback and learning.

2.4.2 Decision Making Process – Governance

The Governance model described in Section 6 has a direct connection to the engagement plan. This is because engagement is about working with the community to have ownership over the outcomes that will ultimately impact them. The engagement process is always linked to decision-making, and therefore to governance. As the governance model evolves, so too will the engagement plan.

The ConnectYXE Council is the ultimate decision-maker. The Advisory Groups and Working Groups are at a collaborate level. There will also be engagement beyond these formalized structures, at a variety of levels. The program team will look to these governance groups for support with designing and leading engagement efforts to ensure they will resonate with the intended participants.

2.4.3 Community Relationships

The table below outlines the main stakeholder groups that have been and will continue to be engaged through the course of the program.

Key Stakeholder	Level of Engagement	Engagement Mechanism	Description	Purpose or Role
Youth with lived experience	Collaborate	Youth Advisory Group	15 Indigenous youth representatives recommended by 9 youth-serving agencies in Saskatoon	Provide lived experience voice to share experiences, identify needed supports and prioritize needs; foundational input for the program focus and approach
	Involve	Design and Testing Workshops or Stations	Wider group of Indigenous youth to engage with user experience design and testing	Provide lived experience and user voice to the process, ensure diversity of users are engaged
Government and Public Institutions	Collaborate	Institutional Partners Table	Representatives from 11 public institutions and levels of government, including Indigenous government	Provides overall strategy and approach based on input from lived experience and community, involved in developing governance model
	Involve	Individual Meetings	Meetings with individual institutional partners	To identify areas of program and data support that aligns with the ConnectYXE program
Community Based Organizations & Allies	Collaborate	Community Allies Advisory Group	25 organizations with a primary focus of working with at-risk youth in Saskatoon	To build awareness of ConnectYXE and gather ongoing input
	Involve	Outreach Meetings	Organizations from housing, food, recreation, and cultural sectors	To build awareness of ConnectYXE and gather ongoing input
Technology Partners	Consult	Technology Advisory Group	Representatives of key technology partners	To provide input and guidance with respect to the technology solution
	Collaborate	Weekly Update Meeting	Meeting with ISM as major tech partner	To build on the platform to support development
Residents	Inform	Communication Channels	Communications of key program milestones and opportunities for involvement	To keep interested residents aware of the program, key milestones, and ways to support

TABLE 3: ENGAGEMENT ACTIVITIES

2.4.4 Projected Engagement Goals and Activities

The table below outlines projected activities that correspond with an engagement goals. This represents an iterative and agile-thinking approach to the engagement processes.

Engagement Goals	Activities
1. Broaden the base: all appropriate supports and stakeholders are engaged and involved in program development. Active participation of Indigenous-led groups and allies.	• Identify and build relationships with Indigenous and community-based service providers, organizations, and allies that have not yet participated. • Reach out to service providers in neighbouring First Nations outside the city to identify possible partnerships and involvement (because of the high rate of migration between surrounding reserves and the City). • Solidify governance model through participatory involvement of stakeholders, and ensure clear understanding of purpose, roles, and responsibilities of various bodies. • Recruit for membership within working groups.
2. Gain a holistic picture: stakeholders are deeply involved in needs assessment processes to ensure barriers and needs of youth, youth supporters, and CBOs are addressed in the design	• Convene collaboration and input workshops with community allies to test the scope of current initiatives and gain feedback • Involve working groups in needs and opportunity assessments • Continue to support youth advisory group and build processes for onboarding new members if there are transitions • See goal #5
3. Build trust and change-readiness: CBOs see program value, feel respected, and are ready to make changes to support the program success. Participants have trust in the program; are willing to disclose what's not working and to express ideas that may be uncomfortable.	• Ongoing communication about program status, opportunities for participation and influence, and next steps. • One-to-one relationship building meetings with CBOs to build deeper understanding of operational realities and to discuss what's working and not working. • Create guidelines for advisory and working groups that emphasize importance of confidentiality, non-judgement, and productive discomfort. • Facilitate a series of workshops that build social capital and trust among participating groups, using a variety of facilitation methods for courageous conversations.
4. Strengthen community interconnections: enhance awareness and connections between service providers, to promote reinforcing activities and reduce unnecessary duplication. Work in a way that advances community reconciliation.	• Through engagement gatherings, create a collective system map of what each CBO is doing, and where there are overlaps, gaps and opportunities. • Broker partnerships and collaborative activities between CBOs, as appropriate, to leverage other strengths. • Convene courageous dialogue about areas of possible duplication or necessary redundancy. • Indigenous inclusion at every layer of the program and its governance, including both membership, cultural protocol, and modern treaty considerations.
5. Iterate based on testing and feedback: leverage design thinking approaches to put users at the centre of development and iteration. Ensure the right people are engaged at the right time in key design phases.	• Build capacity in design thinking methods and tools, increase stakeholder familiarity and comfort with these processes. • Host prototype testing experiences with incarcerated youth, affected families, youth advisory group, community allies, and members of the broader public. • Host feedback forums to gather feedback from institutional partners, subject matter experts, and other key allies.

TABLE 4: PROJECTED ENGAGEMENT GOALS AND ACTIVITIES

2.5 Communications, Marketing and Change Management

Communication to and from the youth, partners, and broader community will be a key activity towards building ConnectYXE success, and organizational and social change. Once ConnectYXE has been identified as a successful program, we will develop a communications plan that will include a news release and media announcement event, social media content shared across the City's Facebook, Twitter and Instagram channels, and updates on saskatoon.ca/smartcities.

We will then begin the next steps of program development and implementation. When ConnectYXE is ready to be launched to the community, we will create awareness by using a combination of advertising elements using both digital (social media, search engines, online) and traditional (radio, print, billboards, posters) media.

In the lead-up to the launch, we will work with the youth advisory group to develop plans for how best to reach other youth. We will also work with institutional partners and community allies to identify the best way for them to market ConnectYXE through their networks and how we can support them to do this.

After the launch, we will develop training and resource materials for onboarding additional CBOs to ConnectYXE and use these when approaching targeted groups to invite to ConnectYXE. We will

also host information sessions for the general public to understand how ConnectYXE works, while at the same time using this as an opportunity to test it as part of an on-going iterative development process.

ConnectYXE will introduce a new tool and new ways of thinking about how youth, their families and their allies might find available options and services. The program will be successful only if those end users actually use the service – that is, change how they do things. Introducing a change in the way individuals think and act is the discipline of Organizational Change Management (OCM). The change we seek to achieve is the use of ConnectYXE to make informed decisions.

ConnectYXE incorporates two frameworks to achieve the art and science of OCM: the McKinsey 7S model, and the PROSCII model. These formal methodologies have these broad steps in common:

• We identify what change we are introducing

• We identify who is impacted by the change, and

• We identify who influences whom

Based on this, we then seek to introduce the change in a managed way:

• We start by creating "Awareness" of the change

• We communicate the potential advan-

tages of the system, to build "Desire"

• Then we provide information as to how to use the system – or to build "Knowledge"

• We work with our users to build skill or proficiency is using the system – or to build "Ability", then

• We seek to "Reinforce" the newly-learned behavior

This "ADKAR" framework will – like other aspects of the ConnectYXE program -- evolve as we learn from early deployment efforts, as we listen to our end users, and as we monitor and measure the adoption of the solution.

2.6 Issues & Risk Identification

Risk Management cuts across each of the sections of this proposal, and risks frequently overlap domains. We have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management". We have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

03 Technology

Using a technology-based solution to address a social issue such as breaking the cycle of Indigenous youth incarceration is ambitious. We believe technology can play a critical role in connecting Indigenous youth, their families and allies, with a wider range of choices, empowering them to make decisions, and to seize existing opportunities. Technology can be a tool to help connect them to people, programs, and activities related to their cultural identity, that enhance their sense of life purpose, that give a sense of belonging, and provides security.

3.1 What is ConnectYXE? An Overview of the Technological Solution

ConnectYXE is both a data hub of programs and services (the back-end) as well as multiple interfaces for youth, their families, their allies and service providers to access those programs and services in real time. For example, access to the service will be available using a phone, a computer in a public library, or a public touch screen in a mall (the front-end).

Each Community-Based Organization (CBO) and institutional partner presently provides a subset of these services for youth and their families. However, they often work in isolation. ConnectYXE will collect existing programs, services and capacity information and connect it to youth, their families and their allies, in
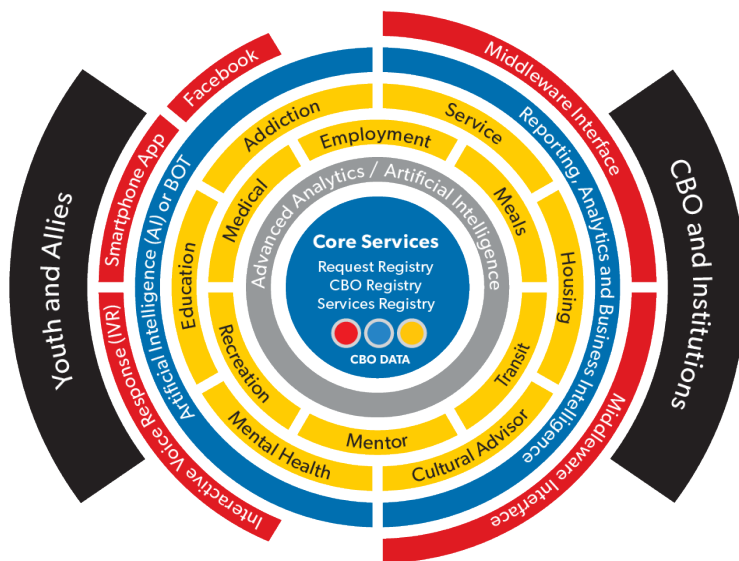
FIGURE 1: CONNECTYXE INTERFACE LAYERS

the moments they need it most.

Through analytics, ConnectYXE will provide a city-wide picture of what services are available and the demands on those supports at any time. This can be used by organizations and decision makers to identify gaps, trends, and opportunities, and recommend policy and program changes.

In this section, we explore each of the elements of the technological solution shown in the image, and "build" the system conceptually layer by layer.

We discuss data and privacy in detail in a subsequent section, but at this point we are clarifying that we will not collect data that contains personally identifiable information (PI) or Personally Identifiable Health Information (PHI).

3.1.1 Core Services

The core of ConnectYXE is a repository of data from CBOs and institutional partners, services those organizations offer, and a repository of requests. Data from CBOs and institutional partners reside here in the form in which it was received from the partner organization. This design is modeled after Saskatchewan's Social Innovation Hub (SIH), developed with our technology partner, Information System Management (ISM).

Detailed planning of the system core will include several elements:

• **Core Services** provide access to the system for administrators and partners. A secure process to log into the system will allow administrative users to access their own data. Authentication (that is, who logs into ConnectYXE) is discussed in Section 7.2 "User Access".

• **Requests** collect the metadata associated with requests by youth, their families and their allies. Collecting and analyzing this data can identify metrics associated with the system, which will help CBOs determine services that are most in demand and those service requests that most often cannot be met.

• **A Registry of CBOs** collects key organizational data about the CBO. This information is used to implement and maintain interfaces as a part of the Core Services.

• **Contacts** are integrated to both the authentication service and the repository
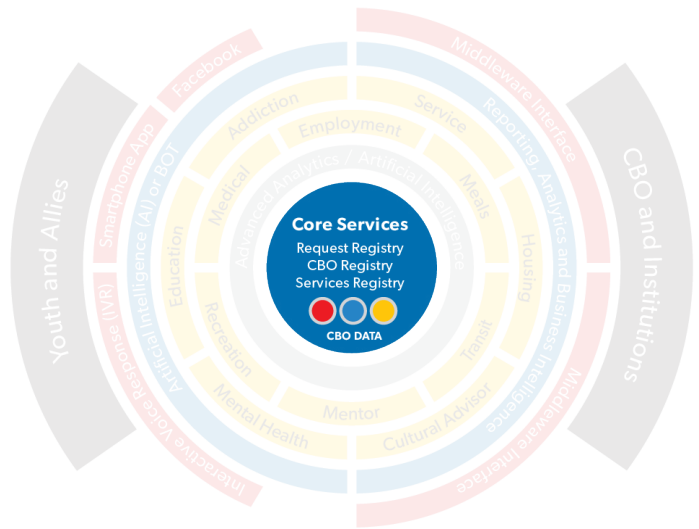
FIGURE 2: CORE SERVICES

Is ConnectYXE a Tool for Case Management?

The design outlined in this section specifically calls for a system in which the identity of an end user is not identified. While we recognize potential benefits of tracking and recognizing trends in the interactions of an individual, respect for the privacy of the end user has prevailed. The system is *not* designed to be a Case Management System.

of CBOs. This data will maintain roles and contact information.

• **CBO Data** is provided by CBOs and partners in their own format, sidestepping a long and difficult effort by each partner to transform into a highly structured/normalized model. *Note: Each CBO's data is isolated from other CBO's data. Staff from a given CBO will be able to view only their own data.*

3.1.2 Core Interface with Advanced Analytics

Advanced Analytics are built into the Core Services of ConnectYXE through the Registry Interface. This interface includes enhanced Artificial Intelligence (AI) – a variety of AI tools – to bridge the gap between data received from CBOs and the services offered by ConnectYXE.

Data provided by CBOs and institutional partners stored in the core will be both structured and unstructured. Highly structured and normalized data, for example, is housing data or data about recreational services stored in a database. Highly unstructured data might be published in a document or maintained on a spreadsheet that is stored on a server or on a local workstation of a CBO.

Knowledge from this data will be ex-
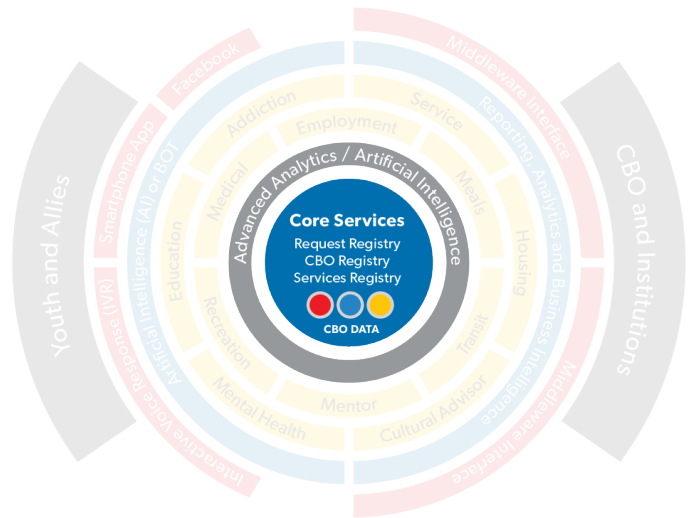
FIGURE 3: CORE INTERFACE WITH ADVANCED ANALYTICS

tracted using a set of Advanced Analytics tools and methodologies. This approach is trusted and used in a similar fashion to extract meaning from disparate data sets in the Saskatchewan Social Innovation Hub. AI is used to help deliver the right information, at the right time.

3.1.3 Services Offered by CBOs

The primary function of ConnectYXE is to connect organizations providing services to Indigenous youth and their families. These service connections will live in the Services layer of ConnectYXE. This information is populated by the Advanced Analytics Interface from CBO data maintained in the core.

Initially the services provided will start with Meals, Housing, Transit, Recreation, Cultural Interactions, and Mentorship. Additional services will be added as CBOs are on-boarded under the direction of ConnectYXE program governance.

FIGURE 4: SERVICES ONBOARDED

3.1.4 A Public Request Interface Enhanced Through Artificial Intelligence

A Public Request Interface is where youth who are requesting services can interact, make requests, and receive context-sensitive information to enable them to make informed decisions. It acts as a layer brokering the interactions between the youth and the services. This public layer is enhanced by a Chatbot utilizing Natural Language Processing (NLP) and other forms of Artificial Intelligence (AI).

This feature is a differentiator of this proposal. It allows users to interact with the system in language and terminology that is meaningful to the youth. Whether the youth is speaking to the system using a phone or is "talking" to the system using text, the Chatbot can be a primary handler of conversational interactions.

Chatbots are becoming more prevalent. Apple's *Siri*, Amazon's *Alexa*, Microsoft's *Cortana* and Google Assistant are ex-
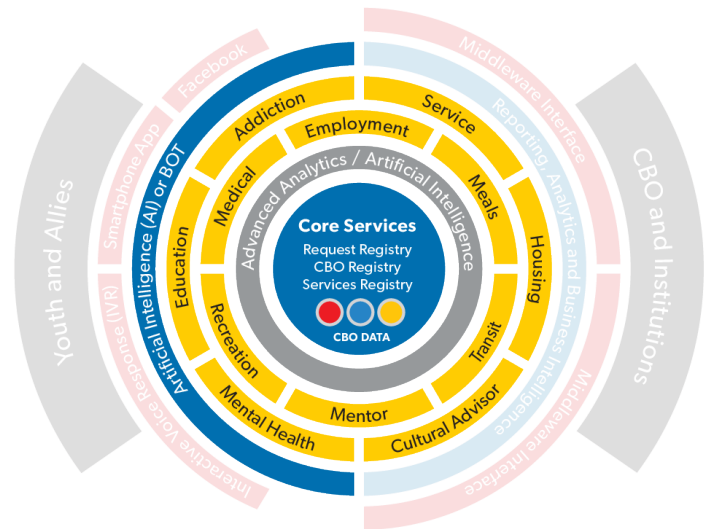
FIGURE 5: ADDITION OF ARTIFICIAL INTELLIGENCE

amples of interfaces that are on a smart phone or voice-activated personal assistant, or as a first encounter in calling customer service at several companies.

A Chatbot can be implemented in multiple languages. Future iterations of ConnectYXE may provide access in French. As the vision of ConnectYXE is scaled beyond the immediate objectives, the front end can be enhanced to speak other languages.

3.1.5 User Front End

A layer of web services wraps the public request interface to provide a seamless experience connecting the user to the service they need. Social Media and interactive voice response will allow youth, families and allies to interact with ConnectYXE by whatever method suits them. Together, with the front-end options and the Chatbot, information on programs and services will be available 24/7 with an interactive experience.
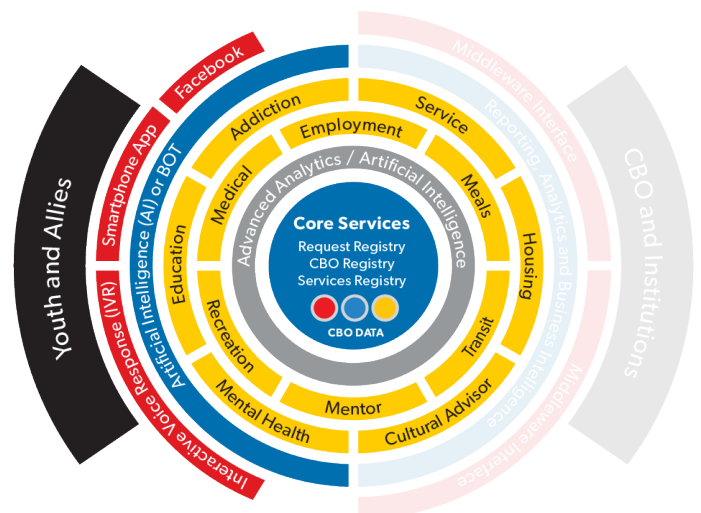
FIGURE 6: USER FRONT END

ConnectYXE Public Interface Uses Two Forms of Artificial Intelligence

Artificial Intelligence, or AI, is used in two distinctive ways in ConnectYXE's Public Interface.

The AI Chatbot handles the phrasing and conversational interaction, working with short, snippet-based conversation. Examples are phone calls, text message or a Facebook conversation or post. It uses Natural Language Processing and can "learn" from previous conversations.

The second AI dimension is learning what a person is looking for, even when they have difficulty articulating their needs in terms of services. Here, AI tools search for relationships in data. This is Advanced Analytics or machine learning applied to the ConnectYXE context.

In ConnectYXE, data will be analysed by a rich set of analytic tools in the ISM Data Lab. The richness of the analytics, too, grows over time.

3.1.6 Operations Interface Supporting Reporting, Analytics and Business Intelligence

ConnectYXE includes an operations interface comprised of reports, analytics and business intelligence (BI). This interface includes prepared reports that will be available to authorized partners (e.g. CBOs, institutional partners, etc.) This interface layer will support the exchange of data between ConnectYXE and each partner.

ConnectYXE partners – CBOs, Institutional partners, policy makers and researchers will connect to these reporting, analytics and BI services through a web portal. They will have access to information that is related to their services that will allow them to understand the efficiency of the programs they provide, and also understand the landscape of the entire city to understand what the needs are of at-risk youth. This allows them to understand the funding required to run their programs and which social services are at greatest demand. The intelligence gathered will allow us to position social services funding to optimal advantage.
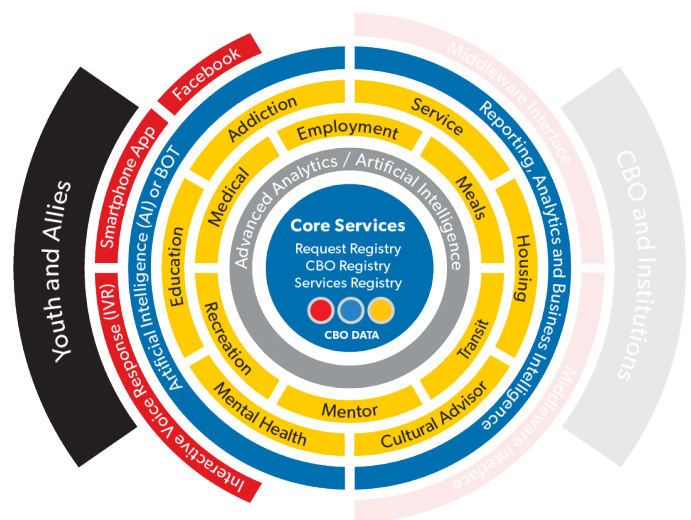
FIGURE 7: ADDITION OF OPERATIONS INTERFACE

A report is analogous to driving a car while looking in a rear-view mirror while Business Intelligence is analogous to looking through the front windshield.

A Partnership with Saskatoon Housing Initiative Partnership (SHIP)

The Government of Canada National Homeless Individuals and Families Information System (HIFIS) has developed a software solution to enable CBOs to manage shelter and food services, and to share and collaborate their current status and use. In Saskatoon, SHIP is working to promote the use of the current version of HIFIS. CBOs that sign-on with HIFIS publish available shelter space and meal infor-mation. This makes SHIP an ideal partner for ConnectYXE-IFIS data are available to ConnectYXE by an Application Layer Interface (API) that has already been developed. This means that the rich dataset maintained by HIFIS for shelter housing and for meals is available to ConnectYXE.

Conversely, ConnectYXE promotes the objectives of SHIP and works to promote the adoption of HIFIS 4.0. As ConnectYXE onboarding process identifies CBOs that do not have a technical solution to managing services, the program will work with HIFIS to meet that need.

3.1.7 Middleware Connector

A middleware layer will connect the data repository to ConnectYXE partners. This is a set of APIs that pull data from our partners' data sources. The nature of the interface will depend on the level of IT maturity of the CBO or institutional partner. Each partner will have a different level of technological maturity. This is discussed further in Section 3.5 "Technical Onboarding of CBOs and Providers".

ConnectYXE is not imposing a standardized, normalized data model on its partners. The approach described above proposes to receive data as it is available, and using AI, will extract information that can be provided to the users of the service. This data will be received by the system by creating APIs. Collectively, these APIs can be thought of as comprising a "Middleware" between the partners and ConnectYXE.

Data provided to the system from the CBOs and institutional partners will be stripped at the source of any PI/PHI.
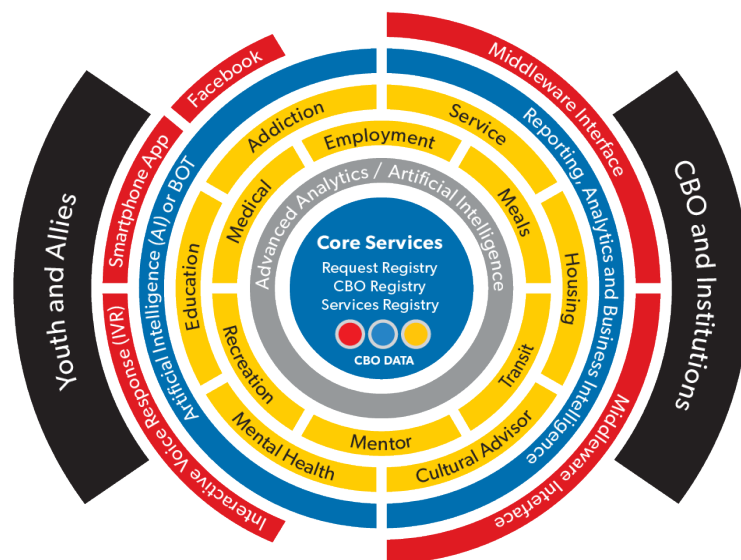
FIGURE 8: FULL FUNCTIONING CONNECTYXE SYSTEM

ConnectYXE and 211 Saskatchewan

The Province of Saskatchewan has implemented 211 Saskatchewan "to be THE provider of real time community information and referral in Saskatchewan."

211 Saskatchewan is a free, confidential, 24/7 service that connects individuals to human services in the province by telephone, text, or web chat, plus a searchable website with over 5,000 listings of social, community, non-clinical health, and government services across the province.

This service is available by voice or text, from a phone or computer, and is available 24 hours a day, 365 days a year in 100 languages, including 17 Indigenous languages.

ConnectYXE is different from 211 in that ConnectYXE connects to the services offered by partner CBOs – in addition to connecting the individual to the CBO. ConnectYXE will collaborate with 211 Saskatchewan in three ways:

• ConnectYXE will connect to 211 Saskatchewan, facilitating an additional means of access to this service;

• 211 Saskatchewan data will be connected to ConnectYXE so that it is accessible by the analytical and AI tools of the ISM Data Lab. This will provide a rich source of data to match requests for services with ConnectYXE user's requests; and

• 211 Saskatchewan will be onboarded as a partner CBO, providing 211 with access to the services offered by constituent ConnectYXE CBOs.

3.1.8 Public Access Kiosks

Public kiosks will be strategically placed throughout Saskatoon where Indigenous youth meet and congregate. These will present information about programs, services and transit information.

The potential for public kiosks beyond the ConnectYXE program is significant. They can be integrated with current events to promote tourism, and to advise of public services. These would provide the justification for an independent sustainable organization to advance the number of public kiosks beyond what would be funded by the program. We will monitor the use of the initially-provided kiosks as input for a business case to leverage public funding to extend this service.

3.1.9 Internet Exchange

CIRA (Canadian Internet Registration Authority) is a non-profit organization that manages all .CA domains in Canada. One of the goals of CIRA is to keep internet traffic within Canadian borders. The City of Saskatoon is a member of the Saskatoon Internet Exchange. The goal is to ensure all communications (internet traffic) between CBOs and ConnectYXE is within Canada. Combined with all data residing in Canada, we have an opportunity to keep all interactions in Canada.
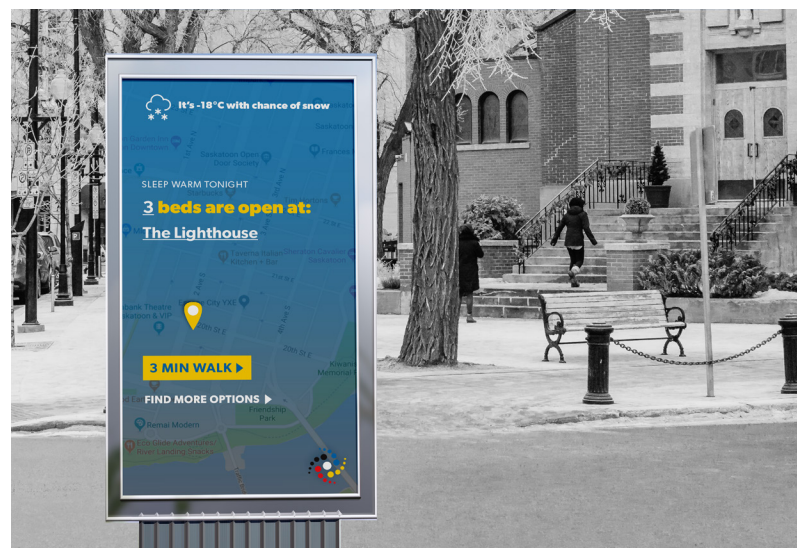
SAMPLE OF CONNECTYXE PUBLIC ACCESS KIOSK

3.1.10 Free Wireless Internet to Strategic Locations

Another aspect to improving access to ConnectYXE is to enhance the opportunities for connecting to the Internet in locations where Indigenous youth and their families are likely to be. We know that Wi-Fi access is a limiting factor for many youth who have access to a smart phone, but cannot afford monthly data plans. Current practice is for these youth to hang around schools after hours where they can get a Wi-Fi signal.

Providing broad public Wi-Fi access throughout Saskatoon is beyond the scope of the ConnectYXE program. The ConnectYXE program will improve Internet access by placing wireless access points in neighbourhoods that we identify as having a high concentration of Indigenous families, combined with socioeconomic indicators that indicate high rates of poverty. Using the Stats Canada data overlaid with Geospatial data we have determined where Indigenous families with the lowest income are located. The map shown here illustrates this approach. We will install Wi-Fi Access Points (WAPs) on light standards in one of these neighbourhoods and then use results of utilization of this service to build a business case to secure funding to extend it to additional neighbourhoods.
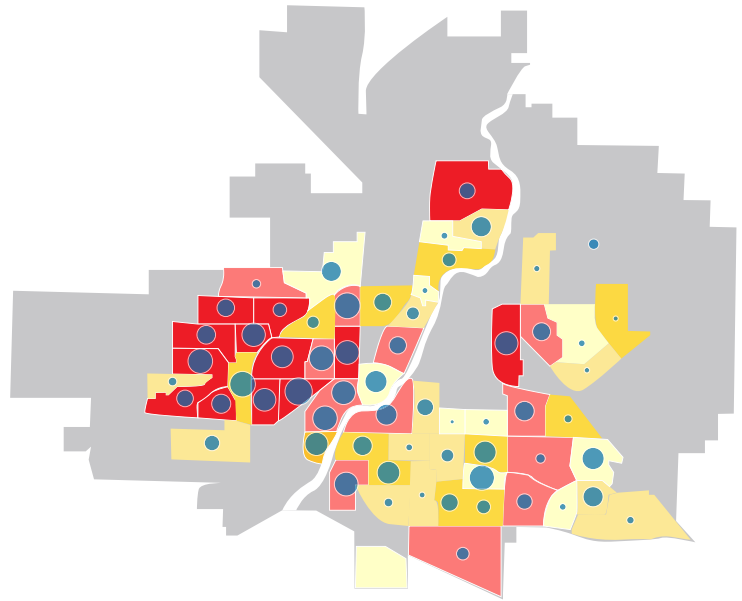
FIGURE 9: WI-FI ACCESS POINTS IN CORE NEIGHBOURHOODS

3.2 Storage and Application Infrastructure

Access to ConnectYXE is required 24/7, comparable to emergency services. We will leverage Microsoft's Cloud solutions to host the environment required for ConnectYXE. This solution keeps all aspects of the solution within Canadian borders and allows ConnectYXE to be scalable across Canada. Microsoft's Cloud solution includes disaster recovery, backup/restore, archiving, auditing and redundant Internet services. With a high level of redundancy, this will ensure that ConnectYXE users will have a consistent experience.

3.3 Getting Connected to ConnectYXE

ConnectYXE will be valuable to youth, families and allies only if they have the devices to access the system, and if there is an internet connection available. ConnectYXE will address this by increasing the points of access to the system. ConnectYXE will:

1. Provide enhanced access to free Wi-Fi,

2. Place kiosks strategically throughout the city,

3. Be promoted on existing computers in schools and libraries,

4. By text or by voice using an individual's own device, and

5. (In the future) provide free Wi-Fi on public transit
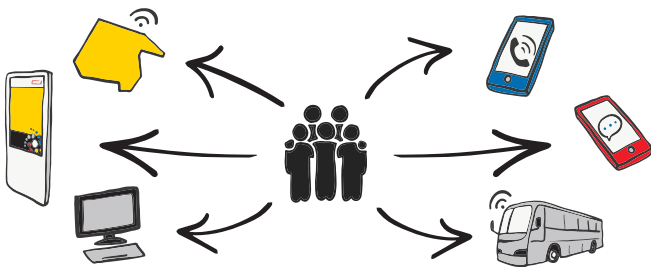
FIGURE 10: CONNECTING TO CONNECTYXE

3.4 IT Governance

IT Governance fits within the context of the overall Program Governance. In the governance model proposed, the execution of the program will reside with a Program Team, led by a Program Di-rector. That team will deliver projects as directed by the ConnectYXE Council (documented in Section 6) and will provide IT Operations support (see Section 4.7 "Transition to Operations").
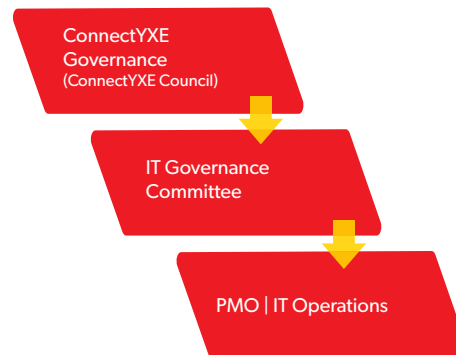
FIGURE 11: IT GOVERNANCE

The system delivered by ConnectYXE requires IT Governance to ensure the IT operation is compliant with legislation, regulations and privacy. IT Operations will be responsible for Data Governance, including data retention and disaster recovery. IT Operations is responsible for ongoing financial accountability, preparing ongoing operating budgets and applying accounting regulations to costs and expenditures.

The IT Department of the sponsoring organization – the City of Saskatoon – employs an ITIL-based Governance framework and uses IT Service Management. The City has offered an instance of the ITSM service as an in-kind contribution to ConnectYXE.

3.5 Technical Onboarding of CBOs and Providers

There are two dimensions to the onboarding of a CBO or of an institutional partner: one is the onboarding of the partner at an organizational or partnership level. This is a product of engagement and is managed by ConnectYXE Program Governance. The second dimension is to establish a project to onboard the partner at a technical level.

CBOs can be broken into three broad categories:

•**"No Tech"** organizations present different challenges. These are CBOs who do not have data in a form that can be shared. For these, the onboarding process will work with the CBO to establish basic administration of the services offered. Some funding will be allocated to this purpose. For these CBOs, our agreement will include supporting them to establish IT systems as appropriate. Once systems are developed, these CBOs may then be integrated into the ConnectYXE system.

•**"Low Tech":** These are CBOs who have basic IT technology. For example, they may manage their services using spreadsheets or a local database. Data from these CBOs may be integrated into ConnectYXE.

•**"High Tech":** Institutional partners have well-developed IT infrastructure in place and can be considered "High Tech". For example, Saskatoon Transit, City of Saskatoon Recreation and Community Development, Saskatoon Public Schools and Greater Saskatoon Catholic Schools have existing mature systems with which we can build interconnections. CBOs that use HIFIS are also "High Tech."

The roadmap provided below will vary depending on the CBO and their level of technological maturity, but will generally follow this roadmap:

Community-Based Organizations Onboarding Roadmap

PRIORITIZE
CBO is identified by program governance for onboarding

1

2
ASSESSMENT
Assessment of data and technology

AGREEMENT
Data Sharing Agreement between CBO and ConnectYXE

3

4
PLANNING
Establish project to integrate technology and onboard data

AI ANALYSIS
AI Analysis of new data

5

6
TEST & RELEASE
Test User Acceptance and Release
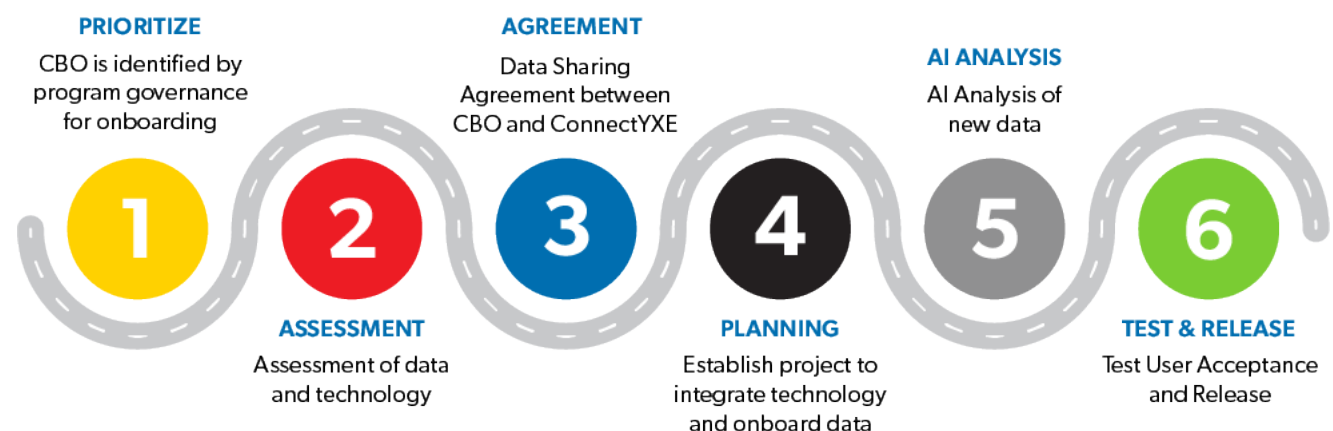
1. Prioritize: ConnectYXE program governance will identify that a CBO is a candidate for onboarding. This process is managed by the Portfolio Management Process discussed in Section 4.6 "Program Governance."

2. Assessment: We will complete a detailed assessment of the CBO's technological maturity and of their data. This will include identifying whether the CBO's data includes, or is likely to include, any PI/PHI.

3. CBO Agreement: The CBO and ConnectYXE will complete an agreement that includes a Data Sharing Agreement and a Privacy Impact Assessment.

4. Planning: The CBO and ConnectYXE will charter a project to onboard the CBO. This step completes the planning for the onboarding, complete with a project team from the CBO and ConnectYXE. Planning will include identifying the process(es) by which any PI/PHI will be removed from the data sent to ConnectYXE.

5. AI Analytics to Extract Services: Once CBO data has been onboarded and resides in a secure partition, the AI Toolkit of the ISM Data Lab will begin to extract meaning from it – which will populate the services that end users will access.

AI Analytics to Provide Insights: This same ISM Data Lab will, once it has a sufficiently large set of data, analyze the aggregated data, producing trends, deeper analysis and insights.

6. Testing and Release: Once the new data has been tested by the CBO and other User Acceptance Testers, the data will be made available to the youth, families and allies of ConnectYXE.

3.5.1 Integration with CBOs and Institutional Partners

ConnectYXE does not replace nor compete with applications delivered or being developed by other partner organizations. ConnectYXE will connect users to other partner applications. Here are a few examples:

CBO/Institutional Partners	Technology Integration
211 Saskatchewan	211 Saskatchewan (S211) maintains a database that connects individuals with over 5000 agencies and social services. It provides access to this list of services 24 hours a day, every day, by voice (dial 211), text (text to 211), or as a web chat. This database has a published API with which ConnectYXE will directly connect. As discussed, partnering with S211 provides a "safety net" such that users who cannot otherwise find a ConnectYXE service can connect – in real time – with S211. ConnectYXE can be configured to seamlessly connect to 211 Saskatchewan – either text or voice.
HIFIS	The Homeless Individuals and Families Information System (HIFIS) is a federal government system, providing real-time information about emergency shelter and food services. This system as a published API with which we can integrate ConnectYXE.
Central Urban Metis Federation Inc.	CUMFI uses HIFIS and is moving to HIFIS 4.0 for all of their locations. There is an opportunity for ConnectYXE to expand other services that CUMFI offers, an example is laundry.
EGADZ	EGADZ maintains a SQL database stored on servers at Innovation Place. They currently have an interface used by outreach workers that provides ConnectYXE an integration opportunity. Integrating with EGADZ, we can tap into services that it provides -- for example, the "I am not for sale", or the "runaway" apps.

Saskatoon Transit	Saskatoon Transit is a major institutional partner. Through the API to their TRAPEZE system, we can provide real-time transit information. Through ConnectYXE, we can connect to, and use "Trip Planner". Of particular significance, we can provide pre-paid transportation, using new functionality coming with the "Mobile Ticketing" feature.
Saskatoon Recreation and Community Development	ConnectYXE can connect to City of Saskatoon Recreation and Community Development systems, to provide real-time access to drop-in programs, longer term recreational opportunities and other services.

TABLE 5: TECHNOLOGY INTEGRATION WITH CBOS

3.5.2 Technical Collaboration Partners ISM and the Social Innovation Hub (SIH)

ISM Canada is the major technology partner in the development of the Saskatoon Smart Cities Challenge and will be the major contributor of the technical solution of ConnectYXE. The design of ConnectYXE is based on the design of the existing and successfully deployed Social Innovation Hub (SIH), as mentioned earlier. ISM Canada, in conjunction with the Government of Saskatchewan, has invested significant research and development over the past two years to create this innovative data hub in the social sector.

3.6 Scalability, Replicabiility and Future Proofing of the ConnectYXE Design

The ConnectYXE program has been developed to meet the needs of Indigenous youth in Saskatoon. However, the design is:

•**Scalable –** that is, it can be extended to meet the needs of other marginal communities in Saskatoon;

•**Replicable –** it can be applied to other cities in Saskatchewan, in Canada, and globally; and

•**Is "Future-Proof" -** it will only improve as AI tools, Natural Language Processing Tools and other technologies emerge.

3.6.1 Scalable

The proposed design can be scaled to ben-

efit other communities than the initial target community of Indigenous youth. What tailors the system to Indigenous youth is the fact that services identified by the Youth Advisory Board are those services that will be on boarded and in the priority identified. Other related services can be added as needed.

3.6.2 Replicable: A Framework for Canada

The specific data collected by ConnectYXE will apply to Saskatoon and people moving to Saskatoon. However, the system as designed has a much broader reach. The solution is built on the ability for any service provider to be added. This framework approach allows any city in Canada to add their services.

Part of what makes this solution replicable is that it is cloud based: it is not contingent on a locally-placed server infrastructure. This solution can be scaled upwards to meet the needs of other cities in Saskatchewan, in Canada, and globally.

3.6.3 Future Proof

AI is emerging as a technology that is bringing new capabilities and automating tasks that humans currently do. Institutions and businesses around the world are increasingly using AI for a multitude of purposes including medical diagnosis (e.g., IBM Watson), analysis of "big data" for purposes of marketing, or for stock optimization to mention only a few examples. ConnectYXE seeks to use the same technology to address a social challenge.

Future improvements to AI and to Natural Language Processing (NLP) are coming rapidly. We have seen firsthand NLP provide translation between languages. In the future, we anticipate support for local Indigenous languages

The technology incorporated in the design of ConnectYXE is best practice, available, and used in other industries today. What distinguishes ConnectYXE is what the technology is being used for, how the application will make itself available and accessible to those who will benefit from the service, and the

Scalable
• Marginalized Communities
• Immigrant Communities
• Youth in General
• Indigenous Peoples
• Indigenous Youth

Future
• Include Indigenous Language and Dialects
• Increasingly Capable AI
• Include French National Language Processing

Replicable
• Other Saskatchewan Communities
• Other English Language Canadian Communities
• English and French Canadian Communities
• Any Community Globally

FIGURE 12: FUTURE EXPANSION OF CONNECTYXE

provision of powerful and meaningful analytics delivered to stakeholders.

3.7 Risk Management

Risk Management cuts across each of the sections of this proposal, and risks frequently overlap domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management." That section shows those risks that, overall, received the highest impact profile: we have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

04 Project Management

The ConnectYXE Program is a collection of coordinated projects. Together they deliver a technology-based solution to break the current cycle of Indigenous youth incarceration by connecting those youth with a wider range of services and options.

The Smart Cities Challenge award, combined with contributions by our partners, will not provide us unlimited resources. Therefore, program planning will balance dual requirements: to onboard services provided by CBOs and our partners; and to provide access to youth and end users. An emphasis on one of these at the expense of the other will result in an incomplete solution. Maintaining this balance and ensuring that the program delivers the services that are priorities is the ongoing responsibility of Program Governance.
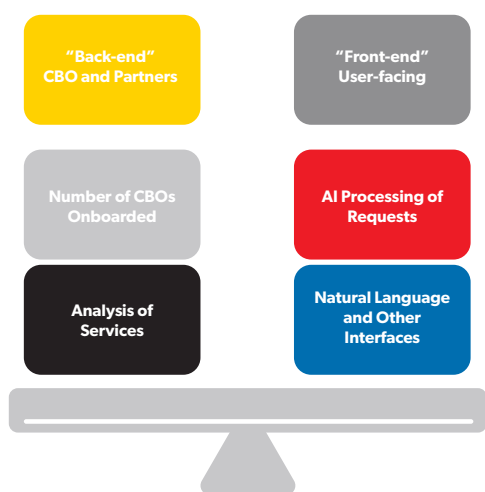
FIGURE 13: BALANCE OF FRONT END AND BACK END SYSTEM

In this section, we discuss our overall approach to the program, our detailed plan, our program and project management approach, and methods and tools that will be employed.

4.1 Project Approach

The ConnectYXE program will consist of multiple streams, each with component projects. The projects are a mix of technical and non-technical. The approach, at a high level, is demonstrated in the graphic on the next page.

Upon receiving the Smart Cities Challenge award, we will enter into a formal agreement with Infrastructure Canada and immediately move to establish the ConnectYXE Council and other governance bodies, and develop the core Program Team. We anticipate being able to add some access points as early as 2020. We will enter into formal agreements with our CBOs and institutional partners, based on a detailed understanding of their systems and services that feeds into a detailed integration plan and onboarding process ("roadmap"). We will procure the remaining IT resources needed.

We then move into a period of system development where we will acquire our infrastructure and build the core. Next we begin to connect to, and import data
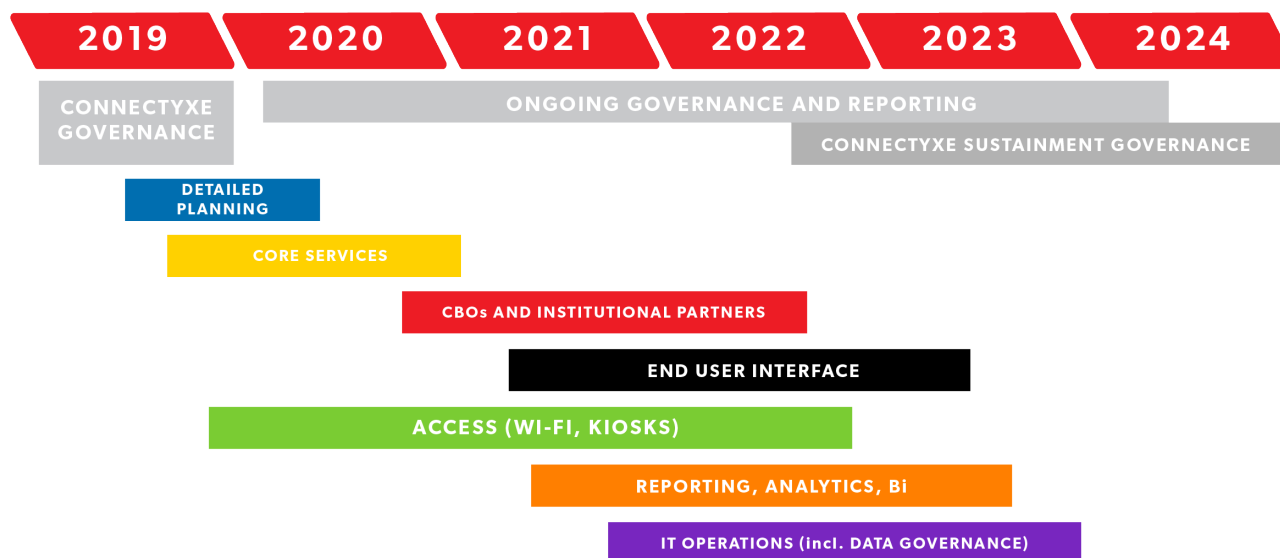
FIGURE 14: FIVE-YEAR IMPLEMENTATION PLAN

from, our CBOs and institutional partners, and build out the user interface – including the Natural Language Processing component. These components will be developed with an agile project management methodology (described later in this section), ensuring end user participation in the project teams. When we have a functioning system available for user acceptance testing, we will begin to promote the system to youth.

Reporting, analytics and business intelligence is a stream that will begin when we have our core built and a sampling of CBO and institutional partner data, It will continue as we engage with end users so that the system will provide insights.

We will form an independent sustainable organization to take ownership of ConnectYXE after the period of Smart

Cities Challenge funding and secure ongoing funding for this organization. As each separate project delivers functioning components of the system, IT Operations will own these, ensuring that they are managed and supported for our partners. IT Operations will transition to the new organization as the program ends. We will formally close the program – working with Infrastructure Canada to ensure the insights, tools and solutions are available to be applied throughout Canada.

ConnectYXE will live on after the period of the Smart Cities Challenge-funded program. The independent organization will continue to develop the solution, add partners, reach out to youth, and operate the service.

4.2   Program Scope

This is a high-level scope of the ConnectYXE Program.

Program Phase	Major Deliverables
1. Establish Program	• ConnectYXE Council Established • Recruit Staff Positions • Program Governance Committee Formed • Formal Agreement with Smart Cities/Infrastructure Canada
2. Stakeholder Engagement and Detailed Planning	• Detailed Scenario Mapping with Youth and other partners • CBO Detailed Requirements Gathering • Detailed Solution Planned • CBO On Boarding Roadmap Delivered (includes PIA and Data Sharing Agreement) • Technology Resources Procured
3. Platform and Core Services Delivered	• Infrastructure Procured and Developed • Core Services Establish (Requests and Services) • APIs Developed • Connection to ISM Data Lab and AI Analysis
4. CBO and Institutional Partners On Boarded	• Accommodation and Meal-serving CBOs onboarded • HIFIS Integration – adding additional accommodation and meals • Culture and Mentoring CBOs onboarded • Saskatoon Transit onboarded • 911 Services Connected • 211 Saskatoon Connected • Recreation and Community Services Onboarded
5. ConnectYXE End User Interface Built Delivered to Youth, Families and Allies	• End User Interface Wire framed and Built • Natural Language Interface and AI Interface Delivered • Solution delivered by text, voice and smartphone app • Solution Tested by End Users (Youth and Families) • ConnectYXE Solution Marketed • ConnectYXE Deployed to Youth, Families and Allies
6. Reports, Analytics and BI Delivered	• Reports configured for respective CBOs • Consolidated reports, analytics and Business Intelligence ("Insights") Delivered
7. Wi-Fi Access Points and Kiosks Deployed	• Wi-Fi Access Points (WAPs) deployed in identified neighbourhood. • Kiosks configured and deployed in strategic locations • Business Case written, and partners engaged to extend Wi-Fi and Kiosks
8. Program Turned Over to Sustainment	• Program Funding Secured • Operations Processes and Tools Adopted • Formal Production Turnover to Sustainment Organization
9. Program Closeout	• Final Accounting and Program Closeout

TABLE 6: PROGRAM SCOPE

We have formulated these scope elements into a Work Breakdown Structure (WBS) shown on the next page. From the WBS we have identified the dependencies and sequence of the projects to produce a detailed schedule, which we have included in Appendix Six: Detailed Gantt.

This scope and schedule encompass the entire ConnectYXE program. Each individual project that comprises the program will similarly develop a project scope and schedule.

0 ConnectYXE Program

1 Program Governed
- **1.1** Start - ConnectYXE Awarded
- **1.2** ConnectYXE Council Formed
- **1.3** Agreement with Infrastructure Canada finalized
- **1.4** Staff Recruited
- **1.5** Knowledge and Action Governance Committees Formed
- **1.6** Oversight Governance Committees Formed
- **1.7** Ongoing Program Governance
- **1.8** Ongoing Program Reporting

2 Detailed Planning
- **2.1** Detailed Scenario Mapping with Youth and other partners
- **2.2** CBO Detailed Requiremenets Gathering
- **2.3** Solution Design in Detail
- **2.4** CBO Onboarding Roadmap Built
- **2.5** Technology Resources Procured

3 Core Services Configured
- **3.1** Infrastructure configured for ConnectYXE
- **3.2** APIs Developed
- **3.3** Services Layer Delivered
- **3.4** Requests Repository Built

4 CBOs and Institutional Partners Onboarded
- **4.1** Youth-serving CBOs providing Accommodation and Meals with no and low automation Onboarded
- **4.2** ConnectYXE Council Formed
- **4.3** Agreement with Infrastructure Canada finalized
- **4.4** Staff Recruited
- **4.5** Knowledge and Action Governance Committees Formed
- **4.6** Oversight Governance Committees Formed

5 ConnectYXE End User Interface Built Delivered to Youth, Families & Allies
- **5.1** End User Interface Wireframed, and Built
- **5.2** App built for Devices (Smart Phones, PCs)
- **5.3** Natural Language Interface/AI Interface Enabled
- **5.4** User Interface Piloted with Youth
- **5.5** ConnectYXE Solution Marketed
- **5.6** ConnectYXE Deployment to Youth, Families and End Users

6 Reports, Analytics, BI Enabled
- **6.1** CBO Reporting Delivered
- **6.2** Analytics and BI Core Services Delivered

7 Access Points Added
- **7.1** Fibre pulled and WiFI Access Points Installed
- **7.2** Community PC Locations Engaged
- **7.3** Kiosks Designed and deployed
- **7.4** Business Case developed and Partners Engaged to expand WiFI and Kiosks

8 Program Handed Over to Operations
- **8.1** Sustainment Funding Secured
- **8.2** Operational Documentation Delivered to Sustainment Body
- **8.3** Production Turnover

9 Project Closeout
- **9.1** Final Reporting and Accounting
- **9.2** Finsih. ConnectYXE Self-Sustaining

CHART 1: WORK BREAKDOWN STRUCTURE

4.3 Project Methodology

ConnectYXE will be managed as a program, comprised of a collection of projects. We will use a "portfolio management" methodology to advise program governance bodies as to the optimal sequence of projects, and will use well established, PMI-based project management methods to manage individual projects. Projects will be run as traditional "waterfall" projects or as agile projects, as best suits the deliverable.

4.3.1 Portfolio Management

The City of Saskatoon employs a mature Portfolio Management approach to select which of the many possible projects to undertake. This approach provides a mechanism for managing the ConnectYXE Program: ensuring that projects are undertaken in an order that aligns with the strategic direction of the program; that those projects are resourced appropriately; and then manages which projects must precede other projects. The City portfolio management approach uses Microsoft Project Server ("Project Online") as an in-kind contribution from the City of Saskatoon.

4.3.2 Project Management

The City of Saskatoon has a mature Project Management Office (PMO) and this, too, is available to ConnectYXE as an in-kind contribution to ensure the successful delivery of each of the component projects that make up the ConnectYXE portfolio. These PMO services include:

- Project Charter process;

- Project Scheduling using Microsoft Project Professional;

- Project resourcing and tracking, using Microsoft Project and Project Online;

- Status Reporting;

- A Project Collaboration Site, also a component of Project Online;

- Project Risks Management; and

- A Project Management Community of Practice (PMCoP) which provides support and guidance to project managers.

4.3.3 Agile or Waterfall

The City of Saskatoon's PMO has adopted a hybrid approach to managing each project – selecting a waterfall or an agile approach as best suits the specific project.

The Agile approach is suited to projects where the exact nature of the deliverable is less certain. Agile projects establish a "Product Backlog" and define a series of Sprints – intended to last between two to four weeks, the end of which produces a viable product. The team that produces each sprint is comprised of technical resources – developers, programmers, designers, and of "business" resources – in our case, comprised of youth and representatives of CBOs.

The Waterfall, or traditional, approach is applicable to projects where the process of delivery is well understood and the deliverable well-defined at the out-

set. For such projects, the overhead of daily scrum sessions and other Agile techniques are not warranted.

4.4 Program and Project Resources

A mix of resources will deliver ConnectYXE over the five-year program period. These will be resources from CBOs and institutional partners (including from the City of Saskatoon - Saskatoon Transit and Recreation and Community Development) and procured resources from our technology partners.

At the level of the ConnectYXE Program, we will employ dedicated resources although they may be full-time or part time depending on the requirements of the program at a given time. These are:

• Program Director,

• Technical Director,

• Project Coordinator, and

•Administrator.

We will preferentially seek program staff of Indigenous backgrounds.

Each project initiated by the ConnectYXE program will have its own mix of resources. Typically, a project will use a mix of:

• Project Manager,

• Business Analyst,

• End User Stakeholder Representative (including youth),

• CBO, Institutional Partner Representative,

• System Architect,

• System Analyst,

• Programmer, and

• Web Designer.

Not all of these resources will be fully dedicated to a specific project. As well, not all resources will remain engaged throughout each respective project. For example, a System Architect would be engaged in the earlier planning stage of a project and have limited or no involvement during implementation.

4.5 Procurement of Resources

Among the in-kind contributions provided by the City of Saskatoon are business support services including Supply Chain Management (SCM). We have partnered with SCM to arrive at a procurement process that incorporates the Community Employment Benefit (CEB) – one that allows for weighting of the results to encourage participation from marginalized communities, and specifically, from Indigenous Communities. It is the goal of ConnectYXE to engage with an Indigenous Technical Director. If that should be unsuccessful, we will engage with an Indigenous Program Coordinator, with the objective of growing this person's skills and experience over the course of the Smart Cities Challenge funding period to the point where this individual can assume the role of Technical Director.

ConnectYXE will procure more than human resources. The ranking system that encourages vendor participation from marginalized and Indigenous communities will apply to any response to a Request for Quotation, or Request for Proposal that is of any size or substance.

FIGURE 15: PROCUREMENT RANKING PROCESS

We have detailed our approach to procurement in Section 10.7 "Community Economic Benefit Lens of Procurement."

4.6 Program Governance

Program Governance is a part of the ConnectYXE governance, and in turn directs the execution of individual projects. We look at each of these in turn.

4.6.1 Responsibilities of the PMO to the ConnectYXE Council

As described above in Section 4.3 "Project Methodology," the City of Saskatoon's Project Management Office (PMO) will manage the portfolio – the collection of projects that comprise ConnectYXE, determining the resources required for each, and the dependencies between projects in the portfolio. The PMO will report to the ConnectYXE Council the

program plan, and changes to the plan as the program proceeds. While the PMO will advise the Council of project priorities, the selection of projects remains a responsibility of the Council.

4.6.2 Project Oversight and Status Reporting

The PMO is responsible for providing oversight to the respective projects, ensuring that projects are managed according to project management standards. The PMO will receive status reports from the respective projects and will consolidate these and report to the ConnectYXE Council.

4.7 Transition to Operations and to the Sustainment Organization

Each project will deliver some function of ConnectYXE. As technical projects deliver working components, these will be operationalized – that is, the project team will formally hand over the component to IT Operations, who will assume responsibility for supporting, maintaining and operating the system as it evolves. This includes:

· Continuing and expanding engagement with CBOs, institutional partners;

· Continuing engagement with youth, developing the functionality of the system to meet their needs;

· Overseeing continued development of the system;

· Sharing the technology with other cities;

- Establishing added services in the IT Service Management (ITSM) application, so that support tickets can be generated and managed;

- Adding new business processes to the ITSM Support Library;

- Providing end user support; and

- Monitoring the service.

A deliverable of the ConnectYXE program is a funded, independent, sustainable organization that will manage the program after the period of Smart Cities funding. The plan calls for this body to form at year three of the program. This organization will assume responsibility for operations.

4.8 Project Monitoring and Control

Project monitoring and control can refer to the monitoring of the outcomes of projects to ensure that the deliverable achieves the overall objectives of the program. Such outcome monitoring is addressed in Section 5.3 "Monitoring, reporting, and evaluation strategies". The approach outlined in that section allows ConnectYXE governance to adjust the strategy on an ongoing basis to optimize the effectiveness of the program. The mechanism of performance measurement in Section 5.3 "Monitoring, reporting, and evaluation strategies" ensures this ongoing alignment.

Monitoring and control can also refer to individual projects which must themselves be monitored and adjusted so that

each is successful. To achieve this and following the established processes of the City of Saskatoon Project Management Office, each project will be managed by a project manager, and each will have an accountable project sponsor. Projects will be managed appropriately. The intention is not to add overhead where it does not add value. Accordingly, the Portfolio Management process which oversees the recommendations of which projects proceed also recommends the level of project management ("light", "standard", and "complex"). Program Governance selects which projects will proceed, based on the recommendation of the Portfolio Management process.

As each project is authorized and then initiated, that project establishes a baseline project schedule and budget. The PMO requires regular monthly project status reporting. Project status reports forecast revised schedule and costs and if the change from the baseline is significant, a Project Change Request to account for those differences. These reports also provide updates on project risks and issues to the PMO. The PMO aggregates these reports for IT Governance (and on to the ConnectYXE Council), but also provides support and direction to the respective project managers and their teams.

4.9 Stakeholders

We have discussed engagement with our stakeholder communities in Section 2.4. We addressed the ongoing engagement

with stakeholders and our processes for ensuring actively listening to their requirements and incorporating their concerns into the design of our solution.

Our stakeholder communities are integrated into our Project Management approach in three ways:

• As discussed in Section 6.3, our stakeholders are integrated into the oversight of the ConnectYXE program. Presence on Governance Bodies ensures that the mix of projects and their sequence reflects the priorities of the stakeholders.

• Direct participation in project teams, particularly on agile project teams, means that stakeholders perspectives are included daily in the design, development and delivery of each component of the solution.

• Stakeholders are represented in User Acceptance Testing (UAT) of each of the components as the are developed and before they are released.

4.10 Communications

Communications related to the ConnectYXE program is discussed in Section 2.5, "Communications, Marketing and Change Management." We address communication of the ConnectYXE program, ensuring that stakeholder communities are continuously informed of the program.

Communication at the individual project level is for the purposes of relating project status to the PMO (through status reports) and maintaining internal project coordination. Thus, each project maintains a dedicated project site that acts as a repository for that team, to store project team minutes and all artifacts associated, project-specific risks, schedule, and other artifacts. This is a feature of Project Online.

4.11 Approach to Risk Management

The City of Saskatoon's PMO employs a robust Risk Management approach, and ConnectYXE has adopted this already as we have designed the Program.

Risk Management cuts across each of the sections of this proposal, and risks frequently overlap domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management." That section shows those risks that, overall, received the highest impact profile: we have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

05 Performance Measurement

5.1 Outputs and outcomes

The team has created three major long-term goals to achieve its vision which has been incorporated into the performance metrics. These goals are:

1. Empowerment - Increasing the quality of life for Indigenous youth and their community by empowering individuals and giving them easy access to opportunities and resources to enhance opportunities.

2. Collaboration - Strengthening partnerships and collaborations, both existing and new, are critical to ensuring this program can be executed and sustained successfully.

3. Harnessing Technology - Utilizing innovative data and technology to bridge gaps and leverage opportunities. Building a strong, fluid, multi-faceted system will ensure that information received and analyzed is accurate, in real-time and valuable to the users. It will be easily expandable and transferable, and will ensure that where we find gaps, we will be able to bridge them to provide more services and resources for those in need.

In our phase-one Smart Cities proposal, the performance metrics included:

· Reduction in the Indigenous Youth incarceration rate;

· Contribution of data and feedback to a technology hub by service providers;

· Increase in adoption and usage rates of the online platform by Indigenous youth and families;

· Improved usability and accessibility of real-time data through better integration and coordination;

· Improved transportation options and usage, improving youth and families' accessibility to programs and services;

· Increase in life skills and pre-employment training programs/resources; and

· Improved high school graduation rates for Indigenous youth, year over year.

These initial performance metrics have carried forward into this second phase with a strong focus on ensuring data is a two-way process, allowing the end users - the youth, families, allies, CBOs and institutional partners - easy access to the data and resources they need and that delivery of data is accessible and user-friendly. We continue to focus on strengthening coordination between services to ensure youth and their allies are receiving the resources they need at the time they need it.

We have added additional socio-economic benefits to our end results; the five

indicators that summarize the expected socio-economic well-being impact of this program include:

• Decrease the Indigenous youth incarceration rate;

• Increase the high school graduation rate;

• Increase in recreation uptakes;

• Increase in awareness and attendance of cultural activities and events; and

• Decrease in youth crime.

5.2 Theory of Change, Logic Model, Performance Metrics and Payment Schedule

A Theory of Change is a comprehensive illustration of how and why a desired change is expected to happen in a particular context. It is focused on mapping out what has been described as the "missing middle" between what a program or change initiative does (activities and interventions) and how these lead to desired goals being achieved. It does this by first identifying the desired long-term goals and then works back from these to identify all the conditions (outcomes) that must be in place.

Our theory of change builds on the connectivity among our goals of empowering individuals, collaboration between partners, and harnessing innovative technology. We sketch out how the use of our data hub and information access platform (ConnectYXE) will lead towards improved quality of life (particularly purpose, identity, security, and belonging) for Indigenous youth, their families, and allies, and will ultimately reduce Indigenous youth incarceration.

Our theory of change is attempting to identify causal change which is complex, fluid, and in many cases, has not been proven. For example, one path could propose that an increase in awareness of cultural activities leads to an increase in mentorship that leads to an increase in recreation uptake that leads to a decrease in youth crime that leads to a decreased youth incarceration rate that leads to increased high school completion rates. The data we collect and analyze with ConnectYXE will be critical in enabling us to better determine which choices are leading to which paths that lead to our desired effects.

To achieve our long term vision:

To break the cycle of Indigenous youth incarceration by creating new cycles through purpose, belonging, security and identity

Will require:

Empowerment
• Empower individuals with necessary tools to enhance opportunities
• Highlights the voices of Indigenous youth, and their communities

Collaboration
• Strong collective partnerships and collaborations
• Good governance and accountability

Harnessing Technology
• Utilize innovative data and technology to bridge gaps and leverage opportunities

Which results in:

Outcomes
• Youth, families, and allies will be connected in real time to services and opportunities
• CBOs will have better access to coordinate accurate information and programs and will be able to rely on data for trends and metrics for their own spending

Which requires:

| Shared Data | Aligned & Effective Strategies | Continuous Communication | Clear understanding of roles & interactions • A connector of services, not a replacement to humans | Systemic Leadership Cross sector leadership | In-depth user experience research to ensure the solution is collaborative | Aligned infrastructure at all levels with all systems | Aggregated and shared data | Accurate and easy data delivery |

CHART 2: THEORY OF CHANGE

The above Theory of Change describes what desired changes at multiple levels are expected to happen. The logic model below describes how this will be achieved. In the logic model, we define *activities* as what we will do with our resources; *outputs* are a direct product of our activities; and *outcomes* reflect overall behavioural change.

The outcomes for the five-year span of this program are focused around three main areas: maintaining the Indigenous youth voice in the centre of the solution; onboarding CBOs in a collaborative manner; and ensuring proper set up of the ConnectYXE. Outcomes will also be used as performance metrics along with indicators to determine proper monitor-

ing, evaluation and reporting responsibilities.

The outputs for this performance metrics model are based on: ensuring partnerships and collaboration efforts are maintained throughout the project; usability and connectivity of the program are useful to the end users; the system is able to grow and expand with the number of queries and users; and data must continually maintained.

In addition, we have added in indicators and socio-economic impacts to understand what measurements will allow us to know how our program is progressing and to indicate the impact that this system is having for the community.

Inputs (resources)	Activities	Outputs	Outcome	Indicators - Including socio-economic impacts
Staffing **Program Team:** • Program Director • Technical Manager • Administrator • Project Coordinator **Funding** • Infrastructure Canada • Corporate sponsors • In-kind contributions, institutional partners & CBOs • Social Financing i.e. **Industry Standard Facility/Equipment** • Database • Computers • Office space • Cloud storage • Public interactive screens and kiosks **Users** • Youth, youth supports, families and allies • CBOs • General public **Partnerships/ Collaborations** • Institutional Partners (11 organizations) • Community Allies (37 organizations) • Youth Advisory Group (currently 21 individuals) • Technology Partners (ISM, etc.)	Provides real-time, live, inter-active and verified information and connectivity services • Ability to connect 24 hours per day, 7 days per week, 365 days per year • Available at any location • Multi-language • Via telephone, text, chat, email, app, website, public kiosks and interactive screens • Meets industry standards • Connects users who need help and those who offer help • Engagement with youth advisors • Continued support of CBOs • Continuous communication • Solidify partnerships and governance models • Create guidelines for advi-sory and working groups that emphasize confidentiality • Create & maintain a collec-tive system map to identify overlaps and gaps • Continued involvement of key stakeholders in the building and implementation process **System Activities** • Develops and maintains a comprehensive data reposi-tory that allows information to be interpreted and exchanged • Databases are updated daily with community, social, gov-ernment and health service information • Develops and maintains a system to track, report, and analyze community queries and needs • Allows CBOs to aggregate and utilize data for organiza-tional business cases • Designed to be preventa-tive in nature – i.e. providing options and resources for recreational, cultural, mentor-ship activities • Ability to connect individu-als to the right resources in a crisis	• # of queries to the system via public kiosks, website/chatbots, texts, email, calls and app • Usage rates • # of users receiving needed services • # of repeat users • # of locations system is used in • # of users connected to a service • Level of uptake in services • # of data access points • # of contacts made with service providers • # of organizations, programs and services on the database • # of services on boarded into the system • # of community needs reports produced • # of partnerships formed with CBOs • # of trend reports produced • # of CBOs on boarded into the system • Wi-Fi usage	**Individual Outcomes** • Users (youth, families, allies) have more options and resources available • Users have increased knowledge of available community resources, activities and events • Users are connected quicker to available resources • Users receive needed services at needed time • Users understand the types of services they can access and where they may face constraints • Users receive better con-nections to mentors/adult supports • Youth and families experience personal well-being (resilience, meaning purpose, belonging, self-esteem, competence) **Community Outcomes** • CBOs are able to un-derstand where there are gaps in programming • CBOS have access to real-time data on needs for community services and where gaps exist and would need to be addressed • CBOs are able to provide services more ef-ficiently and effectively • CBOs are able to focus on their mandate to en-hance services rather than be a jack-of-all trades • CBOs now understand what other CBOs are taking on • CBOs, institutions, community members and governments are working collaboratively to address	**Individual Indicators** • Increased uptake in recreational and cultural activities • Increased inquiries into community resources, activities and events • Increased uptake in community resources • Increase in ef-ficiency during peak times of services • Increase in mentor-ship resources • Increased quality of life for in-crisis youth, families and allies **Community Indicators** • Increased capacity in programs • Development of ac-curate trend and data reports • Increased uptake of services • Increased coordina-tion among CBOs and programs • Increase technical capacity from CBO • Decreased Indigenous youth incarceration • Increased high school graduation rate • Decrease in youth crime

TABLE 7: CONNECTYXE LOGIC MODEL

The following is an illustration of the performance metrics proposed for this program. The performance measurement table combines program deliverables, outcomes as well as a time frame and payment schedule.

	Program Phase	Major Deliverables	Outputs	Timeframe	Payment Schedule Year 1	Payment Schedule Year 2	Payment Schedule Year 3	Payment Schedule Year 4	Payment Schedule Year 5	Total
Immediate	Establish Program Governance	• ConnectYXE Council established & governance committees recruited and formed • ConnectYXE Staff recruited • Strategic plan developed • Agreements signed	• Operational infrastructure for ConnectYXE complete • Strategic plan completed	Year 1 and ongoing afterwards	$414, 012	$424, 062	$434,414	$423,476	$423,476	$2,130,420
	Stakeholder Engagement and Detailed Planning	• Scenario mapping and requirements gathering complete • Solution design complete • CBO Onboarding Roadmap Delivered • Technology resources procured	• Initial requirements gathering and design complete • Front end interface development begins	Year 1 and ongoing afterwards	$114,880	$114,880	$114,880	$107,440	$107,440	$559,520
	Platform and Core Services Delivered	• Infrastructure procured and developed • Core services established • APIs developed • Connected to ISM Data lab and AI Analysis	• Platform and core services connected and completed	Year 1	$1, 118,000					$1, 118,000
Intermediate	CBO and Institutional Partners Onboarded	• Priority services onboarded and integrated - i.e. HIFIS (housing), transit, recreation, etc. • Marketing & communications plan delivered • Deployment begins	• Initial CBO services onboarded and integrated • Marketing & communications plan executed	Year 1-2 and ongoing afterwards	$101,400	$43,400	$43,400	$43,400	$43,400	$275,000
	ConnectYXE End User Interface Built Delivered to Youth, families and Allies	• End Use Interface wireframed, tested and built • Natural Language Interface and AI Interface Delivered • ConnectYXE deployed to youth, families and allies	• ConnectYXE goes live and is deployed to all end users	Year 2-3		$1,752,000	$1,554,000			$3,306,000
	Reports, Analytics and BI Delivered	• Reports configured for respective CBOs and deliver consolidation reports, analytics, business intelligence	CBOs are utilizing analytics and business intelligence from ConnectYXE	Year 2-3 and ongoing afterwards		$10,000	$10,000	$10,000	$10,000	$40,000
Long Term	Wi-Fi Access Points and Kiosks Deployed	• Deploy Wi-Fi Access Points (WAPs) in identified neighbourhood • Kiosks configured and deployed in strategic locations	• Wi-Fi enabled in all indentified neighbourhoods and kiosks utilized throughout the city	Year 4				$495,000		$495,000
	Program Access Points and Kiosks Deployed	• Sustainment funding secured • Operational documentation delivered to sustainment body • Data monitoring & input capabilities	• ConnectYXE is fully enabled and used by all end users • Sustainment plan is established and executed	Year 4-5				$686,000	$490,000	$1,176,000
Contingency per Budget				Years 1 through 5	$172,852	$232,452	$213,652	$174,552	$106,552	$900,060
Total					$1,921,144	$2,576,794	$2,370,346	$1,939,868	$1,191,849	$10,000,000

5.3 Monitoring, reporting, and evaluation strategies

The reporting and evaluation process for ConnectYXE will have a scheduled check-in every 90 days to ensure data is accurate and timely, that services are continuing to be connected to the system, and that users are able to access the necessary data, reports and information that they require. Reports and evaluation will be completed by the ConnectYXE support team and submitted to ConnectYXE Council for approval of action items.

A results-based monitoring framework determines if the program is progressing according to a plan and gives an explicit definition of results through to measurable indicators. It provides a clear relationship between inputs, outputs, intermediate results or outcomes, and impact. By quantifying these variables to the extent possible, the framework monitors progress towards the results. We will use the outcomes and socio-economic indicators from the Logic Model to determine how to evaluate the socio-economic impacts of the program. The challenge will be to articulate the causal change and we anticipate it being a fluid process where the combination and sequence of programs (i.e. cultural awareness, mentorship, recreation, etc.) may vary as it leads to a decrease in crime which leads to a decrease in incarceration. The goal of ConnectYXE is to identify what choices are taken and what order of choices may have the greatest impact on Indigenous youth incarceration.

Our proposed monitoring system will be the following:

1. A defined model that explains the outcomes without the intervention of the proposed initiative. This can be established through various econometric methods. While developing the model, we will identify variables that could affect the outcome of a certain indicator (control variables).

2. Collect periodic data on the outcomes and the control variables.

3. Estimate the model before the implementation of the program.

4. Using the estimated model, predict the outcome indicator before the implementation of the program (baseline).

5. To estimate the net impact of the program, two options will be used to determine the impact:

a. Option 1: Using the new data collected during the implementation of the program, we will predict the level of the outcome indicator, deduct the actual level of the indicator from the predicted level to arrive at the net impact of the program.

b. Option 2: Re-estimate the model using additional data collected during program implementation.

The following table illustrates our suggested results-based monitoring framework:

Outcome Indicator	Output Indicators	Explained Input	Likely Control Variables
Definition			
Results that we aim to achieve and measure	Measurable/quantifiable indicators that can be used as proxies for outcome indicator	Input that represents implementation programs. Our analysis will be a time series that goes from the times that the social programs did not have the benefit of Connec-tYXE to a period where they did and how our program changed things.	Other inputs affecting the outcome. We measure their effect to delineate the effect of our implementation.

TABLE 8: RESULTS-BASED MONITORING FRAMEWORK

5.4 Identification of risks and development of appropriate mitigation strategies

Risks in this area are dependent on ensuring there is progress made towards the proposed outcomes. Risk Management cuts across each of the sections of this proposal, and risks frequently overlap domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management." That section shows those risks that, overall, received the highest impact profile: we have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

06 Governance

6.1 Description of the Governance Framework

ConnectYXE is inclusive and complex. It requires an inclusive and complex governance model. In *A Theory of Governance* (2013), Mike Behir defined how "Governance refers to all processes of governing, whether undertaken by a government, market, or network; whether over a family, tribe, corporation, or territory; and whether by laws, norms, power, or language,"[14] Behir also refers to how the activity of governing is increasingly shared with social actors, including private firms, non-governmental organizations, and non-profit service providers.

ConnectYXE needs to incorporate all these parties and more: a municipal government, a First Nations government, a Metis government, private technology firms, NGOS and service providers working in the areas of safety, mental health, crisis intervention, youth support, as well as institutions (health, educational, and policing).

The governance of this program has been developed through engagement with the institutional partners and community allies, determining who has "voice" and who will have "votes," and ensuring these roles are fair and accountable to the other parties, and that the fullest
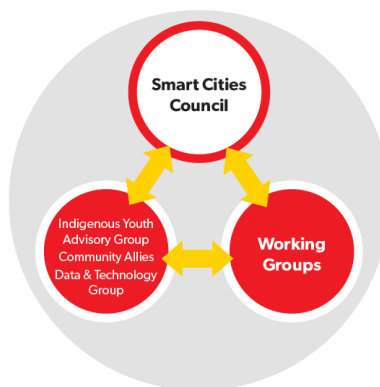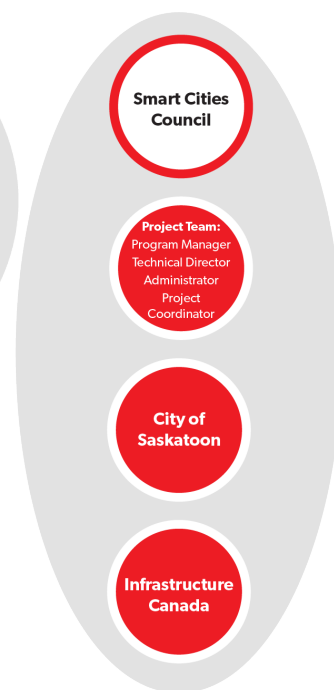
FIGURE 16: CONNECTYXE GOVERNANCE MODEL

engagement is made possible for all parties.

The goal of this governance model is to separate the functions of governance into two circles to demonstrate the relationships between the parties within a particular circle, as well as establish to whom they are accountable. The engagement and knowledge-sharing among the groups in the Knowledge and Action Circle (shown in the figure) is critical to the success of ConnectYXE. It is the heart of the program and, for the purposes of simplicity and reducing bureaucracy,

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14   Mark Behir, A Theory of Governance, London England, University of California Press, 2013

it was felt this circle needed to be kept whole and separate from more hierarchical relationships in the Oversight Circle.

It was also important in the development of the governance model to ensure that the groups in the Knowledge and Action Circle are as close to the data as possible. They represent the larger community, and for trust and relationships in the ConnectYXE program to be built and maintained, these groups need to be key partners in recommending and influencing how the data and information will be used.

The ConnectYXE Council is the decision-making body for both circles, providing the governance consistency and continuity between the two circles.

6.2 Principles

Our principles relate back to the seven guiding principles outlined in Section 2.4.1. The principles are grounded in this governance model and extend throughout all aspects of the program.

6.3 The Knowledge and Action Circle

The objective for this circle is to enable full engagement and knowledge-sharing for all of our partners – ranging from institutional, community, youth and technology partners. For example, the data being collected needs to be interpreted accurately, the youth need to provide their perspectives on what is working and not working, and the ConnectYXE

Council, as the decision-makers, needs to have as fulsome information as possible to make appropriate decisions.

This circle is where the information and programming will be learned, shared, and acted upon, with each grouping having distinct responsibilities. These are the subject matter experts. Their role is to provide the data to ConnectYXE, analyze the data when it is produced into reports, and understand how it reflects the needs and context of the community. The knowledge produced by these groups becomes concrete actions when the ConnectYXE Council makes decisions about programming and policy.

The groups in this circle are supported by the program team, which we have put in the Oversight Circle. In some cases, this support will be to provide technical or human support to the CBOs to be integrated into ConnectYXE technology. In other cases it will be to provide grants to those CBOs to build capacity within their organization around data and analytics. The program team will also ensure communication of information among the groups, opportunities to engage and learn from each other, and regular updates on the progress of ConnectYXE.

Members of the ConnectYXE Council and groups will not receive honorariums or payment for their participation. Rather, the organization they are associated with will receive funding to support initiatives that further ConnectYXE outcomes. Youth will receive honorariums

for their participation.

The composition of the Knowledge and Action Circle is made up of:

ConnectYXE Council: 6 representatives from the institutional partners and 5 representatives from Indigenous partners, community allies, Indigenous youth, and technology partners, for a total of 11 people on the Council.

The key responsibilities of the ConnectYXE Council are to provide strategic direction and oversight. It is also responsible for making the final decisions on strategic direction and work plans, aligning priorities, and financial oversight. It is accountable to the community, Infrastructure Canada and the City of Saskatoon. The current institutional partners are:

• Central Urban Metis Federation Inc.
• Greater Saskatoon Catholic Schools
• Saskatchewan Health Authority
• Saskatchewan Indian Institute of Technologies
• Saskatchewan Polytechnic
• Saskatoon Police Service
• Saskatoon Public School Division
• Saskatoon Tribal Council
• United Way of Saskatoon and area
• University of Saskatchewan

Indigenous Youth Advisory Group: comprised of Indigenous youth aged 15 – 29 who are currently part of the Smart Cities Challenge proposal. The youth are members of programs run by community allies and institutional partners. Their individual participation in the group may change overtime, to be replaced by another member from that program. The program team will be responsible for coordinating engagement and support for the Youth Advisory Group. This group will provide direction and advice to the ConnectYXE Council on community priorities and needs. Youth Advisory Group are accountable to the ConnectYXE Council.

Community Allies, Mentors, Elders: comprised of representatives from community and/or institutional partners that are working directly with Indigenous youth. They provide advice and guidance to the ConnectYXE Council on community priorities and needs and support the youth advisory group. They are accountable to the ConnectYXE Council.

Data and Technology Group: comprised of representatives from technology partners who are both private technology companies, technical staff working with the institutional partners and CBOs, and non-technical members representing the requirements of respective organizations and end users. This group is accountable to the ConnectYXE Council.

Working Groups: comprised of representatives of CBOs working in the areas that fall within each pillar: belonging, purpose, identity, security. Their responsibilities include ensuring relevant data is collected from their organizations for the Data Centre, to regularly reviewing and discussing the data analytics, discussing how the data informs programs, services and policy, providing proposals for new

programs and services to be onboarded into ConnectYXE, and offering insight to the ConnectYXE Council, directly and through the Project Team. They are accountable to the ConnectYXE Council.

6.4 The Oversight Circle

The Oversight Circle provides accountability and management functions are located.

Responsibilities of this oversight circle will include:

• Determining and ensuring mission and purpose;

• Selecting and supporting the chief executive;

• Ensure effective planning as well as monitoring and strengthening programs and services;

• Ensuring there are adequate financial resources;

• Protecting assets and providing proper financial and data oversight;

• Ensuring legal and ethical integrity; and

• Enhancing the organizations public standing.[15]

Once the ConnectYXE Council and program team is in place, a working group made up of representatives from both tables will be initiated to develop:

• Policies and procedures;

• A strategic plan;

• A communications plan; and

• An evaluation plan.

The governance of this program will also be developed with the intention that after the five-year grant period, it will transition to a separate and sustainable non-profit organization.

The Oversight Circle is made up of:

• ConnectYXE Council – see above for description

• Program Team: A program manager, technical director, administrator, and project coordinator. This team is responsible for overall project administration and management, communications and engagement and is accountable to the ConnectYXE Council and City of Saskatoon.

• City of Saskatoon: The City is the project sponsor and the point of contact for the Federal Government. Key responsibilities include being the contract agreement holder, project reporting, and financial management. It is accountable to Infrastructure Canada and the ConnectYXE Council.

• Infrastructure Canada – Will remain involved in the program as part of the federal program.

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15   Source: Board responsibilities and Structure. (2016, June 2). Retrieved from: www.boardsource.org/resources/board-responsibilities-structure

6.5 Data governance

Data Governance of ConnectYXE is detailed in Section 7.6 "Data Governance." The Data Governance Committee will be delivered by a group of representatives from CBOs, institutional partners, the City, and the technical solution provider, ISM. This committee will be responsible for overseeing:

· Audit, Compliance and Risk Policies;

· Ongoing Regulatory compliance;

· Data quality improvement;

· Customer experience / application usage and performance;

· Big data/Open Data (include usage, reporting of value to the public);

· Data retention and destruction processes, procedures and approvals;

· Processes and procedures for approved, aggregating and sharing data;

· Direct Freedom of Information Requests; and

· Establishing and monitoring performance metrics

6.6 Letters of Support

Letters of support from Institutional partners have been collected and are included in Appendix Five: Letters of Support.

6.7 Risks

Risk management cuts across each of the sections of this proposal, and risks frequently overlap domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management." That section shows those risks that, overall, received the highest impact profile. We have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

07 Data and Privacy

We recognize that the success of ConnectYXE hinges on trust of the system by youth, their families and allies. Maintaining that trust demands that ConnectYXE comply with all applicable legislation, regulations, standards and best practices in collecting and managing data from or about individuals.

All dimensions of Data Governance and Management are built to start creating a system respecting the privacy of the data and complying with privacy regulations.

This section will 1) address what data will flow into and out of the Connect YXE system; 2) discuss requirements to connect to the system from the view of respective parties; and 3) describe how the program will protect privacy and manage data.

7.1 Data Life Cycle

Privacy and data governance must be designed in the context of the solution. The following diagram is a detailed view of the data flow of ConnectYXE. It details the "Core" shown more abstractly as a circle in Section 3.1.1 "Core Services".

1. A business analyst will work with each participating stakeholder group to identify the data required from their organization for the public application. To add value to the stakeholders, data required to enhance their business under-
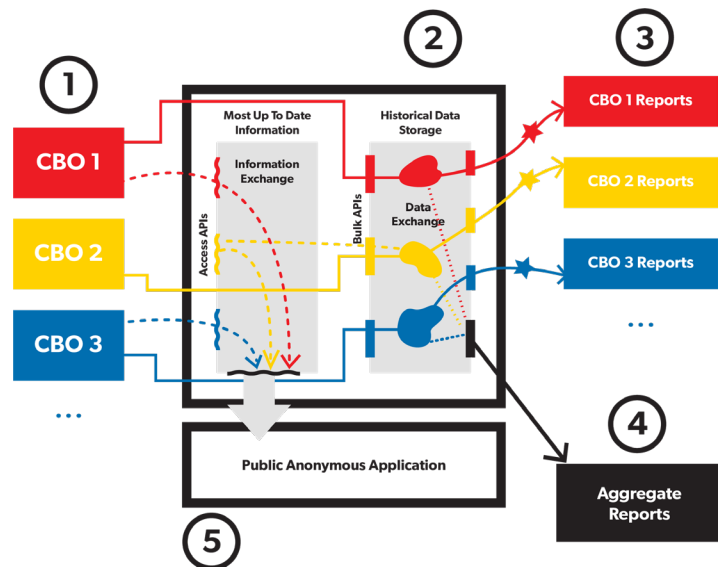
FIGURE 17: DATA FLOW FOR CONNECTYXE

standing and reporting ability will also be identified at this time.

2. All required data will be connected to ConnectYXE and transformed by the API. This process will exclude PI/PHI. It will be segregated from all other stakeholder data. This data is encrypted in transit and secured through access controls at rest and will continue to be owned by the provider. Historical data will be stored here.

3. Participating stakeholders can request to have reports built to enhance understanding of their own operations. Reports will include only data from that specific stakeholder and will remain segregated from the other participants.

4. To understand system wide trends (e.g. "How many beds are available each day across all participating shelters?"),

non-identifiable information will be combined from multiple service providers. No PI/PHI will be provided in an aggregate report. Each participating stakeholder group will provide consent to have their data used for these reports. These aggregate reports will be governed by the Data Governance Committee; appropriate access to the stakeholder groups will be determined on a case-by-case basis.

5. To direct youth to services with capacity to serve them, the public application provides relevant information from any service provider.

6. New data, all non-PI/PHI will be created through use of the public application. This data will be stored in a separate repository from all other stakeholder groups and will be governed by the Data Governance Committee.

7.2 User Access

Different users require different levels of access. There are three broad categories of users who will require access to the system:

1. CBOs and other stakeholder groups will have authenticated access to a business portal, allowing them to query their own data, view reports built using their information, and view aggregate, anonymous reports to which they have been granted access by the Data Governance Committee.

2. Youth, family, allies, and other members of the public will have access to joint aggregate data through the Public
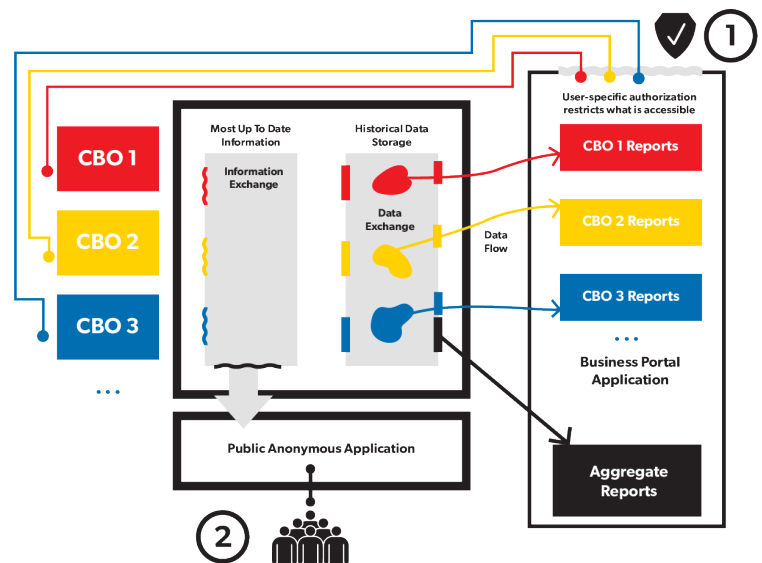
FIGURE 18: USER ACCESS

Anonymous Application. This access will not require any sign-in information to protect the identity of the user.

3. System Administrators. Administrator access has elevated privilege, using principles of *least access*, Segregation of Duties (SoD), and is audited. Based on the design of ConnectYXE – which will not contain PI/PHI – Data Governance (a function of IT Operations) will ensure appropriate and monitored access to ConnectYXE by those with System Admin privileges.

7.3 Technical Provider Access

The ConnectYXE system will connect to the Historical Data Storage using the ISM Data Lab, to extract the data that will be subsequently used to provide the ConnectYXE services.

1. ConnectYXE will connect to service provider source systems to populate the historical data storage repositories, including transformed data from each

service provider. This access will be enabled through agreements between ConnectYXE, the City of Saskatoon and the specific service providers.

2. These agreements may also include, or be amended to include, report creation permissions and requirements. To do this, ConnectYXE will access the Historical Data Storage Repositories to connect required data to the ISM Data Lab. Creating aggregate reports will be managed through data sharing agreements.

3. Data permitted to be moved into the lab will be used to create individual reports for service providers, as well as aggregate reports as directed and approved by the Data Governance Committee.

7.4 Collection and Use of Data

The objective of ConnectYXE is to onboard service-providing CBOs and institutional partners, and to connect youth to these services. Trust is the biggest barrier to adoption. ConnectYXE will not collect nor store PI or PHI and will not request youth to identify themselves to access this system.

7.5 Legislative Compliance

ConnectYXE will comply with all legislative requirements, Federal, Provincial and municipal. We have completed Preliminary Privacy Impact Assessments (PPIA). The PPIA is attached as Section 11.1 "Appendix One: Preliminary Privacy Impact Assessment for the City of Saskatoon" along with the respective approvals.

FIGURE 19: TECHNICAL PROVIDER ACCESS

FIGURE 20: IDENTIFIED VERSUS ANONYMOUS COLLECTION OF DATA

7.5.1 Fair Privacy Principles

The ten fair privacy principles are respected in the ConnectYXE design:

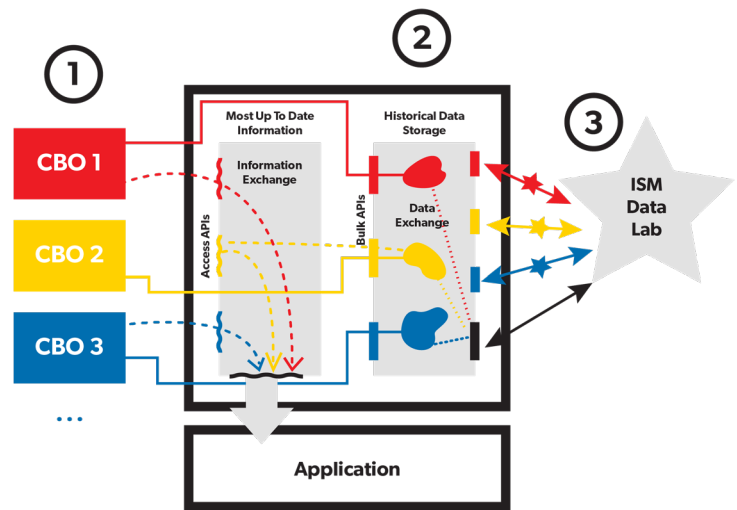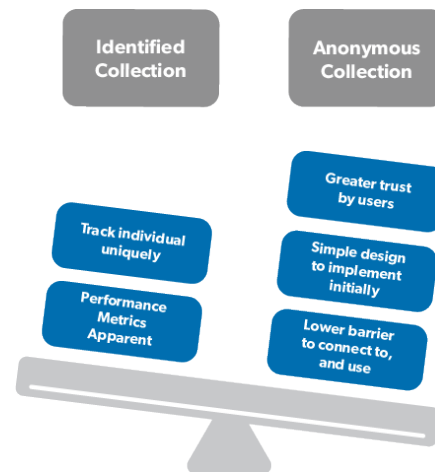| Principle	Details of how the principle is met
Accountability An organization is responsible for personal information under its control. It must appoint someone to be accountable for its compliance with these fair information principles	The designated individual accountable for compliance is the City of Saskatoon's Access and Privacy Officer.
Indentifying Purposes The purposes for which the personal information is being collected must be identified by the organization before or at the time of collection	The information collected for Connect YXE will not be identifiable PI/PHI. CBOs and institutional partners will be informing their clients of their partnership in ConnectYXE and communicate no identifiable information will be involved in the partnership with ConnectYXE.
Consent The knowledge and consent of the individual are required for the collection, use, or disclosure of personal information, except where inappropriate	ConnectYXE will not collect or aggregate PI/PHI and so does not require consent
Limiting Collection The collection of personal information must be limited to that which is needed for the purposes identified by the organization. Information must be collected by fair and lawful means	As this solution seeks to connect at-risk individuals to services and to track usage and performance metrics rather than serve as a case management tool, identifiable PI/PHI is not required
Limiting Use, Disclosure and Retention Unless the individual consents otherwise or it is required by law, personal information can only be used or disclosed for the purposes for which it was collected. Personal information must only be kept as long as required to serve those purposes	Connect YXE will not collect personally identifiable information at this time
Accuracy Personal information must be as accurate, complete, and up-to-date as possible to properly satisfy the purposes for which it is to be used	Connect YXE will not be collecting identifiable PI/PHI therefore this fair privacy principle does not apply
Safeguards Personal information must be protected by appropriate security relative to the sensitivity of the information	ConnectYXE adheres to strict IT technical securities, including regular internal and external audits. Standard administrative policies and processes will be created even though all data will not involve identifiable PI/PHI
Openness An organization must make detailed information about its policies and practices relating to the management of personal information publicly and readily available	Connect YXE governance will ensure the activity of the project is open providing details regarding any policies and procedures
Individual Access Upon request, an individual must be informed of the existence, use, and disclosure of their personal information and be given access to that information. An individual shall be able to challenge the accuracy and completeness of the information and have it amended as appropriate	Data is not personally identifiable.
Challenging Compliance An individual shall be able to challenge an organization's compliance with the above principles. Their challenge should be addressed to the person accountable for the organization's compliance with Personal Information and Protection of Electronic Documents (PIPEDA), usually their Chief Privacy Officer	Issues or concerns regarding Connect YXE compliance with privacy legislation will be answered by ConnectYXE Data Governance Committee.

7.5.2 The Local Authority Freedom of Information and Protection of Privacy Act (LAFOIP)

As detailed through compliance with the fair privacy principles, ConnectYXE addresses the two major goals of LAFOIP: to ensure individuals have access to public documents and the protection of privacy. CBOs and institutional partners will not be disclosing identifiable PI/PHI. Only non-personal and public information will be shared and aggregated. Therefore the Act's requirement to collect, use and disclose the least amount of information necessary to satisfy the program is achieved. Given the funding source, ConnectYXE will be subject to freedom of information requests; should an access request occur it will be managed through the City of Saskatoon's City Clerk's Office.

7.5.3 City of Saskatoon Municipal Legislative Requirements.

Records created by ConnectYXE will follow the City's retention schedule and will be preserved as a public document as required by The Cities Act.[16] The preservation of public documents indicates the City must establish and abide by record retention and disposal schedules.

7.6 Data Governance

Data Governance fits within IT Operations, which in turn is a part of the ConnectYXE program governance. Data Governance fits within a set of governance principles. This section addresses those principles, and what governance of ConnectYXE entails. Last, this section will provide details as to the Data Governance committee that will provide oversight.
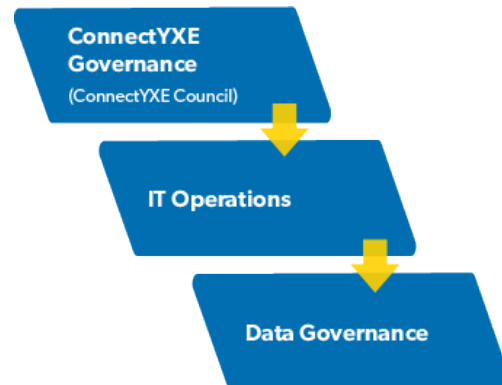
FIGURE 21: DATA GOVERNANCE

7.6.1 Data Protection and Security

ConnectYXE is based on the mature design of the Saskatchewan Social Innovation Hub (SIH). This system was designed by and is operated by ISM Canada. ConnectYXE will leverage the security and privacy elements of that design. The SIH was designed to meet the privacy and security standards of the Government of Saskatchewan and has been audited and approved by the IT Division (ITD) of the Government of Saskatchewan. By partnering with ISM, the City will leverage a well-established set of security and privacy protocols for the technical solution.

ISM's Framework of Internal Control (FIC) is based on the Committee of

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16   http://www.qp.gov.sk.ca/documents/english/Statutes/Statutes/c11-1.pdf

Sponsoring Organizations of the Treadway Commission (COSO) Internal Control - Integrated Framework 2013. Controls compliance is managed through ISM's Management's Self-Assessment of Controls (MSAC) program. MSAC is an extensive control point testing and monitoring process across all aspects of the organization including customer relationship management and IT delivery services.

7.6.2 Monitoring for Data and Privacy Breaches

IT Operations will monitor for data and privacy breaches. This includes these steps:

1. We will routinely examine data submitted from CBOs and institutional partners looking for personal data that may have inadvertently been transmitted to ConnectYXE.

2. IT Operations will engage with third parties to conduct penetration assessments and vulnerability assessment of ConnectYXE.

If an exposure is identified, we will take recommended steps to address the exposure, and to determine if the exposure led to a breach.

If a data or privacy breach occurs, IT Operations will follow the City of Saskatoon Privacy Breach Protocol.

7.6.3 Open Data

ConnectYXE is designed to be accessible to the public at large. The solution, by design is "Open Data," and moreover, fits within the City's Open Data Strategy. Published ConnectYXE data will be added to the City's Open Data Catalog. There will be a process created for approval before publishing data collected from ConnectYXE. An example of data that would belong in the catalog is transit and transportation information, based on the requests. This type of data can help ride share organizations market their services to those locations.

7.6.4 Data Governance Committee

The Data Governance Committee will focus on delivering a technically accurate, secure and private solution, to build trust with the public as well as the CBOs and institutional partners. The City is the data steward in this solution. ISM Canada will be the data custodian.

The Data Governance Committee will be comprised of representative stakeholders from the City, and ISM Canada. The list of the responsibilities of this committee is in Section 6.5.

7.7 Risk Management

Risk Management cuts across each of the sections of this proposal, and risks frequently overlapped domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management." That section shows those risks that, overall, received the highest impact profile: we have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

08 Financial

8.1 Comprehensive project budget

The comprehensive project budget for the next phase of this project is below. A detailed breakdown of the budget can be seen in the notes below.

Technology	Year 1	Year 2	Year 3	Year 4	Year 5	Total
ConnectYXE Core Systems (Back-End) User Interface (Front-End)	$618, 000	$1,727,000	$1,529,000	$661,000	$465,000	$5,000,000
Coding and Development	$500,000	-	-	-	-	$500,000
Maintenance and upgrades	-	$25,000	$25,000	$25,000	$25,000	$100,000
Wi-Fi/kiosks for pilot - Network Equipment	-	-	-	$387,000	-	$387,000
Wi-Fi/kiosks for pilot - Network Construction	-	-	-	$108,000	-	$108,000
	$1,118,000	$1,752,000	$1,554,000	$1,181,000	$490,000	$6,095,000
Governance/Staff/Management	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Project team compensation	$350,812	$360,862	$371,214	$381,876	$392,856	$1,857,620
Contract support	$20,000	$20,000	$20,000	$20,000	$20,000	$100,000
Elder honorariums	$43,200	$43,200	$43,200	$21,600	$21,600	$172,800
Youth engagement	$14,880	$14,880	$14,880	$7,440	$7,440	$59,520
Community partner engagement	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
	$528,892	$538,942	$549,294	$530,916	$541,896	$2,689,940
Other Program Costs	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Measure & Monitor Performance	$60,000	$10,000	$10,000	$10,000	$10,000	$100,000
Communications and promotion	$10,000	$20,000	$20,000	$20,000	$20,000	$90,000
Office costs, equipment, supplies	$31,400	$23,400	$23,400	$23,400	$23,400	$125,000
	$101,400	$53,400	$53,400	$53,400	$53,400	$315,000
Contingency	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Technology	$111,800	$175,200	$155,400	$118,100	$49,000	$609,500
Governance, staff and management	$52,900	$53,900	$54,900	$53,100	$54,200	$269,000
Other program costs	$8,152	$3,352	$3,352	$3,352	$3,352	$21,560
	$172,852	$232,452	$213,652	$174, 552	$106,552	$900,060
Total	**$1,921,144**	**$2,576,794**	**$2,370,346**	**$1,939,868**	**$1,191,848**	**$10,000,000**

Note 1: Breakdown of project team compensation

Estimated annual salary increases - 3% Salaries	Year 1	Year 2	Year 3	Year 4	Year 5
Program Manager	$100,000	$103,000	$106,090	$109,273	$112,551
IT Technical Director	$100,000	$103,000	$106,090	$109,273	$112,551
Administrator	$60,000	$61,800	$63,654	$65,564	$67,531
Project Coordinator	$75,000	$77,250	$79,568	$81,955	$84,413
	$335,000	$345,050	$355,402	$366,064	$377,045
CPP & EI	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Maximum employer portion of annual CPP	$2,749	$2,749	$2,749	$2,749	$2,749
Maximum employer portion of annual EI	$1,204	$1,204	$1,204	$1,204	$1,204
	$3,953	$3,953	$3,953	$3,953	$3,953
Multiplied by: # of employees	4	4	4	4	4
	$15,812	$15,812	$15,812	$15,812	$15,812
	$350,812	**$360,862**	**$371,214**	**$381,876**	**$392,857**

Note 2: Calculation of Elder Honorariums

Number of Elders	24	24	24	24	24
Multiplied by: Number of meetings	12	12	12	6	6
Multiplied by: Meeting honorarium	$150	$150	$150	$150	$150
	$43,200	**$43,200**	**$43,200**	**$21,600**	**$21,600**

Note 3: Calculation of Youth Engagement

Honorariums	Year 1	Year 2	Year 3	Year 4	Year 5
Number of youth per focus meeting	20	20	20	20	20
Multiplied by: Number of meetings	12	12	12	6	6
Multiplied by: Honorarium per youth per meeting	$50	$50	$50	$50	$50
	$12,000	**$12,000**	**$12,000**	**$6,000**	**$6,000**

Meals	Year 1	Year 2	Year 3	Year 4	Year 5
Number of youth per focus meeting	20	20	20	20	20
Multiplied by: Number of meetings	12	12	12	6	6
Multiplied by: Meal cost per youth	$12	$12	$12	$12	$12
	2,880	2,880	2,880	$1,440	$1,440
	$14,880	**$14,880**	**$14,880**	**$7,440**	**$7,440**

Note 4: Community Partner Engagement

	Year 1	Year 2	Year 3	Year 4	Year 5
Community partner stipends (37*$2,000 per year)	$74,000	$74,000	$74,000	$74,000	$74,000
Room rentals and other amenities	$6,000	$6,000	$6,000	$6,000	$6,000
Other costs of community partner engagement	$20,000	$20,000	$20,000	$20,000	$20,000
	$100,000	**$100,000**	**$100,000**	**$100,000**	**$100,000**

Note 5: Office costs, equipment and supplies

	Year 1	Year 2	Year 3	Year 4	Year 5
Office Equipment ($2,000 per employee in year 1)	$8,000	$-	$-	$-	$-
Office supplies ($200 per employee)	$800	$800	$800	$800	$800
Rent/occupancy costs	$21,600	$21,600	$21,600	$21,600	$21,600
Memberships/event registration fees	$1,000	$1,000	$1,000	$1,000	$1,000
	$31,400	**$23,400**	**$23,400**	**$23,400**	**$23,400**

8.1.1 Implementation In-Kind Contributions

The following chart depicts the in-kind services we expect to receive in the five-year program plan:

In-kind contributions for Next 5 years	Year 1	Year 2	Year 3-5
City Staff Time			
Social Development Manager	$7,200	$5,400	$4,800
Social Development Consultant	$4,950	$3,600	$3,600
Community Development Manager	$2,880	$1,728	$1,440
IT-Project management support & IT operations	$9,000	$9,000	$9,000
Mayor's Office	$3,600	$2,880	$2,160
Community Services Director	$4,500	$3,600	$2,700
Marketing - general supports PSA, social media	$2,000	$1,200	$1,200
Solicitors - governance	$2,800	$1,400	$1,400
HR and Procurement	$2,400	$1,800	$1,200
Accounting support	$2,500	$2,500	$2,500
SUBTOTAL	$41,830	$33,108	$30,000

In-kind contributions for Next 5 years (cont'd)	Year 1	Year 2	Year 3-5
City Services Supports			
Leisure Access - to city leisure centres	$6,000	$8,000	$12,000
Transit (SAFE program/subsidized bus passes)	$2,500	$3,000	$5,000
SUBTOTAL	$8,500	$11,000	$17,000
CBO supports			
Staff time (total for multiple CBOs)	$15,000	$20,000	$25,000
SUBTOTAL	$15,000	$20,000	$25,000
Meeting Room Space			
City Meeting Rooms	$1,000	$1,000	$1,000
Community Allies/CBOs mtg rooms	$750	$750	$750
Institutional partners mtg rooms	$500	$500	$500
SUBTOTAL	$2,250	$2,250	$2,250
Data sharing, analysis & reporting- linking to existing technology			
Project management/ITSM Software (city support)	$1,500	$1,500	$1,500
Institutional partners	TBD	TBD	TBD
Community View	TBD	TBD	TBD
Community Allies/CBOs	TBD	TBD	TBD
Other Agencies - i.e. SIEC, etc	TBD	TBD	TBD
SUBTOTAL	$1,500	$1,500	$1,500
GRAND TOTAL	**$69,080**	**$67,858**	**$75,750**

8.1.2 Future Financing

Future funding for ConnectYXE will utilize a social financing model to ensure that the business model of the program will be sustainable. ConnectYXE will create a collective impact group to help with the social financing. This will involve a centralized infrastructure, a dedicated staff, and a structured process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all participants. As we have discovered throughout this phase, large-scale social change comes from better cross-sector coordination rather than from the isolated intervention of individual organizations. From the start of this program, we have received large support of community allies, CBOs and institutional partners who are committed to ensuring this program will be implemented. As ConnectYXE continues to evolve and connects to business and industry, we will leverage corporate social responsibilities to enhance the funding opportunities for ConnectYXE.

The social financing model being proposed will be consistent with the Collective Impact Initiative model. This is a collaborative model that shows long-term commitments by a group of key actors from different sectors that have a common agenda for solving specific social problems.[17] The funding received by the Smart Cities Challenge will act as a catalyst to allow the program to be piloted. It will demonstratethe social value that ConnectYXE creates through the data collection in the back end and the delivery data on the front end - with public kiosks and Wi-Fi supports. As this program is executed, we will partner with service providers and organizations who have been onboarded to the system,

to create a business case that will support the expansion of ConnectYXE and demonstrate the power of a collaborative effort. ConnectYXE can result in social investments and benefits well in excess of the initial $10M investment.

8.2 Financial Reporting

The below table demonstrates how the $250,000 finalist grant money was used and where the variances occurred from the original estimated budget of the finalist grant.

Program	Original	Projection to Project End	Variance from Original
Staffing & consultant support resources	$95,000	$108,000	$13,000
Additional esearch & data collection	$30,000	$16,000	-$14,000
Technology	$50,000	$-	-$50,000
Prototype - pilot testing	$25,000	$2,500	-$22,500
Project Manager	$-	$45,000	$45,000
Community engagement and meeting supplies	$25,000	$18,000	-$7,000
Communications - social media	$7,500	$-	-$7,500
Professional services - legal/privacy	$7,500	$-	-$7,500
Writing and design	$10,000	$30,000	$20,000
Travel	$-	$17,000	$17,000
Video Creation	$-	$9,000	$9,000
Contingency	$-	$4,500	$4,500
TOTAL BUDGET	**$250,000**	**$250,000**	**$-**

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17   John Kania & Mark Kramer, Collective Impact, Stanford Social Innovation Review, Winter 2011.

Rationale for the change from the original budget is as follows:

• Staffing and consultant support resources

Staffing and consultant support resources were increased with additional resources to current project staff as the project timeline was longer and more extensive than originally expected. In addition, honorariums were given to members of the Smart Cities Core Team to offset costs of time from work when needed to help with the Smart Cities process.

• Additional Research and Data Costs

The decrease in variance in this section was because of a decision to focus the scope of the project. While there was general agreement that the project needed more research and data undertaken, it was determined that at this proof of concept stage of the project, the initially proposed level of research and data was not required.

• Technology

Originally estimated to be $50,000, the technology piece was not used in this portion because of several reasons: 1) ISM came on as a major partner offering $40,000 of in-kind services with the technology portion; 2) A large portion of this amount was allocated to the IT Project Manager to help set up what the concept of the system would be; and 3) With the magnitude of the backend of the system, it was decided that building a prototype in a short period would be under representative of what we would hope to achieve.

• Prototype – pilot testing

Prototyping was changed to a simple wireframe and proof of concept of the front-end portion of the tech solution as time did not allow for a full interactive prototype to be developed.

• Project Manager

This was a new item added to the contract to assist with project management. The complexity of this proposal required this additional team member.

• Community Engagement and Meeting Supplies

A significant portion of these expenses was used to support participation for the Indigenous youth involved in the process (by compensation for participation), as well as supplying supports to community allies. This portion also included honorariums to Youth Advisors on the core team as well as the Elder who attended the youth, community allies and institutional partners meetings.

The variance in this portion was because of in-kind services provided by community partners.

• Communications – social media

This portion of the budget was not used, all social media engagement costs were in-kind.

• Professional Services – Legal/Privacy

The variances in professional services was again because of in-kind supports from ISM and the City Clerk's Office in helping to complete the privacy portion of the project. ISM had previously engaged in a program with the Province of Saskatchewan on a social innovation hub that helped to complete other legalities regarding the project.

• Writing and Design

There was a variance in the writing and design portion. Costs for this portion increased due to the size of the proposal and the amount of design and graphics needed as well as adding in additional assistance in writing the report.

• Travel

Travel requirements for the Smart Cities project were unknown when the original budget was proposed. Travel has been added to allow for team members to speak at relevant conferences that are aligned with the project and for travel for jury check-ins and finalists showcase.

• Video Creation

When the budget was built, this was also a requirement that was unknown in the original application and has now been allocated to fulfill this submission component.

• Contingency

Contingency was added to offset any additional miscellaneous costs that came up during this phase of the project.

8.2.1 Finalist Grant In-Kind Contributions

The following is a breakdown of the finalist phase in-kind contributions we received:

Final Proposal Development In-Kind Supports	June 2018 to March 2019	
City staff time	
IT Project Management	$13,400
IT - Operations	$600
Community Development Staff	$1,152
Mayor's Chief of Staff	$15,120
Mayor's Office - Mtg logistics	$1,440
Community Services Director/GM	$14,400
Marketing - general supports PSA, social media	$500
City Clerks (Privacy review)	$1,500
Solicitors - Finalist contribution agreement	$560
HR and Procurement	$480
Accounting support	$2,000
SUBTOTAL	$51,152

Final Proposal Development In-Kind Supports	June 2018 to March 2019 (cont'd)	
CBO supports	
Staff time	$15,000
SUBTOTAL	$15,000
Meeting Room Space	
City meeting rooms	$500
Community Allies/CBOs mtg rooms	$250
Institutional partners mtg rooms	$500
SUBTOTAL	$1,250
Technology supports	
ISM - solutions components development	$40,000
SUBTOTAL	$40,000
GRAND TOTAL	**$107,402**
Additional supports unable to quantify	
Institutional partners	
Community view	
Community Allies/CBOs	
Other agencies - i.e. SIEC, etc.	

8.3 Financials Risk

Risk management cuts across each of the sections of this proposal, and risks frequently overlap domains. As a result, we have consolidated the risks, and the discussion of the risk log in Section 9 "Risk Management". That section shows those risks that, overall, received the highest impact profile: we have provided our current risk log in its entirety in Appendix Four: Entire Risk Log.

09 Risk Management

Risk is when an uncertain event or condition could occur and influence the program outcome. We have identified risks associated with the ConnectYXE program.

9.1 Risk Management Strategy

We track all risks associated with ConnectYXE program, and with each of the constituent projects. In both cases, we employ a common Risk Management Strategy comprised of 1) risk identification, 2) risk assessment, and 3) ongoing risk monitoring.

9.1.1 Risk Identification

The starting point in Risk Management is Risk Identification. This process is executed in the early stages of the Program, and of each project, and then repeated at regularly scheduled intervals thereafter. Risks are reported monthly in project status reports to the PMO, then aggregated and reported to IT Governance. The City methodology records risks in a Risk Register, shown in Figure 22.

9.1.2 Risk Assessed

Once identified, the risk is assessed. This involves these seven steps:

1. The risk is assigned one individual to be the risk owner.

FIGURE 22: PROGRAM RISK REGISTER

2. The risk likelihood is assessed. We use a 5-point scale to assess risk likelihood:

1 - Unlikely to happen during 5 years of the program

2 - May happen rarely -- once or twice in the five years of the program

3 - Occasional -- expect this event to happen at least annually

4 - Very likely. This may happen multiple times annually

5 - An almost certainty. This will happen, and/or frequently

3. The risk impact is assessed. Again, we use a 5-point scale, except that risk impact is calculated as an exponentially increasing value:

> 1 - A minor impact to the program or to a party or parties

> 2 - An impact to the program that will require resolution or remediation. Minor harm

> 4 - A recognizable impact to the program. Will attract attention, and/or may cause harm

> 8 - A serious impact that may cause substantial change to the program. Will attract high level attention and/or likely harm

> 16 - A catastrophic impact to the program and/or to the party or parties impacted. Potential loss of life or limb, and/or potential termination of the program

4. The overall risk profile is calculated as likelihood multiplied by impact.

5. A risk domain is assigned. This is the aspect of the program or of a project that the risk will impact. The choices are:

• Governance (Hindsight, Foresight, Oversight, including: Privacy, data...);

• Engagement (Stakeholder: CBO, Youth...);

• Engagement (Marketing, Communications and Change Management);

• Technology;

• Data and Privacy;

• Performance Measurement;

• Project Management;

• Finance; and

• Implementation Phase Requirements.

6. A risk trigger is identified. This is an event that will indicate that the risk is being realized, or that the conditions are in place for the risk to be realized.

7. Mitigation strategies are identified for those risks that have a risk profile of 8 or greater. There are four general categories of mitigation strategy:

• Avoid;

• Transfer;

• Reduce; or

• Accept.

We may have multiple mitigation strategies.

9.1.3 Risk Monitoring

Each project manager monitors and updates respective project risks. By assigning risk owners, and by establishing triggers, changes to risks will be recognized earlier giving the project team time to respond and/or to escalate the risk level.

Risk monitoring at a program level is administered by the PMO and reported

to the ConnectYXE Council.The PMO receives risk catalogues from respective projects, consolidates them, includes program risks, and reports the highest risks to the Council.

The ConnectYXE Council reviews risks with the highest risk profile. The Council may direct the PMO to apply new mitigation strategies to resolve, reduce or transfer risks.

Individual Project
- Establish project risks
- Monitor risk triggers
- Escalate high impact risks
- Report high profile risks by monthly project status reports

PMO
- Aggregate respective projects risks
- Monitor Program Risk Triggers
- Escalate high impact risks
- Report high profile risks by monthly program status report

ConnectYXE Council
- Review and approve program risks
- Recommend alternative mitigation if required

FIGURE 23: RISK LEVELS

9.2 Risk Register Showing the Highest Rated Risks

Using the Risk Management approach, we have identified 25 risks, some in each section of this proposal.

The complete Risk Register is included in Section 11.4 as "Appendix Four: Entire Risk Log." Here we report on the top risks associated with each section.

Risk Title	Risk Statement	Impact	Likelihood	Risk	Mitigation Strategies
Engagement (Marketing, Communications and Change Management)					
Youth, a family member and/or an ally turn to ConnectYXE for an immediate, urgent need that the service does not, or does not yet, provide resulting in a failure to connect to an emergency service, or a delay, resulting in harm to an individual…	Youth, a family member and/or an ally may turn to ConnectYXE for an immediate, urgent need that the service does not, or does not yet, provide. Examples may include: reaching out for immediate medical aid, for mental health services, for a security concern. This might result in a failure, or at least a delay, in connecting to an emergency service and this could result in harm to an individual, damage to the reputation of ConnectYXE, and/or exposure of the service to poor publicity or to litigation.	4	2	16	All emphasis must be placed on "Avoid" for this risk. **Avoid**: Clear communication of the intention of ConnectYXE and emphasize what the service does not provide -- or provide yet. **Avoid:** Provide an option to connect to emergency services as an early option of the service.

Engagement (Stakeholder: CBO, Youth…)					
Youth will not be aware that ConnectYXE exists, resulting in poor adoption	Youth have an overwhelming number of choices on the Internet - even when they are trying to locate services that ConnectYXE provides. If those youth, their families and their allies are not aware of ConnectYXE, adoption of the service will be threatened, CBOs will not be encouraged to participate, and overall, the program will languish and fail.	3	4	16	**Avoid:** Build into the plan a realistic adoption plan to ensure a gradual rollout, one that allows for adoption of each group in succession. **Avoid:** Invest in effective and youth-led marketing that increases awareness of the benefits of the program to the youth (etc.) so as to promote adoption. **Transfer:** Enlist our community allies and institutional partners in promoting adoption of the service, synchronized with the rollout plan to promote awareness, desire and adoption of the service. **Reduce:** Establish a realistic adoption plan that does not over-reach or over-promise and delivers what it does promise. **Accept:** A certain amount this risk is intrinsic to the nature of the project, and must be accepted.
Technology					
ConnectYXE must balance user accessibility and system development (providing meaningful services)	The project is an agile one and more input and requirements gathering is a need to develop the whole solution. The solution is valuable only when both CBOs provide valuable services, and youth are able to connect and use the system. Delivery of one or the other of these will not provide a functioning system. The solution developed must carefully balance the development of the services provided with the access to the system.	3	3	12	**Avoid:** Effective program governance establishes a balance between developing a robust back end solution and content provided by CBOs and institutional partners with a well-developed front end that makes the system accessible by youth.
The Advanced Analytics that will extract meaningful data from disparate data sources is a new approach, attempting to solve a complex problem. This may not produce useful results in early stages of the program, resulting in loss of confidence in the approach.	The Advanced Analytics that will extract meaningful data from disparate data sources is a new approach, attempting to solve a complex problem. This may not produce useful results in early stages of the program, resulting in loss of confidence in the approach. Some data sources will be very different from others. At the same time, we need to extract results which have a degree of nuance (e.g. gender, age, low-barrier) for these results to be meaningful. It may take some time and effort for the analytic tools to be tuned to provide that degree of nuance, which can result in delays, additional costs, and as a result loss of engagement.	3	3	12	**Reduce:** Testing of the overall solution, and in particular, of the robustness of the solution sets, to address nuanced and complex circumstances will determine when the program can be released. Program governance will aim for a balance -- the system must provide a basic level of robustness in addressing complex circumstances, but not delay implementation until the solution is "perfect".
Project Management					
Actual execution of the program is long -- longer than we can sustain interest resulting in shifting priorities and less focus on ConnectYXE	Actual execution of the program is long -- longer than we can sustain interest resulting in shifting priorities and less focus on ConnectYXE. ConnectYXE will take several months to establish governance, and several more to build core services -- all before we produce visible results. Maintaining stakeholder interest through this time is a question of ensuring there are project activities relevant to stakeholders.	3	4	16	**Avoid:** Continually engaging with stakeholders and partners and scheduling deliverables early and throughout the program to maintain their engagement.

Performance Measurement					
Failure to meet milestones results in failure to request payments from Infrastructure Canada, resulting in cash flow challenges	Failure to meet milestones results in failure to request payments from Infrastructure Canada, resulting in cash flow challenges. This also threatens the timeline of the delivery of ConnectYXE services and benefits to the community.	3	3	12	**Avoid:** Good project management, and early identification of issues that threaten delivery. **Avoid:** Careful alignment of project deliverables and outcomes with the cash flow requirements of the program will ensure that the City has a manageable demand to fund the program.
Governance (Hindsight, Foresight, Oversite, including: Privacy, data…)					
Youth advisors aging out of their advisory role, leaving the city, or turnover of staff representation in advisory and working groups resulting in the loss of the original vision	Youth advisors aging out of their advisory role, leaving the city, or turnover of staff representation in advisory and working groups resulting in the loss of the original vision or lack of fresh vision.	1	5	5	**Reduce:** Refresh insights on an ongoing basis, and broaden conversation to larger cohort groups. Set up mentoring process to bring on new advisors (youth and other). Recruitment and succession plans for the various governance groups.
Data and Privacy					
The quality of the information received from service providers is incomplete or inaccurate resulting in data that cannot be trusted and reduced confidence and uptake of the services.	The quality of the information received from service providers is incomplete or inaccurate resulting in data that cannot be trusted and reduced confidence and uptake of the services.	3	4	16	**Avoid:** User interface must be clear, easy, and intuitive for the service providers and must not require extensive additional work **Avoid:** Well-defined onboarding and orientation processes including ongoing training for data entry **Avoid:** Automated systems that identify inconsistent or inaccurate data **Avoid:** Ongoing feedback that identifies inaccurate data **Avoid:** Regular data review by the governance/ops team **Avoid:** Clear requirements/screening for service providers as a part of onboarding **Avoid:** Service providers become more proficient with and see the benefits of the system they will self-manage **Accept :** Some data inconsistency is inevitable and processes must be identified to compensate
CBOs and institutional partners may fear that information shared could be used against participants or accessed by people they do not trust. For example, an organization's processes or areas of improvement could be shared with a key funder.	CBOs and institutional partners may fear that information shared could be used against participants or accessed by people they do not trust. For example, an organization's processes or areas of improvement could be shared with a key funder. This would result in reticence to onboard, reducing the services available, and ultimately, adoption.	3	3	12	**Avoid:** Clearly identify who has authority over the data that is shared and collected. Do not collect personally identifiable data. Confidentiality agreements as a part of the Data Sharing Agreement to provide peace of mind to participants, as appropriate.

Finance					
The greatest source of cost is in the technology that will provide the front-end and back-end solution where we have been able to give only high level estimates of cost. This may result in a solution that is not as developed as we currently plan.	The greatest source of cost is in the technology that will provide the front-end and back-end solution where we have been able to give only high-level estimates of cost. Our approach will be to balance development of front-end and back-end to provide a system that is usable as soon as we can, with the funding available. Given the uncertainty of the costs, current funding may take us to a point that is not as fully developed as we currently plan. This could result in reduced onboarding of partners and CBOs, and in reduced adoption by end users.	3	4	16	**Avoid:** More granular planning will allow us to optimize technology spending to arrive at an optimal solution. **Reduce:** The need to spend additionally on technology will enable program governance to seek additional contributions for funding of the program.
Implementation Phase Requirements					
There is a risk we are unable to attract and/or retain Indigenous people to fill the key positions for ConnectYXE	ConnectYXE is designed to address the needs of Indigenous youth, families and allies. We plan for significant participation from Indigenous youth or Indigenous peoples to better reflect the perspective and needs of this community as the program is developed and delivered. There is a risk that we will not be able to attract Indigenous peoples to the executive roles (Program Manager, Technical Director, , Administrator or Program Coordinator), or to keep individuals in these roles.	3	4	16	**Avoid:** The approach to procuring staff provides for weighting of results for individuals who are from CEB identified groups, with a focus on representation from Indigenous Peoples. **Transfer:** We will work with community allies, asking them for help in identifying Indigenous candidates for program roles, and for help in encouraging those individuals to apply. **Reduce:** We will create incentives to support individuals who apply for roles that are new to them, including opportunities for mentorship and training in these new roles. **Accept:** We will aspire to fill executive roles with Indigenous peoples, but will accept that we may have to fill program roles with other CEB target groups in order to keep the program moving forward.

10 Implementation Phase Requirements

We are committed to honouring our Treaty responsibilities and moral Duty to Consult throughout this proposal process. We have an Elder for this project and for each meeting with our institutional partners, community allies, and Youth Advisory Group we have offered tobacco to him to open and close the gathering. When the youth asked for sharing circles, he also began each circle with a smudge. We will continue to practice respectful and meaningful consultation with all of our partners, allies, and youth, and continue to ask for guidance and teachings from our Elder.

10.1 Treaty Responsibilities and The Duty to Consult: Background

The governing structure and organization of the Plains Cree of Treaty 6 Territory is embedded with a strong ethic of citizenship consultation. Supporting the leadership structure is a complex system of research, dialogue, analysis, and consensus. There are societies, councils and Elders who are expected to provide input into the major governing decisions faced by their leaders.[18] In preparation for significant decisions, such as the treaty talks in 1876, leaders provided the citizenship with the information required to work towards a negotiable position on issues of welfare, medicine chest, land relationship, education, and compensation.[19] Wrapped in a cloak of wāhkōtowin and pimācihowin (making relations and livelihood),[20] the system works for the Cree nation. In most cases, the decisions reached through these processes are supported by spiritual practices, ceremonies and teachings.

10.2 Duty to Consult

The legal definition for the Duty to Consult reached by the Canadian courts and implemented through Canadian government policy falls short of the Cree teachings about the necessity for community engagement when major decisions are being reached for the growth and welfare of the community. In cases like Canada's attempted consultation process on First Nations Education (2016), the First Nations resisted the process declaring that it was too narrow in scope, lacking the complexity of their own consultation processes.

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18   Muskeg Lake Election Act. 1999.

19   "The chiefs and leading men at Fort Carlton believed that they had signed, on behalf of the Indian nations they represented, a treaty to share the land with the settlers and to keep the peace with the government, amongst themselves, and with the newcomers…They were all of them 'children of the Queen,' of the same blood, and had been made by the same God…Spoken in the presence of the sacred pipe, they believed that the promises made by the lieutenant-governor could not be broken." (Christensen. Ahtahkakoop. 2000, p. 273).

20   Cardinal, H. & Hildebrand, K. Treaty Elders of Saskatchewan. OTC, 2000.

10.3 Truth and Reconciliation Calls to Action

The pressure coming from the publication of the 94 Calls to Action by the Truth and Reconciliation Commission (2016) is generating its own energy to bring about change in Canada.[21]

ConnectYXE, by both connecting more people to appropriate services, as well as collecting comprehensive data of these activities, would help Saskatoon make progress on TRC Calls to Action 1, 19, 30, 38, 39, 40, 55, and 66. The most direct impacts would be on:

30. We call upon federal, provincial, and territorial governments to commit to eliminating the overrepresentation of Aboriginal people in custody over the next decade, and to issue detailed annual reports that monitor and evaluate progress in doing so.

38. We call upon the federal, provincial, territorial, and Aboriginal governments to commit to eliminating the overrepresentation of Aboriginal youth in custody over the next decade.

10.4 Reconciliation

The City has recognized that reconciliation is the way forward for a harmonious community, bringing to life the Treaty 6 clause calling for peaceful co-existence.

Saskatoon City Council declared 2015 as the **Year of Reconciliation** and subsequently supported the development of **Reconciliation Saskatoon**, a continuously growing network of 70 organizations committed to active reconciliation in the city.

Since 2015, a number of City projects have explored different opportunities for greater citizenship engagement across a very diverse population.[22] The efficiency of decision making is affected by a deeper more complex approach to data collection. The new engagement processes also bring ownership of the City to the citizens of Saskatoon.

Data collection and data management are key components for any planning process. Building a database that has engaged several layers of citizens with a wide spectrum of perspectives is important, especially the engagement of the potential beneficiaries of a project. This relationship between reconciliation and data collection, to improve well-being for members of our community, is the foundation of ConnectYXE.

10.5 Treaty Relationship

The medicine chest clause is a way forward to understand the distance between Canadian administration of health care and Indigenous interpretation of the spirit and intent of Treaty 6. In this con-

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21   The current political climate and stated position of the federal government on an agenda of "government to government" relations challenges Canadians to plan forward on this base: "We are all in this together, and the relationships we build need to reflect this reality. In Canada, this means new relationships between the government of Canada and Indigenous Peoples – relationships based on recognition of rights, respect, cooperation and partnerships." (Prime Minister Justin Trudeau's Address to the 72th session of the United Nations General Assembly. September 21, 2017.)

22   Naming of Libraries (2017); Bridge Naming Project (2017-2018); Victoria Park Reconciliation Sculpture Project (2017-2018)

text, Indigenous holistic understanding of wellness provides the service providers an opportunity to merge and balance the distance between the two worldviews on wellness of the individual, family and community. The governing processes of the City with its priority to dialogue towards a collaborative strategy with Indigenous individuals, communities and organizations is creating the type of environment required to formulate strategic plans towards setting a higher standard in the quality of life for all its citizens.

The Treaty 6 Flag that was raised with a pipe ceremony in front of Saskatoon City Hall is a bold announcement to the citizens of Saskatoon. The way forward is an organized strategy to meaningfully recognize what it means to be a Treaty 6 member, and to have consultation processes that honour the ability of the Saskatoon citizen to contribute to building a Smart City that benefits everyone.

10.6 Climate Lens Assessment

The climate lens assessment only applies to proposals that focus on climate change mitigation or adaptation. The ConnectYXE proposal does not focus on either of these areas and so does not include a climate lens assessment.

10.7 Community Economic Benefit Lens of Procurement

The ConnectYXE program will provide a Community Employment Benefit (CEB), as defined by the Investing in Canada Plan. The program will plan to hire an Indigenous person in the role of Project Coordinator. Over the course of the five-year program, this person will be given the opportunity to transition into the role of Technical Director. The program will provide for the training required to complete the coursework component of the Project Management Professional (PMP) certification (40 hours of training), will be mentored by the Program Director, and will be invited to join the Project Management Community of Practice sponsored by the IT Department of the City.

If a province or territory indicates that the project will be participating in the initiative, then a specific target for the benefits that will be provided for at least three of the federal target groups (apprentices; Indigenous peoples; women; persons with disabilities; veterans; youth; recent immigrants; and small-sized, medium-sized and social enterprises) will be required for the project.

Under the Smart Cities Challenge, the City is outlining our procurement approach to meeting CEB participation and reporting requirements.

The City will work cooperatively with key stakeholders to advance corporate social responsibility in the business community by promoting our policy and encouraging suppliers and subcontractors to work towards the social, economic, and environmental objectives of the City.

The City's Purchasing Policy stipulates that we will procure goods and services,

and promote and participate in viable procurement opportunities with diverse and Indigenous suppliers.

The City is committed to working with targeted groups throughout Saskatchewan to promote the procurement of goods and services from diverse individuals and businesses. To this end, the following will be evaluated as part of our ConnectYXE Procurement Initiatives:

A proponent wishing to be evaluated and awarded scores for CEB participation will provide the City with a completed participation form that will be attached to our RFx bid package as an Appendix. The City reserves the right to not award any scores to any proponent in respect of CEB participation when the proponent does not provide sufficient information, as required by the City and Smart Cities challenge.

Consistent with Supply Chain Management processes, during the performance of the services the contractor will provide the City of Saskatoon with a written monthly report which outlines information (in detail reasonably satisfactory to the City) establishing the contractor's compliance with its CEB commitments and contractual obligations.

11 Appendices

11.1 Appendix One: Preliminary Privacy Impact Assessment

1. General

Name of Department/Division	Strategy and Transformation/Information Technology
Project Lead(s)	Jazz Pabla
Title	ConnectYXE

2. Description of the project including the purpose and objectives:

In response to the Federal Government's (Infrastructure Canada's) Smart Cities Challenge, the City has proposed a program that, should the City be selected as a winner, will execute over the course of the next 5 years. We have branded this program "ConnectYXE".

The mission statement of this program is "To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity."

The technical solution proposed is to establish an independent board (incorporated or not) to provide governance over the engagement with community-based organizations (CBOs) and institutional partners, and to connect the services provided by those partners so that they are available to Indigenous youth, their families and to their "allies" – those who support and help them.

Users of the system – Indigenous youth, their families and allies – will not be required to authenticate, nor to provide personal information about themselves.

A dimension of the program is to improve access to the internet in areas of highest concentration of Indigenous youth and families by providing free Wi-Fi in strategically selected neighbourhoods and kiosks in locations where youth "hang out". Access to the free Wi-Fi will not collect IP Addresses. Rather, raw data regarding how many individuals use the free Wi-Fi will be collected.

3. What type of information is involved in the project?

All information that will be contained by the ConnectYXE system will be data provided by CBOs and institutional partners. CBOs will remove any PI/PHI prior to disclosing any information to ConnectYXE. This data is encrypted as transmitted and at rest, and will be securely segregated within the ConnectYXE system, accessible only by the CBO who disclosed the data, and by the information management service provider, ISM Canada.

Departments of City of Saskatoon, Saskatoon Transit, and Saskatoon Recreation and Community Development will provide data that is available to the public and does not contain any PI.

As a part of the ConnectYXE program, we will provide free public Wi-Fi to a neighbourhood of Saskatoon. ConnectYXE will ensure appropriate network protocols are in place so that only internet data ("HTTP" or "HTTPS") is transmitted, which will limit access to devices onto the LAN side. DHCP will be set to provide IP addresses with a lease of 8 hours, so that IP addresses will not be associated with a specific LAN. Host names will not be exposed. Free public Wi-Fi may be contracted to an Internet Service Provider such as Shaw or Sasktel; this provider would provide additional network data protection services.

End users will connect to ConnectYXE by phone or by an internet connection. Users will not be required to identify themselves. Depending on the nature of the interaction, the user may be asked to provide their age (not their date of birth), and their gender. If the interaction is such that the individual's location is required, this may be requested. If the interaction results in a requirement to send a transit ticket, the user's phone number may be requested so as to send an electronic ticket. This data will used for the purposes of the transaction. Phone number and information that identifies the device (such as IP address) will not retained; other data will be stored as aggregated data only. This data cannot be used to identify a specific individual, and so is not considered PI.

4. How will the information be used?

The Information Management Service Provider, ISM Data Lab, uses Artificial Intelligence tools that mine the CBO data and extracts services provided by CBOs. Following processing, all source data extracted and analyzed by the Data Lab will be destroyed: only the aggregated results – the list of services available and other data surrounding and supporting these services – will be preserved.

5. Questions:

1 - Does the project involve any type of confidential information? (i.e. personal, sensitive third party or other confidential information)

No. No. CBOs will remove any PI/PHI prior to disclosing any information to ConnectYXE. As CBOs are onboarded,

the ConnectYXE Council will conduct a pre - privacy impact assessment and a data sharing agreement with each CBO. This assessment will determine if the CBO data contains any PI/PHI. If it does, we will work with the CBO to develop a process whereby that data is removed before transmission.

We will subsequently monitor the data that is submitted to look for any PI/PHI; if found, it will be removed, and treated according to the protocols for a data and privacy breach.

2 - Is this a new program or service?

Yes. ConnectYXE is a proposal for the national Smart Cities Challenge. If it is a successful winner it will be a new service that connects youth, families and allies to additional CBOs.

3 - Are you making significant changes to an existing program or service?

No. This is a new service, that is modelled after the provincial Social Innovation Hub.

4 - If this project relates to an existing project was a full PIA completed? If so what is the project's name?

This does not relate to any existing project of the City of Saskatoon.

5 - Will you be data linking with other information within the City?

Yes. Yes, there will be aggregation of data provided from multiple CBOs and institutional partners. No linked data will contain PI/PHI because ConnectYXE does not have any.

6 - Will the project contract out any function?

Yes. ISM is our technology partner in this program. Upon being awarded the Smart City Challenge, the City of Saskatoon will form a governing body (the ConnectYXE Council) which will enter into an agreement with ISM Canada and will formalize the Information Management Service Provider service agreement.

7 - Will there be a collection of any personal, third party, or other confidential information via web-based technology?

No. If they have any, CBOs will remove PI/PHI prior to disclosing any information to ConnectYXE.

8 - Are you using personal information to determine eligibility for a program or service or for enforcement?

No. ConnectYXE provides a list of services available for end users. No personal information will be used to determine eligibility for a program or service, nor for enforcement.

9 - Will the personal information be shared outside the organization?

No. No PI/PHI from the City of Saskatoon will be disclosed.

10 - Will the personal information be stored outside the organization?

No. Data from respective CBO will be stored in ConnectYXE, which "resides" in the Microsoft Azure Cloud. This data is partitioned and not accessible to anyone except the CBO providing the data, and by the ISM Data Lab. ISM is an Information Management Service Provider (IMSP) as defined by LAFOIP. CBOs will disclose only data that does not include PI/PHI into the system.

City of Saskatoon will not disclose any PI to ConnectYXE.

11 - Will the personal information be used for other purposes, including research and statistical purposes?

No. No identifiable PI/PHI will be collected, disclosed or used for any other purpose.

12 - Will the public be likely to have any privacy concerns regarding the project or the service that is being offered by the City?

Yes. During the engagement consultations with Indigenous groups there were expressions of privacy concerns. We will provide communications and notice of the IMSP agreement as evidence the data is not PI or PHI and is encrypted in transit, at rest, that the data are segregated and not accessible by others.

13 - Are you introducing changes to the business systems or infrastructure architecture that:

• Affects the physical or logical separation of personal information.

No. CBOs will remove any PI/PHI prior to disclosing any information to ConnectYXE.

• Changes the security mechanism used to manage and control access to personal information?

No. The system will introduce a net new system that will store data segregated by CBO, including a security mechanism used to access these data (by the CBO and by the ISM Data lab). CBOs will remove any PI/PHI prior to disclosing any information to ConnectYXE.

14 - Are there any other or additional reason for undertaking a PIA? If yes please explain.

Inasmuch we are importing data from CBOs, the process of onboarding those parties would each entail a PPIA. ConnectYXE will provide solutions regarding how the CBOs will ensure PI/PHI is not disclosed to ConnectYXE.

6. Legislative Authority of ConnectYXE Proposal

Principle:

The City of Saskatoon is a local authority as defined by section 2(f) of The Local Authority Freedom of Information and Protection of Privacy Act (LAFOIP). ConnectYXE will be a program of the City and will, therefore, be subject to the provisions of LAFOIP.

ConnectYXE will not be collecting PI or PHI; therefore, the data that will be disclosed by CBOs or institutional partners

will be restricted to data fields that do not include PI/PHI or from which one can infer identifiable PI/PHI. It will be the CBOs that ensure the data fields disclosed to ConnectYXE do not include PI/PHI. ConnectYXE will monitor collected data, looking for incidental PI/PHI. If such incidental disclosure occurs, the City will undertake a privacy breach investigation following the City's Privacy Breach Protocol Guidelines.

ConnectYXE will conduct an extensive privacy impact assessment should they be the successful winner of the Smart Cities Challenge.

Signatures

Project Lead Name & Title	Michelle Beveridge Chief of Staff, Mayor's Office
Signature	
Date	Feb 14, 2019

IT Project Lead Name & Title	Jazz Pabla Manager of Technology Integration
Signature	
Date	Feb 14, 2019

Director of IT Name	Paul Ottmann Director of IT
Signature	
Date	Feb 14, 2019

Access and Privacy Officer	Wenda Atkinson Access and Privacy Officer
Signature	
Date	Feb 14, 2019
Comments	Full PIA is required should the City be the successful winner of the Smart Cities Challenge

General Manager Name	Lynne Lacroix Acting General Manager, Community Services
Signature	
Date	Feb 14, 2019

Response from the Office of the Saskatchewan Information and Privacy Commissioner

The following response was provided to the City of Saskatoon Data and Privacy Office on Monday, March 4th, indicating the engagement of the team with the OIPC.

…, this email is to confirm that our offices have engaged in telephone calls on February 11 and 25, 2019, and that we receive various documents, including a copy of the City's finalist proposal and PPIA, on February 15 and 27, 2019.

We are currently drafting our response letter to the City which will include comments on the City's final proposal and PPIA. We hope to have this draft sent to you sometime this week. A final version of our letter will be prepared after you have read our draft. The final letter will be provided to you, with a c.c. to Infrastructure Canada before the April 9, 2019 deadline.

If you have any questions or need any information, please do not hesitate to contact me. Thank you,

Marjorie Platero

306-798-2360

11.2 Appendix Two: Truth and Reconciliation Calls to Action

The pressure coming from the publication of the **94 Calls to Action by the Truth and Reconciliation Commission (2016)** is generating its own energy to bring about change in Canada.[23]

ConnectYXE, by connecting more people to appropriate services, and collecting comprehensive data of these activities, would help Saskatoon make progress on TRC Calls to Action 1, 19, 30, 38, 39, 40, 55, and 66. The most direct impacts would be on:

1. We call upon the federal, provincial, territorial, and Aboriginal governments to commit to reducing the number of Aboriginal children in care by:

    i. Monitoring and assessing neglect investigations.

    ii. Providing adequate resources to enable Aboriginal communities and child-welfare organizations to keep Aboriginal families together where it is safe to do so, and to keep children in culturally appropriate environments, regardless of where they reside.

19. We call upon the federal government, in consultation with Aboriginal peoples, to establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and to publish annual progress reports and assess long-term trends. Such efforts would focus on indicators such as: infant mortality, maternal health, suicide, mental health, addictions, life expectancy, birth rates, infant and child health issues, chronic diseases, illness and injury incidence, and the availability of appropriate health services.

30. We call upon federal, provincial, and territorial governments to commit to eliminating the overrepresentation of Aboriginal people in custody over the next decade, and to issue detailed annual reports that monitor and evaluate progress in doing so.

38. We call upon the federal, provincial, territorial, and Aboriginal governments to commit to eliminating the overrepresentation of Aboriginal youth in custody over the next decade.

39. We call upon the federal government to develop a national plan to collect and publish data on the criminal victimization of Aboriginal people, including data related to homicide and family violence victimization.

40. We call on all levels of government, in collaboration with Aboriginal people, to create adequately funded and accessible Aboriginal-specific victim programs and services with appropriate

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23   The current political climate and stated position of the federal government on an agenda of "government to government" relations challenges Canadians to plan forward on this base: "We are all in this together, and the relationships we build need to reflect this reality. In Canada, this means new relationships between the government of Canada and Indigenous Peoples – relationships based on recognition of rights, respect, cooperation and partnerships." (Prime Minister Justin Trudeau's Address to the 72th session of the United Nations General Assembly. September 21, 2017.)

evaluation mechanisms.

55. We call upon all levels of government to provide annual reports or any current data requested by the National Council for Reconciliation so that it can report on the progress towards reconciliation. The reports or data would include, but not be limited to:

iii. The educational and income attainments of Aboriginal peoples in Canada compared with non- Aboriginal people.

iv. Progress on closing the gaps between Aboriginal and non-Aboriginal communities in a number of health indicators such as: infant mortality, maternal health, suicide, mental health, addictions, life expectancy, birth rates, infant and child health issues, chronic diseases, illness and injury incidence,

and the availability of appropriate health services.

v. Progress on eliminating the over-representation of Aboriginal children in youth custody over the next decade.

vi. Progress on reducing the rate of criminal victimization of Aboriginal people, including data related to homicide and family violence victimization and other crimes.

vii. Progress on reducing the overrepresentation of Aboriginal people in the justice and correctional systems.

66. We call upon the federal government to establish multiyear funding for community-based youth organizations to deliver programs on reconciliation, and establish a national network to share information and best practices.

11.3 Appendix Three: City of Saskatoon Procurement Rating Criteria

The City of Saskatoon will evaluate Requests for Proposals and Request for Quotations using a ranking system that includes Community Economic Benefit. This awards points for responders who represent a diverse or indigenous perspective.

Rated Criteria Category		Weighting (Points)
A.4.1	Pricing	60
A.4.2	Experience/References	15
A.4.3	Project Approach	10
A.4.4	**Community Economic Benefit**	**15**
A.4.4.a	Diverse or Indigenous Person Hours	10/15
A.4.4.b	Diverse or Indigenous Ownership, Social Enterprise	3/15
A.4.4.c	Diverse Community Investment (Including Apprenticeship, Education, and Training)	2/15
	Total Points	**100**

Note: The rating criteria and weightings utilized above are for illustrative purposes only. The final rating criteria and weightings will be determined per the project scope and goals but will include the CEB criteria set out above as a minimum.

11.4 Appendix Four: Entire Risk Log

Risk Title	Risk Statement	Impact	Likelihood	Risk	Mitigation Strategies
Engagement (Marketing, Communications and Change Management)					
Youth, a family member and/ or an ally turn to ConnectYXE for an immediate, urgent need that the service does not, or does not yet, provide resulting in a failure to connect to an emergency service, or a delay, resulting in harm to an individual.	Youth, a family member and/or an ally may turn to ConnectYXE for an immediate, urgent need that the service does not, or does not yet, provide. Examples may include: reaching out for immediate medical aid, for mental health services, for a security concern. This might result in a failure, or at least a delay, in connecting to an emergency service and this could result in harm to an individual, damage to the reputation of ConnectYXE, and/or exposure of the service to poor publicity or to litigation	4	2	16	All emphasis must be placed on "Avoid" for this risk. **Avoid:** Clear communication of the intention of ConnectYXE and emphasize what the service does not provide -- or provide yet. **Avoid:** Provide an option to connect to emergency services as an early option of the service.
Youth may request a service that the system does not offer, reducing his or her confidence in the system.	Youth may request a service that the system does not offer, reducing his or her confidence in the system. Repeated experience may result in the youth abandoning the system altogether.	2	4	8	**Avoid:** Track requests and determine frequently requested services. Prioritize the onboarding of these services. **Avoid:** Provide an option very clearly on the interface that allows the user to connect directly to the service provider. **Avoid:** Do not release the service until governance (esp. youth) agree that there is sufficient value. **Transfer:** Transfer responsibility of locating services not provided to the youth themselves. The existence of the system will not change the status quo; services that cannot be located now will be challenging to locate after the system is available. **Reduce:** Manage expectations by providing a clear communication built into the system advising that the services are limited **Reduce:** Be clear in all communications that ConnectYXE is a connecting service -- and does not itself offer services **Accept:** This risk will be difficult to avoid. The system will take a long time (years) to onboard a significant set of services.
Community/ end users don't understand exactly what ConnectYXE is resulting in unrealistic and unmet expectations resulting in reduced adoption	Community/end users don't understand exactly what ConnectYXE is. For example, they expect that ConnectYXE is responsible for the delivery of the services rather than simply connecting the user to the service. This could result in unrealistic and unmet expectations resulting in reduced adoption.	2	4	8	**Avoid:** Communication strategy clearly articulates the intention of the programTransfer: Partners need to clearly communicate the intention of the program **Accept:** A certain amount is to be expected and accepted

This project is mimicking existing services. This may lead to confusion as to who is offering what service, and reduced adoption.	What is the difference between this system and other initiatives that have been undertaken.	2	4	8	**Avoid:** Good communication should position ConnectYXE correctly in people's minds. **Transfer:** Partner organizations having a clear understanding will allow them to communicate the distinction.
Some may question why the program focuses on Indigenous youth and not all youth? This may lead to resentment, negative publicity and political pressure to change the program.	Some may question why the program focuses on Indigenous youth and not all youth? This may lead to resentment, negative publicity and political pressure to change the program.	2	3	6	**Avoid:** Communication material and key messages that explain how designing for those with the most systemic barriers will help meet the needs of all.

Engagement (Stakeholders)

Youth will not be aware that ConnectYXE exists, resulting in poor adoption.	Youth have an overwhelming number of choices on the Internet - even when they are trying to locate services that ConnectYXE provides. If those youth, their families and their allies are not aware of ConnectYXE, adoption of the service will be threatened, CBOs will not be encouraged to participate, and overall, the program will languish and fail.	3	4	16	**Avoid:** Build into the plan a realistic adoption plan to will ensure a gradual rollout, one that allows for adoption of each group in succession. **Avoid:** Invest in effective and youth-led marketing that increases awareness of the benefits of the program to the youth (etc.) so as to promote adoption. **Transfer:** Enlist our community allies in promoting adoption of the service, synchronized with the rollout plan to promote awareness, desire and adoption of the service. **Reduce:** Establish a realistic adoption plan that does not over-reach or over-promise and delivers what it does promise. **Accept:** A certain amount this risk is intrinsic to the nature of the project, and must be accepted.
Key CBO stakeholders concerned that the money could be better spent on direct delivery of programs and services, may not wish to get involved, resulting in reduced engagement and an incomplete set of services, and a reduced quality of the program.	Key CBO stakeholders concerned that the money could be better spent on direct delivery of programs and services, may not wish to get involved, resulting in reduced engagement and an incomplete set of services, and a reduced quality of the program. This in turn would result in reduced adoption.	2	3	6	**Avoid:** During the engagement process, clear communication of the value of coordinating existing services, and that this does not preclude requesting funding for additional services: in fact, we can provide quantified evidence of the need for additional services.
The program may suffer from "Stakeholder fatigue" – feeling like this is just another thing the City wants from them -- resulting in reduced onboarding, reduced quality of service, and hence reduced adoption.	Stakeholder fatigue – feeling like this is just another thing the City wants from them, or that they were part of other collaborative initiatives in the past that didn't go anywhere. Lack of trust in the process, avoiding fatigue/drain.	2	2	4	**Avoid:** Early involvement in the project, so that they can see the impact of their participation as the project takes shape. **Avoid:** Use the language and lens of the stakeholder group to build trust and resonance. **Avoid:** Clearly identifying where the opportunities are to influence the process, demonstrating results, and communicating the path forward.

Technology					
ConnectYXE must balance user accessibility and providing meaningful services.	The project is an agile one and more input and requirements-gathering is needed to develop the whole solution. The solution is valuable only when both CBOs provide valuable services, and youth are able to connect and use the system. Delivery of one or the other of these will not provide a functioning system. The solution developed must carefully balance the development of the services provided with the access to the system.	3	3	12	**Avoid:** Effective program governance establishes a balance between developing a robust back end solution and content provided by CBOs and institutional partners with a well-developed front end that makes the system accessible by youth.
The Advanced Analytics that will extract meaningful data from disparate data sources is a new approach, attempting to solve a complex problem. This may not produce useful results in early stages of the program, resulting in loss of confidence in the approach.	The Advanced Analytics that will extract meaningful data from disparate data sources is a new approach, attempting to solve a complex problem. This may not produce useful results in early stages of the program, resulting in loss of confidence in the approach. Some data sources will be very different from others. At the same time, we need to extract results which have a degree of nuance (e.g. gender, age, low-barrier) for these results to be meaningful. It may take some time and effort for the analytic tools to be tuned to provide that degree of nuance, which can result in delays, additional costs, and as a result loss of engagement.	3	3	12	**Reduce:** Reduce: Testing of the overall solution, and in particular, of the robustness of the solution sets to address nuanced and complex circumstances will drive when the program can be released. Program governance will aim for a balance -- the system must provide a basic level of robustness in addressing complex circumstances, but not delay implementation until the solution is "perfect."
Providing Wi-Fi to a neighbourhood may appear to be an intrusion, or worse, as an invasion of privacy, resulting in negative publicity around the program, negatively impacting the reputation of the Smart Cities Challenge, and/or the City.	Without careful change management, consultation and acceptance, installing Wi-Fi might be viewed by some in our identified neighbourhoods as a means of surveillance or monitoring. This could result in negative publicity surrounding the program, the Smart Cities Challenge, and/or the City of Saskatoon.	3	2	8	**Avoid:** Clear communication to the residents in the identified neighbourhood of our intention to provide free public Wi-Fi with information about the impact on their privacy. **Avoid:** Public consultation before we proceed. Gain broad consensus from the residents of the identified neighbourhood that we should proceed with free public Wi-Fi. **Avoid:** Follow-up communication after Wi-Fi access points have been installed that reiterates the security and the steps taken to respect privacy in providing the service.
Natural Language Processing to translate vernacular speech into meaningful queries is an untested solution. Its use may result in frustrations among end users, and a corresponding lack of adoption.	Natural Language Processing -- whether voice or Chatbot -- is required to translate vernacular speech into meaningful queries against the services that the system maintains. This has not been directly tested. Many of us have experience of these systems that is frustrating. If the user interface is not useful to end users, adoption of the system will suffer.	2	3	6	**Reduce:** The user interface will improve as it has more and more interactions. The challenge for Program Governance is to release the program to end users at a point where it is useful, if not perfect, in all circumstances.

Project Management

Risk	Description				Mitigation
Actual execution of the program is long -- longer than we can sustain interest, resulting in shifting priorities and less focus on ConnectYXE.	Actual execution of the program is long -- longer than we can sustain interest, resulting in shifting priorities and less focus on ConnectYXE. ConnectYXE will take several months to establish governance, and several more to build core services -- all before we produce visible results. Maintaining stakeholder interest through this time is a question of ensuring there are project activities relevant to stakeholders.	3	4	16	**Avoid:** Continually engaging with Stakeholders and Partners and scheduling deliverables early and throughout the program to maintain their engagement.
Project Management approach will be new for some participants. Collaborating on a project will be a new skill and may take time to acquire, resulting in possible delays to the earlier stages of the program.	Project Management approach will be new for some participants. Collaborating on a project will be a new skill and may take time to acquire, resulting in possible delays to the earlier stages of the program.	3	2	6	**Avoid:** Provide orientation and training to project resources and partners that are not familiar with project management or collaboration tools to develop enough proficiency in the use of the tools. **Transfer:** Request support from project management resources within the partner organizations for project participants in developing PM skills. **Reduce:** The City-based PMO can undertake to backfill project-related tasks until partner team members are able to develop the needed skills.

Performance Measurement

Risk	Description				Mitigation
Failure to meet milestones results in failure to request payments from Infrastructure Canada, resulting in cash flow challenges.	Failure to meet milestones results in failure to request payments from Infrastructure Canada, resulting in cash flow challenges. This also threatens the timeline of the delivery of ConnectYXE services and benefits to the community.	3	3	12	**Avoid:** Good Project Management, and early identification if issues that threaten delivery. **Avoid:** Careful alignment of project deliverables and outcomes with the cash flow requirements of the program will ensure that the City will have a manageable demand to fund the program.

Governance (Hindsight, Foresight, Oversight, including: Privacy and data)

Risk	Description				Mitigation
Youth advisors aging out of their advisory role or leaving the city or turnover within staff representation of various advisory and working groups resulting in the loss of the original vision.	Youth advisors aging out of their advisory role or leaving the City or turnover within staff representation of various advisory and working groups resulting in the loss of the original vision or lack of fresh vision.	1	5	5	**Reduce:** Refresh insights on an ongoing basis, and broaden conversation to larger cohort groups. Set up mentoring process to bring on new advisors (youth and other). Recruitment and succession plans for the various governance groups.
Competencies of governance partners do not meet the needs of the project resulting in poor decision making.	Competencies of governance partners do not meet the needs of the project resulting in poor decision making. We have no control over the representatives from the partners to the governance structure. For example, they may come with their own agendas, take no ownership, lack a full understanding of the project. If the reps do not fulfill their role, this results in a lack of accountability and/or clarity for the Program Team.	2	2	4	**Avoid:** clear criteria for partner representation, orientation sessions for partner reps, clear definition of partner commitments and benefits. **Avoid:** strategic relationship building. **Avoid:** annual assessment of partner engagement. **Transfer:** all parties accept responsibility and mutual accountability.

Data and Privacy

The quality of the information received from service providers is incomplete or inaccurate resulting in data that cannot be trusted and reduced confidence and uptake of the services.	The quality of the information received from service providers is incomplete or inaccurate resulting in data that cannot be trusted and reduced confidence and uptake of the services.	3	4	16	**Avoid:** user interface must be clear and easy and intuitive for the service providers and must not require extensive additional work. **Avoid:** well defined onboarding and orientation processes including ongoing training for data entry. **Avoid:** automated systems that identify inconsistent or inaccurate data **Avoid:** ongoing feedback that identifies inaccurate data. **Avoid:** regular data review by the governance/ops team. **Avoid:** clear requirements/screening for service providers as a part of onboarding. **Avoid:** as the service providers become more proficient with and see the benefits of the system they will self-manage. **Accept:** some data inconsistency is inevitable and processes must be identified to compensate.
CBOs and institutional partners may fear that information shared could be used against participants or accessed by people they do not trust. For example, an organization's processes or areas of improvement could be shared with a key funder.	CBOs and institutional partners may fear that information shared could be used against participants or accessed by people they do not trust. For example, an organization's processes or areas of improvement could be shared with a key funder. This would result in reticence to onboard, reducing the services available, and ultimately, adoption.	3	3	12	**Avoid:** Clearly identify who has authority over the data that is shared and collected. Do not collect personally identifiable data. Confidentiality agreements as a part of the Data Sharing Agreement to provide peace of mind to participants, as appropriate.
If we provide free Wi-Fi to a neighbourhood, this could be used to gain access to the devices of users of the system.	Public Wi-Fi has a reputation of providing access to allow hackers access to our devices. Providing individuals in some neighbourhoods with free public Wi-Fi might expose them to hacking, resulting in an invasion of privacy and potential loss of information, in turn resulting in potential harm to our citizens and litigation.	4	1	8	**Avoid:** The Wi-Fi network will be built using network protocols and exposing network ports that allow HTTP and HTTPS traffic only. We may potentially limit this to only HTTPS traffic. Therefore, this is limited to Internet browsing only, and does not expose users to other Internet protocols, which limits the exposure. **Transfer:** This is a service that we will likely partner with another organization to provide -- potentially Shaw or SaskTel. We would then have the established network monitoring and control infrastructure of that service provider to address this risk. **Reduce:** We will have network monitoring in place that detects behavior that reflects a systemic attack on network components, and alerts IT Operations staff.

The greatest source of cost is in the technology that will provide the front-end and back-end solution where we have been able to give only high level estimates of cost. This may result in a solution that is not as developed as we currently plan.	The greatest source of cost is in the technology that will provide the front-end and back-end solution where we have been able to give only high-level estimates of cost. Our approach will be to balance development of front-end and back-end to provide a system that is usable as soon as we can with the funding available. Given the uncertainty of costs, current funding may take us to a point that is not as fully developed as we currently plan. This could result in reduced onboarding of partners and CBOs, and in reduced adoption by end users.	3	4	16	**Avoid:** More granular planning will allow us to optimize technology spending to arrive at an optimal solution. **Reduce:** The need to spend additionally on technology will enable program governance to seek additional contributions for funding of the program.
Operational funding is not secured to sustain the program after the period of the Smart Cities Challenge funding, resulting in a failure of the program to meet its long-term objectives.	The program does not attract sufficient funding to allow it to continue after the Smart Cities Challenge period.	4	1	8	**Avoid:** Early identification and engagement with future funding partners will ensure operational continuity of ConnectYXE, through and after the period of Smart Cities Challenge funding.

Implementation Phase Requirements

There is a risk we are unable to attract and/or retain Indigenous people to fill the key positions for ConnectYXE.	ConnectYXE is designed to address the needs of Indigenous youth, families and allies. We plan for significant participation from Indigenous youth or Indigenous peoples to better reflect the perspective and needs of this community as the program is developed and delivered. There is a risk that we will not be able to attract Indigenous peoples to the executive roles (Program Manager, Technical Director, Administrator or Program Coordinator), or to keep individuals in these roles.	3	4	16	**Avoid:** The approach to procuring staff provides for weighting of results for individuals who are from CEB identified groups, with a focus on representation from Indigenous Peoples. **Transfer:** We will work with community allies, asking them for help in identifying Indigenous candidates for program roles, and for help in encouraging those individuals to apply. **Reduce:** We will create incentives to support individuals who apply for roles that are new to them, including opportunities for mentorship and training in these new roles. **Accept:** We will aspire to fill executive roles with Indigenous peoples, but accept that we may have to fill program roles with other CEB target groups in order to keep the program moving forward.
There is a risk that suppliers and/or contractors who at the outset commit to setting CEB targets are unable to meet those targets, resulting in reduced engagement from CEB target groups, a narrower vision, and reduced adoption.	There is a risk that suppliers and/or contractors, who at the outset, commit to setting CEB targets and are unable to meet those targets, resulting in reduced engagement from the groups identified for this initiative, a narrower vision, and potentially reduced adoption.	2	3	6	**Transfer:** Continue to advocate to our contractors and suppliers the benefits of incorporating diverse voices, and our desire to deal with those who do. **Reduce**: require annual monitoring and reporting out on hours related to employment and/or procurement opportunities of identified target groups
Perceived insufficient Indigenous leadership in this project, a project team that is not representative and has no lived reality. May reduce adoption of the service.	Perceived insufficient Indigenous leadership in this project, a project team that is not representative and has no lived reality. This may reduce adoption of the service or negative publicity.	1	2	2	**Avoid:** Communications will clearly spell out the process and the governance used. **Transfer:** Engage with CBOs and partners to communicate the process

11.5 Appendix Five: Letters of Support

ConnectYXE has broad support of the community and from our institutional partners. We include letters indicating that support from:

- Central Urban Metis Federation Inc.
- City of Saskatoon, Office of the Mayor
- Greater Saskatoon Catholic Schools
- Saskatchewan Health Authority
- Saskatchewan Indian Institute of Technologies
- Saskatchewan Polytechnic
- Saskatoon Police Service
- Saskatoon Public School Division
- Saskatoon Tribal Council
- United Way of Saskatoon and area
- University of Saskatchewan

Central Urban Métis Federation Inc.
315 Avenue M South
Saskatoon, SK S7M 2K5
Tel: (306) 975-9999 Fax: (306) 975-9156

January 8, 2019

RE: Letter of Support – Smart Cities Challenge

On behalf of Central Urban Metis Federation Inc. (CUMFI), I am pleased to provide a letter of Support to the City of Saskatoon with respect to the Smart Cities Challenge. I believe that Saskatoon Smart Cities Challenge Statement, "to be the city that breaks the cycle of Indigenous Youth Incarcerations through innovative and integrated supports that provide purpose, belonging and security", tailors well with our mandate at CUMFI. Over, the past year, Saskatoon's Smart Cities challenge has made leaps and bounds with the inclusion of all partners, including youth. We are proud to be a part of this innovative strategy.

CUMFI was incorporated in 1993, by a group of Métis people living in the City of Saskatoon. Our mandate is: the promotion of the heritage, cultural, economic, educational and social well-being of the Indigenous community in Saskatoon. CUMFI is non-profit charitable organization, with nearly 6000 registered members. We are considered one of the leading Aboriginal Supported Housing and Wellness Community Organizations in Saskatoon, Saskatchewan. With properties throughout the Saskatoon Core Neighborhood. We provide vital supports for the disenfranchised and vulnerable populations while also providing affordable living for those in need. CUMFI's focus has always been and continues to be on women and children, youth and families. Our programs serve the Metis community; however, all of the programming is status blind.

CUMFI has demonstrated to its members, community and stakeholders the professionalism and capability to successfully deliver preventative, intervention and advocacy support programs and services to the urban Indigenous people of Saskatoon. We continue to develop collaborative partnerships with various agencies and support groups to avoid duplication of program and service delivery. CUMFI works with all social issues in the core areas of Saskatoon inclusive of Homelessness, Addictions, Counselling, HIV/AIDS, Fetal Alcohol Spectrum Disorder, Mental health, Fostering Families/shelters and programs, Elder Care, Children's Group homes, Youth Justice, and Community Gatherings, and has many partnerships and participates on various committees.

Indigenous youth in Canada are incarcerated at rates that are six times greater than their non-Indigenous counterparts. Studies have attributed this disparity to several factors: the

intergenerational effect of colonial policies for assimilation; racial discrimination, both by the policy and Canadian society at large; the lingering effects of residential school experiences; low educational levels; and few employment opportunities. In Saskatchewan, the rates of Indigenous youth are staggering, research has indicated that the rate of incarceration for Aboriginal youth in Saskatchewan is 30 times higher than that of non-Aboriginal youth. CUMFI is working towards a youth healing facility that addresses issues like the use of Crystal Meth and other substances that has a direct correlation to Indigenous Youth incarceration rates.

The City of Saskatoon has been a leader in reconciliation and social development. CUMFI has worked closely with the City of Saskatoon since 1993, and we fully support the Administration in this very important endeavor. We believe that working together with the City of Saskatoon and the Smart Cities Challenge, will have a dramatic impact on decreasing the number of Indigenous Youth Incarcerated. We look forward to our continued strong relationship with the City of Saskatoon in addressing this very serious issue. It is with pleasure that I submit this letter support for Saskatoon, Smart Cities Challenge application.

If you require further information or clarification please do not hesitate to call me at (306) 222-5527.

In the Spirit of Reconciliation,

Shirley Isbister
President
Central Urban Métis Federation (1993) Inc.

OFFICE OF THE MAYOR

— City of —
Saskatoon

March 4, 2019

To: Smart Cities Challenge Jury

The City of Saskatoon is very proud of the work our Smart Cities team has accomplished over the past year in developing our proposal: To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity. This required building authentic and committed relationships with and among many individuals and groups - including Indigenous youth, community-based organizations, and institutional partners.

The sense of ownership and collective learning that has been developed in this process over the past year has had a significant and positive impact on how we understand the challenges for both the youth in our city and youth service providers. This knowledge will benefit us all in how we continue to work together and on related issues in the future. We are very thankful for the opportunity to have been a part of this challenge. The City of Saskatoon is fully committed to this proposal. We will be the lead contract agreement holder with Infrastructure Canada and a key partner for the ConnectYXE program. In-kind commitments we have made in the proposal include:

> Staff time - from support provided by our Community Development Managers to Technology Project Management to Solicitors, Human Resources and Procurement support;
> Access to City services such as leisure centres and transit access.

If we can make a difference through ConnectYXE in improving the access to programs and services for Indigenous youth, our entire city benefits. We look forward to working with our community on this program.

Sincerely,

Charlie Clark
Mayor

222 - 3rd Avenue North, Saskatoon, SK Canada S7K 0J5 • Phone (306) 975-3202 • www.saskatoon.ca

January 25, 2019

RE: Letter of Support – City of Saskatoon Application

To: Smart Cities Challenge Adjudication Committee Members

Simple solutions applied to complex problems rarely result in reducing the impact of the problem. This is truer now than ever, particularly when we tackle a complex issue such as indigenous youth incarceration rates.

In establishing an effective solution to this issue, a variety of stakeholders is required along with a core planner and some unique resources. Breaking a cycle requires that these unique resources need to include disruptive innovations. In recent years, these 'disruptive innovations' tend to have come through emerging technologies. However, developing these innovations often takes extraordinary resources and collaboration.

All of the necessary elements are in place here in Saskatoon and we are poised to act. We are ready thanks to; a) the core planning role enlivened by the City of Saskatoon, b) the extraordinary resource possibility from the Government of Canada, c) the variety of stakeholders at the table that bring their expertise, influence and commitment to this plan, and d) the disruptive innovations that technology may provide. We are well positioned.

On behalf of Greater Saskatoon Catholic Schools, please accept this letter of support and commitment to the Smart Cities Challenge. We are one stakeholder that certainly has an important role to play. We are honoured to serve each day many thousands of youth in our city. We currently provide many unique and innovative supports and programs designed to support our indigenous students and families: our Pre-K – Grade 8 Cree Bilingual Program, our Indigenous Language and Fitness Program, our involvement at White Buffalo Youth Lodge to name but a very few. We are involved in the transitions for our youth – particularly as they move into the work force. We have many career education opportunities as well as community connections. As we look at the four pillars of the project (purpose, belonging, security and identity), we have a stake and role to play in all four. Of most significance would be the actions of: *Increasing job training and access to educational activities*.

Education is committed to this project. For our part, schools will support student access to the technological interface as well as support effective planning and delivery of the supports. We have a good deal of internal work happening with the goal of increasing First Nations' students' educational outcomes. We are excited by the possibilities that this project holds to further support our youth.

Any complex, community solution requires multiple stakeholders to participate. Fortunately, at this table, we have the other partners that also have a role to play. As we target a disruptive innovation at this challenge, we have the necessary members of the community to bring it to fruition. This type of work is very invigorating and has many other spinoff effects that lead to greater collaboration amongst sectors independent of the project in this case.

In conclusion, Greater Saskatoon Catholic Schools appreciates this opportunity afforded to the community by the Government of Canada through this grant. As well, thanks to the City of Saskatoon for initiating this application. We look forward to a favourable determination and the exciting positive impacts this would have in our community.

Sincerely,

Greg Chatlain
Director of Education/CEO

Sharon Garratt, Vice President & Chief Nursing Officer
Dr. Mark Wahba, Physician Executive
Integrated Urban Health
2180 23rd Avenue
Regina, SK and S4S 0A5

February 1, 2019

To the Smart Cities Challenge Review Team:

We are pleased to provide this letter of support from the Saskatchewan Health Authority for the City of Saskatoon's Smart Cities Challenge application.

The Saskatchewan Health Authority provides a comprehensive set of health services across the province with a goal of ensuring patients receive high quality, timely health care, wherever they live in Saskatchewan. In the City of Saskatoon, services provided by the portfolios of Primary Health Care and Mental Health and Addictions as well as a Ministry of Health strategy aimed at "Connected care for the people of Saskatchewan" have touchpoints with the City of Saskatoon's Challenge Statement:

> **"To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging and security."**

We are committed to improving mental health services as well as addressing root causes that lead to and/or exacerbate mental health problems, and can result in children and youth engaging in risky, criminal activity. A number of our initiatives complement the work indicated through the Challenge Statement, such as:

- A focus on increasing culturally sensitive practices, cultural adaptations to programming and enhancing the cultural competency of our workforce to address health inequities experienced within Indigenous populations. In addition to this, trauma-informed care is being explored as a principle of practice that helps people (clients as well as health care providers) understand and improve coping responses to the impact of racism, poverty, childhood trauma and more.
- Work within Population and Public Health, such as recreational settings and housing inspection and enforcement, prioritizes the need and response based on social determinants of health. Interventions are prioritized in areas of high social and material deprivation based on findings from mapping the neighbourhood deprivation index.
- Engagement in intersectoral poverty reduction efforts with both a provincial and municipal focus. Currently Population and Public Health is collaborating with community partners and the City of Saskatoon to create a Municipal Poverty Reduction Plan. Poverty is a condition that tends to impact our Indigenous communities more intensely and evidence links it to an increased risk of children and youth engagement in criminal activities.
- The Health and Education Partnership with school divisions (includes Population and Public Health, Mental Health and Addictions, and Primary Health and Chronic Disease Management) that includes a focus on Reconciliation and improving health equity outcomes of Indigenous children and youth.

- Connected Community Care focusing on providing intermediate community-based care for complex needs clients. The aim is to create a centre of excellence for the care of the target population. There is a Community Health Centre planned at Market Mall focusing on older adults, with further investments to focus on the complex needs of residents that live in the 5 core neighbourhoods and Downtown Central Business District.
- Partnership agreements to improve the health outcomes for First Nations populations created with the Saskatoon Tribal Council and Whitecap Dakota First Nation. This works to ensure that activities will improve the health status of First Nations' people through diverse, but targeted initiatives honors protocols to provide culturally sensitive and appropriate care.

As health care leaders, and on behalf of the practitioners involved in this work, we are excited about the opportunity to further partner with the City of Saskatoon on this intersectoral initiative. It has large-scale potential to positively impact the community well-being and safety of Saskatoon residents and reduce health inequities in our community. Please feel free to contact us if you require additional information.

Sincerely,

Sharon Garratt
Vice President & Chief Nursing Officer
Integrated Urban Health

Julie Kryzanowski
Senior Medical Health Officer
Quality, Safety & Strategy

Dr. Mark Wahba
Physician Executive
Integrated Urban Health

SIIT
SASKATCHEWAN
INDIAN
INSTITUTE OF
TECHNOLOGIES

April 20, 2018

118 - 335 Packham Ave.
Saskatoon, SK S7N 4S1

Phone: 306-244-4444
Toll Free: 1-800-667-9704
Fax: 306-244-1391

Web Site: www.siit.sk.ca

To Whom it May Concern,

As part of an ongoing partnership with the City of Saskatoon, the Saskatchewan Indian Institute of Technologies is pleased to provide support in the Infrastructure Canada Smart Cities Challenge. We endorse the following challenge statement: *To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity.*

In support of the four pillars outlined in the City's preliminary application, we are able to support the initiative in the following ways:

Purpose, Security, Belonging, and Identity- SIIT will provide campus tours to youth from Saskatoon Tribal Council, Saskatoon Catholic and Public School Systems, engaging them in career exploration and post- secondary options with our lifelong learning community. In this context, youth will have the opportunity to network with Indigenous staff and students from diverse backgrounds, studying and working in a variety of fields. These tours will also provide exposure opportunities with a variety of simulation technologies, including welding and aircraft simulators.

Additionally, SIIT will make work integrated learning connections between the City of Saskatoon and SIIT students participating in Mental Health and Wellness and Educational Assistant programs. These specialized Indigenous professionals will provide mentorship to Indigenous youth participating in school and recreational programming in and surrounding the city.

There are also opportunities to integrate ABE and essential skills programs into inner city, community schools - such as St. Mary's and Pleasant Hill - as done previously and with great success.

Finally, the White Buffalo Youth Lodge - and additional partnership with the Saskatoon Tribal Council - will add an additional forum to engage youth with programs, services, and mentorship available through the City of Saskatoon and the Saskatchewan Indian Institute of Technologies.

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Indian Governments of Saskatchewan

Please accept this letter supporting the development and delivery of the City of Saskatoon's Smart Cities preliminary application. We look forward to participating in this initiative with Infrastructure Canada and a successful submission.

Sincerely,

SASKATCHEWAN INDIAN
INSTITUTE OF TECHNOLOGIES

Riel Bellegarde
President & CEO

sk

February 12, 2019

Smart Cities Challenge
Infrastructure Canada
Ottawa, ON

Dear Application Jury:

Re: Letter of Support for the City of Saskatoon Smart Cities Challenge Application

As the President and CEO of Saskatchewan Polytechnic, I am happy to express our enthusiastic support for the Smart Cities Challenge application, being submitted by the City of Saskatoon. Our institution is the primary source of technical education in Saskatchewan, providing applied learning opportunities from our four campuses across the Province, as well as through extensive distance education programming. The Saskatoon Campus is our most active one, providing responsive applied education opportunities through certificate, diploma, and degree programs, as well as through apprenticeship training that meets student, employer, and market needs in Saskatoon, the Province of Saskatchewan and across Canada.

The Challenge being undertaken by the City of Saskatoon is one to which Saskatchewan Polytechnic is fully committed. As a recognized national leader in the areas of Indigenous learning and student support, Saskatchewan Polytechnic provides education to over 3,600 Indigenous students each year, and we are steadfastly working at continuing to increase that number. It is our belief that education is a key component to breaking the existing cycle of Indigenous youth incarceration, and we will continue to work with the City of Saskatoon to make that happen.

Saskatchewan Polytechnic will be supporting the achievement of the Challenge Statement in a number of ways. As an Institutional Partner in this initiative, we will play a role in the governance structure of the program, and will be providing our input at every opportunity. In addition, the involvement of our Digital Integration Centre of Excellence (DICE) will be continued. Our researchers within DICE have a strong background in big data, the Internet of Things and machine learning. From the outset they have been an integral part of the technical group gathered by the City of Saskatoon, and DICE will continue to provide direction and support to the rollout of technical supports for Indigenous youth at risk in Saskatoon. We foresee that our expertise will be a valuable boost in the engagement of transportation tracking technology, data analysis, mobile app development and wellness software. Many of these areas are already the subject of research being done by our faculty and research specialists, together with Saskatchewan Polytechnic students who work on capstone research projects with local not-for-profit groups.
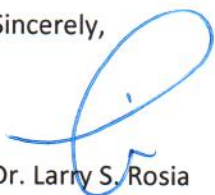
Our Indigenous Strategy group will also remain involved in advancing the goals that the City of Saskatoon is pursuing. Our Indigenous Strategy Director and his team have been active as part of the community group that are developing solutions to the problems that Indigenous youth face. The Sask Polytech Indigenous Strategy Group is a leader in supporting Indigenous post-secondary education, and they are approached regularly by institutions from across Canada, to provide best practice advice on addressing Indigenous needs. They are closely connected with Indigenous groups from across Saskatchewan, working to ensure that Indigenous students are supported in their efforts to advance their education.

Saskatchewan Polytechnic has existing programing which is geared toward the needs of Indigenous youth in Saskatoon. Our Adult Literacy program is an example of the type of course which gives students the tools they need to advance their education. We have Counsellors and Career Assessment Specialists who work with youth to help them make informed and effective decisions about their futures. Our Saskatoon Campus has the potential to provide access to Indigenous elders and ceremonies, which has been found to be a strong support for youth.

As an institution, we see ourselves as being a strong part of the process to improve the future of Indigenous youth in Saskatoon, by providing guidance and programming that will help prepare them to succeed. During a recent ceremony to celebrate the renewal of our Indigenous Success Strategy, one of the elders on our Saskatoon Campus summed up by saying that to her, "Education is the new buffalo. The most powerful educations enable learners to embrace lessons from the past and reconcile those lessons with contemporary circumstances, skills, tools and knowledge." As an institution, Saskatchewan Polytechnic, its faculty and employees believe that statement, and we will continue to support it in every way that we can.

In closing, Saskatchewan Polytechnic strongly confirms its support for the City of Saskatoon's application to the Smart Cities Challenge. We are committed to the success of the proposal and look forward to participating in its implementation.

Sincerely,

Dr. Larry S. Rosia
President and CEO

April 18, 2018

<u>**Re:**</u>   <u>**Letter of Support for Smart Cities Challenge**</u>

The Saskatoon Police Service is excited to participate in the Smart Cities Challenge and has teamed up with other institutional partners in an effort to improve the quality of lives for the citizens of Saskatoon. Saskatoon City Council provided direction that our challenge should be related to community safety and wellbeing and any challenge statement should be a social/human centered one. With that framework, the institutional partners are excited and have created the following challenge statement: *"To be the city that breaks the cycle of indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity."*

Although the primary function of the police is preservation of the peace, public safety and enforcement of laws, we believe the statement is true that "it takes a community to raise a child". As such, the Police Service manages and/or participates in numerous proactive prevention programs aimed at children and youth in our city including the following:

- Partner in the Strengthening Families Saskatoon Program which is an inter-agency collaborative effort working with the family unit toward the reduction of risk factors for problem behaviors in high-risk children;
- Partner in the Hub program working with agencies to better coordinate the services they provide to result in better health, safety and welfare of high risk individuals and families;
- Administer the Crime Free Multi-Housing program which introduces crime prevention techniques to multi-housing properties and is designed to reduce crime in rental properties;
- Partner in the SPS Cadet Orientation Police Studies Program (C.O.P.S.) that provides students a credit for successful completion and exposes the grade 11 and 12 students to the duties and responsibilities of a police officer while building stronger relationships with youth and bridging ethnic and socioeconomic gaps within the community;
- Partner in Drug Awareness and Healthy Lifestyles Days, an event designed to promote healthy lifestyle choices among youth;

- SPS Peacekeeper Cadet Program for Grades 4 to 8 students designed to provide Cadets with structure, discipline, goal setting, leadership, community involvement, the desire to stay in school and participate in organized sports;
- SPS High School Showcase – SPS Trade show – Grades 10 to 12;
- SPS Police and Student Sports Program (P.A.S.S.) – police playing floor hockey and volleyball with inner city youth;
- SPS Youth Advisory Committee – youth committee working with the Cultural Resource Unit to identify and target barriers between police and youth;
- Partner in Saskatoon Restorative Action Program (RAP), working with youth in high schools to encourage engagement in creating respectful and safe communities;
- Alternative Measures Program (AMP) – alternatives for minor criminal offences committed;
- SPS Kids and Cops – Summer programs (July and August) for sport, leadership, and recreation;
- Cultural Unit engages inner city children at spray parks and paddling pools – breaking down barriers and talking with kids and their families in the summer months;
- Duke of Edinburgh Award Program – building youth skills to provide life leadership.

Another strength and contribution the Police Service can make is access to and use of our data. We have an Analytics Lab with extensive IT support.

Finally, our organization is very focused on inclusion and reconciliation. We can offer support for programs aimed at developing a sense of cultural identity.

Yours truly,

Troy Cooper, M.O.M. MBA
Chief of Police
/clt

Saskatoon Public Schools
Inspiring Learning

310 - 21st Street East, Saskatoon SK S7K 1M7
Tel: (306) 683.8200   Fax: (306) 657.3900
saskatoonpublicschools.ca
Barry MacDougall, Director of Education

February 4, 2019

To whom it may concern,

On behalf of Saskatoon Public Schools, I write to express our support as an institutional partner for the City of Saskatoon's submission for the Smart Cities Challenge.

With more than 25,000 students, our school division is the largest in Saskatchewan. Located on Treaty 6 territory, the traditional territory of the Cree and Dakota people and the homeland of the Métis Nation, Saskatoon Public Schools believes in lifting up our Indigenous learners. Our school division has a responsibility to serve not only the Indigenous families in our community, but share the history, cultural understandings, and traditional teachings of the First Nations and Métis with all our students.

This aligns with the City's challenge to focus on building purpose, belonging, security and identity in Indigenous youth. As an educational institution, we know that meeting the City's challenge is not possible without education. To build a sense of purpose, youth must have an opportunity to explore career possibilities and find their passion. To feel a sense of belonging, youth must believe they are seen, heard, and included in their school community. A sense of security can come from the support system that school staff and community partners provide, connecting our youth and their families to the services they need. Above all, we know identity is key to student success. Indigenous youth must see themselves reflected in their learning.

Public education is foundational to the success of society. While the betterment of oneself can lead to the betterment of the community, it is incumbent upon the community to first stand up for its individual members. We recognize the potential our indigenous youth hold but they cannot do this alone; we must provide equitable opportunities for all to succeed.

Our school division stands with the City of Saskatoon and its collective partners to rise to this challenge.

Sincerely,

Mr. Barry MacDougall, Director of Education, Saskatoon Public Schools

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Office of the Tribal Chief

March 1, 2019

To Whom it May Concern

Re: City of Saskatoon Smart Cities Challenge Letter of Support

The Saskatoon Tribal Council has been a proud partner with the City of Saskatoon on many initiatives that address the social issues that Indigenous residents of Saskatoon face on a daily basis. The Smart Cities Challenge is a bold and much needed issue that we are proud to again be working with this city to solve. "**To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity.**"

This proposal will play an important part in reducing social and economic barriers faced by First Nations people in Saskatoon. We support all parts of bringing the ConnectYXE program to Saskatoon:

Data Hub: We are involved in providing services and programs to Indigenous youth and will provide the relevant data for the Data Hub that enable the youth and their families to know what programs and services are available to them.

Access to Program and Service Information: The information will be accessed through interfaces such as websites, smart screens and public kiosks. We will ensure that we support access to those interfaces as much as possible: we will provide a link to the ConnectYXE website where relevant, we will host kiosks in our program facilities, and we will look for other opportunities to let youth and their families find out about the services available in our city.

Collaboration: We will continue to have our staff participate in the ConnectYXE meetings and working groups as a way to contribute to the city-wide collaboration that has been strengthened in the process of developing ConnectYXE.

As a First Nations organization and partner, we have been very pleased with the outcome and results of past and current initiatives with the City of Saskatoon. ConnectYXE will have a real impact on the Indigenous community in Saskatoon and we are proud to continue to be a partner on this important initiative.

Please don't hesitate to contact me at (306) 280-5394 if you have any questions. Thank you.

Sincerely,

Tribal Chief Mark Arcand
Saskatoon Tribal Council

Kinistin   Mistawasis   Muskeg Lake   Muskoday   One Arrow   Whitecap Dakota   Yellow Quill

February 5, 2019

TO WHOM IT MAY CONCERN:

Re: Smart Cities Challenge

At United Way of Saskatoon & Area, we make it our priority to help build strong communities. A few of the ways we achieve this is by providing funding to organizations that focus on mental, physical and spiritual well-being, and as a community mobilizer. We have enjoyed a long and productive partnership with the City of Saskatoon in a variety of capacities, including leading projects that focus on improving the lives of Indigenous youth.

Over the last year, the City of Saskatoon has done a fantastic job of bringing together disparate community stakeholders around the Smart Cities vision; a testament to the trust our community has in its ability to lead. The foresight to include Indigenous youth with lived experience to help lead this initiative will be critical to the success of our Smart Cities initiative.

We have been a strong supporter from the beginning, understanding that our Indigenous community faces unique challenges which require unique, long term, and sustainable approaches. Our role in the Smart Cities Challenge has grown to serve two functions, as part of the institutional partners' governance committee and data and technology sharing through our 211 Saskatchewan service.

We look forward to continuing to invest our time and resources to ensure that together, Saskatoon will reduce Indigenous youth incarceration rates.

Sincerely,

Shaun Dyer
CEO, United Way of Saskatoon and Area

UNIVERSITY OF SASKATCHEWAN

➤ **The President**
107 Administration Place   Saskatoon SK   S7N 5A2   Canada
Telephone: (306) 966-6612   Facsimile: (306) 966-4530

February, 2nd , 2019

Infrastructure Canada
180 Kent Street
Suite 1100
Ottawa, Ontario K1P 0B6

Re: Letter of Support, Smart Cities Challenge

The University of Saskatchewan is a proud partner of the City of Saskatoon and other key stakeholders in the Smart Cities Challenge competition.   Throughout the last year, we have worked with the Smart Cities Saskatoon Committee to focus on our challenge, "To be the city that breaks the cycle of Indigenous youth incarceration by creating a new cycle focused on building purpose, belonging, security and identity". This goal aligns well with the University's mission of community engagement and its commitment to reconciliation efforts here and across the country.

The University sees itself playing a prominent support role with the project, providing the City access to new and existing research and data to assist in designing solutions for the challenge statement. As well we will continue to ensure the project leaders have access to our students, faculty, and staff who can assist in obtaining the outcomes of the project.
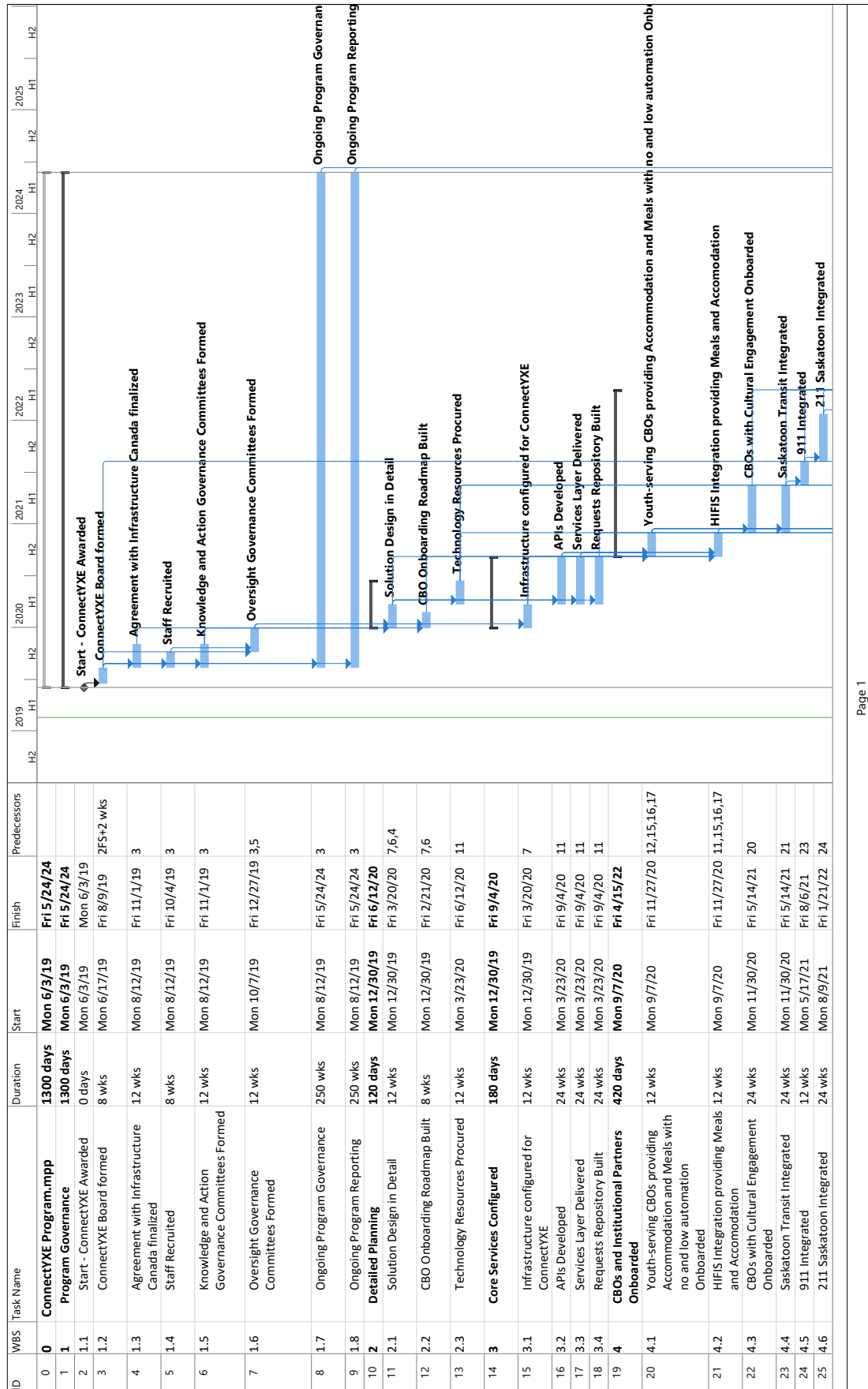
We are proud to be considered a key partner in creating a change for the better in the City of Saskatoon. Thank you for the opportunity to show our support for this transformative initiative.

Sincerely,

Peter Stoicheff
President and Vice-Chancellor

Gantt chart for ConnectYXE Program.

ID	WBS	Task Name	Duration	Start	Finish	Predecessors
0	0	ConnectYXE Program.mpp	1300 days	Mon 6/3/19	Fri 5/24/24	
1	1	Program Governance	1300 days	Mon 6/3/19	Fri 5/24/24	
2	1.1	Start - ConnectYXE Awarded	0 days	Mon 6/3/19	Mon 6/3/19	
3	1.2	ConnectYXE Board formed	8 wks	Mon 6/17/19	Fri 8/9/19	2FS+2 wks
4	1.3	Agreement with Infrastructure Canada finalized	12 wks	Mon 8/12/19	Fri 11/1/19	3
5	1.4	Staff Recruited	8 wks	Mon 8/12/19	Fri 10/4/19	3
6	1.5	Knowledge and Action Governance Committees Formed	12 wks	Mon 8/12/19	Fri 11/1/19	3
7	1.6	Oversight Governance Committees Formed	12 wks	Mon 10/7/19	Fri 12/27/19	3,5
8	1.7	Ongoing Program Governance	250 wks	Mon 8/12/19	Fri 5/24/24	3
9	1.8	Ongoing Program Reporting	250 wks	Mon 8/12/19	Fri 5/24/24	3
10	2	Detailed Planning	120 days	Mon 12/30/19	Fri 6/12/20	
11	2.1	Solution Design in Detail	12 wks	Mon 12/30/19	Fri 3/20/20	7,6,4
12	2.2	CBO Onboarding Roadmap Built	8 wks	Mon 12/30/19	Fri 2/21/20	7,6
13	2.3	Technology Resources Procured	12 wks	Mon 3/23/20	Fri 6/12/20	11
14	3	Core Services Configured	180 days	Mon 12/30/19	Fri 9/4/20	
15	3.1	Infrastructure configured for ConnectYXE	12 wks	Mon 12/30/19	Fri 3/20/20	7
16	3.2	APIs Developed	24 wks	Mon 3/23/20	Fri 9/4/20	11
17	3.3	Services Layer Delivered	24 wks	Mon 3/23/20	Fri 9/4/20	11
18	3.4	Requests Repository Built	24 wks	Mon 3/23/20	Fri 9/4/20	11
19	4	CBOs and Institutional Partners Onboarded	420 days	Mon 9/7/20	Fri 4/15/22	
20	4.1	Youth-serving CBOs providing Accommodation and Meals with no and low automation Onboarded	12 wks	Mon 9/7/20	Fri 11/27/20	12,15,16,17
21	4.2	HIFIS Integration providing Meals and Accomodation	12 wks	Mon 9/7/20	Fri 11/27/20	11,15,16,17
22	4.3	CBOs with Cultural Engagement Onboarded	24 wks	Mon 11/30/20	Fri 5/14/21	20
23	4.4	Saskatoon Transit Integrated	24 wks	Mon 11/30/20	Fri 5/14/21	21
24	4.5	911 Integrated	12 wks	Mon 5/17/21	Fri 8/6/21	23
25	4.6	211 Saskatoon Integrated	24 wks	Mon 8/9/21	Fri 1/21/22	24

ID	WBS	Task Name	Duration	Start	Finish	Predecessors
26	4.7	Recreation and Community Services Integrated	12 wks	Mon 1/24/22	Fri 4/15/22	25
27	5	**ConnectYXE Youth Interface Built**	**540 days**	**Mon 11/30/20**	**Fri 12/23/22**	
28	5.1	User Interface Added using AI	24 wks	Mon 11/30/20	Fri 5/14/21	20,18,13
29	5.2	App built for iPhone and Android	12 wks	Mon 5/17/21	Fri 8/6/21	28,13
30	5.3	Natural Language Interface/AI Interface Enabled	24 wks	Mon 5/17/21	Fri 10/29/21	28,13
31	5.4	User Interface Piloted with Youth	12 wks	Mon 4/18/22	Fri 7/8/22	30,29,22,23,2
32	5.5	ConnectYXE End User Deployment	24 wks	Mon 7/11/22	Fri 12/23/22	31
33	6	**Reports, Analytics, BI Enabled**	**180 days**	**Mon 11/30/20**	**Fri 8/6/21**	
34	6.1	CBO Reporting Delievered	12 wks	Mon 11/30/20	Fri 2/19/21	20,21
35	6.2	Analytics and BI of Core Services Delivered	24 wks	Mon 2/22/21	Fri 8/6/21	34
36	7	**Access Points Added**	**780 days**	**Mon 12/30/19**	**Fri 12/23/22**	
41	8	**Program Handed over to Operations**	**480 days**	**Mon 8/9/21**	**Fri 6/9/23**	
42	8.1	Sustainment Funding Secured	48 wks	Mon 8/9/21	Fri 7/8/22	3FS+104 wks
43	8.2	Operational Documentation Delivered to Sustainment Body	12 wks	Mon 12/26/22	Fri 3/17/23	38,35,32,39,3
44	8.3	Production Turnover	12 wks	Mon 3/20/23	Fri 6/9/23	43,40
45	9	**Project Closeout**	**250 days**	**Mon 6/12/23**	**Fri 5/24/24**	
46	9.1	Final Reporting and Accounting	12 wks	Mon 6/12/23	Fri 9/1/23	44
47	9.2	Finish. ConnectYXE Self-Sustaining	0 days	Fri 5/24/24	Fri 5/24/24	44,8,9