CIVIC PARTNER 2016 ANNUAL REPORT SNAPSHOT- CALGARY SCIENCE CENTRE SOCIETY (TELUS SPARK)

CPS2017-0369 Civic I ISC:UNRESTRICTED CALGARY SCIENCE CENTRE SOCIETY (TELUS SPARK) 2016 City Investment Mission: We are a role model and force for innovation that drives positive change. Operating Grant: \$2,056,577 **Vision:** A community transformed by a culture of curiosity, risk-taking and problem solving. Capital: \$0 City owned asset? Yes Registered Charity How did they do in 2016? Attendance Visitor expectations met Visitors coming to learn & play 100% 60% 500.000 90% 450,000 49% 98% 50% 80% 400,000 431.280 85% 350.000 70% 82% 40% 36% 375,076 300,000 60% 348.047 250,000 50% 30% 200,000 40% 150.000 30% 20% 100,000 20% 10% 50.000 10% 0 0%

2014

The story behind the numbers

2014

2015

2016

Attendance reached record levels and increased 15% from 2015. This growth was driven by the Body Worlds exhibit, improvements to the visitor experience, and increased marketing.

2015

2016

0%

2014

2015

- Ranked 24 out of 267 Things to do in Calgary and won multiple Calgary Child Awards including Best Museum for Families and Best Place to Take your Kids on a Crummy Day.
- Expanded its Community Connections Program to 47 agencies including 4 indigenous organizations, and partnered with 10 high-needs schools through the Spark Learning Connections Program.

Snapshot of 2017-18 priorities

- Celebrate the 50th anniversary of TELUS; host events and exhibits including Star Trek: The Starfleet Academy Experience, Spark Talks, Power of Ideas, Quantum: The Exhibition Exhibit, 50 Years of Spark, and Big Birthday Bash.
- Launch in house retail and food services. •
- Support responsible energy transitions. •
- Infrastructure feasibility work including options for onsite daycare/preschool, catering services, and adult learning spaces and programs.

51%

2016



- 1. Organization Name: Calgary Science Centre Society (operating as TELUS Spark)
- 2. Fiscal Year: 2016
- 3. Latest Annual Report available and web address: 2016/17 Fiscal Year http://www.sparkscience.ca/about-us
- 4. Current Vision, Mission and Mandate:

Our Mission

We are a role model and force for innovation that drives positive change.

Our Vision

A community transformed by a culture of curiosity, risk-taking and problem solving.

Our Values

- Collaboration: We believe that encouraging debate and dialogue, embracing diverse perspectives, and that partnership with our communities results in better ideas and outcomes.
- Curiosity: We are always wondering, always questioning, always seeking to learn.
- Courage: We believe in innovative thinking and taking risks. We embrace change. Our courage to fail gives us the confidence to succeed.
- Commitment: We're deeply passionate about our mission and pursue it in everything we do...and in how we do it.

YEAR IN REVIEW

 What key results of your organization in 2016 contributed to Council Priorities in The City's 2015-2018 Action Plan including A prosperous city, A city of inspiring neighbourhoods, or A healthy and green city? <u>The City</u> of Calgary - Council Priorities

A PROSPEROUS CITY

To ensure that our organization remains focused on initiatives which align with what Calgarians expect from their science centre, TELUS Spark and Larkspur Consulting Inc. (a third party strategic planning partner) hosted a series of Community Interviews and Listening Sessions last year. This work clarified the aspirations Calgarians have and the role TELUS Spark can play in supporting or catalysing change in our community. These same sessions identified TELUS Spark as an "important place in the City's innovation ecosystem", an ecosystem that will be key to realizing the successful diversification of our economy.

TELUS Spark continues to play an important role in the successful implementation of Calgary's 10-year Economic Strategy. As we move towards greater diversification of our economy, the importance of strong *family science capital* as a lead-in to science, technology, engineering and math, or STEM career choice will be critical. We work closely with our community partners and with Provincial and Federal Government to identify opportunities to convene conversations about the



development and diversification of the economy. As a science centre, we have the unique ability to collaborate with a wide spectrum of stakeholders, engage in conversations and convert those discussions into meaningful actions. For example in 2016, TELUS Spark participated in and hosted, the Energy Futures Lab, with members of City, Calgary Economic Development, and representatives of several major energy companies in Calgary, to join other Albertans in the discussion and pilot studies to develop the energy system that the future demands of us.

TELUS Spark is very fortunate to have a strong network among our community partners and corporate sponsors. In 2016, TELUS Spark identified the need to diversify partnerships and work more closely with various levels of government in the areas of innovation and energy sustainability, education and learning and health and wellness. Our network reaches well beyond Calgary and we continue to identify and develop a range of content, community, marketing and funding partnerships.

Access and inclusion is a critical component of a Prosperous City. In 2016, TELUS Spark partnered with 47 social service organizations representing a range of needs (homelessness, hunger, mental health, disabilities and addiction to name a few). Via this network, we welcomed 14,500 people who would have otherwise been unable to visit. We also welcomed thousands of Syrian refugees and displaced residents of Fort McMurray during the 2016 wildfires. TELUS Spark also introduced a new access program in partnership with school districts, targeting marginalized schools. Via this program we welcomed 1,500 students, who received free bussing, a subsidized curriculum-linked school program and a dinner and evening for the students and their families at the science centre.

Plans to commemorate TELUS Spark's 50th anniversary (1967-2017) were well underway in 2016 with events in the works including a nostalgic look back on the talent and diversity of the millions of people who have come through our doors in the last 50 years, a special civic art launch and a "Big Birthday Bash" on Neighbour Day, June 17, 2017.

Specific initiatives included:

- Welcomed a record number of visitors, at 431,262, higher than our first year of full operations
- Maintained admission pricing at 2011 levels to help TELUS Spark remain affordable/accessible to Calgarians
- Invested in new exhibits including 10 new exhibits in the Being Human Gallery, and hosted an ~8,200 ft² traveling exhibit called Body Worlds, highlighting the importance of vital systems in the human body
- Delivered teacher training program called Shift Lab, who's "alumni" now reach more than 4,000 students in classrooms annually
- Delivered curriculum-linked school programs to 82,000 students on-site, another annual record
- Prepared for new food services and retail operations, to be launched in 2017 and managed in-house, enabling TELUS Spark to achieve further financial sustainability



A HEALTHY & GREEN CITY

Calgary

As a LEED Gold building, TELUS Spark has made it a priority to encourage our members, guests, partners and sponsors to seek out and adopt innovative and clean energy technologies. Specifically in 2016, the Board of Directors allocated reserve funds to developing a



Responsible Energy Transitions strategy, including programs and potential permanent installations. In phase 1, we engaged our adult audiences in conversations about how we advance the goal of reducing greenhouse gases, a focus of United Nations Sustainable Development Goal #13 – Climate Action. (See image to the right)

Working with the Ministry of Environment and Parks, the Climate Change Office and the Energy Efficiency Advisory Board, along with other organizations such as Energy

Futures Lab and Student Energy, TELUS Spark intends to build on the work we started in 2016 and pursue funding opportunities for energy efficiency and air quality-related initiatives throughout the community.

Specific initiatives included:

 Celebrated the UNESCO-supported International Science Centre and Science Museum Day (ISCSMD) on November 10, 2016 as part of a global network of



science centres. ISCSMD brought attention to the need for institutions to proactively address global sustainability.

- Continued to promote and foster healthy lifestyles and encourage active living through play and learning opportunities in the outdoor park space (*Brainasium*)
- Delivered environmental stewardship and active living content as a cross-cutting theme of many of our school programs and Spring and Summer camps (See image to the right)
- Introduced public dialogue sessions and programs related to responsible energy transitions, including the addition of a second *Adults Only Night: Energy Series* which examined energy sustainability and clean energy concepts, technologies and values





INSPIRING NEIGHBOURHOODS

TELUS Spark is also a convening space which connects citizens with our partners and contributes to urban vitality. We are much more than a science centre and are proud to act as a lighthouse for innovation within the community. Some key accomplishments and initiatives which inspire Calgary's communities include:

- Installation of our first electric vehicle charging station late last year (See image to the right)
- Expansion of our Community Access program from 40 to 47 agency partners representing a cross-section of social needs, removing barriers to families
- Launched Spark Learning Connections program in partnership with 10 highneeds schools, providing busing and program subsidies to children in high-needs situations
- Partnered with other non-profit organizations to provide a site for their fundraising events, and other forms of community engagement, including Terry Fox Foundation, Inn From the Cold, Alberta Children's Hospital Foundation

A WELL-RUN CITY

- Continued to provide effective management of TELUS Spark city asset:
 - Maintained 2011 admission pricing to help TELUS Spark remain affordable/accessible to Calgarians
 - Transitioned to in-house food service delivery and retail operations to increase earned revenue
 - Proactive maintenance of an aging asset, largely conducted by internal talent
 - Cost-effective and/or partnered service contracts in utilities, landscape management, etc.
 - Retention and hiring of creative, skilled employees to operate and promote the facility
- Maintained and established new partnerships with other Calgary-based and international organizations as a way of bringing great content to our visitors and reducing costs via the sharing of expertise (e.g. TELUS Spark is a key contributor to the 2017 International Play Association conference)



6. Using your organization's existing performance measurement data, please provide selected 2016 performance measures that describe how much you did, how well you did it, and how Calgarians are better off. Please identify through BOLD font, 1-2 measures that are most significant and could be presented in an RBA style chart. *For more information please see the attached Results Based Accountability (RBA) handout.

	Performance Measure	2014 results	2015 results	2016 results	What story does this measure tell about your work? Why is it meaningful?
How much did you do?	Total Visitation Attendance 2014-2016 500,000 20,588 6,837 400,000 22,078 22,700 6,282 25,171 300,000 22,078 71,000 23,916 82,214 71,721 200,000 84,466 86,768 94,913 71,000	cility	375,076	431,280	TELUS Spark saw record attendance levels in 2016 with a 15% increase in total visitation over 2015, including 82,000 school students/chaperones. The traveling exhibit <i>Body Worlds</i> was part of that, boosting general admission and school student attendance. That said, when cross- referenced with visitor satisfaction (below), it also appears that the considerable improvements we made to the visitor experience and the marketing of that experience also made a difference. (See image to the left)
How well did you do it?	Visitor Rating = Expectations Met	85%	82%	98%	TELUS Spark conducts exit surveys throughout the year. In 2016, 98% of visitors were satisfied with their visit. (See



	60				image to the left)
	50 40 30 20 10				In addition, when asked, "What activities would you do in the next 3 months?", exit survey respondents noted 6 separate TELUS Spark experiences.
	0 Extremely unsatisfactory texternely unsatisfactory Nore than satisfactory Nore than satisfactory Nore than satisfactory Extremely attraction				TELUS Spark has also seen a significant increase in positive visitor reviews of the science centre. In 2016, we were ranked 24 of 267 "Things to do in Calgary". In addition, price sensitivity appears to have dropped off guests' radar.
How are Calgarians better off?	Reason for Visit = To Learn and Play	36%	49%	51%	Our visitors clearly come to "learn and play", which differentiated TELUS Spark from other attractions. Independent research from King's College indicates that families with high "science capital" have a higher likelihood that children will choose a STEM career. We believe our impact on the family unit is vital in this area.
	Calgary Board of Education award for programming in 2016.				The educator community also believes TELUS Spark is having an impact on STEM learning. The Calgary Board of Education honored TELUS Spark with the



	Lighthouse Award, particular our schoo and educator programming. (See image to the left)
	Calgarians have voted consistently withe Calgary's Child Awards including: 1. Best place to tak your kids on a crummy day 2. Best accessible/inclusive experience for kids
	with special needs 3. Best museum for families

FINANCES

7. What resources were leveraged to support operational activities in 2016?

City Operating Grant

Leveraged City operating grant by a factor of 4.5.

Volunteer Base

TELUS Spark is fortunate to work with members of the public who are dedicated to giving back to their community. In 2016 we recorded 19,729 volunteer hours largely in professional or skilled roles. This helped to manage staffing costs, maintain a high-level guest experience, while also providing meaningful engagement and skills development for our volunteers, some of whom joined us after losing work in the recession.

Access Programs

In 2016, TELUS Spark expanded our Community Connections Program from 40 to 47 agency partners representing a large cross-section of social needs. New partnerships included 4 Indigenous organizations and overall utilization of the program grew from 10,000 visits in 2015 to 14,500 in 2016, allowing us to share the world of science, technology, engineering, art and math with those who may not otherwise have had the opportunity.

Also last year, in partnership with 10 high-needs schools, we launched Spark Learning Connections which provides bus transportation and program subsidies to students in need. By the end of the 2016/2017 school year we will have reached over 1,500 students. The program culminates with a Family Science Night where all students, their families and teachers come to TELUS Spark for a free private function where students can share their experiences and a meal with their families. We are currently planning for an attendance of 2,000 in 2017/18.

Finally, our Camperships initiative provided 20 free daycamp spots to children in the



community who would not otherwise have the ability to access TELUS Spark day camps.

On March 7, 2017, the Calgary Board of Education honored TELUS Spark for 20 years of excellence in delivery of programs such as Open Minds, Spark Learning Connections and Shift Lab with the Lighthouse Award.

Media

In 2016, TELUS Spark made it a priority to develop deeper relationships with our media partners. Key to our ability to continue to provide fresh, innovative programming and exhibits for our guests, is our ability to meet revenue targets. By increasing our earned media coverage, we were better able to communicate to the public the vast array of learning and play opportunities offered at the science centre. Coverage also focused on standard programming at TELUS Spark and more specifically on Energy Futures Lab, energy sustainability topics, International Science Centre and Science Museum Day, Alberta Student Energy Summit, and school and educator programs like Shift Lab, Open Minds and Prototype Project.

Strategic Mutually Beneficial Partnerships

In 2016, TELUS Spark initiated work to further develop our strategy for partnership with like-minded organizations in an effort to pool resources, access new audiences and leverage existing data/experience. By partnering with other non-profit organizations, TELUS Spark provides a platform for them to engage community, raise funds, etc. and we, in turn, receive exposure to audiences we may not have otherwise reached. (e.g. Alberta Health Services, Decidedly Jazz Danceworks, The University of Calgary, and the Calgary Public Library). Planning was also underway for delivery of a series of "Spark Talks" in 2017, focused on the importance of the integration of play into three distinct areas; innovation, learning and wellness, which will expand our network further.

8. Do you anticipate any changes to plans and/or budget projections for 2017-2018?

The most notable change in the 2017 budget is related to the internal costs and associated revenues for the new food services and retail services operations. Previously developed budgets for 2017 and beyond did not factor in these added revenues and expenses.

Additionally, Q1 2017 attendance revenues are tracking lower than planned. Economic trends may be a factor, and management and the Board of TELUS Spark are closely monitoring performance and making adjustments. See #9.



9. Please describe the impact, if any, of the economic downturn on your organization's operations or revenues including any adjustments you have made to your operations.

TELUS Spark relies largely on earned revenue from a combination of general admission fees, membership and group sales, traveling exhibit surcharges, special event rentals and in 2017, food services and merchandise sales. In 2016 TELUS Spark saw two primary effects of the downturn: [1] reduced corporate donations and [2] reduced facility rentals. That said, this was offset by best-year attendance and group sales. The popularity of *Body Worlds* resulted in a solid stream of general admissions, group sales, school program bookings and related revenue, which may have helped to offset or delay some of the negative effects that the downturn in the economy may have had.

Unfortunately, for 2017, indications are that the economic downturn will have a significant negative impact on attendance numbers as our visitors, members and corporate partners struggle.

LOOKING FORWARD

10. What are your priorities and deliverables for 2017-2018?

- **50th Anniversary of TELUS Spark / 150th Anniversary of Canada** In July 1967, the Centennial Planetarium opened, and with it the origins of Spark. Now, 50 years and one new location later, Spark will celebrate its anniversary and the anniversary of Canada with a year-long series of events and exhibits.
- Star Trek: The Starfleet Academy Experience, Jan 4-Jun 4. The exhibition is enriched with the actual science behind the science fiction of Star Trek.
- **Spark Talks, Jun-Dec.** Spark Talks focus on the ability of "play" to enhance innovation, learning and wellness. TELUS Spark will broaden our external audience and embolden new perceptions of TELUS Spark as a leader in provision of thought provoking, conversation stimulating content and showcase the unique qualities of our programming, exhibits and space.
- **Power of Ideas, Jun 8-13.** This inspiring exhibition from Perimeter Institute enables youth and their families to take a hands-on approach to learning the process of science. The exhibit will launch on June 8 with a lecture by Neil Turok, Director of Perimeter Institute for Theoretical Physics
- Quantum: The Exhibition Exhibit, June 26-Aug 17. The Quantum exhibit delves into the worlds of quantum mechanics, information technology, science and technology and the future of quantum while showcasing immersive and interactive elements. The exhibition also showcases Canada's expertise in the numerous fields of quantum physics.
- **50 Years of Spark, Jun Dec**. Special anniversary exhibits and artifacts will include nostalgia pieces from the original Centennial Planetarium and around Calgary.



• **Big Birthday Bash, Neighbour Day, Jun 17.** TELUS Spark will join the City of Calgary's Neighbour Day festivities by hosting a grand birthday barbecue, free parking and admission to TELUS Spark for the first 1,000 guests.

Launch in-house Retail and Food Services

As TELUS Spark reviews its operation and financial sustainability, two opportunities to generate additional earned revenue were apparent: food services and retail. Originally operated by third-parties when we opened, the contract expirations at the end of 2016 represented an opportunity to bring these operations in-house.

One of our key deliverables for 2017 is the opening of our cafe – *Social Eatery by Roger Mooking.* We're excited to welcome Chef Roger Mooking, Food Network Canada and Cooking Channel host, as the Culinary Director of TELUS Spark. The fresh and flavourful new menu options and design-forward space will provide guests with an exciting culinary experience and the opportunity to engage with other guests in conversations about issues that matter. In addition, we are proud to expand our partnership with locally owned CharBar to deliver catering as part of our facilities rental services.

Secondly, the new Spark Store will bring the best of STEM-focused toys, kits, books and associated products to our visitors. This operation will evolve over 2017-18 as we test and learn the interest of our visitors with new product and service opportunities.

Responsible Energy Transitions

The positive transition to a sustainable energy system is founded on increasing the awareness, understanding and commitment of individuals to integrate sustainability principles into the way they live, work and grow the economy. TELUS Spark has the opportunity to increase the frequency and depth of conversations between parents and children about energy systems. Our unstructured, innovative space, programs and exhibits help our members and guests to increase their own awareness and understanding of the role science, technology, engineering, math and design in achieving the goal of a sustainable energy system for Alberta. In 2017, TELUS Spark has committed resources to focus specifically on the development and execution of initiatives designed to convert conversations into positive actions.

Infrastructure Feasibility and Design Work

Additional school program space, the potential for an onsite day-care/pre-school, expanded catering services, and future adult learning spaces are all under analysis as we develop concept plans for building expansions. Business cases have been completed and architectural planning and schematic design are underway. Funding feasibility studies will be completed in 2017-18.

Education Initiatives

Education-based programs are a key pillar of the capabilities and successes of TELUS Spark. Adult learning, teacher training, future work in early childhood education, and integrating new research in family learning (family science capital), will be key strategic priorities in the coming years.



Calgary Science Centre Society (TELUS Spark) Civic Partner Annual Report 2016



UPDATE ON RISK MANAGEMENT AND GOVERNANCE

11. What are your organization's top 3-5 strategic risks? Describe briefly how you are managing these risks.

Admission Revenue

TELUS Spark continues to rely on admission sales as our largest single revenue source. While trends provide some level of assurance that annual revenue numbers will remain consistent, there are no guarantees that this revenue will continue to provide the current 52% of the annual operating budget (including membership sales). TELUS Spark monitors attendance levels on a daily basis and makes real-time adjustments as required to help ensure we meet monthly/annual targets.

Corporate Donations

Although TELUS Spark corporate donations represent a smaller portion of operating funds at 6%, lower than many other peer organizations, this funding source will continue to play a key role in our ability to maintain infrastructure, embark on important new initiatives and remain committed to our deficit reduction schedule. We have a team dedicated to managing our relationships with existing corporate donors. The same team is responsible for identification of new donor opportunities.

Competitive Environment

Without sufficient funding to support TELUS Spark's long-range plan (LRP), changes to the competitive landscape of leisure activities in Calgary could pose a risk to our current competitive advantage. Specific risks include the lemur and panda exhibits planned at the Zoo, events at the National Music Centre and the expansion of "risky play" offerings in the style of TELUS Spark's *Brainasium*. TELUS Spark's Board of Directors is well versed in the competitive nature of our business and the development of our 2020 LRP identifies a variety of mitigating techniques we can use to remain competitive.

Changing Demographics

Without appropriate and funded evaluation for audience-focused program and marketing strategies, changing demographics in the city (ever-increasing number of new Canadians and seniors) could pose a risk to Spark's attendance. In 2016, the Marketing and Communications team conducted additional persona assessments in order to better understand Calgary's changing demographics. As a result, we saw the addition of two new personas which helped target marketing activities and influence program and exhibit development to provide content that is both interesting and appropriate for all of our audiences. We will assess and enhance our understanding of our audience on an ongoing basis.

Program Operating Expenses

The programs TELUS Spark delivers to the community can be labour intensive. While we monitor and balance compensation expenses with program material expenses to optimize the value for the visitor, a shift to technology and innovation centred experiences will likely result in higher operating expenses. We use recycled materials where appropriate and track and review operating expenses on a regular basis to identify cost savings opportunities.



12. Summarize any activities in 2016 that increased your Board's knowledge and awareness about industry trends, impact of changing economic conditions, risks faced by the organization, or other information needed to make informed decisions.

TELUS Spark hosts an annual Board Retreat for Directors which includes a full day focused on review of strategic trends and identification of opportunities in the sector. Board education activities are also part of the retreat.

In addition, in-depth research and reporting on sector trends and comparative measures was completed in 2016 for TELUS Spark by Lord Cultural Resources. The results of the report were shared with the Board during two strategic planning workshops where insights and strategy discussions occurred. Further application of the report findings is already underway in 2017.

Operations reports are provided on a monthly basis to update the Board on priorities and indicators of progress against identified strategies. The CEO also provides regular intelligence regarding the impact of changing economic conditions, risks and opportunities through quarterly Board meetings, regular Committee meetings, and through routine communications with the Chair and Vice-Chair of the Board.

Finally, an annual Board Education plan is developed by and delivered through the Governance & Nominating Committee to the full complement of Directors.

13. Will any Board or senior management positions be vacant in 2017? If yes, please describe succession plans that are in place.

There are no vacant senior management positions at this time.

There are two Board positions vacant at this time. Prospect review and recruitment of new Directors for the Board is an ongoing exercise that ensures refreshing of perspective and experience. Approximately 2 new members are recruited annually to maintain bylaw requirements. Of a maximum of 15 positions, 1-2 are typically vacant to allow for timing opportunities when strong candidates are available. A Director's Skills Matrix is a major tool for analysis of diversity and requirements for the Board.



14. (a) Mark an "X" by all statements that apply to your organization:

Our organization uses:

- **_X**_ Defined term limits for Board members
- **_X_** A skills and experience matrix to identify gaps on the Board and recruit new board members.
- **_X**_ A structured process for identifying, monitoring and managing risk.
- ____ A Board policy for risk management.
- **_X**_ A risk map, matrix, register or similar tracking tool to assess the risks we face.
- ____A risk management plan or other tool that is updated at least annually.
- **_X**_Tools to communicate key risks to the Board at least annually.
- ____ A Board committee delegated with the responsibility for oversight of our organization's risk management practices.

____ A formal crisis management, business continuity, or similar plan to be ready for an emergency situation.

(b) Add any additional comments about your organization's risk management practices:

CAPITAL AND ASSET MANAGEMENT

15. Provide a summary of your organization's 2016 capital development, including specific lifecycle/maintenance projects.

In 2016, TELUS Spark added 10 new experiences to the Being Human Gallery. These new exhibits were in response to visitor surveys and feedback. Of note, we have reintroduced the "Bed of Nails" exhibit, a popular experience from the original science centre site.

In 2016, we also made modifications to the Administrative Offices to accommodate work spaces for new staff, in particular staff required to support in-house food services and retail operations.

16. What funding was leveraged to support capital activities in 2016?

In 2016, TELUS Spark was awarded a provincial CFEP grant to support the ongoing capital expansion strategy development. In addition, TELUS Spark maintains a financial reserve that continued to receive pledge payments from the original capital campaign. This reserve, governed by the Board of TELUS Spark, supports major projects, and in some cases, is regenerated with new sponsorship agreements against these projects.