



## INTELLIGENT COMMUNITY FORUM **Community Assessment**

Thank you for downloading the Community Assessment questionnaire. This form gathers information that enables ICF to compare your community to its global data set of cities, towns and counties ranging in population from under 10,000 to over 12 million. By completing this questionnaire, you will –

- **Receive a free Snapshot Report** offering six insights into your community's global competitiveness.
- Be considered for one of ICF's **By the Numbers** public rankings of Intelligent Communities.
- Become eligible – with your permission – to compete in the **Intelligent Community Awards**.
- Have the opportunity to **purchase an Analytics Report** that provides in-depth analysis of strengths and weaknesses as well as recommendations for change.

ICF publishes research based on the data provided by communities around the world. The goal is to provide cities, towns and regions of all sizes with evidence-based guidance on achieving economic, social and cultural growth in the challenging digital age. The research runs throughout the year and you may complete a questionnaire at any time.

### Schedule

#### Snapshot Report

Issued within 30 days of the receipt of a completed questionnaire.

#### Top Community Lists

Published annually in April and October. See [www.intelligentcommunity.org/by the numbers](http://www.intelligentcommunity.org/by_the_numbers)

#### Awards

We close each year's Awards cycle in September and announce the Smart21 Communities of the Year in October. The Top7 Communities are named in January, and the Intelligent Community of the Year is announced at the ICF Summit in June.

Return completed forms by email to [assess@intelligentcommunity.org](mailto:assess@intelligentcommunity.org)

## Questionnaire

Name of Community

State/Province

Country

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 [assess@intelligentcommunity.org](mailto:assess@intelligentcommunity.org). ICF's Analysts will use only the information on this form in making its evaluation. Do not send additional information or attachments.

The questions are grouped into six sections, each covering one of the Intelligent Community Indicators. In each section below, you will find a mix of multiple-choice and short-answer questions plus one narrative question requiring a more detailed explanation. The multiple-choice and short-answer questions seek to identify the state of progress in your development as an Intelligent Community. The narrative question offers you an opportunity to explain specific projects and initiatives, and to share with us your aspirations for the future. It can be helpful to **review the description of the Intelligent Community Indicators and Success Factors** beginning on page 11 or visit ICF's Web site at [www.intelligentcommunity.org](http://www.intelligentcommunity.org).

You may find that answering the questions requires you to gather information from several different sources within local government and outside it. This collaboration across organizational boundaries is one of the success factors of a community in the 21<sup>st</sup> Century.

The estimated time to gather information and complete the questionnaire is 4 hours.

### Vital Statistics

Population

Municipality

Metro Area (if applicable)

Area

Municipality

sq miles  km<sup>2</sup>

Metro Area (if applicable)

### Awards

- Check here** if you DO NOT wish to have your community considered for this year's Intelligent Community Awards. (See page 1 for an explanation of your options.)

## Connect

Broadband connectivity is the new essential utility, as vital as good roads, clean water and reliable electric power. Intelligent Communities express a strong vision of their broadband future, develop strategies to encourage deployment and adoption, and may construct infrastructure of their own.

- Broadband Types.** Which of the following broadband networks are available in your community, and how many network operators are in each category? (**Important:** this question asks for the number of operators of physical networks – telephone companies, cable TV operators, fiber-optic network operators, etc. – not the number of channels or ISPs that provide service over the physical network.) *ICF expects the number of systems and providers to vary with population density and weights the data accordingly.*

<b>DSL</b>	No. of Providers:	<b>Fiber optics</b>	No. of Providers:
<b>Cable modem</b>	No. of Providers:	<b>Wireless ISP</b>	No. of Providers:
- Please indicate the availability and adoption of broadband by residents and organizations. **Availability** means having the opportunity to subscribe to the service ("premises passed") as a percentage of total

premises, while **adoption** means actual subscriptions to the service as a percentage of total premises. The availability percentage should be higher than the adoption percentage. *Note: if municipal-level data is not available, please provide county-level or regional data.*

	Availability	Adoption	
Premises:	%	%	<input type="checkbox"/> Municipal data <input type="checkbox"/> County or regional data

3. 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. This information is usually available on carrier websites. Use non-discounted 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:	Approx. Market Share:	%
Minimum		
Median		
Maximum		
Carrier #2:	Approx. Market Share:	%
Minimum		
Median		
Maximum		
Carrier #3:	Approx. Market Share:	%
Minimum		
Median		
Maximum		

4. Please describe the most significant project initiated in your community that promotes greater broadband coverage, higher broadband speeds or greater adoption of broadband by **citizens or businesses and other 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 availability and penetration. **Avoid describing a project that promote digital equality; these are covered under Digital Equality.*** For each project:

- Explain what segment of the population is being targeted: e.g., rural, low-income neighborhood
- Indicate the year in which it started
- Estimate the percentage of your total population this segment represents
- Explain what problem the project seeks to solve and why this problem is important
- Identify the funding sources for the project
- Describe the project
- Outline its results to date

<b>Project Name</b>	
<b>Year Started</b>	
<b>Target Segment</b>	
<b>% of Population</b>	
<b>Problem to Solve</b>	
<b>Funding Sources</b>	<input 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

<b>Description</b>
<b>Results to Date</b>

5. If local government is engaged as a leader or partner in deploying a broadband network, please check the boxes that best describe your network's structure and status.
- Network for government and educational use only (non-public)
  - Dark fiber, wireless tower or conduit for lease to telcos, ISPs and business/nonprofit users
  - Open access network in which the government or partner provides transport layer services for telcos, ISPs and business/nonprofit users
  - Competitive local exchange carrier offering services to the public

**Work**

Knowledge workers create economic value through their knowledge, skills and ability to use information effectively. Intelligent Communities exhibit the determination and 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 corporate headquarters. From elementary school through higher education and into the workforce, they create ladders of opportunity that prepare citizens for employment or entrepreneurial opportunities in the local or regional economy.

6. Check the boxes that indicate the technology offerings of public schools (elementary to secondary) in your community. (check all that apply)
- Inclusion of information and communications technology – e.g., smart boards, laptops, tablets, digital textbooks, Web conferencing, social media – in classroom instruction
  - Interactive Web portal for students, teachers and parents
  - One-to-one laptop or handheld device program
  - Distance learning programs
  - Specialized classes in coding, robotics, digital media and related topics
  - Other:
7. How widespread are these technology offerings within the public schools? (check one)
- Pilot project(s)
  - Schoolwide in selected schools
  - Being deployed to all schools
  - Fully deployed to all schools
8. Check the boxes that describe programs in your community fostering collaboration between secondary, technical/community and undergraduate/graduate institutions and local employers. (check all that apply)
- Work-study programs provided as part of the curriculum by schools in partnership with employers
  - Summer & post-graduate internship programs provided in collaboration between schools and employers
  - Formal apprenticeship programs
  - Formal educational-employer task force, partnership or institute targeting employment issues
  - Career fairs and employer open house events
  - Customized skills training programs developed for local employers by educational institutions
  - Other:
9. Indicate the percentage of the population with the following educational attainment. *Note: ICF expects educational attainment to vary with population density and analyzes the results on a weighted basis.*
- |  |                               |   |
|--|-------------------------------|---|
| <b>Technical/Community College Certificate or "Some College"</b> | <input type="text" value=""/> | % |
| <b>Undergraduate degree</b>                                      | <input type="text" value=""/> | % |



Graduate degree or higher

%
---

10. Indicate the number of higher education institutions located in your community or within reasonable commuting distance (approximately 2 hours travel time). If a single institution operates multiple campuses, count each campus as a separate institution. Your count of institutions within commuting distance **should not** include institutions within the borders of your community but only those beyond its borders. *Note: ICF expects the number of institutions to vary with population density and analyzes the results on a weighed basis.*

	Within your community	Within commuting distance
Technical/Community Colleges		
Undergraduate or Graduate Institutions		

11. Please describe the most important initiated in your community to improve access to education, help students make the transition to employment, or help students and citizens gain skills that will help them find high-quality employment. **Avoid describing programs aimed giving low-income, elderly or similar residents basic digital skills:** these are addressed in the Digital Equality section. For each, please:
- Name the project
  - Indicate the year in which it started
  - Explain what segment of the population is being targeted: e.g., rural, business
  - Estimate the percentage of your total population this segment represents
  - Explain what problem the project seeks to solve and why this problem is important
  - Identify the funding sources for the project
  - Describe the project
  - Outline its results to date

<b>Project Name</b>	
<b>Year Started</b>	
<b>Target Segment</b>	
<b>% of Population</b>	
<b>Problem to Solve</b>	
<b>Funding Sources</b>	<input 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
<b>Description</b>	
<b>Results to Date</b>	

## Innovate

Innovation is the creation of a new process, technology or method, as well as the discovery of new sources of supply, that have commercial value. It has become essential to the interconnected economy of the 21<sup>st</sup> Century. Intelligent Communities pursue innovation through the Innovation Triangle or “Triple Helix” – relationships between business, government and such institutions as universities and hospitals, which help keep the economic benefits of innovation local, and create an innovation ecosystem that can engage the entire community in positive change. “Smart City” investments in innovative technology by government contribute to that culture and improve service to citizens while reducing operating costs.

12. Does local government have policies in place to promote business, institutional and/or government innovation? If so, what is the status of those policies? (check one)

No policies     
  Administrative guidance only     
  Under discussion/     
  Approved by Council     
  Published as public policy document

review by  
Council

13. Which of the following innovation programs is available in your community? (check all that apply)

- Hackathons, mashups, apps contests and related innovation events
- Entrepreneurship training and mentoring
- Business incubator for start-ups
- Business accelerator for young companies
- Technology district or technology pilot program (e.g., autonomous vehicles, IoT, big data)
- Matchmaking between new and established businesses
- Angel investment
- Financing from the public sector or institutions (local, county, state, national)
- Venture capital investment
- Technology demonstration site for local businesses
- Maker space
- Other:

14. Which of the following online services is offered by local government or public agencies to improve quality of life? (check all that apply)

- Open data sets
- Web portal providing citizens with interactive services and transactions
- Mobile apps providing citizens with interactive services and transactions
- Online services specifically supporting sectors of the business community: Sectors \_\_\_\_\_
- Intelligent transportation management systems
- Smart meter systems for utilities
- Intelligent emergency management systems
- Other:

15. Provide up the most important example of **innovation produced by a collaboration among business, government and institutions** in the community. The innovation may generate new companies, support the growth of existing firms, address social or infrastructure challenges, and/or enhance the community's quality of life. Please include:

- Name the organization or project resulting from the collaboration
- Indicate the year in which the organization or project was introduced
- Identify the partner organizations involved in the collaboration
- Identify the funding sources for the project
- Describe the innovation resulting from the collaboration
- Outline its results to date

<b>Project Name</b>	
<b>Year Started</b>	
<b>Partners</b>	
<b>Funding Sources</b>	<input 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
<b>Description</b>	
<b>Results to Date</b>	

**Include**

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 programs that provide offline citizens with access to computers and broadband, by providing skills training and by promoting a compelling vision of the benefits that the broadband economy can bring to their lives.

16. What facilities and services does your community offer to **citizens** who do not have their own online access? (check all that apply)
- Free Wi-Fi hotspots
  - Free access to computers with broadband connections (for example, at public libraries)
  - Free ad hoc technical support for users
  - Free or low-cost formal classes in digital skills for users
  - Technology fairs, competitions or similar one-off/annual events
  - Outreach and training in more than one language
  - Programs to create community champions among excluded segments of the population
  - Computer donation or subsidy program for households without a computer
  - Subsidies or discount programs for broadband access
  - Other:
17. What facilities and services does your community offer to **organizations** (businesses, nonprofits, others) to promote digital adoption? (check all that apply)
- Evaluation checklist to assess an organization's digital readiness and training needs
  - General classes in digital skills and applications for organizations
  - Customized digital training programs for organizations
  - Technology demonstration center to educate on digital opportunities
  - Outreach and training in more than one language
  - Other:
18. Please describe the most important program in your community that aims to increase digital inclusion by **providing access** to information technology and broadband, by **training individuals or organizations** in digital skills, and/or by **motivating them** to acquire and use digital skills. For each program, please:
- Name the program or organization
  - Indicate the year in which the program or organization was introduced
  - Indicate what groups are its primary targets
  - Identify the funding sources for the program or organization
  - Explain the problem being targeted for solution and why it is important
  - Describe the program and its services
  - Outline its results to date
  - Estimate the percentage of the target group that the program has served to date

<b>Name</b>	
<b>Year Started</b>	
<b>Target</b>	<input type="checkbox"/> Low-income <input type="checkbox"/> At-risk or criminal youth <input type="checkbox"/> Elderly <input type="checkbox"/> Disabled <input type="checkbox"/> Geographically remote
<b>Funding Sources</b>	<input 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
<b>Problem to Solve</b>	

Description
Results to Date
% of Target

**Engage**

It is a natural tendency to resist change. A community’s leaders and citizens can be a barrier to progress or can become its most powerful advocates for a better future.

Intelligent Communities work to engage leaders, citizens and organizations as champions of change. They are also effective marketers of their advantages, shaped by their digital policies and cultural strengths, for economic development. The combination of deep internal engagement and effect external marketing powers every other aspect of the community’s development.

19. Does your community have a documented strategy for economic & social development involving digital technologies?  Yes  No
20. Does your community have a task force or group dedicated to carrying out the strategy?  Yes  No
21. In what ways does local government seek to educate and involve citizens and leaders in building a better future for the community? (check all that apply)
- Citizen surveys on civic, planning and related issues
  - Open government meetings on civil, planning and related issues
  - Online engagement through email broadcast and/or access to streaming media
  - Online interaction through social media (Facebook, Twitter, LinkedIn, etc.) and/or specialized collaboration systems
  - Development and publication of formal strategies or charters through government-organization-citizen collaboration
  - Creation of a government-citizen-organizational task force responsible for future planning and implementation
  - Progress reporting to the public on the result of formal strategies or charters
  - Other:
22. How do you communicate your economic and community development story to the outside world? (check all that apply)
- Online marketing including a Web site and email broadcasting
  - Social media interaction (Facebook, Twitter, LinkedIn, Intstagram, etc.)
  - Print and/or digital advertising in site selection and other publications
  - Public relations targeting site selection and other publications
  - Participation in trade shows and conventions of target industries
  - Participation in state, provincial, national or multinational development projects
  - Trade missions to other cities and countries
  - Other:
23. Describe the most important policy or project led by local government, business or institutions that **educate citizens on issues of importance to the community’s future** and **engage them** in creating needed changes. For each:
- Name the policy or project
  - Indicate the year in which it began

- Estimate the percentage of your total population targeted by the policy or project
- Explain what problem the project seeks to solve and why this problem is important
- Identify the funding sources for the project
- Describe the project
- Outline its results to date

<b>Project Name</b>	
<b>Year Started</b>	
<b>% of Population</b>	
<b>Problem to Solve</b>	
<b>Funding Sources</b>	<input 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
<b>Description</b>	
<b>Results to Date</b>	

## Sustain

Environmental sustainability projects improve local quality of life, from cleaner air and water to improved public transportation and greater livability.

Communities that use fewer resources to create products and provide services are also more efficient and productive, which is key to continued improvements in their standard of living. Communities that make environmental sustainability a shared goal typically engage organizations, community groups and neighborhoods in advocating for sustainability programs and activities. These contribute to civic pride, local identity and shared goals.

24. Please report the annual average air quality reading of your community based on all available air quality readings in the municipality (ug/m3). Check if you do not track this information
- |  |                          |  |
|--|--------------------------|--|
| a. Ozone (O <sub>3</sub> )                       | <input type="checkbox"/> |  |
| b. Fine Particulate Matter (OPM <sub>2.5</sub> ) | <input type="checkbox"/> |  |
| c. Nitrogen Dioxide (NO <sub>2</sub> )           | <input type="checkbox"/> |  |
25. What is your total residential and commercial indoor water use **per day** (litres or gallons)?  Litres     Gallons
26. How many metric tonnes or tons of municipal waste goes to landfills from your municipality **per year**, after subtractions for recycling, composting and incineration?  Tonnes     Tons
27. Check the box that best represents local government's support for sustainability. 
 Statement of intent from elected officials  
 Department/staff resources allocated  
 Guidelines or policies approved by Council  
 By-Laws approved by Council
28. How much public park or green space does your municipality provide, measured square meters or square miles, including only publicly-available space?  m<sup>2</sup>     sq miles
29. What support does sustainability receive from the local government? (check all that apply)

- Statement of intent from elected officials  Yes
- Department/staff resources dedicated to sustainability  Yes
- Formal sustainability guidelines, framework or charter approved by Council  Yes
- By-Laws approved by Council  Yes

30. Describe the most important sustainability program or project that your community is engaged in. Please:

- Name the program or project
- Indicate the year in which it was introduced
- Identify the funding sources for the program or organization
- Explain the problem being targeted for solution and why it is important
- Describe the program, giving emphasis to efforts to involve the community in understanding the problem, creating solutions and helping to carry them out
- Outline its results to date

<b>Name</b>	
<b>Year Started</b>	
<b>Funding Sources</b> <input 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	
<b>Problem to Solve</b>	
<b>Description</b>	
<b>Results to Date</b>	

### Key Contacts

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

Public-Sector Official

Name:	
Title:	
Organization:	
Telephone:	Email:
Contribution to the Community:	

Private-Sector Executive

Name:	
Title:	
Organization:	
Telephone:	Email:
Contribution to the Community:	

Nonprofit Executive

Name:	
Title:	
Organization:	
Telephone:	Email:
Contribution to the Community:	

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

Name:	
-------	--

Title:	
Organization:	
Telephone:	Fax:
Email:	

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

Publication	Editor/Reporter	Email Address

### Ownership of Information

ICF will maintain the quantitative data provided in this questionnaire in confidence and will publish only anonymous aggregated totals. Descriptions of projects may be included as models of best practice in ICF digital and print publications. 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 Factors

For a complete description of the Intelligent Community Factors, visit [www.intelligentcommunity.org](http://www.intelligentcommunity.org) and select "What is an Intelligent Community?" on the Intelligent Communities menu.

1. **Connect.** Broadband is the next essential utility, as vital to economic growth as clean water and good roads. Whatever the speed, the power of broadband is simple enough to express. It connects your computer, laptop or mobile device to billions of devices and users around the world, creating a digital overlay to our physical world that is revolutionizing how we work, play, live, educate and entertain ourselves, govern our citizens and relate to the world.
2. **Work.** Today, all desirable jobs in industrialized economies – and increasingly in developing economies as well – require a higher component of knowledge than they did in the past. It is by applying knowledge and specialized skills that employees add enough value to what they do to justify the cost of employing them. In the future, any employee whose "value-added" does not exceed his or

her salary cost can expect to be replaced, sooner or later, by software or hardware. A continuous improvement in an evolving range of skills is the only route to personal prosperity.

3. **Innovate.** Innovation is essential to the interconnected economy of the 21st Century. Intelligent Communities pursue innovation through a relationship between business, government and such institutions as universities and hospitals. The Innovation Triangle or “Triple Helix” helps keep the economic benefits of innovation local, and creates an innovation ecosystem that engages the entire community in positive change. Investments in innovative technology by government contribute to that culture and improve service to citizens while reducing operating costs.
4. **Include.** Digital equality is a simple principle: that everyone in the community deserves access to broadband technologies and the skills to use them. Like most principles, it is easier to understand than it is to live. The explosive advance of the broadband economy has worsened the exclusion of people who already play a peripheral role in the economy and society, whether due to poverty, lack of education, prejudice, age, disability, or simply where they live. It has disrupted industries from manufacturing to retail services, enlarging the number of people for whom the digital revolution is a burden rather than a blessing.
5. **Engage.** It is all too common for a community's leaders or groups of citizens to set themselves against changes that would ultimately benefit the community. The willingness to embrace change and the determination to help shape it, however, are core competencies of the Intelligent Community. Few places naturally possess those competencies. They must be cultivated, often over years, through advocacy.
6. **Sustain.** Improving current living standards, while maintaining the ability of future generations to do the same, is at the core of sustainability. Throughout human history, economic growth has always involved the consumption of more resources and the production of more waste. As humanity begins to push up against the limits of the ecosystem to provide resources and absorb waste, we need to find ways to continue growth – with all of its positive impacts on the community – while reducing the environmental impact of that growth.

### 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.

