NOMINATION FORM

Intelligent Community of the Year Awards

Phase One: Smart21 Communities of the Year

2014

The Intelligent Community Forum will use the data provided on this form for the first stage of its international awards program: the selection of the Smart21 Communities of the Year, semi-finalists for the Intelligent Community of the Year award. The Smart21 will be announced in October at a ceremony hosted by the Institute for the Study of the Intelligent Community at Walsh University in Canton, Ohio, USA. After the announcement of the Smart21, the Awards program will proceed as follows:

October-December 2013
Each of the Smart21 Communities is required to complete a detailed questionnaire in order to be considered for ICF's Top7 and Intelligent Community of the Year (ICY) awards. The information in this form will be evaluated by an independent research firm, which produces numerical scores for each community.

January 2014
The seven top-scoring communities are named as ICF's Top7 Intelligent Communities (finalists) online and at an event at Taichung City, Taiwan, the 2013 Intelligent Community of the Year.

Feb-April 2014
The Top7 Communities host an ICF co-founder for not more than two business days, at the community's expense, for a site visit to validate the information provided to the Forum. The co-founder's report on the community is reviewed by the international jury, which votes on its choice for ICY. To select Intelligent Community of the Year, ICF combines the quantitative scores of the independent research firm on a weighted basis with the independent votes of the jury.

June 2014
ICF invites representatives and citizens from the Top7 to New York City for its annual Summit. Each of the Top7 will participate in roundtable discussions, a ceremony honoring their achievement and an individual interview on stage. On the final day of the Summit, one of the Top7 will be named Intelligent Community of the Year. The Intelligent Community of the Year is barred from entering the Awards program again but is named to the international jury.

Association
Communities named to the Smart21, Top7 or Intelligent Community of the Year become eligible to join the ICF Foundation, the membership association of the Forum, which provides a permanent platform for collaboration on economic development and driving the growth of the Intelligent Community movement.

Completing the Application. Fill in the fields below. Each field will expand to make room for your complete answer. Save the file to your computer and email it to ICF at awards@intelligentcommunity.org **by September 23, 2013.** The Analysts for the Smart21 will use only the information on this form in making its evaluation. Do not send additional information or attachments.

Deadline for Nominations:
23 Sept 2013

2014 Theme: Community as Canvas. In the 2013-2014 Awards cycle, ICF will focus on the power of culture to help or hinder the transformation of towns, cities and regions into Intelligent Communities. Culture is a word that defies easy definition. Say the word in one situation, and it is about the arts and traditional crafts. Mention it in business, and you are talking about the shared identity of the group and how individuals in that group should behave. In a place, whether city or nation, it means the accumulation of history, language and shared experience that shapes every individual and institution. Culture is all of these things – which is why it matters so much. Culture gives us a sense of identity and belonging. It is the foundation for all progress and also and set limits to how much progress we can make. The 2013-2014 Awards will examine three specific aspects of culture in the Intelligent Community - in local arts and crafts, as heritage, and as embedded attitudes – and how culture helps power community success. More information is available in the white paper, *Community as Canvas*, available on the Nominations page at www.intelligentcommunity.org/nominations.

Nomination

Name of Community

Winnipeg, Manitoba, Canada

The following questions provide an opportunity to tell the community's story: its recent history and background, the challenges it faces, how the community has met those challenges, and the results it has achieved. **Before answering the questions, review the description of the Intelligent Community Indicators and Success Factors** beginning on page 20 or visit ICF's Web site at www.intelligentcommunity.org. Your nomination will be more successful if you fully understand how ICF analyzes a community's development.

As you answer the questions, you will find overlap in content among them. This is deliberate: it offers you the opportunity to tell multiple stories about your community's experience. Wherever possible, avoid repeating information from one question to another.

Vital Statistics

Population	Municipality		Metro Area (if applicable)	778,400
Labor Force	Municipality		Metro Area (if applicable)	441,700
Area	Municipality		Metro Area (if applicable)	4,078 kms

1. **Background** (Maximum: 1 page) Describe the community's location, features of interest, demographics and history that relate to current conditions.

Winnipeg, Manitoba, is a community engaged in numerous initiatives directly related to the values and principles inherent in an intelligent community. Curiously, these activities largely developed in isolation from each another: each has its own agenda, and each works within its own realm of partnerships and collaborations. But perhaps this isn't overly surprising, given that Winnipeg's isolation has long played a part in the geographic—and altogether human—challenges that have shaped who and what were are as a city and a citizenry.

Consider this: an underlying ethos ingrained in the majority of our most important initiatives is the pioneering "can-do" spirit inherited from civic leaders long gone, where cultural pursuits and economic prosperity became the means of communicating to naysayers that Winnipeg was a place that could compete with the shining metropolises of the age and come out on top. Despite our isolation—and arguably precisely because of it—a kind of externally competitive yet internally community-centric and self-sustaining do-it-yourself attitude pervades here, which also invariably nurtures a kind of inclusiveness that has always somehow joined us together toward common ends.

Winnipeg's isolation necessitated diversity in all things. Its pioneers recognized over a century ago that innovation stemming from a can-do attitude and creative inspirations would provide the straightest path toward economic, social, and cultural growth. Capitalizing on the historic interdependence between agriculture and transportation, for example, Winnipeg eventually morphed into the centre of Canada's grain trade, the Gateway to the West, and the western crucible of the Canadian rail industry. Winnipeg would later become the birthplace of Canada's first national airline.

This pioneering spirit and inclusive attitude is alive and well in our city. As in the past, civic leaders continue to find a welcome footing here when venturing into uncharted territory. Nowhere is this more evident than with the imminent opening in 2014 of the Canadian Museum for Human Rights (CMHR). Given everything the museum represents—and the decades-long evolution of a city that made its conception and eventual construction possible in the first place—it's hardly surprising that Winnipeg would give rise to this enduring edifice, the first new national museum created in Canada since 1967 and the first to be located outside the National Capital Region. Like so many earlier examples from Winnipeg's

storied past, the CMHR is—at its heart—a nearly inevitable response to the isolation that gives birth to the farsighted leaders and all-too-willing co-conspirators required to imagine and execute tangible wonders that have inspired, entertained, and enlightened millions.

Winnipeg has long been a city of immigrants. Since our beginnings, cultural differences—and the subsequent integration of these seemingly incongruent practices into a unifying whole—have been a regular part of life for all Winnipeggers and a key component of our collective strength. After a slow period of immigration here in the 1990s, the rate has recently spiked sharply. Winnipeg's immigration rate is projected to increase to more than 10,000 immigrants per year by 2020. And given the city's rising tide of immigrants once again, familiar yet new cultural differences present themselves in ways that both reflect and supersede similar cultural challenges within our shared past.

Winnipeg is recognized as a vibrant cultural capital. Richly steeped in history, Winnipeg's multicultural birthplace is marked by the convergence of the Red and the Assiniboine rivers. Now a green urban oasis known as The Forks—a fitting home to the CMHR, to be sure—this spot was first discovered 6,000 years ago by various First Nations tribes who congregated and traded here as they traversed the prairie landscapes that sustained them both spiritually and physically.

Recognized as the 2010 "Culture Capital of Canada," Winnipeg is a midsized city of culturally diverse people who bring a cosmopolitan, international flair to the city, as well as a warm and welcoming spirit. The city's diverse cultural makeup shines brightly through its globally inspired cuisine; its wide array of world-class arts, culture, and festivals; its many one-of-a-kind shops and trendy boutiques; and a pervasive opportunity to experience breathtaking prairie scenery across all seasons.

Culturally, Winnipeg's offerings easily surpass most cities of 750,000 people. The city boasts Canada's Royal Winnipeg Ballet (the nation's oldest ballet company), Rainbow Stage (the country's oldest and largest outdoor theatre), the Winnipeg Symphony Orchestra, the Royal Manitoba Theatre Centre, the Winnipeg Art Gallery, and a multitude of smaller performing companies and galleries. In the summer, there's the Winnipeg Fringe Theatre Festival and the International Children's Festival, both drawing acts and attendees from around the globe. The Winnipeg Folk Festival, held each July at Bird's Hill Park near Winnipeg, attracts tens of thousands of music fans across its four-day run. With two major universities, as well as professional sports represented by the NHL's Winnipeg Jets and the CFL's Winnipeg Blue Bombers football club, it's difficult to think of Winnipeg as just another prairie town.

A critical component to Winnipeg's arts and culture scene is its uniquely vibrant creative community; it's the city of choice for artists of all sorts—from musicians, painters, and sculptors to digital-age game designers, cinematographers, and architects. These essential individuals have not only provided new visions, but also have played important roles in conserving, promoting, and protecting Winnipeg's heritage. These people live in an extraordinary cultural centre and are internationally recognized for their artistic and creative diversity. Locally, this rare mix of ingredients, when coupled with business icons, entrepreneurial pioneers, and world-renowned intellectuals, has created a sense of community that makes Winnipeg an unrivalled example of what can happen when isolation in all its forms ironically creates an outward-looking optimism rather than an inward-turned trepidation.

2. **Challenge** (Maximum: 3 pages) Describe the economic, social, political, and technological challenges to the community's future that led it to begin a process of change using information and communications technology.

Winnipeg isn't alone in confronting multiple challenges that promise to impact its citizens for generations. Population and consumption growth, increasing global competition for resources, environmental sustainability, and the effects of climate change will all play consequential roles in the city's future growth and prosperity.

One of the most pressing challenges in developing our local economy concerns the need to consider a vision that combines the city's many unique assets and attractions into a vibrant and compelling whole to

create a genuine and authentic place for business investment, employment, and visitation. Winnipeg needs a vision that is reflective of the diversity of the community, sensitive to its history and authenticity, yet clear, intelligent, and willing to take risks and boldly proclaim its inimitability. Winnipeg needs a vision that creates an emotional relationship between everything the city offers to potential investors, residents, or travellers. And finally, Winnipeg needs a vision promoting a singular experience that can't be duplicated elsewhere without sacrificing something valuable—and palpable.

But vision necessitates action. As the global market becomes increasingly competitive, companies must streamline business units and become more efficient. Firms have therefore reduced non-value-added activity and emphasized innovation. In particular, they have focused on niche markets and on expanding their international supply bases. Several Winnipeg industry clusters are characterized by low levels of intra-industrial competition. This is evident in the aerospace cluster, for example, where its constituents are intently focused on a few key niche markets requiring a high degree of specialization. While area industries have excelled within this sphere, limited capacity currently exists to expand skills and expertise along the regional supply chain. This narrow scope has resulted in low levels of horizontal integration. If Winnipeg industries do not contemplate new growth opportunities in sustainable ways, this parochial focus will remain a significant barrier to growth. Consequently, perhaps the greatest developmental opportunity for local businesses involves the engineered expansion of new types of economic activity and the subsequent elaboration of regional supply chains.

Perhaps more than ever, research and innovation must be embraced in developing new products and practices critical to the competitiveness of industries driving Winnipeg's economy forward. The majority of companies are small to midsized enterprises with extremely limited access to research and commercialization support. Industry needs to stay ahead of the competition by building a strong intellectual property foundation and an improved technology infrastructure with access to financing, talent, and markets.

The need exists to increase the ability to effectively deploy applied research into industry through enhanced networks and collaborative environments—and to establish more viable commercialization strategies. Winnipeg is challenged by its aging networks and limited or complete lack of access by industry to high-speed testing and delivery pipelines, which invariably hampers the innovation process. It's very difficult for businesses to lobby for the changes required of telecommunications companies and government agencies regulating the space. To prosper, Winnipeg must develop a shared strategy for deploying a progressive infrastructure plan that provides both producers and consumers with a globally competitive platform.

With regard to collaborative environments, it is difficult for small and medium-sized enterprises (SMEs) to navigate academic channels to find appropriate research and knowledge exchange points for technology transfer. Also absent is a central point of contact for knowledge dissemination and shared program development. A centralized repository serving to connect hubs across the globe would achieve efficiencies in knowledge sharing, increase innovation, and improve speed to market (and potential success).

In terms of commercialization, Winnipeg businesses consistently lack the international partnerships and networks required to access global markets with ease. Our industries must be more sensitive to the needs of a global market and more knowledgeable of indigenous characteristics. Developing that market knowledge through trade programs, training initiatives, and expert mentorship will help local products get to market faster and attain greater success amongst a worldwide consumer base.

Action is needed to activate sustainable regional economic advantages by enabling researchers, innovators, and business leaders alike to advance Winnipeg's productivity performance. This can be accomplished by leveraging partnerships and by building capacity in industry. Community stakeholders must pursue coordinated and collaborative opportunities with greater integration across value chains. As

the issues facing various industries grow in complexity, partnerships have become the preferred model to maximize resources, tap into specialized expertise, and elevate science, research, and innovation capacity in Winnipeg. Cooperation—coupled with relevant, actionable research—will help realize these results with the greatest possible efficacy.

Winnipeg's enabling factor relative to capacity building is its workforce. The city's shortfall of knowledge-based workers results in part from reduced enrollment in post-secondary institutions. Gaps in the availability of skilled science and technology workers are emerging within key industry sectors, among them information and communications technology (ICT) and interactive digital media. Addressing this issue requires a concerted effort to increase both the number and level of skilled workers in the community—our critical mass. Concurrently, activities must ensure the overall environment is conducive to creating quality business opportunities allowing companies to take maximum advantage of new and existing skilled workforces developed in Winnipeg. Necessary actions are needed to nurture, attract, and grow these opportunities in a sustainable fashion.

Similarly, education and training initiatives must provide firms with the qualified staff they require, while offering a convincing rationale to young workers for remaining in the community. And although implementing coordinated strategies to increase both the number and level of skilled workers in Winnipeg is essential, these approaches must nevertheless remain sensitive to the potential windfalls presented by older workers, the disabled, and skilled immigrants.

A corresponding concern involves Winnipeg's young and growing aboriginal community. Aboriginal youth will soon account for one in four new hires but are traditionally underrepresented in the high-skill, high-paying jobs that populate various technologically enabled fields. A pervasive lack of awareness and exposure to these kinds of employment opportunities among aboriginal youth further complicates matters and encumbers appropriate developmental and educational paths. To mitigate this deficiency, efforts must focus on specific, targeted capacity building within the aboriginal community. The inclusion—digital and otherwise—of this growing population within Winnipeg is considered critical to creating sufficient workforce capacity across multiple sectors.

Building on their founding values and on the fundamental and long-standing work already accomplished, local stakeholders from institutional, government, and interest groups must institute a series of initiatives designed to advance digital inclusion efforts. Ideally, a core objective would be to expand opportunities by enhancing the skill sets of people from all backgrounds and circumstances. The desired outcomes should include building capacity, retraining employees, improving job skills of the unemployed, and preparing citizens for employment in emerging economic areas.

The principal challenge: determining the most effective means of encouraging the use of technology by all members of the community. At a basic level, this can perhaps be accomplished by making functional computers—and Internet connectivity—accessible to those who would otherwise be denied access. Success on this front would invariably enhance quality of life, literacy, and fluency, as well as the specialty skills that have become a prerequisite to securing broader and better employment opportunities, even in entry-level positions.

As a result of these mitigating factors, Winnipeg's post-secondary institutions, among other entities, are now presented with the challenge of delivering the goods. And yet the importance of community-based learning, and understanding that this kind of learning is embedded in everyday settings—the family, the neighbourhood, the school, and the workplace—is critical to overall success. The foundations of lifelong learning must be provided by all to enable every person to participate and contribute to their community and society. The goal is to encourage and support Winnipeg's post-secondary institutions in instituting innovative initiatives to extend their commitment to community learning to help address issues of access and community capacity building.

"Community learning is becoming a state-of-the-art term that applies to a suite of post-secondary institutional activities. It describes the active integration of the university into the social, cultural and educational life of the community. It recognizes the responsibility of the university to function in an accessible manner and to open itself up to the wide diversity of knowledge and experience represented within society." (Dr. Lloyd Axworthy, president and vice-chancellor of the University of Winnipeg)

With a skilled workforce comes innovation and creativity. This flourishes in positive environments that encourage entrepreneurial enterprise and investment. As our regional governments adopt policies to encourage greater innovation and creativity, Winnipeg must ensure that its business environment (including tax policies, regulations, and programs) meets the needs of its knowledge-based economy, so it can compete effectively on a global level. And although it is critical that the business community keeps pace with alternative jurisdictions in this respect, it must also prove instrumental in finding novel ways to help establish and sustain the requisite knowledge infrastructure through education and training, research and innovation funding, and access to Internet connectivity across the region and throughout the globe.

Despite the rapidly changing world we live and compete in, and the tendency to think of the challenges ahead of us as unique, Winnipeggers can—and should—take comfort in the notion that the city's founders faced similarly daunting obstacles when they started to shape the "Chicago of the North" over 100 years ago in a way that would set the stage for its current diversified successes. In many respects, Winnipeg is still considered an isolated city in the middle of nowhere. But thanks to those who braved this environment so long ago—to those who planned for a city's eventual greatness with little justification for it at the time (across infrastructure, architecture, and arts and culture, for example), today's Winnipeggers understand that the work required to push our intelligent community forward into the twenty-first century and beyond is a both responsibility we owe to our forefathers and a legacy we must protect for our future generations.

3. **Strategy & Programs** (Maximum: 3 pages) Explain the ideas, plans and process that the community put into place to address these challenges and seize opportunities. Describe the organizations involved, how collaboration was established, and how key ideas were developed and formed into a coherent strategy. Please organize your response by Intelligent Community Indicator.

Introduction

Winnipeg's enduring diversity demands dedicated leadership across multiple disciplines. As a result, an array of compelling projects were contemplated as evidence of our determined climb to the top of the intelligent community ladder. But given the requisite need to narrow the field, the marquis initiatives presented hereafter best reflect what our community is doing to address the contemporary challenges noted in the previous section. These solutions range from developing capacity in our broadband networks by incorporating the use of TelePresence technology to increasing digital access to those who would otherwise be shut out, and from diversifying our industries through innovation to exposing marginalized students to digital technologies in order to create a more robust knowledge-based workforce.

Broadband

Dr. Lloyd Axworthy—president and vice-chancellor of the University of Winnipeg, Nobel Peace Prize nominee, and former Canadian Minister of Foreign Affairs—has routinely expressed a visionary passion for our city centre. Like Winnipeg's earliest civic leaders, he believes the overall health of our city is dependent on a thriving downtown. In realizing this vision, the Richardson College for the Environment and Science Complex (Richardson College) was publicly launched with the unveiling of a $3.5 million donation from the Richardson Foundation, James Richardson & Sons Limited, and members of the Richardson family. This gift established Richardson College for the Environment. Two months later, the Manitoba government announced an unprecedented $25-million capital investment in the University of Winnipeg to aid in construction of the Science Complex, with a further $7 million gifted for laboratory and vivarium development. In 2009, the federal government contributed an historic $18 million infrastructure grant to support the project.

One of the most intriguing projects at the college is the world-class Cisco TelePresence system housed at

the University of Winnipeg's Cisco Innovation Centre for Collaboration Technologies, whose mandate is to explore the collaborative potential of high-speed fibre optic networks. The TelePresence vision began with a conversation about global networks between two distinguished Winnipeggers. At a Cisco conference in San Jose, California, Hartley Richardson, one of the main private-sector contributors to—and inspiration behind—the development of Richardson College, was chatting about global networks with Robert Lloyd, president of development and sales at Cisco Systems, himself born and raised in Winnipeg. The return on a TelePresence investment was vigorously discussed around issues relating to remote areas, small centres, and aboriginal communities. This discussion was later brought to the attention of Dr. Axworthy. And the seed was planted.

Following approval from the university's board of regents, an application to the Cisco Centre of Innovation was made in collaboration with Cisco Systems Inc., Cisco Canada, and the University of Winnipeg. Both the federal and provincial governments supported the vision and, after a number of deliberations among potential private and public partners, the project got the green light.

The Cisco TelePresence system is an integrated combination of technologies and services designed to create a truly collaborative environment. It creates a live, face-to-face communication experience over a broadband network. TelePresence helps people meet and consult with experts, share content, and create high-quality video recordings and events, all using the power of the network to create a uniquely immersive experience. This virtual meeting system promotes energy conservation by reducing travel and delivering measurable energy savings. Further, it enables high-quality distance education and more effective collaboration with research sites around the world.

A second TelePresence system, donated by Cisco, is inside the university's Faculty of Business and Economics at the Buhler Centre. Eventually linking to the University of Winnipeg will be two additional TelePresence systems, one in Brandon University and the other in University College of the North (based in The Pas, Manitoba). Adding to the systems will be Cisco's unified communication and collaboration technologies, including WebEx Connect.

Knowledge Workforce

To increase Winnipeg's knowledge-based workforce, collective efforts are underway to align educational institutions with industry needs, focusing on increasing and sustaining employment among key industry drivers. This is most notably being accomplished via concerted efforts involving investment attraction and business development. Canadian Tire, one of Canada's most iconic brands specializing in retail and automotive service, recently launched an advanced cloud computing centre and app factory here in Winnipeg. The centre will feature the latest energy efficient and green computing standards and will be hardwired directly to the Communitech Hub, Waterloo Region's nucleus for the commercialization of innovative technologies.

Winnipeg was selected for several reasons: a well-established ICT sector, affordable access to power, and a centralized time zone, for example. Initially, Canadian Tire only intended to establish a data centre; however, following the company's realization that Winnipeg boasts a vibrant interactive digital media community, its executives elected to expand their assessment to see if an "agile application development component" could also be built.

Critical to Canadian Tire's operations is the need to access a sustainable, creative workforce. Recognizing the potential opportunity for added employment, YES! Winnipeg, a division of Economic Development Winnipeg Inc., led the charge and coordinated a team of stakeholders from Winnipeg's post-secondary institutions in forming a partnership with Canadian Tire. But post-secondary institutions weren't the only entities involved; numerous additional stakeholders were also actively engaged in the effort to land the Canadian Tire account. This expanded team of stakeholders included New Media Manitoba, the Information and Communication Technologies Association of Manitoba (ICTAM), and Manitoba Hydro, among others.

While the Canadian Tire story is a prime example of how Winnipeg's civic leaders can successfully rally around the specific objective of enhancing the knowledge workforce to continue laying the groundwork for an increasingly intelligent community, it is by no means the only evidence of Winnipeg's pioneering attitude in this regard. The Digital Voices Project originated at Sisler High School, Winnipeg's largest high school with almost 2,000 students, as a means of capturing the attention of individuals interested in indigenous education. The program addresses the demographic makeup of the school's catchment area within the inner city. Lots of aboriginal students go to Sisler, as do many children who have recently immigrated to Canada.

The program's main objectives focus on enabling twenty-first century learning by providing students with relevant skills in cutting-edge digital technology that can springboard them into post-secondary or employment opportunities. This is chiefly accomplished by exploring personal, familial, and cultural stories via various innovative technologies. An impressive 27 partners were involved either as host schools or as contributing corporations and businesses. Among the most notable were Microsoft Canada and Polycom, an industry leader in voice/video teleconferencing.

After successfully completing this two-credit course, students achieving a grade of 80 per cent (or higher)—and who meet the articulation agreement setup—receive a digital media credit at the University of Winnipeg. This has proved a compelling incentive to students from lower socioeconomic backgrounds to continue their studies at the post-secondary level.

Digital Inclusion

Digital inclusion requires broad-based penetration within all segments of a community. In Winnipeg, this isn't happening solely as a by-product of government action; it's happening because individuals, local government bodies, businesses, not-for-profits, special interest groups, and an array of other stakeholders are combining forces to create the kind of environments that make digital inclusion possible—and practical.

Through its Winnipeg Public Library system, the City of Winnipeg recognizes that it can ensure everyone has ready access to digital technologies, together with applicable training and support, especially for those who find themselves on the wrong side of the digital divide. The City of Winnipeg has cooperative, high-capacity networks at its disposal. Appreciating the opportunity this presents to advance digital inclusion initiatives, it has developed partnerships with other organizations to share networks and leverage infrastructure investments. The City contracts with Shaw, a regional telecom carrier, to provide free WiFi service in all Winnipeg Public Library locations.

The library recently enacted a series of policy changes and service improvements to further its digital inclusion efforts, like introducing free Wi-Fi, increasing online content, and offering two-hour workshops to help build and improve computer and Internet skills. Children could "Read Away Your Fines," and reference materials could be checked out for the first time. E-books and audiobooks were made available in Apple Macintosh as well as MP3 formats, and unsold books could be donated to local community groups. E-commerce also became a reality, with online payment available via credit card.

Supplementing the laudable efforts of the Winnipeg Public Library are the abundant community-based organizations that provide access to digital technologies, training, and support. One such establishment is the University of Winnipeg's Wii Chiiwaakanak Learning Centre, a drop-in centre for inner-city residents managed by the university's Aboriginal Student Services Centre. Funded entirely by donations from the private sector, Wii Chiiwaakanak offers free computer access along with complementary academic programs, traditional language programs, and a homework club.

Complementing these efforts is targeted outreach by local companies to successfully connect youth interested in digital technologies with the business world. The staff of Randstad Technologies, a firm that

connects global companies to customized technology, has chosen to work with R.B. Russell Vocational School (typically comprised of students from lower-income families) to furnish students with hardware, software, training, and incentives to encourage them to become more familiar with ICT avenues and to enable practice of basic digital literacy skills at home. Students are given access to the computers during the academic year, and if their attendance is suitably high, they are given outright ownership of these computers upon course completion.

Innovation

Research and development are key elements in creating an atmosphere conducive to innovation, but transitioning from R&D efforts to practical application is what really creates growth. An excellent example of this is the Composites Innovation Centre (CIC)—a not-for-profit corporation jointly sponsored by private industry and government—which supports and stimulates economic growth through pioneering research, development, and the application of composite materials and technologies for advanced manufacturing industries. This innovation platform has proven instrumental in assembling regional, national, and international research and commercialization partnerships. The CIC's goal is to develop pertinent technologies, promote industrial interest, and implement an economically viable supply chain to exploit sustainable materials for bioproduct applications within the aerospace, ground transportation, civil infrastructure, industrial, and medical sectors.

Thanks to its role with the Manitoba Bioproducts Strategy the CIC is becoming world-renowned for its work in the development and commercialization of natural-fibre materials used in composite structures. The centre spearheads several initiatives focused on the development and commercialization of biocomposites that use biofibres such as hemp and flax in place of artificial glass and carbon fibres for advanced composite applications in buses, recreational vehicles, sporting goods, and aircraft manufacturing.

The CIC works closely with major locally based clients like Boeing Canada, Cormer Group Industries, and Magellan Aerospace. The CIC is also the coordinator and driving force behind the establishment of Canadian Composites Manufacturing R&D Inc., a national aerospace-focused pre-competitive technology, development, and demonstration research consortium. In addition, the centre plays an analogous part in the operation of a biofibres initiative, and it works with diverse countries to implement research centres supporting technology-based advancements.

The CIC also serves as an important fixture in post-secondary education. It provides opportunities for faculty members to conduct research and gives students the chance to acquire practical on-the-job experience. As well, the CIC assists in the ongoing training and skills development of industry professionals through its technology transfer program, which brings together engineers from local industries and shares with them the latest developments in composites technology.

Over the years, the CIC has morphed into a chief enabler of Winnipeg's innovation ecosystem, providing a client-driven set of engineering, prototype development, testing, project management, and business-planning services to the composites community. As a direct result of this centre's assorted successes, Winnipeg is now considered the central hub of the country's composite materials industry.

Marketing and Advocacy

A division of Economic Development Winnipeg Inc., Tourism Winnipeg and its industry partners are engaged in an exciting effort to reassess Tourism Winnipeg's fundamental identity and future direction via a Master Tourism Plan. A conscious effort was made to think strategically, document the basis for direction, establish priorities, enhance organizational effectiveness and accountability, define metrics, and draw upon teamwork and expertise. The paramount goal: to generate increased tourism activity and improve Tourism Winnipeg's effectiveness.

Tourism Winnipeg led stakeholders in creating a wide-reaching, strategy-specific, operationally ambitious

Master Tourism Plan to mobilize expenditures and initiatives. Throughout its development, Tourism Winnipeg tapped traditional and non-traditional tourism partners to elevate Winnipeg as a desirable tourist destination. Strategic panels considered branding, clearly defined unique selling propositions and core experiences, and captured sophisticated market segmentation.

A key component of the plan is its focus on integrated marketing communications via a range of promotional tools, including media relations, advertising, digital marketing, and sponsorships. Attention was accorded to appropriate technologies, including a website enhancement to tourismwinnipeg.com that features engaging photos, video uploads, core experience descriptions, and testimonials about visitor experiences. As well, search engine optimization and related marketing strategies were employed to boost the site's profile, and social media marketing was introduced as a means of connecting with leisure travelers. And finally, blogs, QR codes, permission-based e-mail blasts, and the development of mobile apps were some of the additional technologies that further augmented Tourism Winnipeg's marketing efforts.

4. **Results** (Maximum: 3 pages) Describe the results produced to date by the strategy in terms of new infrastructure, new investment, better quality of life, improved educational achievement, employment growth, income growth, new industries or growth in existing industries (including small and medium-size businesses), and new efficiencies for citizens and organizations. Please organize your response by Intelligent Community Indicator.

Introduction

While the previous pages illustrate the various solutions Winnipeg has proposed in attempting to solve the problems identified by a diverse collection of civic leaders harbouring equally disparate specialties and interests, we all know the proof is in the pudding. As our forefathers appreciated long ago, best intentions without concrete consequences cannot succeed in moving Winnipeg to the forefront of intelligent community territory. Instead, real-world results must be recorded, assessed, and shared in order for material advancements to be made in this regard. The following pages therefore detail the higher-level outcomes realized to date within the programs and strategies presented earlier.

Broadband

The Cisco TelePresence system enhances the University of Winnipeg's ability to broaden the reach of community learning initiatives, and it ensures northern and rural learners have greater access to the university's classrooms and research initiatives. The Cisco Innovation Centre for Collaboration Technologies reports that its TelePresence facilities have been used 322 times, with a record monthly usage of 28 events established in 2013. Averaging two external participants per session, the savings in travel expenses to the University of Winnipeg by private-sector and government-sponsored partners is in the range of $600,000 to $800,000.

A recent notable event included Communication Enabling Technologies for the North, a collaborative effort with Cisco Canada and the Conference Board of Canada's Centre for the North. This TelePresence conference included more than 25 participants spanning multiple locations, including Fairbanks, Alaska; White Horse, Yukon; The Pas, Manitoba; The University of Winnipeg (as host); and several sites in Ottawa and Toronto. A video conference link was also established to the University of the Arctic and the Arctic Council in Tromsø, Norway.

Another high-profile event involved the 2010 meeting of the United Nations International Criminal Court Advisory Council, which linked TelePresence sites in Brussels, Belgium; Geneva, Switzerland; Johannesburg, South Africa; San Jose, Costa Rica; Washington, DC; New York, New York; and Winnipeg, Manitoba. A telephone line to Havana, Cuba, was also established. This ably demonstrated the capacity of the TelePresence technology to connect a wide spectrum of international participants.

With the new Cisco Innovation Centre in place as the innovation platform, the University of Winnipeg is uniquely positioned to play a pivotal role in developing the expertise and infrastructure necessary to

become a global collaborative technology leader. This benefits industry and government partners, as well as the students and citizens of Winnipeg. The centre-led initiative clearly articulates a bold vision pertaining to how Winnipeg must position itself to prosper in a broadband economy. Like other visionaries with similarly lofty ambitions that came before him, Dr. Lloyd Axworthy's leadership has formed a solid foundation that has propelled Winnipeg into the twenty-first century.

Knowledge Workforce

The immediate impact of Canadian Tire's investment in Winnipeg is the creation of 50 ICT and new media jobs. According to Economic Development Winnipeg, the economic impact resulting from Canadian Tire's employment growth is significant. Consider this: the total output of goods and services generated is $5.6 million in direct, indirect, and induced effects; the total GDP output is estimated at $4.9 million; and the employment created in addition to the company's 50 employed is an inducement of 35 more people.

The results achieved by the various stakeholders involved in this project demonstrate another prime example of our community's ability—and desire—to collaborate and develop strategic partnerships to realize specific goals. Canadian Tire's investment is expected to have countless spin-offs; notably, the growth of Winnipeg's knowledge workforce, starting from an increase in post-secondary institution enrollments within the science and technology fields, as well as in interactive digital media courses. Together with the burgeoning job opportunities comes the strengthening of Winnipeg's creative critical mass. As Kevin Hnatiuk, co-founder and executive director of New Media Manitoba, observes: "It's yet another exciting boost to the sector, along with the ongoing success of our local companies."

Switching gears to the Digital Voices Project, this landmark initiative incorporates a number of cultural and artistic elements using a variety of materials, techniques, tools, technologies, and skills from diverse disciplines like dance, drama, music, and visual arts. The technologies and processes employed in creating digital media art involve photography, film, sound, animation, and video. And they are also fully digitized, making use of the following components: computer software, blogging, networking, game development, digital imaging, digital sound recording, 2D and 3D animation, multimedia production, and web-page design.

Students from inner-city high schools with high levels of aboriginal and new immigrant enrollment successfully share their skills, knowledge, and cultures via a wide range of digital media. They convey personal and family stories through online communication, digital storytelling, and art, doing so with the enthusiastic assistance of cultural advisors. Furthermore, students receive university or college standing as an enticement to continue with post-secondary studies.

Another critical part of the Digital Voices Project involves the hosting of summer institutes, whereby educators in the program—and those interested in becoming part of the program—improve their understanding and skills to execute the program. Over the two-year lifespan of this component, approximately 80 educators have participated.

By equipping socially conscious students for the future, Sisler High School has created an active and inspiring learning environment that has radiated out to other parts of the province, Canada, and the world. In the 2012-2013 academic year, for example, 158 students from four provincial schools/divisions participated in the program, as did eight teachers and 28 online partners; moreover, four additional Canadian provinces took part, and so did eight international partners. Given this and other notable accomplishments, Sisler High School is nationally recognized as one of the highest-achieving schools in Canada. Microsoft, too, has bestowed its own impressive accolade, naming Sisler one of 80 Innovative Pathfinder Schools worldwide.

Digital Inclusion

By providing digital access to those in need and by increasing these users' skill sets in the broadband economy, the Winnipeg Public Library has evolved into a far more efficient service provider to its diverse

clientele. The library's shift to e-resources prompted a huge increase in the use of e-books and online applications. In 2009, for example, 26,813 e-books and audiobooks were checked out virtually on eLibraries Manitoba. Computer bookings remained high and free Wi-Fi access proved very popular, with over 25,000 wireless connections made.

The library has successfully augmented its electronic databases, providing users with greater access to information 24 hours a day, seven days a week. Whether searching for car repair information or researching a career, the library's website (winnipeg.ca/library) provides current and reliable information to its audience. E-books continue to grow in popularity, with the library offering an ever-growing array of downloadable titles. And as the world increasingly goes mobile, the library updates its apps so users can access its databases. Facebook is also expanding the library's outreach to its constituents, and an active YouTube stream gives viewers an excellent introduction to everything the library offers.

Along similar lines, the Wii Chiiwaakanak Centre at the University of Winnipeg has become one of the most visible community learning initiatives. The centre's programming has strengthened the funding base that helps support the university's mandate to provide educational opportunities and services to the local community—especially relating to capacity building within Winnipeg's inner city.

And finally, Randstad Technologies' initiative is especially successful. Its innovative program was welcomed by administration officials and educators alike at R.B. Russell Vocational School, which boasts an annual enrollment of just over 500 students. The program's most recent incarnation resulted in a contribution of 72 laptop computers to students who demonstrated good citizenship, high achievement, and excellent attendance. The computers were purchased from IBM Canada at a discounted rate, and an astounding 99 per cent of students participating in the program were awarded these prized computers at the culmination of the program.

At the end of the day, initiatives like those championed by the Winnipeg Public Library, the Wii Chiiwaakanak Centre, and Randstad Technologies serve as evolving embodiments of community-based private, public, and corporate interests working collaboratively to provide the resources and tools deemed essential for the sustained development of a digitally inclusive society.

Innovation

Emerging as the heart of Winnipeg's composite industry cluster, the Composites Innovation Centre (CIC) has spearheaded various projects totaling more than $12 million. Since inception, the CIC has recorded significant milestones, many of which have strengthened capacity and created employment opportunities within Winnipeg's advanced manufacturing industries. Success stories include the following five initiatives: 1) active project involvement with 80+ industrial clients; 2) the development and transfer of over 10 new technologies, increasing the competitiveness and growth of Manitoba companies; 3) coordination of more than $11 million in project funding from industry and government sources; 4) the establishment of several regional, national, and international consortiums in aerospace, biocomposites, and green building material sectors to expedite technology advancement, commercialization, and supply-chain development; and 5) the launch of two not-for-profit organizations whose operations are coordinated by the CIC.

Frequently, the by-product of the CIC's growth is new jobs for existing companies or start-ups. The centre has undertaken over 300 projects since opening its doors. Some have helped launch local start-up companies: five new businesses and three nonprofit centres have been established with the help of the CIC, which together have created approximately 60 new jobs. They have also assisted large companies like Boeing develop and commercialize new composite technologies that result in direct increases to productivity, reduced costs, accelerated growth, and new jobs. The majority of the jobs the CIC has helped create are highly skilled and well paid, such as engineers, engineering technicians, and managers.

And in leading the development of the local biomaterials sector, for example, the CIC scored a home run for environmental sustainability. "There was a very limited biomaterial industrial supply chain in Canada

when we began working in this area," explains Sean McKay, the CIC's executive director. "We've focused our efforts regionally, nationally, and globally to develop this supply chain and create a demand for these materials. Rather than have farmers burn flax and hemp off their fields, which generates significant greenhouse gas emissions, we've brought together various partners with the goal of creating commercially viable alternatives."

These partners include the scientists who develop the seeds and the farm groups, manufacturers, and governments who consider ways of re-purposing this bio-waste and turning it into new and sustainable products. The result is a win-win: lower CO2 emissions, increased revenue for farmers (contributing to more sustainable rural communities), and a reduction in fuel consumption since vehicles made using biocomposite parts are lighter.

Over the years, the CIC has grown both steadily and organically; it now stands at the centre of a series of networks in industry, academia, research, government, and other agencies, with 108 industry partners and 40 agency partners. It is involved in a variety of collaborations with groups across North America, Australia, New Zealand, China, and Europe—and the CIC has spearheaded the creation of five international industry consortia. A true economic catalyst, it continues to facilitate growth and new employment for many Winnipeg companies, while acting as a leading international player in innovative composites technology.

Marketing and Advocacy

To date, the principal outcomes of Winnipeg's Master Tourism Plan have been an increase in tourism expenditures and a greater return on investment for stakeholders—including the City of Winnipeg and the Province of Manitoba. Another notable upshot involves the broadening of strategic partnerships, whereby Tourism Winnipeg strengthened collaborations with stakeholders to improve industry communication and integration. Valuable alliances were formed with key partners, including Travel Manitoba; The Forks North Portage Partnership; the Canadian Museum for Human Rights; the Manitoba Lotteries Corporation; the Winnipeg Convention Centre; Sport Manitoba; True North Sports & Entertainment; the Winnipeg Airports Authority; Tourisme Riel; post-secondary institutions like the University of Manitoba, the University of Winnipeg, Université de Saint-Boniface, and Red River College; and other important stakeholders.

In addition, the direct spin-off of alliances with the Festival du Voyageur, The Manitoba Museum, and Oak Hammock Marsh led to the development of applications for the Canadian Tourism Commission's Signature Experiences program. And through roundtable dialogues with VIA Rail and surrounding attractions, visitor opportunities for Winnipeg's stopover rail passengers were increased. Tourism Winnipeg also brought the Manitoba Tourism Education Council and the Rainbow Resource Centre together to offer LGBT training for frontline staff.

Integral to the Master Tourism Plan is the integrated marketing communications component involving Tourism Winnipeg's website, tourismwinnipeg.com. Tourism Winnipeg was recently honoured with a prestigious award from the Economic Developers Association of Canada (EDAC). EDAC recognized Tourism Winnipeg's accomplishments with a Marketing Canada Award for its dynamic website. Unsurprisingly, traffic to the website continues to grow. In 2013, Tourism Winnipeg's website activity increased from an average of 35,000 page views per month to an average of 150,000 page views per month—a staggering 329 per cent increase.

5. **Community as Canvas** (Maximum: 3 pages)

a. Culture as Art & Craftwork. Provide an example of the direct contribution of the arts (visual, performing, musical,etc.) and craftwork to the city or region. The contribution may be in economic terms, in changing citizen perceptions of the community, in attracting and retaining employers and employees, or a combination of them all.

Preserving and encouraging Winnipeg's identity has yielded many cultural, social, and economic windfalls. Celebrating our community's artistic heritage allows us to retain and convey a sense of our

history, and it also provides aesthetic enrichment and educational opportunities. In a very real and tangible way, our historic sites—old enough to elicit reverential appreciation but not so old as to be essentially disconnected from present-day challenges and accomplishments—have become our communal touchstones that inform a unique vision of ourselves and our city. Taken together, they add to our city's vibrancy and character, and they represent an enduring legacy that has weaved a rich and indelible tapestry throughout Winnipeg's diverse neighbourhoods.

One of Winnipeg's most notable historical landmarks is the Exchange District, known to locals as a veritable "crown jewel" that merges past and present with an admirable ease. The Exchange District is a dense urban area consisting of approximately 20 city blocks located just north of Winnipeg's equally iconic Portage and Main intersection. It is renowned for its intact collection of warehouses, financial institutions, and early terra cotta-clad skyscrapers dating from the dawn of the twentieth century. The Exchange District represents an exceptional and exclusive legacy chronicling Winnipeg's boom-time transformation from a modest 1870s pioneer settlement to Western Canada's largest metropolis by 1913. The city's dominance in the fields of finance, manufacturing, wholesale distribution, and the grain trade can be traced though the district's spectacular architecture and distinct streetscapes.

The Exchange District encompasses Winnipeg's greatest concentration of heritage buildings and is recognized as a Canadian treasure through its designation as a National Historic Site in 1997. To quote the Parks Canada Commemorative Integrity Statement (November 2000): "It is not the individual buildings themselves…but the historical process of bringing together large numbers of heritage structures illustrating important themes within a tightly defined area which makes the Exchange District unique."

The Exchange District today flourishes as Winnipeg's commercial and cultural nucleus. This thriving and unique neighbourhood is home to an array of speciality retailers, restaurants, nightclubs, art galleries, wholesalers, and the city's theatre district. Its cobblestone streets and friendly pedestrian environment also contribute to the Exchange District's popularity as a period backdrop for the contemporary film and television industries. Currently, the Exchange District is comprised of approximately 640 businesses, 205 not-for-profit organizations, and 140 residences. It is also home to a variety of annual festivals and special events, including the Winnipeg Fringe Theatre Festival, the Jazz Winnipeg Festival, and the Music for Lunch concert series. As well, it features the Centennial Concert Hall, which plays host to the Winnipeg Symphony Orchestra, Canada's Royal Winnipeg Ballet, and The Manitoba Museum.

Recent district developments have focused on building out the digital media knowledge base, thanks to the construction of Red River College's Princess Street Campus, which has approximately 200 staff and 2,000 students studying modern media, information technology, and business administration. The building is a stunning testament to state-of-the-art functionality that successfully retains the historic façades of one of the Exchange District's most storied structures.

The Winnipeg Arts Council, the City of Winnipeg's arms-length organization mandated to promote arts and culture within the city, embraces the Exchange District as one of the city's cultural hubs. It's both a dynamic and vital artistic centre, a quality that distinguishes Winnipeg from other places, which arguably boasts a natural quality not duplicated elsewhere across the Canadian landscape. For our communities to be complete, the Winnipeg Arts Council considers it imperative that our land use planning and design accommodate a critical mix of uses, pedestrian places and spaces, and active forms of transportation on a local scale. With these elements in place, the council asserts that creativity and spontaneity will, over time, increase artistic expression and advance Winnipeg's distinctiveness and sense of place. This kind of big-picture completeness is most evident in our Exchange District. It stems, absorbs, and reflects an artistic way of life that is tied to past patterns and processes which have merged with modern-era requisites, making this particular neighbourhood complete in an atypically alluring way.

By almost every measure, the Exchange District has been a boon to Winnipeg's economy. Investment within this area has paid notable dividends in enhanced tax assessments, improved urban environments,

business recruitment and retention efforts, and enhanced opportunities for business incubation. The district is also a convincing draw in the development of Winnipeg's cultural tourism industry, the fastest-growing segment of the tourism industry, which grows globally by 15 per cent each year. Tourism Winnipeg, the city's tourism agency, considers the Exchange District to be the key driver behind cultural tourism. In particular, it views the district as a place for culture aficionados to specifically seek out, a place where they can experience the locations and activities that represent bona fide voices from Winnipeggers past and present.

An excerpt from Tourism Winnipeg's Master Tourism Plan reveals the following: "[The Exchange District] provides the opportunity to walk in the past, to explore where others have been, and to hear authentic stories that distinguish an area from every other place on earth. Its authenticity adds real value and appeal and teaches others of its importance."

b. Culture as Heritage. Provide an example of how your city or region's history and traditions have contributed to its progress as an Intelligent Community. How has today's development reflected the past or how has citizens' understanding of your heritage helped them accept and support change?

Intelligent community evolution via cultural history and traditions is evident everywhere in Winnipeg. A notable example is the way the city's aboriginal communities embrace their cultural tradition of storytelling. Verbal storytelling among aboriginals has long been their way of assuring their culture and history is conveyed to successive generations. Today, this ancient concept has found a modern-day equivalent in the form of the Aboriginal Peoples Television Network (APTN), the first national aboriginal television network in the world with programming by, for, and about Aboriginal Peoples. Headquartered in Winnipeg, APTN offers an unprecedented opportunity for aboriginal producers, directors, actors, writers, and media professionals to create innovative, reflective, and relevant programming for Canadian viewers. An impressive 84 per cent of APTN programming originates in Canada, with 56 per cent of the programs broadcast in English, 16 per cent in French, and 28 per cent in a variety of aboriginal languages. Inherent in APTN's mission is the preservation of aboriginal culture and language.

To accelerate awareness among the younger generation through the use of innovative technologies and to help develop a knowledge workforce, APTN recently expanded its efforts into the online social media environment. APTN's Digital Drum (digitaldrum.ca), launched in the fall of 2012, is a testament to the network's acknowledgement of Canada's changing media landscape and the need to engage youth more effectively—and directly. Digital Drum allows people to explore, discover, and share original digital media content and is a live connective space where cultural traditions merge with ubiquitous evolutionary elements. It is an open, inspirational, elevating, inclusive, and animated interactive social media website allowing aboriginal youth to express their identity and to connect with each other.

Each year, APTN collaborates with talented individuals to create award-winning works. This past year was no exception: Dark Thunder Productions received a Kidscreen Award in New York City for its movie Wapos Bay: Long Goodbyes. And Sonia Bonspille Boileau, director of the documentary film Last Call Indian, won the prestigious Prix de la Diversité award at the 26th annual Gémeaux Gala in Montreal. Finally, APTN's flagship series Blackstone continues its reign as one of Canada's most hard-hitting dramas. Since its debut, the series has been nominated for 49 awards, winning 20. In 2011-2012, the series won two national Gemini awards and multiple British Columbia-based Leo awards.

For the fifth consecutive year, APTN was recognized as one of Manitoba's Top Employers; and for the first time, it has been tapped as one of Canada's Top 100 Employers for 2013. These external recognitions validate the strength of APTN's organization and its employees, but perhaps even more notable is the development of higher-quality employment opportunities throughout Winnipeg's aboriginal communities. This inexorable drive toward appreciating APTN's higher purpose—while honouring age-old traditions at the same time—has helped the city's aboriginals come to respect, accept, and support change in ways that have resulted in the creation of a broader, stronger intelligent community throughout Winnipeg.

c. Culture as Attitude. Provide an example of common attitudes stemming from your history and traditions that support and accelerate progress on your Intelligent Community initiatives, as well as attitudes that represent an obstacle to progress, and how they are overcome.

Arts and culture are strongly tied to place; and the relationship between people and place is reflected through cultural practices and traditions extending way back into Winnipeg's storied past. Artistic expression is ingrained in all aspects of our lives from the time of our birth, and it is deeply connected to our sense of home. This innate correlation is something Winnipeggers from all walks of life—from immigrants to lifelong inhabitants alike—have habitually relied on to strengthen the qualities that make us who we are, and which gives rise to the inherent virtues that make us distinctive, compelling, and competitive as a city and a people. And it's from this unique circumstantial mix that Winnipeg's cohesive cultural attitude stems.

Every city has its own personality and temperament, and Winnipeg is no different. Artistic expression is irrevocably affected by shared experiences: a history, a landscape, a climate. Given the uniqueness of Winnipeg's historical record, which chronicles our valiant struggle against isolation while we somehow also embrace it, is it any wonder that our art and artists have long emerged as distinct and vibrant? There is a wealth of artistic examples (music, theatre, visual arts, literary arts, film, and video) that communicate the story of Winnipeg and the people who live, or have lived, within the city. To be sure, it's a story worth telling—a story of pioneers, of First Nations, of European explorers, and of the Métis; a story of farming settlers, of rail barons, and of rebellion; a story of ingenuity and of heroic sacrifice; a story of separation, of immense spaces, and of the never-ending cycle of strife and renewal that forms our love/hate relationship with Winnipeg's extreme climate. It's also a story of a modern city setting a bold course for the future, a city that acknowledges and embraces its complex history while refusing to be constrained by it.

Winnipeg's attitude is the "pluckiness" of its people, a people who have always accepted that if anything exceptional is expected to happen here, it must be executed locally. Located in the middle of nowhere, Winnipeggers have learned to look after their own, including the hundreds of artists who gravitate here to find a better life. Consequently, the artistic community has inherited a strong do-it-yourself ethos of pitching in and of working together to create new opportunities. This mind-set in part stems from the days when seemingly disparate groups of Winnipeggers collectively recognized the intrinsic value of artistic and cultural pursuits—and the need to stimulate creativity in order to survive and compete as an isolated yet emerging economic force requiring self-sustenance to prosper. Over a comparatively short period, this communal realization birthed Canada's Royal Winnipeg Ballet, the Winnipeg Art Gallery, the Winnipeg Symphony Orchestra, the Royal Manitoba Theatre Centre, and many more world-class institutions.

Canada's Royal Winnipeg Ballet is among the world's most esteemed dance companies. Based in Winnipeg, it's the nation's oldest ballet company and the longest continuously operating ballet company in North America. Its origins can be traced back to 1939 when Gweneth Lloyd and Betty Farrally opened the Winnipeg Ballet Club. They soon connected with a dynamic artistic director named Arnold Spohr; together, they formed an unbeatable team that brought ballet to new heights in Canada. Recognition of their impressive achievements came in 1953 when Queen Elisabeth II bestowed the 'Royal' designation upon what had come to be known thereafter as the Royal Winnipeg Ballet.

Before the First World War, Winnipeg reigned as Canada's third-largest city, the undisputed metropolis of the West. Rapid growth had given the city material prosperity, but little of its wealth was diverted to cultural or artistic pursuits. Despite the city's fragile cultural veneer, the enthusiasm and dedication of members of the arts community, together with a group of public-spirited city leaders, led to the establishment of the Winnipeg Art Gallery (WAG) in 1912 and the Winnipeg School of Art in 1913. Throughout its 100+ years in operation, the WAG has evolved from a small civic gallery to Canada's sixth-largest gallery boasting an international reputation.

More recently, the Plug In Institute of Contemporary Art (Plug In) opened its doors in 1972, formed by a group of discontented local artists seeking to highlight the creative process of non-mainstream art and to emphasize the experimental—sometimes considered "difficult"—art in all media. In celebrating its 40th anniversary last year, Plug In collaborated with two French institutions to create the My Winnipeg project in Winnipeg, Paris, and Sète (a port city in the south of France). Collectively, the project created opportunities for more than 100 Winnipeg artists to exhibit their work.

Perhaps now more than ever, the world is taking notice of Winnipeg's unique can-do attitude. One prime example is the way a small independent film company based in Winnipeg went on to create and distribute an award-winning documentary entitled Indie Game: The Movie—the first-ever feature-length exploration of video game creation. It was also among the first films to ever originate through Kickstarter - a company that provides tools to raise funds for creative projects via crowd funding through its website (kickstarter.com). The film was made by two Winnipeggers, James Swirsky and Lisanne Pajot (herself a graduate of Red River College's innovative Creative Communications program). The documentary premiered at the Sundance Film Festival in 2012, where it won the Best Editing Award in World Documentary Cinema. Indie Game: The Movie is a New York Times Critics' Pick and is one of the top-reviewed movies of 2012 on the popular review portal Rotten Tomatoes (rottentomatoes.com). It was nominated for Best Documentary at the Canadian Screen Awards and for Best Design & Animation by Cinema Eye Honors for Nonfiction Filmmaking. It has since been selected for many festivals, including SXSW, the Game Developers Conference, Hot Docs, and the Sheffield Doc/Fest. And it continues to screen all over the world and is available in 22 languages.

Viewed as an isolated outpost for some 150 years, Winnipeg has necessarily crafted its own culture, a synthesis of European pioneer sensibilities, aboriginal spirituality and storytelling, and the international ideologies of contemporary art. Culturally and geographically, Winnipeg occupies an unrivalled space within Canada's consciousness, where east meets west and north meets south. At one time far removed from its closest urban contemporaries (an isolationist legacy that manifests itself even now), Winnipeg's do-it-yourself mentality has been—and will continue to be—a defining lens through which onlookers can best appreciate what happens here.

From an intelligent community perspective, we've inherited a complex tapestry woven from the harshest struggles and most celebrated triumphs of our pioneering forebears. It's a legacy that today results in an unquenchable desire to crest horizons that expose what being a Winnipegger is all about. And that means making use of cutting-edge technologies that bridge diverse divides, be they cultural, digital, or otherwise. From nearly every conceivable angle, Winnipeggers have always craved to keep abreast of the innovation curve in a way that makes us successful as individuals and as a community, and in a way that prompts our neighbours, however distant, to acknowledge and admire our inimitable contributions across sundry fields to our fellow man wherever they may be found.

At its core, the real story of Winnipeg, unfinished though it is, cannot be fully understood without first appreciating how our seemingly incongruent past achievements have brought us to where we are today, as evidenced by the disparate yet undeniably effective initiatives detailed throughout our submission. As a community, we regularly pay homage to our past and we appreciate the bounty of our present, but we can't help but turn our gaze to that which is yet to come. At the dawn of the twentieth century, our forefathers created everlasting architectural monuments for us to decipher, immutable exclamations of accomplishment, enlightenment, and communal affluence. And as the inheritors of that tradition, it's only fitting that we're currently engaged in exactly the same exercise as we look toward the future and consider what ensuing generations will see when they contemplate Winnipeg's past. What kind of consequential vision will coalesce in their minds as the defining portrait of our era?

In a rare confluence that accentuates its significance, the vision we find ourselves collectively promoting as a prized gift to Winnipeg's future leaders and collaborators takes us back to the beginning of our inquiry—to the junction of the Red and Assiniboine rivers, to The Forks, where a manifestation of

everything the city has come to stand for throughout its 140+ years is about to be unveiled to the world: the Canadian Museum for Human Rights. In a deliberate acknowledgement of intelligent community metrics, the museum will soon take its place alongside other definitive edifices around the world by delivering a transformative and state-of-the-art digital experience. Its mandate is to convey an immersive, interactive, and memorable journey for visitors of every background, age, and level of ability. All participants will cross over into a fully reinvented museum model that sets a new standard for inclusion and universal accessibility.

Although not yet open, the museum has already become more than just a masterpiece of modern design and a symbol of human rights advancement that easily rivals Winnipeg's turn-of-the-century buildings imagined by some of the most prominent architects of the age. It has already become more than the most recognizable example of form and function that graces our city. And it has already become more than just a demonstration of who we were and who we have become as inhabitants of this one-time outpost.

In the end, what the museum signifies—and what it will forever represent to locals and visitors alike—is the notion that we are not alone in our struggle to create better lives for ourselves, our families, our neighbours, our communities, our cities, our nations, and our world. And with this recognition, the past has come full circle into the present as, evidently, the isolation early Winnipeggers confronted in the initial years of the city's founding merely served as a palpable reminder that by coming together under even the most adverse circumstances, they could create something spectacular while imparting a navigable roadmap to succeeding standard-bearers of Winnipeg's unstoppable drive toward becoming the consummate intelligent community.

Key Contacts

6. Please provide contact information for a key public-sector, private-sector and nonprofit leader involved in your community's Intelligent Community programs.

Public-Sector Official	Name: Douglas McCartney Title: Senior Executive Director, Science, Innovation and Business Development at Province of Manitoba Organization: Manitoba Innovation, Energy and Mines Telephone: 204.945.6298 Email: dmccartney@gov.mb.ca Contribution to the Community: Provides leadership and strategic direction to the Department and is the lead across government on innovation, research and technology policies and initiatives. Douglas McCartney is also responsible for the strategic development and management of initiatives which encourage economic growth of the province's life sciences, biotechnology, ICT, digital new media, water, and clean technology industries.
Private-Sector Executive	Name: Mary Jane Loustel Title: National Aboriginal Program Executive Organization: IBM Telephone: 204.285.9056 Email: mloustel@ca.ibm.com Contribution to the Community: Mary Jane leads the IBM Canada National Aboriginal Strategy, which supports Aboriginal IT skill development through training and scholarship and seeks to increase employment and business opportunities through recruitment, partnerships, and procurement.

Nonprofit Executive	Name: Marina James Title: President & CEO Organization: Economic Development Winnipeg Inc. Telephone: 204.954.1988 Email: marina@economicdevelopmentwinnipeg.com Contribution to the Community: Marina James leads Economic Development Winnipeg Inc. (EDW), which is the lead economic development agency for the city of Winnipeg. EDW facilitates investment, capacity building, tourism development, marketing and the management of market information for Winnipeg.

7. Please provide the name and contact information for the person to be contacted by ICF in connection with this application.

Name: Edward Suzuki

Title: Senior Manager, Information Research

Organization: Economic Development Winnipeg Inc.

Telephone: 204.954.1986 Fax: 204.942.4043

Email: edward@economicdevelopmentwinnipeg.com

8. Please provide from your own press list up to 10 local and regional media (print, broadcast or online), including the publication's name, the name and title of an editor or reporter, and an email address.

Publication	Editor/Reporter	Email Address
Mais Oui, C'est le Peg!	Alison Mayes	alison.mayes@freepress.mb.ca
City attracts artists from all corners	William Burr	william.burr@freepress.mb.ca
Shaw offering free wireless Internet service to their customers at city facilities	Bartley Kives	bartley.kives@freepress.mb.ca
First Director of Cisco Innovation Centre named	Diane Poulin	d.poulin@uwinnipeg.ca
Digital Learning Leads To University Credits	Shawn Coates	s.coates@uwinnipeg.ca
City a composite 'epicentre'	Martin Cash	martin.cash@freepress.mb.ca
Filmmakers 'really excited' about local première	Randall King	randall.king@freepress.mb.ca
Canadian Tire Announces State-of-the-Art Digital Content Warehouse and 'App Factory'	Sarah Van Lange	Sarah.VanLange@cantire.com
Economic Development Winnipeg Inc.'s Tourism Winnipeg Division Wins Industry Award For Web-Based Marketing Collateral	Croft Petersmeyer	croft@economicdevelopmentwinnipeg.com
All roads leading to downtown Winnipeg -- again?	Jino Distasio	j.distasio@uwinnipeg.ca

Ownership of Information

By submitting this information, the above-named community attests and acknowledges that:

- All information provided is accurate and fairly represents the past and current condition of the community to the best knowledge of the individual submitting the information.
- All information submitted to the ICF in connection with its international awards program becomes the property of the Intelligent Community Forum and will be used for the purposes of research, analysis and publication in pursuit of its global mission.

Intelligent Community Indicators

For a complete description of the Intelligent Community Indicators, visit www.intelligentcommunity.org and select "Intel Comm Indicators" on the Intelligent Communities menu.

1. **Broadband Connectivity.** Broadband is the new essential utility, as vital to economic growth as clean water and good roads. Intelligent Communities express a clear vision of their broadband future and craft policies to encourage deployment and adoption.

2. **Knowledge Workforce.** A knowledge workforce is a labor force that creates economic value through the acquisition, processing and use of information. Intelligent Communities exhibit the determination and demonstrated ability to develop a workforce qualified to perform knowledge work from the factory floor to the research lab, and from the construction site to the call center or Web design studio.

3. **Innovation.** Intelligent Communities work to build the local innovation capacity of new companies, because these produce all of the job growth in modern economies, and invest in e-government programs that reduce their costs while delivering services on the anywhere-anytime basis that digitally savvy citizens expect.

4. **Digital Inclusion.** As broadband deploys widely through a community, there is serious risk that it will worsen the exclusion of people who already play a peripheral role in the economy and society, whether due to poverty, lack of skills, prejudice or geography. Intelligent Communities promote digital inclusion by creating policies and funding programs that provide “have-nots” with access to digital technology and broadband, by providing skills training and by promoting a compelling vision of the benefits that the broadband economy.

5. **Marketing and Advocacy.** Like businesses facing greater global competition, communities must work harder than ever to communicate their advantages and explain how they are maintaining or improving their position as wonderful places to live, work and build a growth business. Effective marketing shares this story with the world, while advocacy builds a new vision of the community from within.

Success Factors

In evaluating nominations, ICF looks for trends that characterize successful Intelligent Communities. We suggest that, where appropriate, your nomination refer to the following success factors in describing your strategy and results.

Collaboration. The development of an Intelligent Community typically requires intense collaboration among government, businesses, universities and institutions. Few organizations have enough resources, political capital or public backing to drive a community-wide transformation. But collaboration is challenging. It demands vision, flexibility, and a high degree of trust among the partners. Intelligent Communities develop the vision, find the flexibility and create trusting relationships among key constituencies. Effective collaboration is typically the result of the working environment created by effective leaders.

Leadership. It is fair to say that no Intelligent Community has succeeded without strong leadership. Effective leaders identify challenges, set priorities, communicate a compelling vision and foster a sense of urgency in achieving it. They establish a collaborative environment that encourages risk-taking and creates win-win relationships with partners in government, businesses and institutions. It matters little where leadership comes from. In the Intelligent Communities that ICF has studied, leadership has emerged from elected officials, government employees, business executives, universities and nonprofit organizations. What matters is the character, motivation and talents of the individuals who commit themselves to improving the economic and social wellbeing of the community.

Sustainability. When Intelligent Communities invest in broadband, workforce development, digital inclusion, innovation and marketing, they work to create programs that sustain themselves through local service revenue, growth of the tax base, and the attraction of long-term investment. They avoid depending on short-term funding that fails to lay a foundation for the future, or that is subject to changing political priorities. They also plan their growth in order maintain quality of life while creating jobs and spurring business growth. They craft policies on land use, building codes, transportation, rights-of-way and other infrastructure to ensure the community remains a desirable place to live and work. They also use technology to reduce dependence on physical infrastructure, allowing more citizens to share the same community resources.