

Intelligent Community Awards Program
Top Seven Intelligent Communities Phase

2011

Congratulations on being selected for the Intelligent Community Forum's Smart21 of 2011. 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 used in the Smart21 selection – will provide the basis for selection of the Top Seven Intelligent Communities of 2011, to be announced at the Pacific Telecommunications Council conference in Honolulu, Hawaii on January 19, 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 3, 2010 at ICF's *Building the Broadband Economy* 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 provided up to seven full-conference registrations to attend *Building the Broadband Economy*.

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 20. **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 20

2011 Theme: Health in the Intelligent Community. In addition to ICF's five permanent criteria (the Intelligent Community Indicators), the Intelligent Community Awards are guided by an annual theme. In 2011, our theme is Health in the Intelligent Community. ICF invites nominees to describe efforts by local government, institutions and businesses to improve the delivery and management of healthcare using information and communications technology in order to enhance the health of residents, reduce costs and create business opportunities for local employers. For a complete description of the theme and examples from award-winning Intelligent Communities, download a copy of the ICF White Paper *Health in the Intelligent Community* (see "Publications" on the Intelligent Communities 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

Brainport Eindhoven

Background

1. Population	Municipality <input style="width: 150px;" type="text"/>	Metro Area (if applicable) <input style="width: 150px;" type="text" value="735.000"/>
2. Labor Force	Municipality <input style="width: 150px;" type="text"/>	Metro Area (if applicable) <input style="width: 150px;" type="text" value="342.000"/>
3. Area	Municipality <input style="width: 150px;" type="text"/>	Metro Area (if applicable) <input style="width: 150px;" type="text" value="1,440km2"/>

4. Top Industries by Employment	High Tech Systems & Materials (including ICT)
5. Emerging sectors or clusters with potential for growth	Automotive, LifeTec, Design, Food



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 checked="" type="checkbox"/> Wireless	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership
<input checked="" type="checkbox"/> Satellite	<input checked="" type="checkbox"/> Private-sector	<input type="checkbox"/> Public-sector	<input type="checkbox"/> Public-private partnership

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

	% with access to broadband (homes or organizations "passed")	% connected to broadband
Households	100%	86%
Businesses	100%	98%
Government	100%	100%
Educational and nonprofit	100%	90%

8. Please indicate the minimum 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. 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: KPN		Approx. Market Share: 45%	
Minimum	Down: 8Mb/s Up: 1Mb/s	25,00	Euro
Maximum	Down: 30Mb/s Up: 30Mb/s	40,00	Euro
Carrier #2: UPC		Approx. Market Share: 37%	
Minimum	Down: 5Mb/s Up: 0,5Mb/s	18,50	Euro
Maximum	Down: 120Mb/s Up: 10Mb/s	70,50	Euro
Carrier #3: Ons Net		Approx. Market Share: 15%	
Minimum	Down: 100Mb/s Up: 100Mb/s	33,06	Euro
Maximum	Down: 100Mb/s Up: 100Mb/s	39,95	Euro

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

Name	Funded By	Description	Year Started	Results to Date
1. Schoolnet Eindhoven (SnE): (Open NGA infrastructure, ICT solutions for operational purposes and E-education developments)	<input checked="" 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 checked="" type="checkbox"/> Other	<p>1. SnE: This project is a joint initiative of the municipality of Eindhoven, the independent Eindhoven Fibre Exchange, the municipal library and the school boards (primary, secondary schools and schools for "special" children).</p> <p>It aims to achieve:</p> <ul style="list-style-type: none"> - Interconnection via an NGA of: <ul style="list-style-type: none"> - all primary and secondary schools, all library locations, all "SPIL" centres (combinations of education, child support and learning centres). - Introduce a marketplace for all types of educationally related services whereby the schools may select the services and providers as they decide (maximisation of quality and flexibility and minimisation of costs and barriers related to switching service provider). - In combination with cost reduction, improve functionality and quality of educational and administrative services as required for running the school. - Use the "profits" as a result of better and cheaper business services for E-educational developments and increased E-educational portfolio and usage - Adapt and transform education so that it adapts better and more flexibly to personal (pupils and teachers) demands and needs, reducing early school leaving, etc. - ICT to increase the quality of education, a response to the ageing of the teaching staff, should provide access at any time and place preventing early school leaving, etc.. <p>The project utilises "best practices" developed in the Netherlands in recent years to 'offer' interactive services aimed at primary and secondary education (including libraries). The NGA is very low priced while it is built upon (layer 1) of the FttH infrastructure in the city.</p>	2009	<p>1. SnE:</p> <p>Currently 90 schools and library locations are connected with an open NGA (fibre based connection).</p> <p>The first 25 schools outsourced their local ICT environment and use services for several purposes.</p> <p>Several collective platforms for internet, voice and video learning services are in place.</p> <p>New digital education information services have been built, including educational-gaming toolkits.</p> <p>Several other e-education projects and tools will be implemented in the coming year.</p>
2. Schoolnet Brabant (SnB)				

This combination resulted in fast rollout, low costs, connection possibilities for every school and future "home" services for children as well as training and parent contact.

2. SnB

An initiative of the municipality of Eindhoven, financed and supported by the Province of Brabant and intended for all schools in more than 100 municipalities. This means over 1200 schools.

Goals:

A Province-wide cooperation in which parties such as government, social institutions, knowledge organisations, schools and private organisations work together for ICT driven innovations beneficial to educational purposes.

- the approach is based on 4 lines of work:

- a. Experience
- b. Expertise
- c. Developments and innovations
- d. Network and networking

All these lines of work are facilitated by the SnB organisation using the combined knowledge and experience of all parties involved (collective services for individual projects, sharing for individual and collective benefits).

For knowledge networking we use an Artificial Intelligence tool which connects people based on experience, knowledge and demands.

Schools are facilitated to define their ICT policies based on educational policies and translate them into operational and managerial actions.

The activities of SnB are defined by the demands of the schools. One such activity is to investigate how all schools can grow and migrate towards an educational NGA network.

2.SnB

- operational programme in 4 areas: experience, expertise, development & innovation and network & networking.

- The facilities and activities in those programlines are constantly adapted to the need of the schools. More than 30 activities are currently provided for and by the educational partners.

- RFI has been set up to investigate how more than 1200 schools can be interconnected (migrate) to NGA structures.

- The Artificial Knowledge system is up and running for knowledge sharing and development

- Policies and tools have been developed for schools to help them to migrate towards modern and better education using digital means.

- Communication platforms have been developed for improving information towards policy makers, teachers, etc.

- Congresses have defined and planned. Congresses are related on all actual topics related to ICT and education. And, of course, they play an important role in programme lines such as experience and networking.

For actual news, actions and events please visit:
www.schoolnetbrabant.nl.

Breedband Regio Eindhoven (Broadband Region Eindhoven)	<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"/> School <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Broadband Region Eindhoven is the neutral and open Dark Fibre provider created by the main (21) government and public institutions like the minicipal authorities, housing associations, hospitals, high schools, health institutes, energy companies (networking part), etc.</p> <p>This initiative gives all parties the possibility to fill in their own network services, to select their own providers, create internetworking and shared services between each other. Furthermore, this network is the backbone for other thematic initiatives like the FttH programme, open networks for the bigger private organisations at several (10) of Eindhoven's large business parks. It also serves as the layer for public services such as public surveillance and monitoring of other objects controlled by the municipality for traffic management and environmental monitoring purposes.</p>	2002	<p>BRE is now connecting more than 50 customers (institutes, government and thematic networks such as the network for business parks and the Fiber-to-the-Home (FttH) network for customers, the green BIO energy plant in Eindhoven, etc..). The entities and objects directly coupled number several hundreds, with indirectly more than 25,000 households and 400 business connections.</p> <p>There are also connections to some other regional municipalities to interconnect regional partners (companies, municipalities, hospitals, business parks).</p>
Zorg en welzijnnet (Care and Well-being)	<input checked="" type="checkbox"/> Local Gov <input checked="" type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input checked="" type="checkbox"/> Private sector <input type="checkbox"/> School <input checked="" type="checkbox"/> Public-private partnership <input checked="" type="checkbox"/> Other	<p>The goal of the Care and Well-being net is to connect all 184,000 elderly and chronically ill citizens of the Brainport Region to the care and well-being network and provide them with services which will enable them to remain independent and living alone for a prolonged period of time. Participants of this project are major cure & care providers in this region, municipalities, housing associations and network providers.</p> <p>The concrete goals of the project are to interconnect all the 200 locations of care institutions with a fiber-optic connection, enable all 184,000 elderly and chronically ill in the region to get additional care over a secure IP-based connection, specifically aimed at care and well-being services on top of their regular internet connection at very low cost, and to create a central facility to share cost and personnel to provide and support such services in a cost-efficient</p>	2010	<p>Currently, the care institutions are working on making their facilities and hardware interoperable to allow interconnection and cooperation among organisations (e.g. Viedome and Lunet Care enable their central Care Centres to react to sensor activity for all the other care institutions that otherwise have to invest a lot before they can give the digital attention they would like to give). Also the effect and consequences of specific rules and regulations regarding combining telehealth services are being examined.</p>

way.

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	8%	Secondary (high school) degree	40%
Undergraduate (university) degree	41%	Graduate degree (M.A., Ph.D., Eng., etc.)	11%

11. Please indicate the number of degrees awarded in all disciplines during the most recent academic year by educational institutions either (a) within your community or (b) outside the community but within reasonable commuting distance for residents. You may include satellite campuses and distance education programs serving your community

Community college or technical school graduates	92000	Undergraduate degrees (B.A., B.S., etc.)	113000	Graduate degree (M.A., Ph.D., Eng., etc.)	15000
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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 *	65000
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13. How many jobs did your community create in the last 36 months that depend on information and communications technology (ICT). This may include jobs with ICT companies but may equally include jobs in the ICT units of retailing, distribution, manufacturing, healthcare, financial services and other businesses.

All jobs *	66400	Jobs depending on ICT *	19200
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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
DAF e-learning	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input checked="" type="checkbox"/> Private sector <input type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>DAF e-learning: A system developed by DAF trucks in-house to bring about quality and efficiency improvements in the dealer network and their service garages through e-learning. It contains a detailed description of the tasks and levels of authority, from starting trainee to the highest management level, in the organisations and the accompanying competencies that can be expected. From the perspective of the entire system, a vision is laid out of the distribution of, and need for, certain competencies. The system teaches not only the most efficient mechanical procedures, but also social skills, DAF standards and values and quality assurance; and it avoids having the personnel learn too much and then become disappointed when they cannot use what they have learned in their profession. The system was set up so that teachers can go on-site and call up the system digitally.</p>	2006	<p>Since DAF started the e-learning the number of e-users has grown to 10,141 training days per year across 14 countries.</p> <p>There are already 31 training modules for Parts-Service and Sales available.</p>
Centre of expertise (and Centre for innovative craftsmanship)	<input checked="" type="checkbox"/> Local Gov <input checked="" type="checkbox"/> State/Prov Gov <input checked="" type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> School <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Automotive Centre of Expertise (ACE) for High Tech Automotive Systems</p> <p>Specialised Automotive education and quality applied research play a crucial role in acquiring a strong position for the Dutch automotive industry in the High Tech global playing field. HAN University of Applied Sciences, Fontys University of Applied Sciences and the automotive businesses want the formation of the Automotive Centre of Expertise (ACE) to make a substantial contribution to improving both the quality and quantity of students entering jobs through creating a structure focused on open innovation (learning coupled with an (innovative) business project, combined with e-learning), entrepreneurship and knowledge transfer with companies in which sustainable new knowledge is</p>	2010 (and starting in 2011)	<p>HAN and Fontys currently have a combined intake of 300 students per year. With the deployment of the ACE, this will increase to 450 in 2015. By improving efficiency approximately 280 students will graduate in 2015. For these graduates, the job market in 2015 will still very broad. If growth continues (as the Berger report states) it will provide a place for more than 60% of all college graduate automotive specialists. Currently about 30-35% of the graduates find a job in the High Tech Automotive Sector (Source: HAN). ACE may contribute to a significantly greater proportion of graduates choosing a job in the industry.</p> <p>- 50 paying customers in 2010</p>

		<p>developed and applied. As part of the valorisation of knowledge, the autonomous knowledge needed is brought in by Eindhoven University of Technology.</p> <p>In the coming year another project will be connected with ACE to create continuous learning possibilities; MBO Automotive Centre (MAC), a centre for innovative craftsmanship, which creates an essential bridge between the idea and realisation of innovative products in five spearhead sectors:</p> <ul style="list-style-type: none"> • Driving Guidance • Efficient Vehicle • Electric vehicles • Cooperative mobility • Platform electrification (software, mechatronics, embedded systems) 		<p>- 50 studies funded in 2010</p> <p>The first 36 students have applied for MAC's first curriculum. In 2016 190 students and 300 automotive craftsmen (per year) will follow courses on innovative craftsmanship.</p>
<p>e-Health Experience Centre</p>	<p><input checked="" type="checkbox"/> Local Gov <input checked="" type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input checked="" type="checkbox"/> Private sector <input checked="" type="checkbox"/> School <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other</p>	<p>The eHealth Experience Centres are places where new innovations (technical and organisational) are exchanged, tested, demonstrated, modernised, and educated. An eHealth Experience Centre will enable care providers to be always up-to-date on new developments in healthcare.</p> <p>Three participating actors will collaborate to develop new innovative processes and approaches at the eHealth Experience Centre.</p> <p>1. Educational institutions: increasingly education institutions have to adjust their curriculum to the demands set by the healthcare market. Moreover, the demand is constantly evolving. A physical location to facilitate these developments is required to unite technology, knowledge and best practices. It is vital that the technical level of the eHealth Experience Centre evolves with the new innovations in technology.</p> <p>2) Healthcare institutions: It is</p>	<p>2010</p>	<p>Construction of an e-Health Experience centre is now underway at ROC (Community College) Eindhoven. In 2011 all 2,332 students studying to become active in the health sector will use these facilities to be educated in the use of technology in the health sector.</p>

of great importance that care providers are educated continuously in a structural manner given the increasing speed at which new innovation comes into healthcare. Connecting the normal educational institutions and industry will enable healthcare institutions to react promptly to new development and will guide and prepare their employees to process changes in healthcare demand.

3) Private Industry: For private industrial partners the eHealth Experience Centre fulfills a commercial function such as demonstrations. The distinctiveness lies in the multi-supplier environment whereby the actual client situation of the healthcare suppliers most closely approaches that of the industry.

By creating a physical location where educational institutions, care providers and private industry share facilities, a climate is created that enables entrepreneurship and easy diffusion and creation of knowledge and new technology.

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.

In Brainport there is a lot of knowledge-intensive manufacturing and focus on innovation. Therefore, you need to embed knowledge within the ecosystem itself and make sure that it makes no difference who you are, what your social position is or how you are geographically located to partner in our knowledge community structure. To ensure this, the subject is noted in several documents like 'glasrijk Eindhoven' ('Fibre-Rich Eindhoven'), 'ICT route 2010' and the 'Brainport Navigator' and, more importantly, embraced and put into practice by the Triple Helix (government, business and knowledge institutes).

However, digital exclusion in this region no longer lies in lack of an internet connection (best figures worldwide: 38.1 connections per hundred residents) or a computer. Everyone who wants it can be connected to internet via work, home or public area. In 2005 a study revealed that potentially around 20,000 people still lacked a computer and/or internet. This has been reduced to virtually zero, which has seen the focus of the municipalities shift to other levels of 'digital exclusion'. How can we - in a caring society - communicate more smartly and easily with each other without excluding people? The answer lies less in the technology and more in how people want to relate to each other!

Eindhoven municipality is therefore targeting citizen participation. In 2007 the Taskforce Citizen Participation identifies the relevant wishes, needs and recommendations. The municipality undertook a Digipanel study and organised sessions with residents, civil servants, council and supervisory board

members to generate ideas. The results were processed into the Executive Programme for Citizen Participation 2008 - 2010 that contains where the citizen participation focus lies, what the aims are and how these should be achieved. The programme comprises 11 concrete projects and activities such as establishing rules of play for interactive policy and improving the information provision to specific target groups and areas as well as the simplification of regulations and subsidy systems, establishing and implementing support points in the city and working and experimenting with neighbourhood contracts. The projects form a coherent whole. The municipality wants to boost the commitment and self-organising capacity of citizens (reinforcing active citizenship) and the sense among citizens that municipalities listen to them (improving interactive processes).

Digital inclusion 2.0

The slogan for the Executive Programme for Citizen participation 2008-2010, which comprises eleven concrete projects and activities, is "take part!" The aim is to boost the commitment and self-organising capacity of citizens (active citizenship) and to give citizens the sense that they are heard and taken seriously by the municipality and that municipal policy take as much account as possible of them (interactive policy).

One of the projects in 2010 was the co-creation project 'Take part'. How should the municipality communicate in the future? And to find out what residents and other stakeholders thought about this, the municipality wrote out a challenge to co-develop ideas: a co-creation challenge. This challenge generated 45 ideas! A jury selected the best five ideas that were elaborated.
(<http://www.redesignme.com/challenge/maak-t-mee-for-gemeente-eindhoven/1276>)

Digital Upgrading Personnel

In our knowledge-intensive region it is vital to constantly upgrade the level of the workforce. The competence set of yesterday is not good enough for today anymore, and for tomorrow even new skills are required. In a labour market that is getting tighter by the month, it is therefore crucial to adopt principles of Life Long Learning, and to include everybody. Since the regio has about the highest penetration of internet, it is logical to execute programmes for this digitally. E-portfolio is an important instrument for that. The big advantage of e-portfolio is, that it also works in the current transient labour market: it does not matter if you are a student or unemployed or if you move from one employer to another, the e-portfolio is yours, and will travel with you. It is the region's policy to include e-portfolio in all human capital programmes. Werkplein Mercado (Eindhoven unemployment agency) and the bigger companies like ASML, DAF Trucks and NXP work together to provide support in training and education
(<http://bit.ly/fv7rsp>).

Digital Daily

But it is not the business world alone that wants to seek 'digital connection', our own living environment is becoming increasingly digitised, too. Without digital knowledge it is hard to make appointments, arrange health insurance or check your children's progress at school. There is a national agreement that 80% of government services is digital. All public services are put together and organized in webportals to make them easier accessible. The next step is to promote cross-overs with new (social) media, the region is actively promoting the use of new media and innovation through events like the Open Innovation Festival Eindhoven (<http://www.oif040.nl>).

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
SeniorWeb	<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>SeniorWeb is a computer club for people interested in computers and internet and want to learn the basics. It also has a service desk for people to go to for PC maintenance (software updates) and to solve problems caused when installing application software, changing settings and viruses.</p>	1998	<p>2 learning centres with 12 workplaces.</p> <p>Around 500 people have enrolled, spread across 2,500 lessons in 2010 (the number of participants has fallen by 25% compared with last year, which shows that digital exclusion 1.0 is no longer an issue).</p> <p>The computer classroom of SeniorWeb Eindhoven has a ring circuit with amplifier, which lowers the barrier for people with a handicap.</p>
Veiligheidshuis' ex-convicts programme	<input checked="" 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"/> Academic institutions <input type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>Safety Region's Rehabilitation programme for ex-convicts being trained in using e-portfolio, using digital coaches sessions and software via the internet.</p> <p>The programme measures the gaps in competencies and the distance to the labour market; then a tailor-made development programme is started</p>	2009	<p>Over 300 ex-convicts are in the programme. The project is expected to be expanded in 2011.</p> <p>Approximately 1,500 (ROC and Fontys) teaching and competence modules are implemented.</p>
TU/e notebook regulation and free wifi	<input type="checkbox"/> Local Gov <input type="checkbox"/> State/Prov Gov <input type="checkbox"/> National Gov <input type="checkbox"/> Private sector <input checked="" type="checkbox"/> Academic institutions <input checked="" type="checkbox"/> Public-private partnership <input type="checkbox"/> Other	<p>A university is expected to be innovative in the area of research as well as education. TU/e has ensured this by giving students access to proper IT facilities. In order to support this, the notebook scheme was created to optimise the use of IT in education. The education set-up is now totally adjusted to the use of notebooks. The notebook is used for communicating with others, gathering information, making calculations and drawings, executing simulations and taking examinations. In other words, it is an indispensable instrument at TU/e, whereby no student can be excluded. Another facility is the free wifi-network throughout the University-campus.</p>	1998	<p>Every first-year student (bachelor or master) enrolled at TU/e can buy a notebook from TU/e, at a heavily subsidised price. Approximately 95% of the students (1.500 new students per year) participate in the TU/e notebook regulation. Great facilities to enable every student to reach his or her full potential.</p>

Indicator #4: Innovation

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

Brainport is the innovation engine of the Netherlands and forms the core of our economic and competitiveness policy. Resident business and research centres act as technology leader or market leader. So, innovation is the key driver of the Brainport economy and promoting innovation is crucial to maintaining and strengthening the position of Brainport (and the Netherlands) as the innovation hotspot. Brainport represents 4.5% of the Dutch population but punches above its weight in innovation by:

- 20% of all researchers in NL
- 25% of all Dutch export
- 36% of all private R&D expenditure in NL
- 52% of all Dutch patents
- R&D = 8% of GDP
- Nr 1 in Micro cities, Nr 20 overall

FDI Magazine Financial Times, European Cities & Regions of the future 2010/11:

- REIS 2009: "High Innovator" in an "Innovation follower" country (EIS 2009)
- MERIT: High Technology Producer, forming the technological backbone of EU-27
- Building knowledge intensive clusters and value chains, where the spending of €1 m in R&D leads to the creation of 70-100 jobs throughout the value chain

Community policy:

Since 2006 Brainport has been implementing the Brainport navigator and building on the results of its predecessor programmes. It is an integral approach to increase the innovative capacity of the Brainport region and to improve its global competitiveness. Companies, knowledge institutions and governments together have identified projects in four domains: people (labour market, education, knowledge workers), technology (R&D investments, knowledge transfer and valorisation), business (start-ups, business networks) and basics (quality of life, accessibility, image, ICT). The best way to promote successes is to share this knowledge with others. This approach was recently rewarded by the Eurocities 2010 award for cooperation.

Open Innovation 2.0

Already for a decade industry and research institutions have gone through the paradigm shift towards open innovation. As the complexity and costs of engaging in innovation – in particular at the front – have increased, so has collaboration. Through partnerships, firms seek to stay abreast of developments, expand their market reach, gain access to a larger base of ideas and technology, and get new goods or services to market before their competitors. Models of collaboration (like Dev-Lab), institutes (like Holst Centre), supportive infrastructure (campuses and facilities like MiPlaza) and Automotive Facilities Brainport and various networks are in place. The region shows substantially higher levels of collaboration in innovation than the national average (13% vs 9%) and industry revenue (expressed as a % of the total revenue) from new products is much higher than the national average (33% vs 13%)

People, Planet and Profit

Innovation is also important from the perspective of society. Societal and grand challenges are meanwhile in the core of EU, national and regional policy. Innovation is deemed to be able to provide answers to challenges like ageing of our population, climate change, sustainable energy, etc. These challenges demand new, innovative solutions enabling the extended, smarter and more efficient use of human resources. That's why the region thinks it's important to be part of 2 (out of 3) of the Knowledge Innovation

Community (KIC): InnoEnergy and ICT Labs.

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
Guido Helmond	<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>Guido Helmond is a digital guide to all questions in the field of housing, welfare, health and care considering all 90.000 inhabitants of the city of Helmond, the second large city in the Brainport Eindhoven region.</p> <p>Guido is a unique product developed for and by the city of Helmond and provides information, interaction and transactions about where help, advice or support can get considering local policy. The icons on the homepage say it all:</p> <ul style="list-style-type: none"> • I have a chronic illness • I have a disability or limitation • I have limitations due to age • I have psychological problems • I have a hard time making ends meet • I take care of someone • I just came out of the hospital <p>Guido is focused on the situation in Helmond. That means that besides general information nationwide, specific arrangements and applications offered apply only to Helmond. The user can click through to the website of the partner for more information, interaction or transactions.</p>	2009	<p>Guido is an initiative of the city of Helmond as part of Brainport Eindhoven region and connects about 23 partners in the field of housing, welfare, health and care. New partners are added regularly. At this date 300 professionals per month regularly use the service with satisfaction.</p> <p>Having invested in development and cooperation, in 2011 Guido will be dedicated to profiling and to optimising the content of the website with the intention of letting every resident of Helmond know about and use Guido, whether for his or her work situation or from a health and caring role perspective.</p> <p>An evaluation survey in 2011 will have to make clear if and when all inhabitants of the Brainport region will be able to use Guido in their specific situation.</p>
BuitenBeter	<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>BuitenBeter is an iPhone/Android application that lets citizens of Eindhoven lodge their civic complaints and get feedback on the status of solving the problems http://www.buitenbeter.nl/english</p> <p>Potholes, stray garbage, broken street lamps? In Eindhoven you can report these local issues by smartphone, using the free</p>	2010	<p>BuitenBeter was launched in April 2010 in the city of Eindhoven and immediately scaled up nationwide. It is operational in every city in the Netherlands. Within 5 months more than 30,000 users signed up, reporting more than 8,000 real issues, with numbers</p>

	<p>BuitenBeter application. After spotting something that needs to be fixed, you can use the app to take a picture, select a location and a problem type and send the issue directly through to the city council. With a combination of GPS and maps users can pinpoint the exact location, providing city workers with all the information they need to identify and resolve the reported issue.</p> <p>Using crowd power, this is a solution providing benefits to both citizen and government, helping to create smarter cities.</p>	<p>increasing rapidly.</p>
<p>3D Virtual Helmond</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Local Gov <input checked="" type="checkbox"/> State/Prov Gov <input checked="" 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>This platform (completely renewed in January 2010) offers the Virtual Helmond municipality, and in fact all 90,000 inhabitants, the option to give spatial physical and social changes via the internet anytime, anywhere (using 3D display supports and video and audio clips, text and links to other sites). Sometimes regarding a new playground or a complete new housing block or renovation but also about social safety in the neighborhood or new initiatives regarding caring society and new services.</p>	<p>2004</p> <p>The Virtual Helmond platform was launched in 2004 as a pilot project to increase communication and participation in the urban renewal district in the Downtown East support. After positive experiences, this platform also decided to apply to other physical space projects and social renewal.</p> <p>Besides the further growth of the 3D city model, innovative applications involving existing 3D city models are currently being examined. For example, in perception studies, simulations, and as for the serious gaming world and the campuses in the Brainport Eindhoven region that are created. For instance, the High Tech Automotive Campus (Helmond) and the development of the Medical Campus (Veldhoven/Best).</p> <p>All together, Brainport Eindhoven and the whole province of Brabant (2.4 million inhabitants) are looking for opportunities to use the virtual 3D world to improve information, educational and safety</p>

	and health services to their inhabitants. Virtual Brabant is already taking the next steps
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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)
TOCO-patch (by NEMO Healthcare)	The electrode patch with intelligent measuring cable monitors contraction activity. With hospital births or births with a risk indication the patch provides reliable information to detect and prevent premature births. The technology is applied externally. This is more convenient, avoids risks and makes it possible to measure in early pregnancy. The Toco-patch contributes to the more natural delivery of births because caesarean births and premature births can be prevented.	Brainport Health Innovation Award
Medido Connected (by Innospense)	<p>In the Netherlands more than eight per cent of the population takes five or more medicines - the average for Western countries - but half of these people make mistakes when taking medicines, so more support is needed than is presently the case. Besides, many people from this group have a chronic disorder, which makes it difficult to take the correct medicines. Disorders such as depression, rheumatism, Parkinsons or dementia often make it impossible to use standard packed medicines on their own. For example, patients forget to take their medicines or are not physically able to open a package</p> <p>Medido Connected</p> <p>Because the correct intake of medicines is important for stabilising or improving health, it is necessary for patient support to be optimised in this respect. Medido Connected makes it possible for a many of these medicine users to take their medication on their own for a longer period, thereby increasing the quality of the use. The responsibility for the patient remains where it should be according to Innospense: with the care provider.</p> <p>Signalling, motivating and observation</p> <p>The Medido Connected signals, motivates and observes patients when they take medicines. This is done by placing pre-packed medicines in the dispenser and setting it according to the current week schedule. Next, the Medido Connected sends a signal to the user when it is time to take the medication. This may be pre-packed or residual medication.</p> <p>When the user responds to the signal by conforming it, the pre-packed medication becomes available and the package is opened. Through a text in the display and speech through the loudspeaker the patient is informed about the methods of using the medication. All possible barriers for the correct use of medicines</p>	Brainport Health Innovation Award

	are now removed.	
ECG Necklace (by Holst Centre)	A Necklace for wireless transmission of the full ECG through an ultra-low power technology application, able to work autonomously for 7 days non-stop. It provides long-term monitoring, while maintaining user mobility and comfort. The signal can also be transmitted through an Android mobile phone, so the data can be transmitted over the internet to make them available for authorised users, such as physicians. The ECG Necklace has been clinically validated and offers a solution for mHealth questions.	<ul style="list-style-type: none"> - WBSO (The WBSO is a tax incentive to compensate a part of the wages for research and development (R & D)) - Holst Centre's pre-competitive open innovation model (generating IP in co-ownership, by sharing the costs and sharing the results)

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.

<p>In general:</p> <ul style="list-style-type: none"> * Process focused on realising shared Incubator company buildings like Cathalyst, Beta II, Device Process building, Automotive Accelerator (all with specific shared facilities). At this moment there are 6 Incubator buildings in operation (250 tennants), 3 under development, 4 in study phase. • Physical full-service accommodation with offices, workshops, business space and labs. All high-quality, affordable, and flexible and with extra attention for: <ul style="list-style-type: none"> - Managerial and financial support. - Pre-seed funding (loans and subsidies) - Seed funding - Professional network activities - Research facilities * Incubator programmes: <ul style="list-style-type: none"> • Techno spurt, techno starters. www.incubator3plus.nl • Design Incubator, design starters. www.incubator3plus.nl • IPC Biosystems Platform, cluster programme Biotech and High Tech Systems. www.bsp-platform.nl • IPC Design, cluster programme Design and High Tech Systems. Under development • SME Finance & subsidy guide. www.mkbfinancieringsgids.nl * Program Brainport Industries: sourcing value from, linking and consolidating the chains of suppliers in the lifetec, food, automotive and high-tech systems sectors to boost cooperation and strengthen the suppliers' international competitiveness and aiming for the establishment of new OEMs * Brains Award Eindhoven (www.brainseindhoven.nl/en/home) is an innovative competition for and by students, to let them think about innovation, give them motivation to do something with it and explore their own entrepreneurial qualities. <p>Concentrated on High Tech Systems & Materials:</p> <ul style="list-style-type: none"> * Intelligent Lighting Institute: institute at the interface of fundamental (public) research and applied research among companies where companies from different disciplines work together on new solutions related to lighting. http://w3.tue.nl/en/institutes/intelligent_lighting_institute/research_programs * Solliance is the alliance on this area between TNO, TU/e, Holst Centre and ECN (Energy research
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Centre of the Netherlands) for the research and development of photovoltaic solar energy (PV) in the ELAT (Eindhoven-Leuven-Aachen) region. Solliance wants to make the region a world player in PV. Solliance sees a synergy of some 250 researchers with similar ambitions. Solliance creates the conditions for this through clustering the infrastructure, harmonising the research programmes of ECN, TU/e, TNO and Holst Centre, and working very closely with industry.

R&D by Solliance in Eindhoven is expected to total ca. € 70 m in the next five years. The initiative aims to give Dutch industry a significant international presence for a long time in the development and production of high-tech machines for the manufacture of solar cells and modules as well as the provision of integrated applications. In the longer term this will mean thousands of high-tech jobs. Solliance will work according to an 'open innovation' model in which more knowledge institutions will join the initiative and long-term cooperation with companies throughout the chain will be sought.

* Brainport Safety & Technology: a programme working towards an international Innovation Centre for Safety & Technology bringing science and industry together so that a new generation of safety products and services can be generated more quickly.

* POINT ONE: The Netherlands is home to a unique European high-tech hotspot in the field of nanoelectronics, embedded systems and mechatronics, encompassing international excellences in business and technology. The strategic innovation programme Point-One aims to expand the current strong position of the Netherlands in this field and bring it up to Silicon Valley proportions. A national subsidy (and network), with a local focus on (and in) Eindhoven. With a budget (2009-2012) of 900 Million Euros.

Employment in high-tech systems & materials in the Brainport region represents 8% of the total employment in this sector in the Netherlands. In the recent years there has been a decline in the number of jobs by 7% and an increase in the number of companies by 41%. The sector is highly dynamic.

Concentration on LifeTec:

* Lifetec network: network for companies and knowledge institutions in the lifetec sector in Southeast Netherlands; also relationships with counterparts in Leuven and Aachen. LifeTec Network has produced a strategic analysis on the sector coming up with a clear approach for further development of the cluster via world class R&D, world class R&D environment, Create Jobs, Highly skilled workforce and the establishment of a cluster management organisation leading towards extra added value of € 500 m p/a per 2020

* Health Technology Park: campus development around the Maxima Medical Centre focusing on attracting companies concerned with applications in the field of childbirth, mother and child.

* Brainport Health Innovation: 'Brainport Health Innovation: Connected Client, Connected Patient' is a long-term program developed by the healthcare sector, knowledge institutions, industry and government that focuses on promoting innovation at the interface of healthcare and technology. Every year it organises the Brainport Health Innovation Award.

* TU/e has part of its cross-departmental research in the strategic research clusters of Energy and Health, enabling the university to create powerful research concentrations able to compete with the strongest research centres around the world. Former Philips executive Dr. Rick Harwig (Energy) and Roel Fonville (Health) are setting out the initial lines of the research themes and ambitions. A clearly defined profile is essential to competing with the world's best in the future. This conviction brings together research groups within the university to cluster strengths in relevant societal fields. This focus and mass the ensure that the partners in industry, knowledge institutions and government know where TU/e excels. Fonville: "Major industrial partners want to cooperate with the very best parties - regardless of where they are in the world. Good profiling can help make TU/e such a party."

Employment in LifeTec in the Brainport region represents 9% of the total employment in this sector in the Netherlands. The number of jobs has grown by 13% in recent years.

Concentration on Food:

* The Technology and Food Network (TeFON) wants to encourage and support companies and knowledge institutions in conceiving, developing, implementing and marketing production environments and installations that have a highly innovative character at the interface of high-tech systems and materials and (agro) food & nutrition.

Food Technology Park Brainport

Food Technology Park Brainport is the cross-over for Food & Technology with technical demonstration lines, accommodation, educational institutions, a learning plant, laboratories, a seed fund facility, relaxation opportunities and practical training for current and future employees.

The mission of the Food Technology Park is to give a solid contribution to making food production worldwide quantitatively and qualitatively more sustainable via the valorisation and application of new innovations at the interface of Food & Technology. 4.8 m euros has been made available by the municipality of Helmond and the Province of Noord-Brabant to develop the Campus.

The Food & Technology focus of the campus targets:

- Process automation: mechatronics, robotics, motion systems, control technology, process automation, process intensification;
- Measuring & Sensing: intelligent measuring systems, vision, optical systems, tracking & tracing;
- Intelligent packaging: smart packaging, flexible printing/labelling, biobased packaging, shelf-life technology, preservation;
- SME services for market introduction of new products;
- Practical training at the interface of Food & Technology.
- Preparation technology: new preservation technologies, innovations in meal preparation (like new concepts for steam-baking, denaturisation of proteins);

The Food Technology Park Brainport leaves scope for emerging themes and wants to connect with themes that interface with Food & Technology (like design).

Several concrete campus entities are in an advanced stage of development:

- Food Application Centre: practical test and demonstration centre primarily for industry and secondarily for education, in the field of mild preservation, for example;
- Food & Fresh Lab: learning plant for education and industry, geared to craftsmanship and preparing motivated, well educated personnel for work (process operators);
- Ongoing development of the Green Campus: innovating the learning of vocational education in the field of food, parkland, hospitality, leisure and the synergy between them;
- Food, Leisure, Health & Wellness Centre: hotel, leisure and recreation initiative;
- Market Connection Centre (MMC): centre to facilitate SMEs in the innovation process, with a palette of supporting partners and tools in the fields of innovation management, consumer knowledge, market research, co-creation and concept development among others. The MMC is an initiative by industry and government with a strong link with the Flemish – South Netherlands project Food2Market.

Food Connection Point

Food Connection Point is a network organisation for and by Food companies in South Netherlands, with focal areas being image, jobs, education and innovation. The FCP clusters strengths and shares knowledge by cooperating with government and education. Some 70 SME(+) companies are affiliated to the FCP.

Employment in Food in the Brainport region represents 6% of the total employment in this sector in the Netherlands.

Concentrated on Automotive:

* The High Tech Automotive Campus is home to public knowledge institutions like TNO Automotive and TÜV, training and business. The ongoing development of this campus will have to generate 20% annual growth in jobs on the campus in the coming years. The ambition is to have 750 students and 1500 jobs there by 2015.

* The Automotive Technology Centre network project, with 125 public and mostly private participants already, initiates and supports cooperation and innovation projects in and for the automotive sector. In the period 2005 – 2008 the ATC developed 39 new projects at a value of 4.48 million euros, 1.88 million of which comes from public funds.

* HTAS, is a market driven innovation programme (2007-2012, investing a total of 260 million euros) set up and steered by the Dutch automotive industry to focus automotive innovation in Hemond on the prime focal areas of Driving Guidance and Efficient Vehicle.

Employment in Automotive in the Brainport region represents 20% of the total employment in this sector in the Netherlands. The number of jobs has grown by 22% in recent years.

Concentration on Design:

* program 'Design in Brainport' (www.designconnectionbrainport.nl) - The Brainport program Design Connection Brainport develops, manages and supports a wide range of projects in the field of design & technology in the Southeast Netherlands. The focus is on reinforcing design as an independent economic sector, and developing new business opportunities at the interface of design and technology by connecting, inspiring and facilitating all stakeholders in the Brainport region.

* program 'Creative conversion factory'; This institute should be a workspace for the development of creative new media products. Resulting promising prototypes outside the factory can be further developed into marketable products. In addition, the Creative Conversion Factory is a meeting place and source of knowledge for the creative industry sector in Eindhoven and beyond.

* The HUB (www.dehub.nl), The Hub offers guidance to creative starters on their way to a profitable professional existence. In addition, the Hub business and the creative sector in contact with each other so that fruitful economic cooperation can occur. The Hub is an initiative of the Alice Foundation (www.alice-eindhoven.nl) and is financially supported by the municipality of Eindhoven and the European Union.

* Madlab (www.madlab.dse.nl), MADlab is the virtual laboratory of MAD emergent art centre. Realisation of projects will be supported by substantive and practical knowledge, experience, manpower, equipment and software. There are all kinds of facilities available at the MAD location and several (education) institutions and companies.

* Design incubator (www.incubator3plus.nl); consortium to support innovative design start-ups in the preseed phase

* Design Academy Eindhoven (www.designacademy.nl); Design Academy Eindhoven has built up an outstanding reputation both nationally and internationally. It is a leader in innovation and change. "Dutch Design is hot, and Time Magazine named DAE 'school of cool'."

* Eindhoven University of Technology, Department of Industrial design (<http://tiny.cc/poAPk>)

Employment in Design in the Brainport region represents 7% of the total employment in this sector in the Netherlands. The number of jobs has grown by 10% in recent years.

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

Incentive	Description
Incubator3plus	Consortium to support high-tech start-ups in preseed phase (www.incubator3plus.nl)
TechnoStars	Venture Capital Fund for high-tech start-ups (www.technostars.nl)
Brainport Health innovation award	Stage for new and innovative ideas and promotion of innovation at the interface of technology and healthcare. (www.brainporthealthinnovation.nl)

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 and 2009	MuTracx	<p>MuTracx is an Océ spin off. Its primary focus is to revolutionise and dominate the PCB inner layer production market. MuTracx will produce the first fully digital inner layer printer based on inkjet technology.</p> <p>By digitising the inner layer manufacturing process, replacing the current lithographic process with a simple one step solution, we offer significant cost advantages by means of:</p> <ul style="list-style-type: none"> - Yield - Labour - Running costs - Environmental impact - Reduced complexity - Reduced lead-times 	17.5 million USD	Technostars (and others)
2010, 2009 and 2008	Liquavista	<p>Liquavista offers a new type of electronic screen technology that will change the way we interact with mobile phones, media players, electronic readers and other mobile devices. Liquavista's displays create bright and colourful images that ensure excellent indoor and outdoor viewability and use dramatically less battery power. Users can engage with their favourite</p>	26.6 million USD	Amadeus Capital Partners, GIMV, Prime Technology Ventures and Applied Ventures

		<p>applications for longer before a recharge is necessary and battery sizes can be reduced allowing devices to be thinner and lighter.</p> <p>The company's ultimate vision is to build on the extraordinary optical performance and unique power efficiency of its technology to lead a green revolution in low power displays for notebook PCs, desktop monitors and televisions. Liquavista is a spin-out from Philips Research</p>		
2010	Reggefiber	<p>Reggefiber, the joint venture of Reggeborgh and KPN, builds, manages and operates fibre to the home networks and wants all homes in the Netherlands to be connected to its fibre-optic network. The crisis made further investments impossible. This risk loan will enable Reggefiber eind to supply a fibre-optic connection to some 1.3 million households in the Netherlands (with a strong focus on our Brainport region) next year.</p>	379 Million USD	European Investment Bank (EIB) and five commercial banks including ING, ABN Amro and RBS.

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.

Brainport's marketing communication messages have been based predominantly on facts and figures derived from reliable, public sources like the national statistics agency, OECD and Eurostat.

These statistics, together with Brainport's activities (e.g. involved in international research projects and reports) are used to substantiate our 'claim to fame'. Meanwhile this has been recognised by many organisations, like ICF, with a top 7 ranking twice in the 'Intelligent Community of the Year' competition. Brainport was runner-up for the 2012 Word Design Capital. Eindhoven has been rewarded for Brainport with the Eurocities 2010 award for Cooperation. In the Foreign Direct Investment Magazine of the Financial Times, Eindhoven is ranked as no. 1 city of the future in Europe (cities < 250,000 inhabitants).

By showing others the example of Brainport (approach, governance, performance and achievements) we create over time a large audience (by visits to the region and via countless presentations on national and international stages) interested peers and followers, who themselves talk about the Brainport example on all kinds of stages and platforms and by doing so are 'ambassadors' for our case. Furthermore, several initiatives organised in the region provide a stage to attract large audiences where the Brainport messages can be conveyed. One such stage is Dutch Design Week in Eindhoven (with 150,000 visitors). Design is one of the main clusters of Brainport's development policy and design is becoming a more driver for innovation processes. The STRP festival of Art and Technology is another key stage. Organisations in Eindhoven (University of Technology, research institutes and private companies) have been awarded so called co-locations in two of the three Knowledge and Innovation Communities in the European Institute

for Innovation And Technology (a flagship of European excellence).

So the Brainport region is trying to stay true to itself in its economic development marketing activities by expressing on all fronts the content of who we are and what we are good at! We do this by inviting very specific delegations to experience our Brainport region by way of our successful initiatives and the respective triple helix parties (including the international, highly renowned companies like ASML, NXP, Philips and FEI). We automatically make it clear how Brainport comes as a 'total package' in which Broadband, Knowledge workforce development, Digital inclusion and Innovation form part of our Brainport DNA. We also head off to interesting regions with our roadshows in search of cooperation and focus on events where we, as the organiser, can showcase our knowledge and expertise worldwide.

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
Brainport 2020	<p>Brainport is a key indicator of the earning capacity of the Netherlands. The Dutch government has underlined the region's importance by commissioning the creation of a Brainport 2020 vision and execution programme to make the top technology region of the Southeast Netherlands a world-class economy. Brainport 2020 will thus help the Netherlands return to the top five most competitive economies. Cooperation with the national government means that we make agreements on profiling our strengths regionally, nationally and internationally. To this end, five 'challenges' have been established for which solutions are proposed in different ways:</p> <ol style="list-style-type: none"> 1. (People) ...future-proofing jobs in the Southeast Netherlands. 2. (Technology) ...Southeast Netherlands as a world leader as technology provider (including NGA networks) contributing to solving societal issues in the field of health, safety, mobility and sustainability. 3. (Business) ...even more market leaders and successful start-ups in the Southeast Netherlands. 4. (Basics) ...an internationally reputed and acquisitive living climate. 5. (Governance)...effective cooperation between industry, knowledge institutions and government, not only within the region but also (inter)nationally.
EUROCITIES Award for cooperation	<p>As a region we compete in several competitions. This year Eindhoven won the EUROCITIES Award for cooperation, also one of the success factors of ICF. Our way of cooperating is a Unique Selling Point for our region and must be repeatedly underlined via internationally acknowledged and high-tech podia. EUROCITIES is the network of major European cities (more than 140 large cities in over 30 European countries) that provides a platform for its member cities to share knowledge and ideas, to exchange experiences, to analyse common problems and develop innovative solutions, through a wide range of forums, working groups, projects, activities and events.</p> <p>To be accepted as a member of EUROCITIES, a city should be an important regional centre with an international dimension. Eindhoven, as a city member in this network, has committed itself to the thematic forum and working group 'The Knowledge society' (focus on ICT and the internet).</p> <p>http://www.eurocities.eu/main.php</p>
Brainport International Community	<p>The Brainport International Community is a worldwide programme to show 'high potentials' the beauty and DNA of our regio AND the career opportunities of our region in a three key features-approach:</p> <ol style="list-style-type: none"> 1. Coming to: promote the region among knowledge workers and their partners/families, and make sure that matching processes in the labour market proceed more efficiently. Goal: help employers to attract knowledge workers.

2. Settling in: make sure that knowledge workers and their partners/families have a fast and pleasant 'landing' in the region. Goal: enhance the likelihood for them to stay in the region and to concentrate on their work.

3. Living in: support knowledge workers during their integration into the region. Goal: make knowledge workers feel at home in Brainport and ready to build up a life and a career in Brainport.

by making use of different sorts of communication:

A Worldwide Platform (www.brainporttalentregion.com) where we promote the Southeast Netherlands as a European Top Technology region to Study, Work and Live and promote our Study and Careers Opportunities. (this website is under construction until 14 January) and then www.expatguideholland.com if there is interest shown in coming here.

Regional Branding through an extensive social media campaign in 13 target countries worldwide.

Visiting worldwide recruitment events, such as MIT European Career Fair in Boston, Career Fair Etseib in Barcelona, IKOM career fair in Munich, customised career event in China and a worldwide online job fair.

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
www.expatguideholland.com	If you are coming to Eindhoven, it is a good idea to prepare well. On the one hand you will first have to complete a number of formalities. And on the other hand, it is worth finding out more about the character of the Dutch and some of their customs that may appear a bit unusual to outsiders. Expatguideholland.com is a practical website with all that and more... The main purpose of this website, just like the physical meeting point (Expatriate Centre Brabant), is to help companies to make it as easy as possible for employees to settle in and familiarise themselves with their new living and working environment in the Brainport Region.
Point One	The Netherlands is home to a unique European high-tech hotspot in the field of nanoelectronics, embedded systems and mechatronics, encompassing international excellences in business and technology. The strategic innovation programme Point-One aims to expand the current strong position of the Netherlands in this field and bring it up to Silicon Valley proportions. A national subsidy (and network), with a local focus on Eindhoven with a budget of 900 million euros (2009-2012).
OP-Zuid	Due to the increased global competition, increasing speed in the renewal of technologies, care for the environment and the ageing of the population Europe is confronted by the challenge to shift from a production economy to a knowledge-based economy. The knowledge economy implies that an important part of economic growth comes from (technical) knowledge. The Operational Programme for South Netherlands ("OP-South") is a European economic incentive for the provinces of Limburg, Noord-Brabant and Zeeland. For the period 2007-2013, the European Union has reserved 186 million euros for OP-South from the European Fund for Regional Development Fund (ERDF) to support and promote regional competitiveness and regional employment.

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

Company	Description
Brainport Automotive Cluster	An impressive 20% of all Dutch jobs in the automotive sector can be found in the Eindhoven region, a very high share. The presence of a large and diversified group of companies active in the automotive sector, together with the fact that TU/e is the only Dutch university with automotive education and research, have contributed to the decision to relocate

	<p>TNO Automotive from Delft to the Eindhoven region in 2007. The regional automotive knowledge chain, or cluster, further intensifies with the extensive and excellent research capacities of TNO. Regional proximity with other automotive researchers, manufacturers and suppliers as well as the presence of the IC sector, whose products are increasingly used in the industry, clearly explain TNO's strategic relocation as well as the success of the sector. An initiative to support this success is the Automotive Technology Centre, working to strengthen the international technology and market position of Dutch automotive companies. The High Tech Automotive Campus is another initiative within the Brainport Automotive programme and aims to attract top companies and related businesses to the Brainport region. The presence of manufacturers such as DAF and VDL in the region and NedCar in the immediate vicinity, and the fact that about 50% of European car production takes place within a radius of 500 km makes this an interesting region especially for the supply chain industry in the automotive sector. The campus strives to create high-tech facilities for large and small (inter)national companies, knowledge creation and training/education within the automotive sector in order to establish an optimal environment and to stimulate the paradigm of open innovation. Furthermore, 'High Tech Automotive Systems (HTAS)', a public-private research programme with 158 million euros invested, focuses on innovation, with special attention for themes like 'driving guidance' and Integrated Human Machine Interaction. (www.htas.nl) The number of jobs has grown by 22 % in the last few years.</p>
<p>High Tech Campus Eindhoven</p>	<p>In the High Tech Campus Eindhoven (HTCE) the region has another valuable card to attract and embed high-tech companies and institutes in the region on the basis of proximity and open innovation.</p> <p>The High Tech Campus Eindhoven is a technology centre of worldwide repute, with a diversity of high-tech companies that work together with more than 8,000 scientists on the development of new technologies, from idea via concept to prototyping. (Growth of campus residents up to over 90 companies and employment from 3,500 in 2005 up to over 8,000 to date). The autonomous growth per year in companies went up from 3 (2008) to 9 (2009) up to 16 (2010).</p> <p>The High Tech Campus Eindhoven will help anchor R&D in the Eindhoven region as well as accelerate and increase innovation through technology cooperation. In this way, the HTCE will improve the competitive position of both the region and the Netherlands in the fields of knowledge and technology. This very attractive site with access to technologies, business opportunities and management support via the Technology Liaison Office offers the Eindhoven region strong added value with which to attract new activities and strengthen the centre of excellence.</p>
<p>Lifetec</p>	<p>The Life Tec cluster comprises medical technology and life sciences. Examples are bio-controlled medication technology, pharmacy technology, health measurement and control systems, sensor and sensing systems, improved vision, imaging systems, biometric devices and recognition, bio-molecular testing and evaluation, molecular detection or activation, DNA chips, microorganisms, cell culture and structures. With a global player like Philips, which is increasingly concentrating its activities in this sector, the sector will become more important in the future. Nowadays, the Eindhoven region already accounts for 9% of the people working in this sector in the Netherlands. The number of jobs has grown with 13% in the last years.</p> <p>The LifeTec Network has produced a strategic analysis on the sector coming up with a clear approach for further development of the cluster via world class R&D, world class R&D environment, create jobs, highly skilled workforce and the establishment of a cluster management organisation leading towards extra added value created of € 500 m p/a per 2020.</p>

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?

As member of the ICA (the Alumni Association of Intelligent Communities) Brainport is committed as are

the other ICA members to further promoting the mission and vision of the ICF and with that, ourselves as a region.

Since Brainport ended in the Top 7 for the second time the ICF concept has become an integral part of international planning and positioning. Both Brainport and its shareholders and partners use the Top 7 ICF nomination in the acquisition of high-tech companies, attracting new international (knowledge) workers as well as (inter)national and (supra)regional subsidies in different ways, varying from lobby and quiet diplomacy to working visits, company presentations and putting new digital forms (websites, social media, etc.) in the market. That has recently generated concrete results.

We are also thankful to our Top 7 status in various national and international settings, publications, readings, performances etc. through which we are again asked to present ourselves in new bodies.

Our Top 21 position has been made known internally (within organisations involved in Brainport) and externally (locally, regionally and nationally) via different digital channels. Existing media such as intranet, websites, print and audiovisual means have been employed according to a preagreed format comparable with that of last year when Brainport ended in the Top 7. Like the extensive evaluation of 2010 presented to a larger target group and the AV productions and other media widely disseminated via local, regional, national and international media and press. Mail and digital newsletters alert readers to different links and the Brainport page that relates to participation in ICF has been refreshed and repositioned as part of the new Brainport website.

Shareholders and associated parties have been asked to offer this information via their websites. Our Top 21 and Top 7 position of 2010 is regularly and structurally stated and incorporated in the communication issued and managed by Brainport.

As soon as we hear that we are in the Top 7, we will cooperate with our shareholders and partners to develop a strategy plan with corresponding media.

That will initially be via an extensive jury visit that will be facilitated (and will have to result in the number 1 position), with plenty of interesting material and momentum to be communicated about this.

A budget will also be reserved to maximise the effect of any number 1 position for now and the near and longer future. Number 1 means a lasting reputation and the duty to stay at the forefront as a knowledge region in terms of trends related to the development and application of broadband provisions in everyday life. Together with the shareholders and other partners this plan will be prepared to ensure support and capacity in order to consider extensively what a number 1 position implies internally and externally and what it means for the position of Brainport as a 'world leader' and most intelligent community.

Brainport will congratulate its inhabitants, companies, foundations and institutions for the achievement and ask them to act as ambassadors of Brainport and ICF, thereby offering a handle to, on the one hand, help spread the concept and main targets of Brainport and, on the other hand, help other regions at home and abroad to grow to the same level of ambition with the aim of helping them towards this in the longer term. Because nothing works better than looking in the mirror as the Intelligent Community of the Year winner and seriously considering what it is you do well, where you can do better and swap ideas with others about this.

Theme: Health in the Intelligent Community (see page 1 for explanation)

28. Provide up to 3 examples of innovative healthcare organizations in your community that are making a positive contribution to the local economy in terms of job creation, business creation or business attraction. Information and communications technology should play an important role in their innovation efforts, and they may be either nonprofit institutions or for-profit companies.

Provided by	Description
Holst Centre www.holstcentre.com)	Holst Centre is an applied research institute, that was started up in 2006 as an initiative of the Ministry of Economic Affairs, imec in Belgium and TNO in The Netherlands. Because Holst Centre works in open innovation modus on pre-competitive generic technologies, it has been able to attract many world-wide industrial partners (Samsung, Philips, Panasonic, NXP, ASML, DSM etc. etc.) and universities (TU/e, EPFL, TU Delft, Boston U., KU Leuven etc. etc.) to collaborate on health-related topics. Examples are the smart

	<p>blister, a flexible electronic pill blister that communicates whether or not a patient has taken their medication (by breaking the foil circuit). The ECG Necklace, that uses ultra-low-power wireless communication. The smart bandage, that can measure blood pressure and wound healing through organic led and organic photo-voltaic technology.</p> <p>Because the research partners join the open innovation programme, they co-define and co-create in the intellectual property that is being generated in Holst Centre. The principle of open innovation means that the industry share in the risk, but also in the success of the organisation. Holst Centre bridges that gap between the academic research and industrial R&D and works on technologies with a road to the market of 3 – 10 years. Since the start-up in 2006, meanwhile a number of technologies are mature enough to attract SMEs to use these technologies for their niche-markets and start spin-offs like NeoDec . Holst Centre has started up the Holst OpenSME programme in 2010, to offer SMEs an interesting package for using the more mature technologies for their own applications.</p> <p>Holst Centre currently offers work to a total of approx. 245 people of 28 nationalities and is still growing. When it started 95% was funded by governmental money. Now it is only 50% with enormous growth in personnel.</p>
<p>Maximá Medical Centre (www.mmc.nl)</p>	<p>Máxima Medical Centre (MMC) is the largest medical centre in Southeast Brabant with some 3,000 staff and 200 specialists, from surgeons to gynaecologists and from internists to ophthalmologists, striving to do their best every day.</p> <p>Top clinical hospital</p> <p>MMC offers more than basic care alone. Over the years MMC has been assigned several special, top clinical functions like intensive care for new-born babies NICU, which means it can compare well with university hospitals.</p> <p>To maintain this high level of care, applied scientific research is ongoing. The specialist knowledge that MMC has in house is transferred to doctors and nurses in training. Vocational education students and university students can undertake work placements at MMC.</p> <p>Association of Cooperating Top Clinical Hospitals (STZ)</p> <p>MMC is a member of STZ, an association of the twenty largest training hospitals in the Netherlands and responsible for:</p> <ul style="list-style-type: none">• healthcare education and training;• promoting high-quality patient care, top clinical treatment and top referential care (highly specialised care for patients that, in principle, cannot be referred, such as burns);• applied scientific research;• innovation in healthcare. <p>MMC – TU/e</p> <p>MMC and TU/e entered a strategic cooperation agreement in mid 2007 in the field of medical technology research and innovation. By clustering each other's knowledge and experience, even better instruments and equipment can be developed to measure the performance of the brain, breathing and blood circulation of seriously ill children during and immediately after pregnancy.</p> <p>A second key component of the cooperation plan is the further development of lifelike computer robots that can function as a test model for teams of specialists, nurses and other healthcare professionals. In this respect MMC has a lifelike baby simulator. The contract includes in 10 postdoc places and 52 PhDs.</p> <p>The result of the cooperation must enable medical treatment to progress and fewer medical errors to occur in Dutch hospitals. The agreement between TU/e and MMC Eindhoven/Veldhoven (with a duration of ten years) puts the Southeast Brabant region firmly on the map as a medical high-tech region.</p> <p>MMC is among the world's best with its prominent and highly innovative fields: the state-of-the-art Woman-Mother-Child centre, the sports medicine department and the medical simulation centre. MMC works closely with top technology companies and knowledge and</p>

educational institutions in Brainport. Apart from highly specialised care MMC is also a 'teaching hospital' for future doctors.

MMC field tests medical innovation. The Health Technology Park will be developed on the MMC grounds.

Health Technology Park

Health Technology Park integrates clinical knowledge, engineering science, applied research and medical engineering. Health Technology Park offered an unprecedented working landscape, an environment for accommodation that facilitates and encourages an optimum climate for open innovation whose ultimate goal is 'life improvement'.

The project aims to reach a number of goals pursued by the various stakeholders. One of the most important results of the realisation of the Health Technology Park is the creation and development of an open innovation centre for healthcare. This should support networking and collaboration, which increases the knowledge flow between actors. The creation of the Health Technology Park will therefore result in new technological innovations in the area of healthcare technology.

Secondly the Health Technology Parc will facilitate business & technology communities by locating various healthcare related actors together in a unique and stimulating environment which is specifically designed to stimulate collaboration and exchange of knowledge.

Thirdly, the Health Technology Park will strengthen and further develop the Brainport region, boosting the Brainport knowledge region in the field of Medicare. The sub-project will accomplish a platform for technological innovation by creating an environment for collaboration between Science (Eindhoven University of Technology, education (Fontys, ROC), users, and developers (for example, Philips, Simtec, TNO and other medical technological companies). The unique development of the area, the presence of healthcare providers and organisations (e.g. the Maxima Medical Centre and other healthcare providers) will attract investments to the region which consequently have a positive effect on employment.

The Health Technology Park creates an area where both medical and technical actors can co-locate together to create an open innovation centre. The Health Technology Parc will also stimulate the further development of the Brainport region as a key player in the area of healthcare technology.

The Health Technology Park is located next to of the Maxima Medical Centre in Veldhoven.

Royal Philips
Electronics
(www.philips.com)

Royal Philips Electronics N.V. (NYSE: PHG, AEX: PHI) is a company with versatile provision in the field of healthcare and well-being, focused on improving the quality of life of people through timely innovations. As a leading company in healthcare, lifestyle and lighting Philips integrates technologies and design for solutions geared to people by a deep-rooted insight into the wishes and needs of the customer and its brand promise of "sense and simplicity".

Philips employs around 118,000 people worldwide in more than 100 countries. With a turnover of 26 billion euros the company is market leader in cardiac care, acute care and ome care, energy-efficient lighting solutions and new lighting applications as well as lifestyle products for personal well-being and amusement, with a strong leading position in Flat-TVs, electric shavers and hair trimmers, portable entertainment and oral hygiene.

Philips invests 1.6 Billion in R&D, which is 7% of sales (In Healthcare it is even more: 12% of sales). This results in 55,000 patent rights, 33,000 registered trademarks and 49,000 design rights.

34% of business is in Healthcare products and services like imaging systems, clinical care systems and Home healthcare solutions.

Since 1999 sales rose from 2.5 billion euros to 7.8 billion euros in 2009.

29. Provide up to 3 examples of local innovation in patient care, efficiency, cost reduction or healthcare outcomes using information and communications technology, whether by government, institutions or for-profit companies. Briefly describe the organization, the innovation and its results.

Provided by	Description
Medsim (www.medsim.nl)	<p>Half of all births begun at home end up in the hospital. A small percentage of these is acute. During transport of the mother and baby to the hospital all manner of things can go wrong, certainly in acute emergency situations. To practise these situations (and communication related to these interventions) more often, Medsim has been developed. Simulated team training enables primary and secondary line nurses to get to know each other's tasks and responsibilities better. Good communication is crucial to a healthy birth and this innovation is an enormous quality boost to communication. It results in:</p> <p>Positive outcomes for quality of the care:</p> <ul style="list-style-type: none"> - 30% less maternal and perinatal morbidity and mortality - more specific use and application of painkillers - Better preparation for interventions during the birth process - Much improved Apgar scores - fewer child hospitalisations by 40%. <p>Positive outcomes for costs of care</p> <p>More planned treatments will mean a rise in fixed healthcare costs of 10%. Greater efficiency and quality of transfer between primary and secondary care is expected to drive down variable healthcare costs considerably and result in fewer complications during pregnancy and thus less care being needed. So the reduction in the variable costs of pregnancy care can be expected to fall by 25%.</p>
Neighbourhood in motion	<p>Eindhoven municipality and its inhabitants are striving to counter inactivity, one of the main causes of prosperity diseases and symptoms (top 3: 1. smoking, 2. inactivity 3. obesity). Together with Fontys Sport Professional University, Innosport.nl, a healthcare insurer and supervision team of 12 Fte, they are identifying the fitness and health of neighbourhood residents and schoolchildren. Then the Philips activity monitor will be used to find out what the health situation is and how the measurements can be used to encourage physical activity. The innovative method is not only informational but also has a persuasive task.</p> <p>This preventive care results in citizens being encouraged to exercise using modern methods, thereby delaying the onset of all kinds of prosperity diseases and leading to lower healthcare costs and lower dropout rates among 55 + employees (who often have one or more chronic illnesses).</p> <ul style="list-style-type: none"> - 5% more physical activity means 400 fewer cases of cardiovascular disease and 100 people dying (mortality rate: 4.200 men and 4.400 women per year). - Decrease absenteeism in the workplace - The living lab cooperation involves an educational institution, neighbourhood workers, a multinational, a healthcare insurer and the neighbourhood residents themselves, and will lead to practical knowledge sharing, new insights, new products and a concept /approach to counter lack of exercise for the lives of people for whom it was conceived.
Independent (www.independent-project.eu)	<p>Independent is an innovation project geared to developing and testing an integrated set of ICT-based services to support trans-sectoral medical care for COPD patients.</p> <p>In concrete terms COPD patients will be supervised via a live audio/video connection at home by a physiotherapist to do their daily exercises, their physical activity will be monitored and their oxygen intake measured at home. All this information, including medication and exercise programme will be integrated in an online patient file (in which an innovative product is used: www.care2u.nl) that the patient can also see.</p> <p>Since the physiotherapist, lung specialist and nurse as well as the home health worker all have online access to the patient file, communication will improve and response to a worsening of a patient's condition can be quicker, drastically reducing the number of exacerbations and subsequent hospitalisations. This will boost the patient's quality of life and significantly reduce costs. Each hospitalisation prevented will save € 1,140 per day.</p>

Independent makes as much use as possible of existing technology and has a clearly demand-driven approach. Smart Homes (www.smart-homes.nl) and TopSupport (<http://www.topsupport-anna.nl>) in Eindhoven have begun to set up and test the innovative self-care of 100 COPD patients along with the necessary corresponding support. By gathering the needs of patients and carers new concepts are generated and underlying process models developed, both functionally and socio-economically, with much attention to trans-sectoral modifications that healthcare will have to make.

Ownership of Information

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

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

Intelligent Community Indicators

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

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

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

Digital Inclusion. The broadband economy promises to usher in a golden age of prosperity, knowledge and freedom. But it has just as much potential to usher in a “gilded age,” where the benefits go to a privileged few and fail to ignite economic growth. Intelligent Communities create digital inclusion by creating policies and funding programs that provide “have-nots” with access to digital technology and broadband, by providing skills training and by promoting a compelling vision of the benefits that the broadband economy can bring to all citizens. Digital access coupled with an intelligent community vision helps to create a culture of digital use with opportunities for varied social improvements and greater community cohesion.

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

Success Factors

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

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

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

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