

Congratulations on being selected as one of the Intelligent Community Forum's Smart21 of 2014. In order to proceed to the second phase of ICF's international awards program, you must complete this questionnaire, which provides ICF's research analysts with more detailed data. Data provided on this form will provide the basis for selection of the Top7 Intelligent Communities and Intelligent Community of the Year in accordance with the following schedule:

#### 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 the 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 are eligible to join the ICF Foundation, the membership association of the Forum, which provides a global network for collaboration on economic development and the sharing of best practices.

**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](mailto:awards@intelligentcommunity.org) by **December 20, 2013**. The Analysts for the Top7 will use only the information on this form in making its evaluation. Do not send additional information or attachments.

**Deadline for  
Nominations:  
20 Dec 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 sets 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](http://www.intelligentcommunity.org/nominations).

**Important:** Questions marked with a red asterisk (\*) below ask for numbers related to the population of your community. In providing this information, please be consistent: *do not* provide numbers for a municipality in one place and a larger metropolitan region or county in another. All numbers should correspond to the same geographic area.

**Name of Community**

Mitchell, South Dakota

1. Population	Municipality	15,254	Metro Area (if applicable)	Metropolitan Area (MiSA) 22,869
2. Labor Force	Municipality	9,000 (2012 Annual Average)	Metro Area (if applicable)	Metropolitan Area (MiSA) 13,370
3. Area	Municipality	12.14 sq. miles	Metro Area (if applicable)	Metropolitan Area (MiSA) 873 sq. miles

4. Top Industries by Employment	Transportation	871
	Healthcare	865
	Manufacturing & Production	532
	Communication Consulting, Engineering, and Software	500
	Production Agriculture	711
5. Emerging sectors or clusters with potential for growth	Transportation	
	Healthcare	
	Communication Consulting, Engineering, and Software	

**Indicator #1: Broadband**

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

6. Which of the following broadband access systems are available in your community, and are they provided by the private sector, public sector or a public-private partnership?

<input checked="" type="checkbox"/> DSL	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input checked="" type="checkbox"/> Cable modem	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input checked="" type="checkbox"/> Fiber optics	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input checked="" type="checkbox"/> Wireless	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input checked="" type="checkbox"/> Satellite	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership



7. Please indicate the percentage of the following groups of users who have access or connection to the Internet at broadband speeds.

	% with access to broadband (homes or organizations "passed")	% connected to broadband
Households	100%	71%
Businesses	100%	83%
Government	100%	100%
Educational and nonprofit	100%	90%

8. Please indicate the minimum, median (middle) and maximum broadband speeds available to residential customers from the three carriers with the largest market share in your community, and the monthly price of that service. Use pricing for standalone broadband service only, not for discounted bundles of Internet, voice and /or video. Be sure to indicate the currency you are using. If your community is served by fewer than three carriers, leave the extra fields blank.

	Speed	Monthly Cost	Currency
Carrier #1: Midcontinent Communications		Approx. Market Share: 35%	
Minimum	30 mbps	\$44.95	US Dollars
Median	50 mbps	\$64.95	US Dollars
Maximum	100 mbps	\$104.95	US Dollars
Carrier #2: Mitchell Telecom		Approx. Market Share: 40%	
Minimum	25 mbps	\$34.95	US Dollars
Median	35 mbps	\$59.95	US Dollars
Maximum	75 mbps	\$104.95	US Dollars
Carrier #3: Century Link		Approx. Market Share: 25%	
Minimum	1.5 mbps	\$35.94	US Dollars
Median			
Maximum			

9. Please describe up to three projects initiated in your community to promote deployment of, access to, or use of broadband by citizens and organizations. *Note:* some communities are well-served by commercial carriers and do not invest in programs to spur broadband deployment. Your community's score will not be affected if does little or no broadband promotion but has high broadband penetration.

Name	Funded By	Description	Year Started	Results to Date
City-provided Wi-Fi	<input checked="" type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>The city has deployed numerous Wi-Fi hotspots throughout the city. These hotspots are based on the IEEE 802.11 standard and available for use by anyone with a Wi-Fi enabled device including smartphones, computers, and tablet computers. These hotspots are connected to the Internet backbone using a fiber optic network. The locations currently include popular locations such as the Corn Palace, the Library, and the City Hall, as well as the Mitchell Activities Center and the new Soccer Complex. The City is currently evaluating additional locations to deploy their hotspot network to provide additional benefits to the citizens of Mitchell and tourists that are visiting the city.</p>	2010	<p>Many city properties currently offer free public Wi-Fi, and additional locations are being evaluated.</p>
Avera Health eServices	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input checked="" type="checkbox"/> Private sector <input type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Avera Health has taken advanced information and communication technologies to an entirely new level in delivering healthcare services to the small, rural communities it serves. Avera Queen of Peace Health Services, one of Avera's five regional hubs, is located in Mitchell, SD. Avera Queen of Peace serves Mitchell and the surrounding 12-county area.</p> <p>Avera Queen of Peace launched the eCare services with the implementation of eICU in 2004 with a grant from the United States Department of Agriculture. Since then, with the help of the Helmsley Charitable Trust, Avera has deployed an entire array of eCare services to serve those living in the rural upper Midwest. eCare is a suite of innovative technology applications which extend 24-hour access to specialty care physicians and pharmacists to patients in remote locations. Tom Clark, Regional President and CEO of Avera Queen of Peace says, "No other health system in America is using eServices to the extent that Avera is." The four main eCare services are eEmergency, eICU,</p>	2004	<p>The eEmergency approach initiates diagnostic testing sooner, streamlines emergency transfers when needed, and keeps patients close to home. Since inception, over 4,600 patients have been impacted, avoiding nearly 750 transfers resulting in estimated savings of more than \$4 million. Another positive by-product of these eServices is that the reduced transfers result in the healthcare dollars staying local and making the local facility stronger financially.</p> <p>The eICU approach has had similar success. Since inception, over 35,000 patients have been monitored resulting in an estimated 800 lives saved, 20,000 ICU days reduced, resulting in savings of more than \$30 million, and 160 transfers were avoided.</p> <p>Since inception of the ePharmacy program, 33 hospitals have used</p>

ePharmacy and eConsult.

eEmergency uses two-way video technology in 63 hospitals to make available board-certified emergency physicians and emergency-trained nurses to assist local providers in treating trauma, heart attack, stroke and other critical conditions. With a push of a button, the around-the-clock eEmergency team gives local doctors and nurses immediate backup and support during difficult and multiple emergency cases. This approach initiates diagnostic testing sooner, streamlines emergency transfers when needed, and keeps patients close to home.

eICU uses the same technology in 32 hospitals and links the rural ICUs (Intensive Care Units) with 24-hour access to a care team led by intensivists. Cameras in patient rooms give the eICU team a firsthand look, and decision-support software continuously analyzes patient-specific data alerting intensivists to pertinent changes in patient conditions. This allows earlier intervention through coordination with local physicians and nurses before problems arise.

ePharmacy provides rural hospitals, without a full-time pharmacist, 24-hour access to hospital-trained pharmacists making it possible for every medication order to be reviewed and approved prior to administration to patients. This results in fewer medical errors, improved patient safety, access to medication consults and comprehensive medication management.

eConsult allows rural patients to access specialty services at their local facilities. There are more than 40 different providers in specialties that include infectious disease, mental health, neurology, pulmonology and more. Ninety-eight percent of patients surveyed ranked eConsult with high levels of satisfaction noting the benefits of

ePharmacy to impact more than 63,000 patients, and avoid an estimated 6,000 serious safety events.

eConsult visits total more than 5,300 per year in 88 locations. Thirty percent of patients claim they would not receive these services without eConsult.

	<p>local access, less time from work or school, and fewer expenses of round-trip travel.</p> <p>Avera is also piloting three new services. eBehavioral Health, eLong Term Care and ePrisons/Urgent Care. The Helmsley Charitable Trust most recently provided another generous gift for the creation of the eHub which has now brought all the eServices under one roof. Not only is this more efficient, it gives the eSpecialists immediate physical access to each other and real time communication for enhanced care.</p> <p>Avera is leveraging broadband communication and other technologies to save lives, reduce costs and provide better care for our rural population most vulnerable due to a lack of close access to advanced healthcare.</p>	
<p>Mitchell Prehistoric Indian Village</p>	<p><input checked="" type="checkbox"/> Local Gov  <input checked="" type="checkbox"/> State/Prov Gov  <input type="checkbox"/> National Gov  <input checked="" type="checkbox"/> Private sector  <input checked="" type="checkbox"/> School  <input checked="" type="checkbox"/> Public-private partnership  <input type="checkbox"/> Other</p>	<p>1999</p> <p>Mitchell is home to the Prehistoric Indian Village, a live, enclosed, climate-controlled archeological site located on the shores of Lake Mitchell. In 1999 the Prehistoric Indian Village Society put together an unlikely group of players to achieve an educational opportunity never before seen in our region. The project was designed to provide a new and dynamic learning environment in the study of anthropology/ archeology for all ages. Anthropology provides a strong foundation for interacting with diverse human cultures, an important ingredient for living successfully in modern society. It exposes young people to the excitement of discovery and sparks interest in scientific fields.</p> <p>The project's intention was to take a unique historical location and, using the broadband network available in Mitchell, connect that site to schools, museums, and culture centers across the state of South Dakota via two-way video and Internet technologies. Accomplishing this goal required that a special team of like minds be developed to</p> <p>The dynamics of this project have provided a real-life, working experience in the study of past cultures via distance learning technologies. Special attention is focused on methodology and techniques available to archeologists (field excavation, mapping, photography, and artifact preparation/analysis) and addressed archeological research from the initial hypothesis through testing and acceptance or rejection of that hypothesis. Students and teachers experience all aspects of archeology, from excavation through analysis and including the theoretical rationale leading to sound interpretations of the structure of past cultures, as well as learning some of the precepts of critical thinking.</p>

reach the state's most rural areas with a level of technological sophistication that made the experience valuable and exciting to the remote learners. The team included representatives from a publicly held corporation (US West – now CenturyLink), a two-year postsecondary institution (Mitchell Technical Institute), a four-year university (Augustana College), and a guiding figure in the South Dakota's K-12 educational system (South Dakota Department of Education).

The University of Exeter, located in Southwest England, provides students from across the United Kingdom the opportunity to serve as resident archeologists for periods of time throughout the year. The lead archeologist for the site is Dr. Adrian Hannus of Augustana College.

The Mitchell Prehistoric Indian Village is the only archaeological site in South Dakota that is open to the public. The Village is an active research center and is a National Historic Landmark. A portion of the site is fully enclosed by the Thomsen Center Archeodome making it accessible year round. The site is fully equipped with a full laboratory connected directly to the dig site.

The curriculum is organized around the broadest possible definition of archeology: the study of artifacts in relation to human behavior at any time and place. The courses used the Archeodome Research Center as the backdrop and South Dakota as the regional focus.

## Indicator #2: Knowledge Workforce

A knowledge workforce is a labor force that creates economic value through its knowledge, skills and ability to use information effectively. 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.

10. Please indicate the percentage of your population whose greatest educational attainment is in the following categories.

Less than secondary (high school) degree	12.1%
Secondary (high) school degree	29.7%
Technical/community college certificate	33.6%

Undergraduate degree	18.8%
Graduate degree (M.A., Ph.D., Eng., etc.)	5.8%

11. Please list the universities, colleges and community colleges or technical schools within your community or within reasonable commuting distance for residents. For the most recent academic year, indicate the total enrollment (number of total students) and the number of graduates.

Name	Type	Enrollment	Graduates This Year	
			2-4 Year Studies	Graduate Studies
Dakota Wesleyan University	<input type="checkbox"/> Community college or technical/vocational school <input checked="" type="checkbox"/> Undergraduate/graduate college or university	883	159	13
Mitchell Technical Institute	<input checked="" type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university	1,227	434	NA
	<input type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university			
	<input type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university			
	<input type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university			

12. Please indicate the approximate number of people in your community who are currently enrolled in continuing education (e.g., adult education).

Continuing or adult education enrollment *	841
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13. How many jobs did your community create in the last 36 months (gross and net)? How many of the the new jobs depend on information and communications technology (ICT)? This may include jobs with ICT companies but may equally include ICT jobs in companies in retail, manufacturing, service and other businesses. It is understood that "jobs depending on ICT" is an estimate rather than a verifiable number.

Gross Jobs		Net Jobs	
All jobs *	315	All jobs *	275
Jobs depending on ICT *	100		

14. Please describe up to three projects initiated in your community to promote the creation of a workforce that is able do knowledge work and is comfortable with digital technologies. Avoid describing programs aimed at low-income, elderly or similar groups. These are addressed in the Digital Inclusion section.

Name	Funded By	Description	Year Started	Results to Date
MCTEA	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>In the past, the Mitchell School District's understanding of vocational education, now better known as career and technical education, was sadly within the guise of vocational education nationally, programming for students who simply couldn't cut the mustard in college-prep work. As a result, vocational courses were generally aimed at teaching skills already hopelessly obsolete, for careers which either no longer existed or soon would not, on equipment 2-3 generations out of use in business and industry.</p> <p>In order to remedy this, the Mitchell District turned to its own post-secondary school, Mitchell Technical Institute (MTI), which has a stunningly successful record of training young people in market-demanded careers through up-to-date training on equipment they would find in the actual workplace (in some cases equipment that was actually slight ahead of the marketplace). MTI now operates all CTE programs for the Mitchell High School with such offerings as industrial welding/manufacturing, Project Lead the Way engineering and health occupations, and culinary arts. Next year, it will add construction trades and precision agriculture. These programs are housed within the Mitchell Career &amp; Technical Education Academy, or MCTEA.</p> <p>All of these programs are now offered to Mitchell High School students with both articulation with MTI courses and, in many cases, for MTI credit as well as to students from regional high schools who, through a combination of virtual/distance education and travel to the</p>	2012	<p>To date we have over 200 students involved in Project Lead the Way Engineering, Project Lead the Way Biomedical, Culinary Arts, and Welding/manufacturing. As a result, we have a higher graduation rate, and a higher rate of post-secondary enrollment after graduation. We also have, though only anecdotal evidence for this exists, a greater enthusiasm among many of our students for their studies because they are more personalized for their interests/abilities and because they see a stronger connection with their own futures.</p>



academy site.				
<p>MTI Welding &amp; Manufacturing Technology Program</p>	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Mitchell Technical Institute is home to one of the newest and finest welder-training programs in the country. The new \$18.5 million Trades Center, opened in August 2013, houses two dedicated lab areas for welding and automated manufacturing education. Both labs are equipped with the latest industrial welding, cutting, robotic and training machines.</p> <p>The Welding &amp; Manufacturing Technology program is industry-driven to educate students to qualify for a variety of high demand careers. The program was actually started due to high industry demand after a 20-year absence in Mitchell. Regional employers cannot find enough qualified welders to fill positions. In fact, one local employer, Trail King Industries, is poised to embark upon a major expansion if the company can be assured of having enough welders available to fill newly created jobs.</p> <p>A number of students are taking advantage of the Workforce Recruitment Program, a partnership that MTI has with several regional employers. It offers eligible students educational stipends and part-time employment while they attend school. The student is also guaranteed an internship site and employment with the company for two or three years after graduation.</p>	<p>2012</p>	<p>While only starting in the fall of 2012, the program has seen great growth and appeal among potential students. The instructors have sought and achieved American Welding Society certification. MTI is now an accredited testing facility meaning that employers can hire a graduate who will be a certified welder and will take no risk that the new hire will or will not be able to pass the certification test. With certification as accredited welders, students will be able to leave the program and weigh hundreds of job openings available to them. MTI is also growing its corporate training side and hopes to become a Midwestern hub for short-term manufacturing training.</p>
<p>MTI Workforce Recruitment Program</p>	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Mitchell Technical Institute works with all kinds of industries to help students access the best possible job opportunities. As part of MTI's Workforce Recruitment Program, students apply for a "partnership" with a sponsoring company. If a partner company approves, the company will pay all or part of the student's tuition and fees (to be determined in advance) for semesters 2, 3, and 4 of a two-year program.</p>	<p>2011</p>	<p>Since its inception four years ago, the program has become very popular among regional employers. As of Fall 2013, there are currently eleven companies funding 26 students in a variety of programs. The early-entry companies are already employing several graduates and have been greatly satisfied with the graduates and their skill</p>

<p>The company is involved throughout the admissions and selection process, assuring that the student is a good fit for the organization. The company will also provide a paid internship experience for the student, giving the organization a chance to assess the student's skills and abilities midway through the program.</p> <p>After graduation, the company agrees to hire the student in a job relevant to his or her career at a competitive wage. A partner company's participation in the MTI Workforce Recruitment Program means that students who fulfill the employment commitment will have saved up to 75% of their education costs, and the company will have gained a loyal, well-educated employee.</p>	<p>levels.</p> <p>MTI is working to promote the program to more companies and organizations and hopes to add another three to five companies in 2014.</p>
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### Indicator #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.

18. Please explain the role of innovation in your community's plans for economic growth and describe your community's policies promoting innovation.

Developing high quality employment in rural areas requires creative thinking, actions and innovative leadership. Mitchell's broadband capabilities, along with the three communication consulting, engineering and software companies, provide the launching point for the future. Strategies for development include ways to:

1. Use of the broadband capabilities within the community to grow and recruit service industries that require high-capacity broadband facilities, such as finance, communications and healthcare.
2. Create a public image of the Mitchell region as a technology-friendly place to live – a place that is situated directly at the center of the broadband economy.
3. Ensure that government policy and local culture fosters and encourages entrepreneurship throughout the region.

Innovation has been very important in the growth of Mitchell and surrounding communities. For example: from 1970 to 2010, the creation and growth of the communications industry in Mitchell represents about 65% of the population growth.

As with the interstate highway 40 years earlier, Mitchell leaders very early anticipated that broadband would be important to the future of the community. In 2003, a local company, Santel Communications, secured a \$20M loan to build a Fiber to the Premises (FTTP) and operates today under the name of Mitchell Telecom. During this time, Midcontinent upgraded their hybrid fiber-coax system to include fiber very deep into their network.

The city of Mitchell, Mitchell Area Development Corporation (MADC) and the state of South Dakota encourage new businesses to locate in Mitchell, but also encourage the growth of existing Mitchell businesses.

Mitchell is home to three communications firms (CHR Solutions, Vantage Point and Innovative Systems) that specialize in helping communications providers all over the US deploy and operate broadband networks. These three companies have helped Mitchell become nationally recognized as a telecommunications hub for technology and innovation.

The city of Mitchell, MADC and the state of South Dakota have been key components in the growth of all three Mitchell communications firms through a combination of grants, workforce development incentives and the use of tax increment financing to help in the construction of additional office space.

The three Mitchell communications firms continue to grow and employ over 500 engineers and software specialists in the Mitchell community. The families of these 500 employees represent approximately 1,500 of the 2,185 population growth from 1970 to 2010; approximately 65% of the growth in the Mitchell population can be directly attributed to the growth of these communications firms which specialize in helping communications service providers deploy and deliver broadband services.

The city of Mitchell, Mitchell Area Development and Mitchell businesses also have encouraged innovation

in the following ways:

1. MADC helped with establishment of the Kelley Center for Entrepreneurship at Dakota Wesleyan University. Bryan Hisel, the Executive Director of Mitchell Area Development Corporation and the Chamber of Commerce, served as the executive director for the Kelley Center for Entrepreneurship when it was established in 2004 until 2009. Recently the Kelley Center for Entrepreneurship named Fredel Thomas, a former CHR employee with a degree in computer science, as its executive director.
2. The MADC assisted in the establishment and continues to facilitate a regional angel investor group to invest in new and established Mitchell businesses.
3. The MADC encouraged the establishment of the Entrepreneurs Club to stimulate ideas and discussions among local entrepreneurs. The goal of this group is to help entrepreneurs to cultivate their ideas and help bring them to market through mentoring, business development, and financing.
4. The Mitchell Chamber of Commerce developed a formalized networking group for young professionals to help build a support group that would be able to foster innovation and job growth. Periodic events bring them together for social and networking opportunities.
5. In order to foster technology innovation and policy, Mitchell elected Steve Rice to the city council. Steve is the SDP Development Manager at Innovative Systems.

19. Please provide up to three examples of innovation **by local government** in the delivery of services to constituents and stakeholders.

Name	Funded By	Description	Year Introduced	Results to Date
Community Digital Audit	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input type="checkbox"/> Academic institutions <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	Upon recommendation of the Regional Marketing Committee of the Chamber of Commerce, the Convention and Visitors Bureau and Chamber of Commerce partnered with the Mitchell Area Development Corporation and the City of Mitchell to perform a digital audit of Mitchell's web presence. The current web presence was described as "redundant," "convoluted," and "confusing," and it was time to serve Mitchell's citizens, businesses, and visitors better.  The overarching goal for all parties was to streamline the information available, reduce web clutter, and make all organizations as user-friendly as possible.  Two items in particular were addressed: First, what is the best use and future of a years-old portal page initially designed to promote local businesses? Second, what direction should the community's web presence take, in general, to maximize	2013	Committees and boards involved in the process are currently examining options, timelines, and costs for implementation of recommendations.

	<p>SEO and minimize redundant information? In total, seven websites were audited as well as any related social media presence. It was noted during the process that the City of Mitchell was in the process of overhauling and revitalizing their website, and the Chamber of Commerce had recently concluded an overhaul of their website.</p> <p>The results of the audit were illuminating. While some organizations' social media presence was very strong, others were in need of strengthening. It was recommended that three websites, each offering information to future residents and businesses, be combined to create a "one stop shop" for individuals looking to relocate to or within the community. The portal page was found to have decent web traffic but poor SEO and user-friendliness; it was recommended to shift this page to a parent website to maintain functionality in a way that also helped eliminate internet clutter. Finally, each site should link to all others in a consistent, easy-to-navigate manner.</p>	
<p>Real-time Student Achievement Data</p>	<p><input type="checkbox"/> Local Gov  <input type="checkbox"/> State/Prov Gov  <input type="checkbox"/> National Gov  <input type="checkbox"/> Private sector  <input checked="" type="checkbox"/> Academic institutions  <input type="checkbox"/> Public-private partnership  <input type="checkbox"/> Other</p>	<p>Before the advent of the federal 'No Child Left Behind' legislation, students in South Dakota were tested on nationally normed assessments (SAT9, ITBS, etc.) but, lacking any reporting or high-stakes requirements, the data provided by these were little used by instructors. This was a less than cataclysmic neglect of the data because, in any case, it provided only an annual 'snap shot' of student performance which has limited use in the classroom. With NCLB's advent, however, the annual testing became more important and performance more studied but the latter problem remained, that of making classroom use of student achievement data that measured literacy and</p> <p>2012</p> <p>We have now have real-time data on student achievement (numeracy and literacy) in grades K-5 such that teachers are individualizing instruction around student abilities, aiming for what we called the 'zone of proximal development' (Vygotsky). The result among these grades is higher levels of proficiency in math and reading a better preparation for Common Core Standards. As of January 1, we will have the same data for grades 6-8. With work, we will have the same in grades 9-12 by the start of the 2014-15 school year.</p>

	<p>numeracy in March but wasn't reported back to teachers until the next fall, after summer regression had already wreaked havoc on the underlying reality represented by these data.</p> <p>The Mitchell School District has therefore set a goal—already essentially met in grades K-5 and planned for implementation (piloted in 2013-14 with full application in 2014-15)—for real-time student achievement data through testing which is integrated within the instructional program. This may include programs such as STARS (literacy assessment), ALEKS (numeracy assessment), or others as identified. Regardless, already in place at the elementary level and soon to be in grades 6-12, the District will soon have monthly, weekly, and even daily data on student performance in literacy and numeracy which can and will be accessed by classroom instructors so that instruction can be both informed and determined based on actual student achievement, individual by individual.</p> <p>This will move the instructional program of the Mitchell District from one of an industrial age model (assembly line with each item manufactured as if identical to every other one, a hopelessly outdated and never really accurate perception of students) to one of mass customization as adopted today by Amazon, computer companies, and even automobile manufacturers (what we call mass customized learning and which is already being piloted at all instructional levels in our schools).</p>		
<p>City Innovation</p>	<p><input type="checkbox"/> Local Gov  <input type="checkbox"/> State/Prov Gov  <input type="checkbox"/> National Gov  <input type="checkbox"/> Private sector  <input type="checkbox"/> Academic</p>	<p>Since Mitchell Telecom has fiber to all residences, businesses, and government facilities, the city of Mitchell worked with Mitchell Telecom to implement an Internet Protocol</p>	<p>2010</p> <p>Quantitative user data is unavailable; however, anecdotal data from Mitchell Telecom indicates that the programs are heavily</p>

<input type="checkbox"/> institutions <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	(IP) based video broadcast of all city council meetings and other city meetings. This IP broadcast is broadcast to all Mitchell Telecom customers using their fiber-based IP network. It is assigned a channel on their Video over IP network. This service has since been expanded to the IP video broadcasting of the local high school sporting events and many of the DWU sporting events.	watched. "We definitely hear a lot of people call in if anything ever goes wrong," says one technician.
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20. Please provide up to three examples of innovation in the delivery of products and services **by local businesses and institutions**, including new business formation.

Name	Description	Incentives (if any)
Larson Data Communications	Larson Data Communications (LDC) is a total solutions provider of wireless and networked data systems for industrial and commercial systems.	State and local low-interest loan funds were provided for the acquisition of a new warehouse and office facility.
On Sight	On Sight is a startup business by a serial entrepreneur. The company provides custom cloud based video surveillance solutions to farms and small businesses in rural areas.	A low-cost lease in incubator space was provided for the company's data center and offices.
Innovative Systems	Innovative Systems is developing new products designed for the college and university market. The new software and systems would assist institutions of higher education by managing donor lists for institutional fundraising and capital campaigns. The software has been developed and tested in collaboration with Dakota State Technical University.	

21. Provide up to three examples of **collaboration among business, government and institutions in the community to generate innovation** that contributes to local economic growth, solves social challenges or contributes to environmental sustainability.

Name	Description	Year Started	Results to Date
DWU Master of Arts in STEM Instruction	<p>Dakota Wesleyan University, in partnership with the PAST Foundation and Midstates Cooperative, is establishing a program to foster passion and excitement in STEM (science, technology, engineering and mathematics) instruction. Working with the Mid-Central Cooperative in Platte, S.D., DWU will be the only higher educational institution in South Dakota offering the Master of Arts in teaching STEM instruction online. The online format will allow rural educators from across the state, and eventually beyond South Dakota's borders, to participate in this coursework. This example of collaboration among institutions and quasi-governmental organizations will help solve the challenge of educating rural teachers in high-tech fields.</p>	2013	<p>Implementation is slated for Academic Year 2014. Currently 14 students, currently enrolled in classes, are set to apply for the STEM certification.</p>
MTI Simulation Labs and Online Certification	<p>Mitchell Technical Institute is staying on the leading edge of incorporating the use of technology to assure that students and community members have access to some of the best high-tech education available. Recently, the school received a federal grant in excess of \$2.5 million to develop delivery of health care education to full-time and continuing education students.</p> <p>The first tier of training is linked to the development of a fully functional medical simulation lab. This lab will contain mannequin simulators as well as task trainers which will allow students to perform diagnostic and treatment activities in real-time. The lab will also be available to health care workers in the community from Avera Queen of Peace Hospital and will allow all levels of care providers from anesthesiologists and internists to nurses to technicians in the areas of laboratory, radiology, and other specialty areas to access the simulators for continuing education purposes. The lab will also be available for training first responders, emergency medical technicians, and others who provide emergence services in and around the community.</p> <p>Tier two of the project will see the development of a completely online certificate program for licensed radiology technicians and technologists to complete</p>	2013	<p>The initiative was undertaken in October of 2013. At the time this application was submitted, a program director has been hired and faculty are being actively pursued.</p>

	<p>certification in computed tomography (CT) and magnetic resonance imaging (MRI). Currently, there is no online program available to those wishing to achieve this certification. MTI will provide the courses, instruction and clinical management to ensure that technicians with those specialty skills are added to the workforce.</p> <p>The final tier of the project is an outreach component to bring education in Medical Office Professional skills to rural areas of the region. This program will be specifically tailored for Native American students who live in areas far from a campus, but is also available to any student who wishes to pursue this degree online.</p> <p>Developing and maintaining high quality health care in rural areas is difficult for any community. Members of the Mitchell community including MTI have become adept at offering the highest quality of specialty medical education. Many of these offerings are made possible because of the technology available in the community.</p>		
<p>MTI Precision Ag Partnership</p>	<p>No other industry has been impacted to a greater degree by innovation and technology than production agriculture. Over the course of the past 80 years, farming and ranching has been transformed from a labor intensive, small family business into an energy-, capital-, land- and equipment-intensive industry. The technology revolution in agriculture is accelerating with innovations in biogenetics and precision farming technology. The impact of this production productivity has allowed a very small percentage of the national workforce to produce all the food required for domestic production and add to GNP through international exports of food products. In fact, Mitchell Technical Institute has been a leader in precision farming, refining it and teaching it to the students in its Agriculture Technology program as an integral part of its curriculum.</p> <p>The MTI ag-related programs recently benefited from a donation by C &amp; B Operations. The company installed one of seven unique weather stations at the land lab that are being used to monitor conditions at the farm site.</p>	<p>2013</p>	<p>C &amp; B will use the equipment for research and for training. The data is also streamed in real time to students in the Ag Technology, Farm Power and Precision Technology programs for use in their classes and labs.</p>

This is the only one of the seven stations that is not operating under an irrigation pivot. The data gathered will reflect true weather and soil conditions not affected by irrigation.

The electronic weather station consists of a solar powered computer and several monitor devices including wind direction and speed, barometric pressure, solar radiation, rain gauge, leaf moisture sensor, and soil moisture probe. The equipment allows the producer to determine at what stage are the crops using the most water? What nutrients or fertilizers should be added and when? How much water and electricity is being used to irrigate?

Division head Darin Maltzberger said that this equipment is the next generation of precision technology. Previous technology was aimed at letting the farmer learn about placement of seed and row definition. This equipment will allow producers to better manage inputs.

22. What were the top three most recent investments backed by venture or risk capital in your community within the past 36 months?

Month/Year	Company Funded	Description	Value (USD)	Source of Funding
11/13	Various	Business & Community Initiatives	\$30,000	Mitchell Telecom
09/12	Yelroc Neuro	Medical Device Manufacturing	\$1,000,000	Venture Capital
06/12	CHR Solutions, Inc.	Data Center	\$500,000	SD Futures Fund

#### Indicator #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 can bring to their lives.

23. Please describe your community’s digital inclusion strategy and outline its most important goals or priorities.

Our most important goal is to make sure that the youth who live in Mitchell and young adults and families coming to Mitchell have equal opportunity to experience and learn the current and future technologies. We have made steps towards this target by becoming a leader in providing laptops and tablets for all middle- and high-school students, a program which is quickly expanding even to our elementary students.

The Mitchell community also aims to ensure that Mitchell area citizens have world-class broadband access at very reasonable costs. All residential locations and businesses in Mitchell are connected to a state-of-the-art fiber optic network that is capable of delivering hundreds of megabits of data to each location. In addition, this network delivers high definition video using the Internet Protocol (IP). Mitchell also provides free Wi-Fi access at a number of public locations including the Corn Palace, city hall, and

the public library.

24 Which of the following groups are the primary targets of your digital inclusion strategy, on which the majority of resources are concentrated?

- Low-income                       Elderly                       Geographically remote  
 At-risk or criminal youth       Disabled

25. Please describe up to three programs in your community that aim to increase digital inclusion by providing facilities, hardware and software, training, and incentives.

Name	Funded By	Description	Year Started	Results to Date
1:1 Technology Program	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	In 2003, the Mitchell School District, recognizing the differential access that its student population had to technology (at that time, computers but today to include a broader understanding of devices which connect students to the world), set a goal of providing a computer to each and every student in grades 7-12. In 2004, that goal was realized and Mitchell became the first school district to offer such to such a broad range of students. Since then, it has maintained that access and has in fact expanded it to include many elementary students. By the 2015-16 school year, it now seems clear, the 1:1 program will be extended to all grades, K-12.	2006	Beginning in 2006-07, we had a 1:1 technology program in grades 7-12. The result of this has possibly been higher student achievement and definitely higher proficiency rates at technology usage. Each year we inch close to having a 1:1 program in grades K-6 and to date we have reached a rate of one computer/handheld technology for every two students at those levels.
Innovative Online Degrees	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Dakota Wesleyan University recently established two online programs to meet the needs of rural business people and healthcare providers. The M.B.A. –Strategic Leadership is a master’s program geared to individuals in smaller, non-publicly traded businesses present in this region.</p> <p>The B.S. in nursing is for associate-degree registered nurses who wish to earn the much-needed bachelor’s degree.</p> <p>Both programs are designed for accessibility to working adults. The M.B.A. can be completed on either a 12- or 24-month basis; the nursing bachelor’s degree is</p>	2013	These programs began in Academic Year 2013, and the first graduating class is anticipated in May 2014.

		a 14-month program. Because the programs are online, they are accessible to potential students in rural or urban areas. The achievement of these degrees create increased earning potential for the graduates.		
Laptop Loan Program	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	Through the federally funded TRiO program at DWU, low-income and first-generation college students have the ability to check out laptop computers to assist with their educational endeavors. The program provides this educational support so students are able to access technology when it's convenient for them, regardless of library or computer lab hours.	2004	The TRiO target for retention is 70%; in 2012-13, the retention rate for this group at DWU was 86%; The TRiO target for good academic standing is 80%, DWU's percentage was 95%; and the TRiO target for 6-year graduation rate was 35% while DWU's was 55%.

**Indicator #5: Marketing and Advocacy**

A community's citizens can be a barrier to progress, when they resist change, or can become its most powerful advocates for a better future. Intelligent Communities are also good marketers of their digital age advantages for economic development purposes.

26. Please give up to two specific examples of communications programs – aimed at people or organizations **inside your community** – that focus on your Intelligent Community initiatives and successes. Include hyperlinks where available.

Marketing Programs or Materials	Intelligent Community initiatives featured; how explained
Public Relations Media Campaign	<p>There has been a public relations campaign with local news outlets regarding Mitchell's selection as a Smart 21 community. The purpose of the campaign was to explain why the community was selected as a "smart city", the world class broadband available in the community and the communications industry that has developed in the city.</p> <p><a href="http://dev1.mitchellrepublic.com/event/article/id/79787/">http://dev1.mitchellrepublic.com/event/article/id/79787/</a>  <a href="http://www.keloland.com/newsdetail.cfm/the-growing-city-of-mitchell-/?id=149467">http://www.keloland.com/newsdetail.cfm/the-growing-city-of-mitchell-/?id=149467</a></p>
Chamber of Commerce – Smart21 Promotion	<p>The Mitchell Area Chamber of Commerce uses its weekly E-memo and monthly newsletter distributed through the daily newspaper to promote and explain the importance of the Smart 21 community designation and the Intelligent Community Forum.</p> <p><a href="http://www.mitchellchamber.com/read_file.php?content_type=PDF&amp;file_name=716.pdf">www.mitchellchamber.com/read_file.php?content_type=PDF&amp;file_name=716.pdf</a></p>

27. Please give up to two specific examples of communications programs – aimed at people and organizations **outside your community** – that feature your Intelligent Community initiatives and successes. Include hyperlinks where available.

Marketing Programs or Materials	Intelligent Community initiatives featured; how explained
Regional Economic Development Website	The Mitchell Regional Economic Development Partnership web site features a hyperlink for to the Intelligent Community Forum (ICF) forum. It highlights Mitchell



	<p>being as a Smart 21 community.</p> <p>The information is used for both inside and outside communications. It highlights Mitchell's technology and communication infrastructure for members of the community and for prospective industrial clients.</p> <p><a href="http://www.mitchellsd.org">www.mitchellsd.org</a></p>
ICF & National Media	<p>Through the assistance and efforts of the ICF, national media articles regarding Mitchell, South Dakota and its Smart 21 designation have been published. The contrast between the community's rural geographic location, relatively small population with the access to world class broadband and the 500 jobs in several communication technology companies was focus of several of the articles.</p> <p>In addition, a Mitchell delegation traveled to New York to enhance community knowledge regarding the Intelligent City Forum working goals and Intelligent 7 communities.</p> <p>The delegation included the Mayor and a City Council Representative, representatives from Dakota Wesleyan University and Mitchell Technical Institute, CEO' from the private communication technology firms of Innovative Systems Inc. and Vantage Point Solutions, Inc. and the Director of the Mitchell Area Development Corporation and Chamber of Commerce. A news article about the trip and the ICF received wide spread distribution.</p> <p><a href="http://www.prairiebizmag.com/event/article/id/14814/">http://www.prairiebizmag.com/event/article/id/14814/</a>  <a href="http://www.digitalcommunities.com/articles/The-Rural-Imperative.html">http://www.digitalcommunities.com/articles/The-Rural-Imperative.html</a></p>

28. Describe programs operated by government, business and/or institutions that **promote the development of an innovative ecosystem**, which attracts and supports leading-edge employers as well as the talented employees they need. Describe up to three such initiatives or programs.

Program	Description
Nursing Simulation Labs	Dakota Wesleyan University has established an innovative ecosystem through nursing simulation labs that allow students to experience real-world healthcare situations with the use of high-tech simulation manikins. Instructors are able to remotely program the manikins, as well as record student reactions to life-threatening health issues. The opportunity to have hands-on access before working with human patients builds confidence and creates highly employable future nurses.
Entrepreneur & Angel Investor Groups	The city of Mitchell and the Mitchell Area Development Corporation (MADC) have taken a double-prong approach to innovation in the community. First, they have organized, facilitated, and funded a local entrepreneur's group that meets regularly to foster new business ideas, provide mentoring of new business leaders, and local collaboration of resources. In addition, the MADC has assisted in the formation of an angel investor group to help fund the exceptional business ideas that may be developed. The angel investor group consists of business leaders with access to private capital that are willing to invest in local businesses that they feel will ultimately become successful and create a better quality of life in Mitchell.
Student-Employee Development Program	During the current academic year, a partnership between Innovative Systems, a Mitchell engineering and telecommunications company, and Dakota Wesleyan University was established in an effort to connect potential employees with this growing company. A DWU faculty member and a student piloted this unique program, working at Innovative Systems as part-time employees. This collaborative effort has given the faculty member the opportunity to stay connected to the industry while providing on-site services; the student is applying and honing her skills in graphic design, interface design and mobile application design within a professional

work environment.

29. Describe up to 3 policies or programs led by local government, business or institutions that **educate citizens on issues of importance to the community's future** and **encourage them to participate** in creating needed changes.

Program	Description
Leadership Mitchell	<p>Leadership Mitchell is an annual program offered through the Mitchell Area Chamber of Commerce. The program is designed to support the development of future leadership with particular emphasis on specific skills and collaborative leadership. Leadership Mitchell is targeted to individuals who are actively seeking positive changes in response to civic, government, business and industry changes in the Mitchell Area by providing training in areas strategic to the well-being of our community.</p> <p>Graduates of Leadership Mitchell become a part of a new community resource, capable of joining responsibly in community leadership. Graduates will have seen how the Mitchell Area works, know its areas of need, and feel challenged to work together for solutions to the challenges that face the Mitchell area in these times of change. Leadership Mitchell is a formal educational program intended for Mitchell area citizens who have an interest in area communities, their leaders and institutions, their decision-making processes, and/or specific leadership opportunities.</p> <p>During the program, which is spaced over five months, participants will learn and practice leadership skills for use in their professional and community service roles. Additionally, participants build a leadership network among current and emerging leaders, learn about community issues, and become familiar with the rewards of community service work. The program provides a format within which participants can meet existing community leaders while encouraging interaction among them. This interaction will in turn encourage emerging leaders to deepen their involvement in the community;</p> <p>Leadership Mitchell has been successful in identifying potential leaders, acquainting them with community matters, and developing their awareness of resources, institutions, individuals, organizations and other entities available for addressing these matters and solving community tribulations.</p>
Chamber Programs	Cracker Barrels and forums, provided by the Chamber of Commerce, allow citizens the opportunity to interact directly with their legislative representatives. Debates are held for nearly all elections and ballot initiatives to allow citizens the opportunity to ask the questions that matter most.
The Network	<p>The Chamber focuses directly on the need for knowledge transfer between industries and between leadership cohorts. The Network, a group of young employees in Mitchell, meets for social, educational, and informational programming aimed at bringing together employees of various industries. The "My Biggest Break" event, held annually, has become a can't-miss event for employees of all industries and age groups. This event features established business leaders handing down the lessons they have learned over the course of their careers.</p> <p>The Network has also begun the process of establishing a formal mentorship program to connect established leaders with emerging ones.</p>

30. Please provide up to three success stories of business formation, growth or attraction in your community.

Company	Description
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Larson Data Communications	Larson Data Communications (LDC) is a total solutions provider of wireless and networked data systems for industrial and commercial systems. LDC is a relatively new company with six employees but has growth projections to create 20 new jobs within the next 3-5 years and has just moved into a newly acquired 12,000 square foot warehouse and office facility. The business is also a distributor of industrial data radio products in the upper Northern Plains states. Services provided include, planning, engineering, and installation of wireless networks for SCADA/automation connectivity. <a href="http://www.larsondata.com">www.larsondata.com</a>
On Sight	On Sight is a startup business by a serial entrepreneur. The company provides custom cloud based video surveillance solutions to farms and small businesses in rural areas. The business is being incubated in a part of a 20,000 square foot office facility that was built and designed for communications based companies by the Mitchell Area Development Corporation. The data center for the business is also located within the facility. The On Sight surveillance solutions provide rural businesses with loss prevention, inventory control, employee monitoring and business oversight. The live and recorded video can be viewed from a phone, tablet computer and PC with proactive e-mail alerts. <a href="http://www.onsight247.com">www.onsight247.com</a>
Innovative Systems	<p>Innovative Systems is an elite group of over 170 professionals who provide expertise in the areas of telecommunications, electrical engineering, embedded systems design, software engineering and marketing. With over 1,200 systems deployed throughout North America, Innovative Systems is the leading provider of integrated solutions for the independent telecommunications industry.</p> <p>The company is developing new products designed for the college and university market. The new software and systems would assist institutions of higher education by managing donor lists for institutional fundraising and capital campaigns. The software has been developed and tested in collaboration with Dakota State Technical University.</p> <p><a href="http://www.innovsys.com">www.innovsys.com</a></p>

**Theme: Community as Canvas (see page 1 for explanation)**

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. The following are the same questions included in the Smart21 nomination form and you may repeat the answers given in that form or provide new answers.

31. 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.

Over 1,000 years ago, roughly 200 Native Americans settled a village on the shore of Firesteel Creek near the James River at the 98th meridian. The architecture of their lodges – nearly eighty on the site – tells much about their relationship to climate: Their lodgings were designed to protect against the harshest elements and accommodate their families. They grew squash, beans and a domesticated type of corn from the Mexican valleys. However, they engineered a shortening of its growing season to mirror the short Plains summers in what is now Mitchell, South Dakota.

These Native Americans, perhaps ancestors of the North Dakota Mandan tribes encountered by the Corp of Discovery, learned to process bison on an industrial scale. In fact, trading pemmican – a type of trail mix made of bison bone marrow, seeds, and dried fruits – with passing fur traders was likely the area's first industry. Though the village was abandoned long ago, evidence of their heritage is being literally unearthed at the Prehistoric Indian Village on the shores of Lake Mitchell (the Firesteel Creek was impounded by an earthen dam as a part of a WPA public works project).

The Thomsen Center Archeodome is a fully enclosed, climate-controlled, live archeological dig site that hosts a team of archeologists for one month a year and invites visitors and students alike year-round. The 10,000-square-foot building encloses two full lodges on its exposed earthen floor. It includes a full laboratory, darkroom, computer classroom, and video conferencing studio. The Archeodome provides an enclosed archeological teaching and research facility, a feature rare in North America. The site is wired with full broadband access allowing for long-distance learning from the dig site.

This cultural gem provides a natural home for Native American art shows, concerts, games, speakers, and classes. The opportunity to view live archeological work attracts thousands of visitors each year, from Boy Scout troops to families to local students. Modernizing a thousand-year-old village for twenty-first century audiences, literally building technology around the remains of those that came before us, exemplifies the contrary nature of those who settled the area long after the Mandan had left and the way two unique heritage groups now share the same space.

The contrast between two unique heritage groups is shown nowhere more clearly than at the Dakota Discovery Museum, located in Mitchell. There, three art galleries share one space: a rotating gallery featuring modern exhibits, the Charles Hargens installation showcasing his illustrative capture of the Old West, and the Oscar Howe Gallery, exhibiting works from one of the greatest Native American artists in American history.

Hargens' gallery captures a romantic view of Western culture in the region; where there are people, there is culture, and his work offers glimpses into the culture as it was being transformed by a new people upon the land. Oscar Howe's work is the penultimate result of a concurrent cultural exposure: his Native American heritage was informed by Western mores, creating the launch pad for beautiful art that has adorned both canvas and the Corn Palace where he was the artist in residence for over 20 years. In fact, a series of Oscar Howe murals on the interior of the Corn Palace depicts the story of the two cultures meeting at the 98th meridian.

These artistic gifts to, and of, the region reflected the local culture within itself and outward to the nation. Coastal cities were forced to recognize and grapple with the incredible art flowing from the region, and local citizens took pride in the images reflected back to them. It has been a regenerating gift in both economic and cultural terms. The galleries attract thousands of visitors each year, which leaves an economic impact on the city. The works themselves hang as a reminder of where have been both the good and the bad.

32. 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?

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?

In a land where the acres outnumber families, time and space have historically dictated societal norms in a way that encouraged sporadic mass gatherings in lieu of constant interaction. Festivals and fairs drew huge swaths of population from the countryside to communities, and came to be iconic of their host cities.

Mitchell is no exception. In 1892 local businessmen lobbied the community to build a Corn Palace to showcase the amazing agriculture and bring new faces to the city. The Corn Belt Exposition was born, and has been held each year since, now known as the Corn Palace Festival. Today, the Palace rising from the prairie pays tribute to the juxtaposition that has always characterized Mitchell.

In the years since the Corn Palace Exposition's conception, the structure itself has undergone renovation of both form and function. Used now year-round, the Palace is a community center, visitor attraction, city icon, and cultural feature combined. Over 300,000 visitors come each year to view the corn murals on the exterior of the building. The murals are replaced each year and reflect a new and changing theme. They are designed by an artist-in-residence and placed by hand on the building as the grasses and colored corn comes into season. This unique form of folk art constantly receives national attention and has been highlighted in numerous publications such as the National Geographic magazine.

33. 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.

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.

The climate in South Dakota dictates a strength of personal character. Only those with an untenable strength of will, would choose to stay in a place characterized by wild swings in weather, unpredictable seasons, and an unyieldingly flat landscape. This tenacity has created a population that overcomes barriers through persistence and determination.

As in many things, this strength comes with a specific set of challenges. Change does not come easily to those whose heritage is built on challenging nature. Acceptance of new ideas, new ways of thinking, and new technologies risk adoption along the slow curve of decades rather than the urban norm of years.

This grind to the top has the unexpected benefit of serving as a sieve for great initiatives. The citizens of Mitchell are savvy, civically engaged, and stubborn in a manner that ensures only the best ideas are implemented.

### 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

**Broadband Communications** is Internet access at speeds higher than dial-up, provided by DSL, cable modem, wireless, high-capacity data line or satellite. Broadband speeds range from a low of 128 Kbps up to 10 Mbps and beyond. Intelligent Communities express a clear vision of their broadband future and craft public policies to encourage broadband deployment and adoption.

**Knowledge Workforce** means a labor force qualified to perform “knowledge work” involving the acquisition, processing, analysis or use of information and the use of automation in manufacturing and manual processing. Intelligent Communities exhibit the determination and demonstrated ability to develop a workforce qualified to perform knowledge work. This is not simply a matter of possessing universities able to crank out post-grads with science and engineering degrees. Effective development of knowledge workers extends from the factory floor to the research lab, and from the loading dock to the call center or Web design studio.

**Innovation.** Intelligent Communities seek to foster or attract innovative businesses, because they are the ones that will grow in terms of employment and contribution to the tax base. These days, the word “innovation” tends to imply technology: the creation of tech clusters and the founding of the next Microsoft or Softbank. But innovation in other areas is just as powerful. Innovation may mean finding a better way to serve customers, ship goods, make reservations, or deliver information. More broadly, innovation is a process that leads to improvements in added value, whether incremental or radical, to markets, organizations, government, and quality of life. It is not the technology that matters — it is the change it makes in people’s lives. Intelligent Communities foster innovation and creativity within economic development programs and policies, for example, by creating an environment that attracts creative people, and by promoting the formation of, and access to, the risk capital that fuels new business

**Digital Inclusion.** The broadband economy promises to usher in a golden age of prosperity, knowledge and freedom. But it has just as much potential to usher in a “gilded age,” where the benefits go to a privileged few and fail to ignite economic growth. Intelligent Communities create 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 can bring to all citizens. Digital access coupled with an intelligent community vision helps to create a culture of digital use with opportunities for varied social improvements and greater community cohesion.

**Marketing and Advocacy.** With markets, capital and business operations more global than ever before, employers and citizens enjoy a great range of relocation choices. Like businesses facing greater global competition, communities must work harder to communicate their advantages - both externally (marketing) and internally to their own citizens (advocacy) - and explain how they are maintaining or improving their position as wonderful places to live, work and build a future for people of all generations. Effective marketing is a necessary piece of the transformative process for Intelligent Communities.

### 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 to 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. And some Intelligent Communities give specific attention to environmental sustainability. They invest in Intelligent Community programs in order to identify environmental issues, reduce pollution and curb carbon emissions as well as for economic development and inclusion. This environmental stewardship contributes to the health of the community and the sustainability of the planet.