

Intelligent Community Awards Program

Top Seven Intelligent Communities Phase

2012

Congratulations on being selected for the Intelligent Community Forum's Smart21 of 2012. Your selection was based on data compiled by ICF as well as nominations submitted by communities. 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 – plus the information in the Smart21 selection – will provide the basis for selection of the Top Seven Intelligent Communities of 2012, to be announced at the Pacific Telecommunications Council conference in Honolulu, Hawaii on January 18, 2011.

If your community is named to ICF's Top Seven, it will be a finalist for the Intelligent Community of the Year award, which will be presented on June 8, 2012 at ICF's Summit in New York. *Please note:* Top Seven communities are required to invite one ICF representative for a site visit to the community between February and April. The purpose of the site visit is to validate information in this questionnaire as well as to develop a report on the community that will be reviewed by the international jury in the selection of the Intelligent Community of the Year. Travel and accommodations for the site visit are provided at the community's expense. There are no additional costs or fees. Top Seven communities are also featured at the ICF Summit in New York and are provided with up to seven free full-conference registrations to attend.

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 to ICF at awards@intelligentcommunity.org by December 19. **ICF analysts will use only the information on this form in making their evaluation.** Do not send additional information or attachments. Your completed application may not exceed 25 pages.

Deadline for
Questionnaires:
December 19

2012 Theme – Intelligent Communities: Platforms for Innovation. In addition to ICF's five permanent criteria (the Intelligent Community Indicators), the Intelligent Community Awards are guided by an annual theme. In 2012, our theme is "Intelligent Communities: Platforms for Innovation." Innovation is one of ICF's five Indicators, but the special theme will focus on how Intelligent Communities create uniquely powerful innovation ecosystems on a foundation of information and communications technology. Innovation in Intelligent Communities brings together business, government and institutions in a dynamic partnership that produces results ranging from better and cheaper service delivery to citizens to the birth and growth of entrepreneurial businesses and vital new institutions. Intelligent Communities are pioneers in the complex collaboration that powers innovation today and are experts at building an innovation culture that attracts talent, investment and global recognition. By becoming platforms for innovation, Intelligent Communities create a better life for citizens on all rungs of the economic ladder and a vibrant future for the next generation.

For a complete description of the theme and examples from award-winning Intelligent Communities, download a copy of the ICF White Paper *Intelligent Communities: Platforms for Innovation* (see "Nominations" on the Awards menu).

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

Dakota County, Minnesota, USA

Background

1. Population	Municipality	<input type="text" value="398,552"/>	Metro Area (if applicable)	<input type="text" value="2,849,567"/>
2. Labor Force	Municipality	<input type="text" value="230,818"/>	Metro Area (if applicable)	<input type="text" value="1,608,334"/>
3. Area	Municipality	<input type="text" value="586"/>	Metro Area (if applicable)	<input type="text" value="2976"/>

4. Top Industries by Employment	(2010 annual average for private sector, DEED, Quarterly Census of Employment and Wages) Retail Trade (20,897 jobs), Manufacturing (17,727 jobs), Health Care and Social Assistancs (17,412 jobs), Accommodation and Food Services (13,718 jobs), Transportation and Material Moving (10,641 jobs), Finance and Insurance (9,546 jobs)
5. Emerging sectors or clusters with potential for growth	Twin Cities employment projections for 2009 to 2019 show larger than average new job growth for the following ICT intensive sectors: <ul style="list-style-type: none"> - Pharmaceutical and medicine manufacturing, 18.2% - Medical equipment and supplies manufacturing, 16.1% - Specialized freight trucking, 15.7% - Truck transportation, 11.7% - General freight trucking, 10.4% - ISPs, search portals and data processing, 20.2% - Software publishing, 18.9% - Insurance agencies, brokerages and support, 18.0% - Depository credit intermediation, 15.2% - Financial invenstment activities, 13.0%

Indicator #1: Broadband

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 checked="" type="checkbox"/> Public-private partnership
<input type="checkbox"/> Wireless	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input 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	99%	75%
Businesses	99%	assume close to, if not 100%
Government	100%	100%
Educational and nonprofit	100%	100 education, assume close to 100 for non-profit%

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: Comcast		Approx. Market Share: 60%	
Minimum	3 Mb	39.95	US Dollars
Median	25 Mb	67.95	
Maximum	105 Mb	199.95	
Carrier #2: CenturyLink		Approx. Market Share: 15%	
Minimum	1.5 Mb	44.99	US Dollars
Median	7 Mb	54.99	
Maximum	40 Mb	114.99	
Carrier #3: Frontier		Approx. Market Share: 15%	
Minimum	1 Mb	29.99 bundled only	US Dollars
Median	9 Mb	44.99	
Maximum			

- 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
Dakota County I/C-Net	<input checked="" type="checkbox"/> Local Gov <input checked="" 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>Dakota County operates a growing institutional network (INET) that connects 265 county facilities, city offices, school districts together over owned and leased fiber optics.</p> <p>Major service centers are connected at 1 Gb. The network is scalable to provide the bandwidth that each facility requires. This network provides robust bandwidth and opportunities for redundancy, back-up services and other network services</p> <p>This network connects to the State of MN Office of Enterprise Technology which serves as the county's ISP. Successful collaborative efforts within Dakota County is spurring new collaborations and innovations.</p> <p>Dakota County led efforts with six other metropolitan counties to create a memorandum of understanding to pursue joint technology projects across the region, focusing on areas such as disaster recovery, data storage, staffing, etc.</p> <p>The county has recently adopted policies to spur broadband investments and improved services. Surplus county-owned dark fiber will be made available for lease to private sector providers, both wireless and wireline providers.</p>	2005	<p>Virtually unlimited bandwidth for the INET Partners, increased access to shared services including back-up and disaster recovery for the INET Partners.</p> <p>Some of the fiber access has been provided through soon-to-expire franchise agreements with the incumbent cable provider. Efforts are underway to move beyond the limits of the current franchise agreement with a new partnership between public sector entities.</p> <p>Dakota County staff have done extensive mapping of public and private sector fiber assets, thus maximizing the ability to swap and share fiber assets, conduct joint builds and other innovative leveraging strategies.</p> <p>The inter-county MOU has been signed by all seven metro counties. Priority project development is underway.</p> <p>Informal marketing of excess dark fiber is underway.</p>
City of Eagan	<input checked="" 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 checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>The City of Eagan first analyzed its broadband landscape in 2005. The report highlighted opportunities to improve infrastructure and services, including the need for more fiber and conduit in certain parts of the city, the need for a telecom hotel in the Dakota County area and the need for a southern route out of the Twin Cities that avoided the centralized telecom hotel in downtown Minneapolis.</p> <p>This planning study was aided by the participation of leading corporate data users, including</p>	2005	<p>The City also worked to encourage private sector broadband investment resulting in new fiber based services to small and medium size firms through Velocity, a relatively small CLEC provider. This company has found a niche market providing fiber based connectivity and advanced telecommunications services, offering broadband choices to growing companies, a</p>

	<p>Thomson Reuters, Unisys, NWA/Delta Air Lines, Blue Cross-Blue Shield and others. Eagan has kept this source of corporate technology intelligence intact over the long term, providing community leaders with a sounding board of unmatched technological capabilities and market savvy.</p> <p>Eagan has been consistently aggressive in working on these opportunities since 2005, beginning with an immediate policy to place conduit in open utility trenches.</p>	<p>definite win for the companies and the community.</p> <p>This year, Eagan has moved even more aggressively forward in two ways. First, the City Council adopted a resolution declaring the need for a co-location facility and fiber optics as critical infrastructure. They then adopted a plan, with appropriate financing, to extend 54,000 linear feet of duct and fiber across significant parts of the community where fiber availability had been previously limited. This dark fiber will be made available to any provider through open access policies.</p>	
<p>City of Burnsville</p>	<p><input checked="" 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 checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other</p>	<p>in 2009, the City of Burnsville constructed a fiber network to provide SCADA monitoring capabilities for their municipal sewer and water utilities. The network has extensive reach throughout the community.</p> <p>The City was also interested in leveraging this new network for more robust broadband services for community members, especially local businesses. Finally, the City was interested in minimizing street disruption and degradation due to multiple utility construction projects.</p>	<p>2009</p> <p>The City issued an RFP for private management of their fiber network to maximize the marketing opportunities for the fiber.</p> <p>The City selected Frontier Communications, the Local Exchange Carrier in one portion of the community.</p> <p>Frontier will manage the fiber network and will market the availability of dark fiber to competitive providers. This results in two community benefits. First, the community gains cost savings in fiber maintenance as Frontier is responsible for fiber locates, etc. City staff is also relieved of day to day fiber marketing.</p> <p>In addition, this network will give Frontier access to the parts of the community currently served only by CenturyLink, thus enhancing competition, especially in areas that may be considered to be underserved.</p>

Indicator #2: Knowledge Workforce



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

Less than secondary (high school) degree	5.1%	Secondary (high school) degree	22.6%
Undergraduate (university) degree	two year degree - 10.1, undergraduate - 27.7%	Graduate degree (M.A., Ph.D., Eng., etc.)	11.3%

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 County Technical College	<input checked="" type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university	3,154	Certificate - 527, Associate degree - 344	0
Inver Hills Community College	<input checked="" type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university	6,372	Certificate - 378, Associate degree - 656	0
University of MN	<input type="checkbox"/> Community college or technical/vocational school <input checked="" type="checkbox"/> Undergraduate/graduate college or university	51,721	Certificates- 470, Undergrad - 6,942	5037
Normandale Community College	<input checked="" type="checkbox"/> Community college or technical/vocational school <input type="checkbox"/> Undergraduate/graduate college or university	Certificate- 166, associate - 997	997	0
Seven St. Paul Colleges and Universities	<input checked="" type="checkbox"/> Community college or technical/vocational school <input checked="" type="checkbox"/> Undergraduate/graduate college or university	39,982	certificates - 1,272 undergraduate - 5,236	3,279

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 *	20,000 estimate
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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.

Gross Jobs		Net Jobs	
All jobs * 27,827	Jobs depending on ICT * 4,555	All jobs * 676 total; 58 ICT dependent	

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 comfortable with digital technologies.

Name	Funded By	Description	Year Started	Results to Date
Inver Hills Community College Computer Technology Academy	<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>IHCC offer the Computer Technology Academy for High School students. The academy offers high school students an opportunity to learn more about the computer networking and security career field, get a head start on college level computer courses, save dollars on college tuition and feed their passion for computer technology. Students learn to install, repair, and maintain home, school, and business computer networks.</p> <p>IHCC has created and deployed a systematic approach beginning with kids in middle school/junior high, increasing skills through college-credit course offerings to high school students, all leading to IHCC's Computer Network Technology Degree Program.</p> <p>These summer, weekend and after school programs give students an alternative to standard high school activities; sports, clubs, etc... or allows students who are on a College Track; (Advanced Placement classes), to have access to these types of classes as well. For many students, the emphasis on a set core of classes that enable success on standardized tests limits their ability to take computer classes during the rest of the school day.</p> <p>Inver Hills provides certified instructors, classroom/lab facilities and new equipment for hands on activities. Classes are offered at multiple locations in Dakota County and now also in St. Paul, serving as a recruiting tool for IHCC.</p>	1998	<p>To date more than 500)High School Students have taken these classes. The classes are typically offered "after school", 3:30pm – 5:30pm during the school year and in a more compressed week long or multi week long format in the summer.</p> <p>U Tech Camp (Middle School Students) is their newest endeavor . We have only run one of these classes so far, but it was a great success. We offered the class for FREE. We had (26) students sign up and we had a waiting list. In the end, only (21) students actually show up.</p> <p>We had: four girls in the class and at least (7) students that had just completed 5th grade. The next highest was 6th grade and only a couple from 8th grade.</p> <p>IHCC has a strong partnership with Cisco and the Cisco Networking Academy. IHCC was one of the very first academies and has been teaching networking for over 13 years. Although Inver Hills has been doing CISCO Academy Instructor Training for years, we will be transitioning into the newly created (ITC) Instructor Training Center as part of the Academy Evolution process and will be training other academies instructors from across the US and Canada.</p>
Inver Hills Community College Networking and Advanced Security Programs	<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	<p>These programs prepare students for rewarding careers in the dynamic field of computer networking. The continued growth of the Internet, wide area networks (WANs) and local area networks (LANs) requires broad knowledge and skills needed to</p>		<p>IHCC is a National Center of Academic Excellence. The Network Technology and Security program has been awarded the Center of Academic Excellence in Information Assurance for Two Year Colleges</p>



	<input type="checkbox"/> Other	<p>design, manage, secure and troubleshoot sophisticated information storage, retrieval and presentation systems.</p> <p>This is a rigorous educational program that covers the workings of networks from an end-user's desktop to a remote server that could be located anywhere in the world. The curriculum has been designed to encompass many of the same competencies that are covered by several recognized industry certifications, for example: CompTIA's A+, Server+, Network+, Linux+ and Security+; Cisco CCNA, Cisco Security; and Microsoft Certified Information Technology Professional MCITP, so students will gain the knowledge and skills that are recognized as important for employment in the field.</p> <p>In the classroom, Network Technology and Security students take a large variety of classes giving them introductions to several areas of the technology world. This curriculum allows for many options of emphasis and additional educational credits to be earned through areas of certification. Courses are taught by expert instructors who stay current in the technology world, expanding the student's ability to learn and experience the necessary knowledge and skills recognized as marketable attributes for employable graduates for IHCC's programs. This is crucial for the A.A.S. degree and any of the certificates offered.</p>	<p>(CAE2Y) by the National Security Agency and the Department of Homeland Security. Only 12 community colleges in the country hold this designation. Inver Hills is the first two-year college in Minnesota to achieve the designation.</p> <p>IHCC has hosted cyber security competitions on its campuses bringing corporate, university and government officials together with students from around the country to compete and learn and improve cyber security preparedness.</p> <p>IHCC students find ready employment opportunities with local technology-dependent firms.</p> <p>Certificates offered:</p> <p>The following certificates are available to enhance the degree:</p> <ul style="list-style-type: none"> · I.T. Help Desk (15 credits) · Microsoft Certified IT Professional (MCITP) Certificate (15 credits) · Advanced Network Technology (15 credits) · Network Security (15 credits) · IP Telephony (15 credits) <p>We also offer many of these same types of classes to businesses and the workforce as a whole.</p>
DCTC Wind Turbine Project	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input checked="" 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	The EOLOS consortium, including DCTC and led by the University of Minnesota has received up to \$8 million for wind energy research and education from the U.S. Department of Energy. The grant, which is funded by the American Recovery and Reinvestment Act, is part of the DOE's Wind and Hydropower Technologies Program.	2009 The new wind turbine has been installed and is operational. A companion 130 meter tower designed for detailed meteorological has been constructed adjacent to the wind turbine for precision monitoring of wind and other conditions. DCTC has a new Energy Technical Specialist

	<p>Dakota County Technical College and Syracuse University are academic partners in the consortium with Siemens Energy, Barr Engineering, Eaton Corporation, Honeywell, Lockheed Martin, Luna Innovations, 3M and WindLogics leading a growing number of the U of M's industrial partners.</p> <p>The U of M has installed a new Siemens 2.5 MW turbine research facility at the University of Minnesota Outreach Research and Education Park, better known as UMore Park, a 5,000-acre site in Rosemount, MN.</p>	<p>Associates Degree program that provides students with energy - related industry skills including the ability for hands-on experience with the on campus wind turbine.</p>
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Indicator #3: Digital Inclusion

15. Please explain why digital inclusion is important to your community and briefly describe your community's policies on digital inclusion.

Dakota Future has recognized the critical nature of the digital inclusion challenge. In our broadband policy, we state "Broadband access should be affordable and competitively priced when compared to our global competitors. For those who cannot afford home broadband and the necessary computer, public access should be made available at schools, libraries, senior and community centers, and affordable housing developments." Dakota County has changing demographics. As a county, we are getting older, more diverse and have higher levels of poverty. Strong action around digital inclusion will be required to ensure that all residents and workers will be able to fully participate in community life. This includes equal access to health care, education and government. It also includes the ability to find employment - finding opportunities, applying for jobs, working from home, starting a business. Digital access is a critical component of the Dakota County Library System. In its current technology plan expresses this vision - "The people of Dakota County, in and through their Dakota County Library, will have convenient access to library resources through proven technology and telecommunications. Customers will be assisted as needed by a sufficient number of knowledgeable, trained staff who can help them make the best use of both new and traditional information resources."

Digital inclusion also pertains to the business community. From simple DSL to Gb fiber connections, our business community needs price competitive, business class service to compete in the global marketplace. With so many small and home businesses and employees needing 7x24 connectivity, the distinction between home and business connections fade.

16. 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
Dakota County Library	<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"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Computers at the Library</p> <p>Computers are available for use by the public in all Dakota County Libraries. A library card registered with Dakota County Library or a photo ID is required to use a public computer.</p> <p>Wireless Internet access is available at all buildings.</p> <p>Free computer classes are offered at all library locations.</p> <p>Internet / Word Processing computers - available at all buildings, these include Internet Explorer and Microsoft Office 2007 (with Word, Excel, Access, PowerPoint, and Publisher).</p> <p>Catalog / Research computers - available at all buildings, these are dedicated to the library catalog and library-selected Research Tools, such as magazine and newspaper indexes, business databases, consumer information, and encyclopedias.</p> <p>Self-Help Center Workstations - available at Burnhaven and Wentworth Libraries for finding legal information . Minnesota WorkForce Center Computers - the Galaxie, Heritage and Wescott Libraries each have one computer from the Minnesota WorkForce Center for use by job seekers. JobView® computers - available at the Wescott, Burnhaven, Galaxie and Wentworth Libraries, these use a simple graphical interface to enable job seekers to locate and apply for employment.</p> <p>Children's computers - available at all buildings, these offer a selection of computer games for children.</p> <p>Spanish-language computer - available at the Wentworth Library.</p>	2000	<p>220 computers for public access computers in ten locations.</p> <p>Ongoing computer training classes at all branches.</p> <p>Online tutorials for better computer skills</p>
Dakota County Community Development	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov	The Dakota County Community Development Agency has instituted a policy to address	2010	200 families now have free wireless access relieving needs to travel to libraries



Agency	<input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input type="checkbox"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	digital inclusion. Their first project, associated with the private sector owned, but CDA financed rehabilitation of a 200 unit apartment complex, includes providing free wireless broadband Internet service to tenants and providing computer access in common areas.		and other public access locations Those with devices can gain access in their apartments; public access computers are available in the common area. In the just more than a year since the system went live, there have been 55,014 user sessions, or an average of 139 users a day.
Dakota Future Digital Inclusion Efforts	<input checked="" type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input checked="" type="checkbox"/> Private sector <input checked="" type="checkbox"/> Academic institutions <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	Comcast's launch of their Internet Essentials program stimulated an opportunity for a direct role in digital inclusion promotion by Dakota Future. Initial Comcast efforts. Initial promotion and partnering efforts by Comcast in the Twin Cities by Comcast were in the inner cities, bypassing low-come residents.	2011	Dakota Future recently convened representatives from our housing agency, schools and social services to begin a discussion around digital inclusion. We met with Comcast and meeting participants committed to spreading the word about these new digital inclusion resources. Next steps are to inventory all providers' digital inclusion efforts, publish a fact sheet featuring all digital inclusion resources, identifying opportunities for partnering, then scheduling future meetings with providers and key partners.

Indicator #4: Innovation

17. Please explain why innovation is a priority for your community and briefly describe your community's policies promoting innovation.

Innovation has been a hallmark of the Twin Cities economy. The reasons for this innovative behavior are many. The Twin Cities is where three eco-systems come together along the Mississippi - northwoods to the north, great plains to the west and big woods farmland to the east. Some of the world's global innovators were born and continue to thrive in the Twin Cities - 3M, Cargill, General Mills, Ecolab, West Publishing (now Thomson-Reuters) Medtronic. Dakota County has its share of innovative companies. In Minnesota, one measure of innovation vitality is the MN High Tech Association's Annual Tekne Awards. Over the past several years, the following Dakota County firms were finalists: Thomson Reuters for technology leadership and technology service; Cool Clean Technologies in the cleantech category; Eco-lab in the cleantech category; Biothera in the biotechnology category and Maverick Software Consulting in the Innovative Collaboration category.

Innovation as an economic driver is critical to our economic future. Innovation has been fueled primarily by a very high quality workforce created through excellent k12 schools, abundant community colleges, technical colleges and state university campuses and the powerhouse University of Minnesota - one of the top public research universities in the country.

In Dakota County, we continue to rely on education to drive innovation. At Inver Hills Community College, they partner with CISCO to provide cutting edge education in network security. This supports our area



companies who have global data centers in Dakota County - Thomson Reuters, Unisys, Delta Air Lines, Blue Cross Blue Shield of MN. Dakota County Technical College has a unique two-year program in nano technology in a collaborative approach with the University of Minnesota. These students graduate prepared to work across industry lines in biosciences, electronics and other industries.

The private sector examples below provide a snapshot of the type of innovation occurring in Dakota County. Goodrich Sensor and Integrated Systems is a global powerhouse in all things that make flying aircraft safer. Thomson Reuters, as Dakota County's largest employer and Minnesota's largest software development company, partnered with colleges to obtain quality software development work at low costs, exposed college students to career opportunities in IT and created a pathway for recruiting high quality, work ready talent. Velocity Telephone is a new entrant to Dakota County and is providing an exciting high level of service for small and medium size companies.

The public sector examples center out of the Dakota County government but generally rely on collaboration with the cities of the county for their success. The High Performance Partnership (HiPP) institutionalizes collaboration as the preferred approach to problem solving and increasing efficiency and effectiveness. Property taxes in Dakota County are the lowest in the Twin Cities Metropolitan Area due to our ability to attract development and to our ability to work collaboratively on problems and avoiding duplicate solutions. Six cross-community teams are working on plans for more collaboration in identified priority areas.

UMORE Park is a new center of innovation emerging in Dakota County. UMORE Park, located in Rosemount, is a 5,000 acre parcel of land acquired by the University of Minnesota after World War II. This land has served as an agricultural experiment station for many years providing the environment for uninterrupted soils, crops and climate data. For several years, the University has been engaged in a master planning exercise that will result in a new community. Our goal is to ensure that this development spurs innovation and economic development for our entire region and we are engaged with the University to make this happen.

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

Name	Funded By	Description	Year Introduced	Results to Date
Dakota County IT Department	<input checked="" type="checkbox"/> Local Gov	Dakota County IT Department leads all technology initiatives of county government. This year, the county received recognition from the Center for Digital Government, receiving 2 nd place in the county's size category of counties less than 500,000. The county has moved aggressively in networks - with ongoing improvements in fiber connectivity and wireless technologies. Data management, disaster recovery, application implementation have all shown improvements. Their comprehensive approach was recognized by the Digital Counties reviews.	ongoing	Flexible scalable open systems using off the shelf softwares, moving away from mainframe to server based applications. Centralized help desk. County intranet with Sharepoint. Bridging silos between departments. Expanded fiber for traffic management. Virtual server environment with movement towards desktop virtualization.
	<input type="checkbox"/> State/Prov Gov			
	<input type="checkbox"/> National Gov			
	<input type="checkbox"/> Private sector			
	<input type="checkbox"/> Academic institutions			
	<input type="checkbox"/> Public-private partnership			
	<input type="checkbox"/> Other			
City of	<input checked="" type="checkbox"/> Local	The City of Burnsville has implemented a web	2008	In 2011, a total of

Burnsville	<input type="checkbox"/> Gov <input type="checkbox"/> State/ Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input type="checkbox"/> Acade mic institutio ns <input type="checkbox"/> Public- private partners hip <input type="checkbox"/> Other	based system for citizens to report issues around code enforcement, fire, forestry, parks, police, streets,etc http://www.ci.burnsville.mn.us/requesttracker.aspx . The City of Eagan has a similar web presence; most communities within Dakota County have a variety of online forms and tools, including the streaming of public meetings.	2,910 cases have been closed. This is an increase from 2,248 cases in 2010 and 906 in 2008.
Lakeville Schools Technology Initiative	<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"/> Acade mic institutio ns <input type="checkbox"/> Public- private partners hip <input type="checkbox"/> Other	Lakeville Schools has adopted a compelling vision for technology use. Their goal is to turn vision into district-wide action by the 2013-14 school year. They have committed \$2.1 million dollars for the district wide infrastructure and the seeding of implementation through early implementers. Teams of teachers are competing for these technology resources through the "iLearning Lakeville" application process. Their principles are: Equity of access, integration of digital tools, textbooks and resources. Anytime, anywhere access to learning, personalization. Unleashing passion. Empower and enhance teaching and learning. Excellence in customer service, operation and productivity. Accelerate learning. Global intelligence, and career, work and world ready skills. The adopted plan calls for wireless in all buildings, digital tools with 1:1 computing ration, personalized customized learning options, blended learning for all students, hybrid learning, online learning, teachers trained and supported. Specialized software for English language learners, special education, gifted and specific content areas. The district completed a comprehensive assessment around infrastructure, hardware, software, staffing and investment. The cost of the plan is \$300 per student annually. The district has made a downpayment on achieving the vision with an emphasis on moving forward with early implementers.	2011 The district has supported early implementers with teams of teachers, digital tools, research and documentation of results. Provides access for all k-2 students. Provides each grade 3 - 12 student with their own device. Mobile technology for each teacher and projection capabilities for all devices. Staff development and training.

19. 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)
Goodrich SSI	Goodrich Electronic Flight Bags (EFBs) Will Play a Key Role in NextGen Air Transportation Systems Airlines and aircraft manufacturers around the world are	none



	<p>preparing for next generation air transportation systems that will replace today's radar-based air traffic control systems. This involves finding an easy and affordable way to display GPS-based Automatic Dependent Surveillance-Broadcast, or ADS-B information which is critical to enhancing safety, increasing airspace usage efficiency, and reducing aviation's environmental footprint. The advanced SmartDisplay® electronic flight bag (EFB) system developed by Goodrich Corporation's Sensors and Integrated Systems business in Burnsville, Minnesota is quickly becoming the best choice for an affordable "ADS-B In" capable solution for airlines. The company's unique upgradable system provides airlines a very cost-effective path to unlocking the benefits provided by the U.S. and Europe's next generation air transportation systems. The Goodrich SmartDisplay EFB, the leading EFB system on the market today, is capable of running Windows-based applications or FAA-certified "ADS-B In" applications. In 2012, Goodrich will introduce its new NextGen SmartDisplay EFB system which uses a unique dual-partitioned architecture EFB system to allow installation and operation of FAA-certified software applications, as well as Windows-based EFB applications; both operating concurrently on the same EFB. Because of this dual-partition capability, operators can confidently buy a Goodrich EFB now for their Windows-based applications, and then easily upgrade their EFBs with the dual-partitioned system in the near future to meet emerging next generation air transportation system application needs. Goodrich is at the forefront of the air transportation system transformation and is participating with two leading airlines on major "ADS-B In" demonstration programs in 2011. One of the FAA-sponsored EFB test programs is with US Airways. Goodrich was chosen to outfit the airline's Airbus A330 fleet with Class 3 SmartDisplay® EFBs to develop NextGen solutions and demonstrate the economic, safety and environmental benefits of "ADS-B In" technology. Goodrich, as well as the participating airlines and regulatory authorities, expects these demonstrations to illustrate the business case for airlines to equip their fleets with "ADS-B In" technology and accelerate aircraft retrofit installation. EFBs are seen as a natural platform for NextGen air transportation system functionality, and are a much more affordable way to display NextGen functions than implementing changes to the aircraft's primary flight display systems. Once positive business case results are in, airlines around the work will updated their aircraft fleets with a cost effective EFB and ADS-B solution. Goodrich has positioned itself to grow its business through its "future-ready" next generation SmartDisplay® EFB.</p>	
<p>Maverick Software Consulting</p>	<p>Maverick Software Consulting in Lakeville partners with Advance IT Minnesota (a MN State College and University partnership) and private sector partners Thomson Reuters and Digital River have created a</p>	<p>none</p>



	<p>first-of-its-kind academia-meets-corporate America partnership, bringing together top computer science students from campuses across Minnesota with corporations seeking local software development and software testing. The innovative collaboration provides corporate partners with top student talent as a successful, proven option for cost-effective software development and testing services and an experienced workforce after graduation. It also provides students real- world experience working in the field with cutting-edge technology and, typically, a job offer prior to graduation. This collaboration creates a motivated, skilled and productive workforce that sustains and expands Minnesota's technology-based economy. Students are from various college campuses in Minnesota and now in Iowa and Wisconsin. Students get great jobs skills, access to exposure to industry leading corporate culture and a chance for post graduation employment. Companies get workers with great IT skills to do work that might otherwise be outsourced and a chance to "try talent before they buy it". All participating students have been hired to full time positions. Today, Maverick has 110 part-time workers. Dakota County's Thomson Reuters has hired 45 workers from Maverick.</p>	
<p>Thomson Reuters</p>	<p>Eagan-based Thomson Reuters Checkpoint® is the industry-leader for online information for tax and accounting professionals. For more than a decade, professionals have been turning to Checkpoint, the revolutionary, easily-searchable online system, to get straight to their answers. Checkpoint blends cutting-edge technology, editorial insight, time-saving productivity tools, online learning and news updates with intelligent linking to related content and software. Thousands of tax and accounting professionals rely on Checkpoint every day to understand complex information, make informed decisions and use knowledge more efficiently.</p> <p>94 of the Top 100 U.S. Law Firms, 95 of the Fortune 100 and all of the Top 100 U.S. CPA Firms rely on Checkpoint. Discover the latest evolution of Checkpoint Based on years of customer feedback and intelligent innovations, we've developed a unique solution that works the way you do. Search the way you want to across unparalleled content. Organize your favorite documents, add your own notes within them, or flag them for follow-up. Quickly link to related source materials, analysis, tools, news and courses. Or even stay connected on-the-go with Checkpoint on your iPad®.</p>	<p>None</p>

20. Does your community have policies or programs designed to attract or promote the creation of businesses in the latest growth sectors – for example: gaming, cloud computing, Web services, new media, life sciences or micro-technology? Is so, describe them.

Dakota Future and our partners have put an emphasis on specific industry clusters for development - IT and Information Processing, Advanced Manufacturing and Food/Energy/Chemicals. Our leadership continues to believe that a well-trained workforce is our best economic development strategy for



promoting and attracting investment in growth industries. We have also placed a high priority on broadband infrastructure development and have seen multiple initiatives moving forward.

Our colleges are engaged in creating the workforce of the future in three key areas - information technology (Inver Hills Community College), nano-technology and alternative energy (Dakota County Technical College). Inver Hills continues to add to its IT Center of Excellence, known for its IT Security Program, with a program in Voice over Internet Protocol (VOIP). DCTC continues its National Science Foundation-supported Nano Technology Program in partnership with the University of MN. This program is also partnering downward to K12 with a new partnership with ISD 917 where high school students are gaining exposure to the emergence of nano-technology. DCTC and the other partners hosted an introductory summit on nano-technology for area companies so that they could learn about the possible applications of nano-technology within their industry. This is a first step at leveraging direct economic development from this nationally recognized program.

DCTC is also stepping into alternative energy as a new program area. The first step in this strategy is the construction of a new wind turbine on the DCTC campus. This turbine will be used for teaching all facets of wind energy, from siting to construction to maintainance. This too is a partnership with the University of MN. DCTC and the University of MN are finding new and exciting ways to partner and to increase the presence of the U of M in Dakota County. DCTC is located on the edge of the U of M UMORE Park, a 5,000 acre emerging planned community .

21. Are there specific incentives for private-sector and nonprofit innovation available in your community? If so, please describe them.

Incentive	Description
MN Job Skills Partnership	State of Minnesota program that funds projects up to \$400,000, in partnership with one or more firms, customized training for existing workers that brings new skills and capabilities to participating companies. Both Dakota County Technical College and Inver Hills Community College have significant experience in designing the necessary partnerships, completing the grant applications and delivering training through this program.
Simplified University of Minnesota - Business Partnership Process	A just announced new program that simplifies negotiations around licensing and royalties so that there is a set standard - the royalty is now 1% royalty on annual sales over \$20 million dollars. The new model allows for profit entities to prepay 10 percent of the sponsored research agreement or \$15,000, whichever is greater , for exclusive rights to the resulting inventions. According to one high-tech CEO, "this will change the U of M which is already an intellectual property generating machine, into an efficient translator of products."
MN Growth Acceleration Program	The Growth Acceleration Program provides consulting services to help small manufacturers that employ up to 100 workers become more efficient, more competitive, and more likely to thrive and grow. GAP provides grants of up to \$50,000, which are matched dollar-for-dollar by companies. The grants are typically used to analyze and improve business and manufacturing processes. Companies must provide dollar-for-dollar matching funds. Some examples of how grants may be used: Technology upgrades; Value stream mapping; Lean enterprise; Financial analysis and budgeting; Workplace organization; Strategic Planning; Business Process Review; •Situation Analysis and Operational Excellence

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
2010	Goodrich SSI	New wind tunnel, new	confidential	Corporate Finance



		manufacturing space, facility expansion		
2011	Five Nines Digital	New 130,000 square foot multi-tenant data center, telecom hotel	\$100 Million	Corporate Finance
2011	ImageTrend	Expansion of existing corporate headquarters building for growing IT software and data management company	\$2 million	Public Private

Indicator #5: Marketing and Advocacy

23. How does your community feature its Intelligent Community initiatives and successes - in broadband, knowledge workforce development, digital inclusion and innovation - in its economic development marketing? Please provide a summary only; the next question asks for specific examples.

Dakota Future has focused primary on internal marketing. We have worked to educate our leadership on the Intelligent Community concept and the necessity for cross-sector collaboration. Beginning in January 2010, we engaged our community leaders from business, education and government to create and implement strategies in each of the five Intelligent Community indicators. Since then, work teams have set goals, identified assets and determined and begun to implement strategies designed to make our county more economically competitive. These efforts have increased the awareness of key leaders and we are seeing clear evidence of progress in each of the five indicators.

The Twin Cities Metro Area has launched a new regional economic development - Greater MSP. Dakota County has committed \$100,000 and several of our communities have contributed funds of approximately the same amount to this start-up private-public partnership. Dakota Future sees Greater MSP as a significant partner with unlimited potential. We plan to actively participate.

Dakota Future has included Intelligent Community messaging in our annual report, public access television, press releases and other communications vehicles. We have done some external marketing efforts, primarily within the Twin Cities Metro Area and within Minnesota. Dakota Future was recognized by the Economic Development Association of Minnesota for Collaborative Economic Development. We completed and promoted our application for a Tekne Award from the MN High Technology Association so as to get our efforts noted by a wider corporate and community leadership. Our board chair was invited to speak at a conference in China to discuss our efforts. Our board chair and executive director spoke at the MN Development Conference as well as other speaking opportunities. We organized a shared marketing presence at the MN High Tech Association Spring Conference where more than 1,000 people from Minnesota's leading companies were in attendance. Our exhibit booth was visited by company representatives interested in Dakota County as a business location. Very interestingly, we were also able to connect to many Dakota County residents who work for these companies in and outside of Dakota County.

24. Please give up to three specific examples of marketing programs or materials – aimed either at people *outside* your community or *inside* your community – that feature your community's Intelligent Community initiatives and successes. Include hyperlinks where available.

Marketing Programs or Materials	Intelligent Community initiatives featured; how explained
Dakota Future Annual Report	The Dakota Future Annual Report provides an overview of Dakota Future, our activities (focusing on Intelligent Community), our board of directors and members. The piece is targeted to Dakota County stakeholders, promoting our Smart 21 achievement (http://dakotafuture.com/wp-content/uploads/2011/03/Dakota-Future-2010-Annual-Report.pdf).
Dakota Future "Bridges" Marketing Piece	This material was developed in conjunction with a shared marketing effort of Dakota Future, our colleges and several communities, specifically for the



	<p>Minnesota High Tech Association Conference where Dakota Future was an exhibitor. This event provided us with an opportunity to interact with Minnesota's leading companies. A side benefit was the ability to talk about our efforts with many Dakota County residents who were attending the conference as employees of Dakota County and other metro area high technology firms. (http://dakotafuture.com/wp-content/uploads/2011/11/BuildingBridgesFinal2.pdf)</p>
Greater MSP	<p>Dakota County and cities are strong backers of a new Greater Minneapolis-St. Paul metropolitan economic development organization. Greater MSP will be engaged in national and international marketing efforts to raise the profile of our region; this is something that Dakota Future did not have the scale or resources to accomplish. Greater MSP is a public private partnership. Find out more at www.greatersp.org. Greater MSP has incorporated many Intelligent Community messages into its emerging marketing campaign. www.greatersp.org</p>

25. Does your economic development offer incentives designed specifically to attract or create leading-edge businesses? If so, describe up to three such incentives.

Incentive	Description
Angel Investment Tax Credits	<p>Minnesota's Angel Tax Credit provides incentives to investors or investment funds that put money into startup and emerging companies focused on high technology or new proprietary technology. The Angel Tax Credit :Provides a 25-percent individual income tax credit for qualified investors;</p> <p>Non-Minnesota residents, including residents of foreign countries, are eligible for the credit; Allows a maximum credit of \$125,000 per year per individual; maximum credit of \$250,000 for those married and filing jointly; Available</p> <p>Funding All Angel Tax Credit Funds for 2011 have been allocated.; Funding for years 2012-2014 is set at \$12 million per year; Enacting Legislation The Angel Tax Credit was signed into law on April 1, 2010.</p>
Minnesota Job Skills Partnership/Customized Training	<p>We provide training grants of up to \$400,000 to educational institutions that partner with businesses to develop new-job training or retraining for existing employees.</p>
Minnesota Data Center Incentives	<p>Our tax incentives make it more attractive than ever to build data and network operation centers in Minnesota.</p> <p>Qualifying projects receive sales tax exemptions for 20 years on: Computers and servers; Cooling and energy equipment; Energy use and Software</p> <p>And pay no personal property tax - ever.</p> <p>Qualifying for the Incentives Companies that build data or network operation centers of at least 30,000 square feet and invest \$50 million in the first two years qualify for the tax break.</p> <p>Distinct Operating Advantages Come see what Fortune 500 companies and industry leaders like United Health Group, Thomson Reuters, and Target already know: Minnesota is the right choice for your data center.</p>

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

Company	Description
oodrich SSI	<p>Goodrich Sensors and Integrated Systems is a home-grown Dakota County company, originally as Rosemount Company, a creation of University of Minnesota researchers. Goodrich is the global leader in aircraft instrumentation and sensors. They employ more than 1,500 people in Dakota County.</p> <p>Goodrich SSI has some of the world's most sophisticated design, test and manufacturing facilities including its new addition, the icing wind tunnel. As aircraft flight envelopes and operating environments are pushed by each new generation of aircraft type, product testing capabilities also need to evolve to keep pace with increased demands and requirements.</p> <p>To support the advancement in ice detection technology, Goodrich broke ground for</p>

	<p>its fourth research and development wind tunnel in August 2010. The tunnel was unveiled during a ribbon cutting ceremony in June 2011. The new icing tunnel will focus on meeting new enhanced icing regulations with the world's regulatory agencies. The new facility will be one of the most sophisticated of its type in the world when considering the high speed and altitude, low temperatures, and amount and size of ice particles that will be generated. The tunnel, which is partially operational today, will be fully operational in 2013.</p> <p>All four wind and icing tunnels at Goodrich have combined capabilities of speeds over Mach 1.0 (speed of sound), altitudes above 40,000 feet and temperatures down to -40°C. By maintaining its own wind tunnel facilities, Goodrich is able to rapidly develop new concepts, prove out designs, resolve customer issues and respond to industry needs.</p> <p>By staying on the leading edge of icing innovation, aircraft and engine manufacturers, airline and military customers, and regulatory agencies will continue to look to Goodrich for advancing sensing and sensor-based technology to meet changing aerospace industry needs. The end result is continued high tech business growth.</p>
<p>City of Rosemount Redevelopment Project: Rosemount Clean Energies, Feed Products and Hawkins</p>	<p>The City of Rosemount with the Flint Hills Resources Refinery is the center of the Energy and Chemicals industry cluster for Dakota County. The City has worked to find new companies to redevelop a 110 acre site east of the refinery and has now succeeded.</p> <p>Rosemount Clean Energies is a new terminal site located dedicated to exploring and providing regional marketers clean, renewable, environmentally-responsible energy solutions. Rosemount Clean Energies' clean energy facility contains more than half a million barrels of storage capacity and resources to receive and ship petroleum-related products by rail cars, trucks, tanks and pipeline. Rosemount Clean Energies has testing and production capabilities that include biodiesel fuel injection blending and the distribution of normal refined diesel, ethanol, waste oil recycling, asphalt, #6 oil, propane, diesel exhaust fluid, compressed natural gas and liquefied natural gas. The company is turning an obsolete 50-acre industrial site into a large terminal facility with capabilities to provide the region with enhanced clean energy products. The only of its kind and scale in the Upper Midwest, Rosemount Clean Energies is on the forefront of clean, renewable energy with its superior ability to solidify supply and offer biofuel injection blending, providing local marketers and end- users increased savings and flexibility to customize products. The green-built, non-waste generating terminal site, which has a large-scale rail spur and nearly half a million barrels of storage capacity, has the flexibility to receive and ship products through various mediums – including rail cars, trucks, tanks and pipeline. Beyond improved biodiesel and diesel capabilities that will change the energy game at the regional level, Rosemount Clean Energies offers another advantage the local market previously lacked: An efficient mechanism to actually test biodiesel in the market place. The ability of this terminal to customize products through injection blending ensures greater accuracy and a consistent product that takes the reliability question of fuel out of the equation. The facility can perfect biodiesel and additive blending in a highly efficient manner, collaborate with all parties to find an efficient medium to deliver new products to the marketplace, and offer marketers and energy users a range of high-performance products specific to their applications and market demands.</p> <p>Feed Products purchased existing warehouse buildings, retained existing workers from the prior site owner and added several additional employees. The company blends and bags fertilizer, agriculture and ice melt products.</p> <p>Hawkins occupies 28 acres and is building a warehouse on the site to store and distribute chemical and other industrial products.</p>
<p>Eagan Data Center "The Connexion"</p>	<p>Imminent development of a 138,000 data center/telecom hotel by Five 9s Digital. The City of Eagan, guided by its technology advisory group with members from leading Eagan-based companies, provided funding for a market study and site analysis, selecting Five 9s to complete the study, giving Five 9s exclusive access to the study information for a limited time. Five 9s decided to proceed</p>

with the project. If they had declined, the study information would have been made available to other prospective data center developers. This data will soon be under construction providing a high technology hub for fiber optics and communications in the south metro region. The need for this project was identified in 2004 by an ad hoc technology group. Since that time, the ad hoc group has been formalized and has continued to meet with the active participation of the city's corporate IT leadership as well as other tech-oriented citizens. City technology, communications and economic development staff have kept this project at the forefront and now it is coming to fruition.

27. If your community is named to the Smart21, the Top Seven or as Intelligent Community of the Year, how will you use this honor to further your marketing goals?

Dakota Future would use this distinction as a significant differentiator within the Twin Cities as we seek to raise our profile within this large metropolitan area. Though we have significant high technology assets, we are not known as a center of technology or innovation, trailing other parts of the metro area. As the Twin Cities Metro Area begins efforts at metro-wide marketing, the distinction will make Dakota County a leading element of the Twin Cities branding effort. The designation would help to build momentum towards joint marketing of Dakota County. Marketing, limited as it is, is done by individual communities. This county designation would be a magnet and provide a platform for more collaborative efforts.

We will use the designation as a vehicle for attracting increased business participation in our efforts and for membership in Dakota Future. Dakota County's use of the Intelligent Community framework has already had an impact on economic development in MN. Our neighbor, Scott County, has proposed using the Intelligent Community Framework. The Blandin Foundation has successfully used the Intelligent Community framework to obtain almost \$5 million dollars in federal broadband stimulus funds for Sustainable Broadband Adoption. Dakota Future has been recognized for innovative partnerships by the Economic Development Association of MN.

Theme: Intelligent Communities – Platforms for Innovation (see page 1 for explanation)

28. Provide up to 3 examples of local institutions (universities, technical schools, research institutes, business R&D facilities) engaged in the development of products and services with commercial potential. Describe any commercialization activities or results to date.

Institution	Description of Activity, Commercialization to Date
Ecolab R&D	<p>Ecolab is the global leader in water, hygiene and energy technologies and services with headquarters in St. Paul. Ecolab established its R&D facilities in Eagan and now employs 550 people at this facility; 265 of these staff are scientists. Ecolab has a long history of breakthrough innovation that provides superior results for our customers. For example, Ecolab pioneered solids technology in warewashing and then expanded this platform to a variety of other markets and application. Their solids technology provides benefits in reduction of packaging, storage, handling, water and energy use while providing superior product performance. Another example of their industry leading innovation is our proprietary peracid sanitizer platforms which have become the gold standard globally in many food safety and public health applications. Meanwhile, our "smart solutions" provide customers with data-enabled systems to optimize overall cleaning quality, operational efficiency, water use and/or energy use. These and other innovations have led to more than 3,500 active patents and a strong pipeline of pending patent applications.</p> <p>Ecolab has a structured, phase gate approach to managing their innovation portfolio. Often, they can take advantage of broad capabilities to combine chemistry, microbiology, packaging, dispensing, engineering, informatics, sensors and process control in a holistic approach to help deliver the optimal, total solution for their customers.</p>
Biothera	<p>Biothera is biotechnology company focused on enhancing the immune system. The company is commercializing its unique platform technology through a pharmaceutical business that is developing an oncology drug for multiple cancers and a healthcare business that markets food-grade immune health ingredients for foods, beverages and supplements.</p> <p>Biothera's Pharmaceutical Group is developing Imprime PGG®, an oncology drug that activates a natural, highly specific innate immune mechanism to target and kill cancer cells.</p>



	<p>Imprime PGG mobilizes the body's largest population of immune cells and can be used against a wide range of cancer types. Imprime PGG is currently in multiple clinical trials, including a Phase III clinical trial for metastatic colorectal cancer and three phase II clinical trials; two in nonsmall cell lung cancer and another in chronic lymphocytic leukemia.</p> <p>Biothera's Healthcare Group manufactures and markets natural ingredients for foods, beverages, nutritional supplements, cosmetics and animal nutrition products worldwide. Wellmune WGP® is clinically proven to safely prime key immune cells that keep the body healthy. It is an ingredient in products in more than 30 countries and customers range from large global companies, such as Mead Johnson and Coca-Cola, to smaller regional food, supplement and beverage companies.</p> <p>Founded in 1997, Biothera is a privately held company with headquarter offices and laboratories in Eagan Minnesota, USA. The company employs more than 70 people at its Eagan facility, including two MDs and 13 PhDs among its Research & Development staff of 29. Biothera has multiple contract manufacturing facilities located in the USA, Canada and South America.</p> <p>Company Highlights:</p> <ul style="list-style-type: none"> • Biothera's technology platform represents an investment of more than \$300 million; Imprime PGG's Proof of Relevance has been established in multiple clinical trials, including phase II trials in mCRC and NSCLC with consistently strong results; Biothera began enrolling patients in a Phase III trial in metastatic colorectal cancer in May 2011. This multi-centered trial, which will eventually have approximately 50 clinical sites in the U.S., Canada, France and Germany, has an opportunity for accelerated approval; excellent safety profile based on more than two dozen preclinical toxicology studies and more than 250 subjects dosed in clinical studies. There have been no dose-limiting toxicities. Healthcare business sales have doubled annually for the past few years and are positioned for continued rapid growth. Wellmune WGP is currently being formulated into numerous new food and beverage products. More than a dozen clinical studies support the safety and efficacy of Wellmune and Biothera's other food-grade immune health ingredients. Biothera received \$3.5 million dollars in venture financing in 2010.
Nano-Link	<p>The National Science Foundation awarded Dakota County Technical College a \$3 million grant to develop the Midwest Regional Center for Nanotechnology Education, or Nano-Link.</p> <p>Situated on DCTC's Rosemount campus, Nano-Link will work to create a skilled workforce of nanotechnologists to enhance economic growth in nanoscale science and technology. The center builds on the success of DCTC's pioneering Nanoscience Technology program, which was established in partnership with the University of Minnesota to prepare graduates for employment in the abundant array of industries where nanoscience applications are rapidly emerging. More than 30 Minnesota companies participated in the development of the DCTC nanoscience technology curriculum, which will serve as Nano-Link's educational platform. Many of these companies have hired DCTC nanoscience technology graduates in nano-related technician positions. Those same companies report that the need for nanotechnologists far exceeds the numbers the DCTC program can produce. Nano-Link will provide resources and support to colleges throughout a five-state Midwest region from North Dakota to Michigan. Six two-year colleges in North Dakota, Minnesota, Wisconsin, Illinois and Michigan have partnered to develop this center along with two outstanding regional research universities, the University of Minnesota and Northwestern University.</p> <p>The singular project is designed to promote competitiveness and future job growth in the full spectrum of U.S. industries resourcing the potential of nanoscience, including biotechnology, cosmetics, pharmaceuticals, medical devices, agriculture, materials, energy and electronics. A thoroughly interdisciplinary field, nanotechnology is sometimes called a great melting pot of research. Nanotechnologists must understand the fundamental behavior patterns of atoms and molecules. Equipped with increasingly sophisticated equipment, they are constantly pushing back the frontiers of physics, biology and engineering on a hugely small scale. Derived from the Greek word for "dwarf," the prefix nano means "one billionth." In respect to nanotechnology, the term involves the measure of one nanometer, or one billionth of a meter. As a reference point, the average virus on Earth is around 100 nanometers in length. Comparing one meter to one nanometer is like comparing the diameter of our planet to the diameter of a single hazelnut.</p>

29. Provide up to 3 examples of projects or programs in which local government, business and nonprofits are collaborating to create new companies or new employment, address social or environmental challenges, and/or improve the quality of life of the community.

Organizations Involved	Description of Program or Project, Results to Date
UMORE Park	<p>The University of Minnesota Outreach, Research and Education (UMore) Park is the University's 5,000-acre property located 25 miles southeast of the Twin Cities in Dakota County. The vision to build a unique, sustainable, University-founded community of 20,000 to 30,000 people, a 25- to 30-year endeavor, was affirmed by the University's Board of Regents in December 2006. The plan for this new, sustainable community integrates environmental, socio-cultural and economic opportunities with a specific focus on innovations in renewable energy, education and lifelong learning, health and wellness, the natural environment and regional economic development. Planning and development for UMore Park is founded upon the University's academic mission—research, education and public engagement—making UMore Park a distinctive planned community in the nation. Work based on the concept master plan for UMore Park is underway. UMore Park offers University faculty, students and staff a unique platform for disciplinary and interdisciplinary research and education. Research activities and learning opportunities provide real-time experience related to the planning and development of a new, sustainable community at UMore Park. Differentiated by innovations in renewable energy, education, environmental quality, transit, technology, housing and other University mission strengths, the community at UMore Park would contribute to a vital regional economy characterized by thriving businesses, and educational, social and natural amenities.</p> <p>The concept master plan for UMore Park, affirmed by the University's Board of Regents in December 2008, features:</p> <ul style="list-style-type: none"> 13,000 houses plus multi-family dwellings accommodating 20,000 to 30,000 residents; Neighborhoods blending mixed-use commercial and retail amenities; 1,000-acres of open space; Eco-industrial park to locate R&D-based companies; Office and wellness complex incorporating professional offices and health and wellness facilities. <p>Research and education projects supporting planning and development include:</p> <ul style="list-style-type: none"> • University of Minnesota to spearhead a new wind energy research program featuring UMore Park – The University of Minnesota was selected to receive funding for wind energy research. • Department of Design, Housing and Apparel Community-Based Teaching and Research Program – A faculty team in the Department of Design, Housing and Apparel received an Engaged Department Grant to assess housing, retail and branding opportunities for the planned community and the surrounding region through department teaching and research activities. • Research opportunities for undergraduates – Partnering with the Undergraduate Research Opportunities Program (UROP), the Office for UMore Park Academic Initiatives seeks to create unique opportunities for faculty and students to participate in practical, real-time research to support planning and development of a community at UMore Park. • Student contribution to groundwater monitoring efforts – Graduate students in the Department of Geology and Geophysics are contributing to a long-range groundwater study through documentation of groundwater characteristics at UMore Park prior to development. The data will be used to assess the short- and long-term effects of development on the groundwater. • Research on housing and infrastructure development – Researchers in the College of Design conducted a study identifying an approach to neighborhood development that maximizes energy conservation while maintaining comfort for individual residents and economic viability for the development. • Undergraduate Architecture Design Studio – A fall 2009 undergraduate architecture design studio course utilized the UMore Park property and concept master plan as the launchpad for class projects on housing and neighborhood design.
360 Communities	360 Communities has targeted community building initiatives in three Dakota County



	<p>communities, Burnsville, Lakeville and Eagan. The Burnsville initiative is the farthest along.</p> <p>They gathered key community leaders from Burnsville who will understand the past trends and develop a plan to focus on three themes to encourage positive change.</p> <p>Who's Involved: Community Leadership</p> <p>Leaders are committed to changing the community's will, and play an important role in leading planning teams and engaging the community. These leaders include representatives from:</p> <ul style="list-style-type: none"> • Fairview Ridges Hospital • School District 191 • Burnsville Chamber of Commerce • Goodrich Sensors and Integrated Systems • City of Burnsville • local churches • 360 Communities <p>Learn more about Burnsville's leadership team.</p> <p>Check out the new MyBurnsville.org website at http://myburnsvill.org with more information at http://www.360communities.org/MyBurnsville.aspx</p> <p>Data-Based Burnsville Priorities for Creating Positive Change</p> <p>Burnsville's priorities were determined by understanding data from MN Compass, local surveys and data, experts, and Cost of Doing Nothing information. From this information, Burnsville focused on these priorities:</p> <p>Education</p> <ul style="list-style-type: none"> • Increase literacy • Build healthy families • Improve graduation and post-secondary enrollment rates • Inclusive discovery about the expectations for education as it relates to changes in workforce, demographics, and perceptions <p>Economy and Workforce</p> <ul style="list-style-type: none"> • Support a competitive business climate • Increase economic stability in families • Innovative community partnerships <p>Civic Engagement</p> <ul style="list-style-type: none"> • Create sustainable community capacity • Utilize leadership and technology to foster civic engagement <p>By working across traditional community boundaries and with affected community sectors, 360 Communities is enabling positive change. A recent meeting around education targeted Somali community members. Almost half of the Somali parents (approximately 130 parents) attended the meeting. Buses picked up parents at strategic locations to ease transportation woes; kids played in gyms under supervision during the meeting. Attendance was driven by personal phone calls from a team of Somali parents. The parents' biggest frustration was their own inability to help their children with their homework due to language and education gaps.</p>
<p>City of Burnsville Heart of the City</p>	<p>The 54-acre Heart of the City is a smart-growth based, mixed-use, pedestrian friendly downtown area for Burnsville. Featuring a host of retail shops, business and office space, a community arts center, community park and diverse housing opportunities, the Heart of the City is the place to Live, Work, Shop and Play.</p> <p>The Heart of the City project grew from the Partnerships for Tomorrow community visioning project and community feedback that identified the creation of a central meeting area as a community goal. The Heart of the City grew from a simple</p>



streetscape project in 1995 to a full-fledged redevelopment effort. In 1999, the Burnsville City Council adopted a framework design manual and zoning ordinance which outlines design standards and other requirements to assure that future development is consistent with the community's vision.

The Heart of the City is focused on bringing arts and cultural opportunities to the area and building tax base to benefit the entire community. Along with cultural development, the Heart of the City is aiming at economic development. At full development, the Heart of the City area will generate approximately \$2-\$3 million in property taxes annually compared to the \$200,000 it did before redevelopment.

The Heart of the City has attracted an excellent and varied set of projects, including 34 units of rowhouse family housing, a mixed use development of commercial and 113 rental housing units, a 91 unit condominium project, a destination restaurant, grocery store.

Most impressive is the Burnsville Performing Arts Center, a multifunctional center for community and national events. The Center has two theatres - a 1014 Proscenium Stage and a 150 seat Black Box, plus 2000 square foot gallery, meeting rooms and a large rehearsal room. The Burnsville Performing Arts Center is dedicated to: fostering the growth, development and appreciation of the performing arts through the presentation of the broadest possible range of cultural, entertainment and artistic activities and events; providing a home to the community's major performing arts groups; serving as a community center for the visual arts, business and educational meetings and presentations and providing economic stimulus for the benefit of the residents of Burnsville and the surrounding region.

The Heart of the City project has created a destination area for the City of Burnsville and the Dakota County community.

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 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.