



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Table of Contents

- A. General Application Information
- B. Executive Summary, Project Purpose, and Benefits
- C. Partners
- D. Congressional Districts
- E. Demographics
- F. Project Budget
- G. Historical Financials
- H. Public Computer Center Summary
- I. Project Readiness
- J. Environmental Questionnaire
- K. Environmental Questionnaire – Part 2
- L. Uploads



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

A. General Application Information

1. Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	193247145
CCR # (CAGE)	4B834
Legal Business Name	MICHIGAN STATE UNIVERSITY
Point of Contact (POC)	DANIEL EVON 5173555040 Ext. 234 evon@cga.msu.edu
Alternate POC	SUZANNE MORGAN 5173555040 Ext. 257 morgansi@cga.msu.edu
Electronic Business POC	DANIEL EVON 5173555040 Ext. 234 evon@cga.msu.edu
Alternate Electronic Business POC	SUZANNE MORGAN 5173555040 Ext. 257 morgansi@cga.msu.edu

2. Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
Prefix	Ms.
First Name	Kurt
Middle Name	
Last Name	DeMaagd

**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Suffix	
Telephone Number	517-355-4714
Fax Number	
Email	kdemaagd@msu.edu
Title	Assistant Professor

3. Additional Contact Information of Person to be Contacted on Matters Involving this Application:

Project Role	Name	Phone	Email
Secondary Point of Contact	Mr. Bart , Moore	5174327206	moorebar@msu.edu
Secondary Point of Contact	Sue P, Hopper	5173555040 244	hopper@cga.msu.edu

4. Other Required Identification Numbers

Easygrants ID	6547
Funding Opportunity Number	500000
Catalog of Federal Domestic Assistance Number	BTOP CFDA Number: 11.557 BTOP CFDA Title: Broadband Technology Opportunities Program

5. Organization Classification

Type of Organization	Non-profit Institution
Is the organization a small business?	No
Does the organization meet the definition of a socially and economically disadvantaged small business concern?	No



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

6. Authorized Organizational Representative	
AOR	MORGAN, SUZANNE
Result	Applicant Authorized

7. Project Title and Project Description

Project Title: Evidence Based Computer Centers II

Project Description: Based on prior research, we determine the optimal number of computers in a given library or community center service area and propose a upgrades, expansions and new locations to meet this objective. To deploy these computers, we use a system of college internships in coordination with community colleges to train the next generation of IT workers.

8. Other Applications

Is this application being submitted in coordination with any other application being submitted during this round of funding?

➤ Yes

Easygrants ID	Project Title
152	REACH-3MC
4568	REACH-3MC II
5415	Berrien and Cass Counties
6548	Broadband Adoption through Education and E-Entrepreneurship in Michigan's Urban Cores
4223	Traverse Bay Broadband Initiative
5315	Michigan Thumb Areas Broadband Grant II

If YES, please explain any synergies and/or dependencies between this project and any other applications.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Our proposal will substantially expand the number of computers at community centers around the state. Although the funding rules technically allows one-time capital expenses related to increasing the broadband connectivity, we concluded that it would be more efficient to build partnerships with Comprehensive Community Infrastructure and other proposals to help provide this increased capacity. Therefore, we have been sharing our computer center list with these providers so that they can be included in any of these infrastructure proposals. Although this does not guarantee that all computer centers will be connected using BTOP funds, it will help us coordinate our activities, increasing capacity for our computer centers and driving greater demand for the infrastructure providers.

We are also submitting a sustainable adoption proposal. This proposal will involve the creation of additional educational materials that will be made available through our computer centers. Furthermore, these computer centers will be candidate training facilities for activities conducted under our sustainable adoption proposal.

9. Is the Applicant exempt from the Department of Commerce requirements regarding individual background screening in connection with any award resulting from this Application?

- Yes, Applicant is exempt because it is an accredited college or university

If the answer to the above question is "No," please identify each key individual associated with the Applicant who would be required to complete Form CD-346, "Applicant for Funding Assistance," in connection with any award resulting from this Application:

Name	Title	Employer

B. Executive Summary, Project Purpose and Benefits

Essay Question

10. Executive Summary of the proposed project:



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

Michigan State University (MSU), on behalf of the State of Michigan, the Michigan Department of Information Technology, and the State of Michigan Planning Consortium for Broadband, is submitting this computer center proposal to strengthen the computing and training capacity of anchor institutions throughout Michigan. The computers will be coordinated with libraries, public housing centers, tribal community centers, community colleges, and other anchor institutions.

This proposal is an extension of our successful first round proposal. We are expanding access in regions not covered in the previous proposal. In addition, we are enhancing the previous proposal by including community colleges both as recipients of computers for computer centers and as sources of students for our internship programs. Finally, we are including more community centers and other anchor institutions as locations for our computer centers.

Problem

Michigan faces unique challenges in taking advantage of the opportunity for economic recovery. The state is leading the country in unemployment and struggles with economic changes resulting in fewer manufacturing jobs, which has previously been the major employment sector in the state. Even as the national economy rebounds, Michigan will be challenged to change its underlying employment structures to take advantage of new economic opportunities.

The solution to this problem is workforce retraining, moving more of the population from manufacturing jobs to the new economy. However, this is a problem that cannot be solved solely through the traditional avenues of continuing education. To retrain all of Michigan's half-million unemployed workers would require a doubling of the capacity of the state's colleges, universities, and vocational training facilities, and even then that system may not be the best to meet the needs of re-training. Instead, non-traditional educational methods must pick up the excess demand and offer novel opportunities for people learning new job skills. Online education and training materials, and training through small courses offered at libraries and other community anchor institutions are an effective way to accomplish these training goals and have already been widely used in the state.

However, these training opportunities have strained the capacity of Michigan libraries. Recent surveys indicate that the average Michigan library is operating at their maximum computing capacity 82% of the time. Furthermore, rationing policies—a requirement given the excess

**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

demand—often limit access to half-hour or hour-long appointments. This restricts the patron’s ability to use the computers for education, job search, access to government employment development resources, and online job systems for companies who offer entry level employment to economically disadvantage workers

Approach

Our approach uses an evidenced-based formula for determining which locations can most benefit from additional capacity. Using a system developed by the Colorado State Library, we have assessed Michigan’s libraries, community colleges, and other community center computing capacity. Using this approach we identified those locations that have the greatest need for additional computers and that can most efficiently meet the community needs by using existing available facilities to keep total costs low.

In addition to expanding the number of desktop computers in these areas, we will be investing in upgraded wireless networking in these locations. This has two benefits. First, it allows us to more efficiently use space. Although some locations may not have available space for the desks and chairs to create a traditional computing lab, the wireless networks will support a laptop checkout program so that patrons can use other available spaces in the facility. This helps us expand capacity without construction costs. In addition, it will allow those patrons who have personal laptops to bring them to the computer center and use it for access. This further helps leverage the existing broadband connectivity at the library to serve a larger population with minimal additional cost.

To provide the training, we are using a two-pronged approach. We envision these computer centers as both a platform for delivering training materials and as a learning opportunity in and of themselves. First, we will provide access to a variety of online course materials consisting of materials available at the local library, materials on the Michigan e-Library, and newly developed material coming from our parallel Sustainable Adoption proposal. These materials can be both accessed independently and will also be covered as part of training classes taught by local librarians and other trainers. Second, we will use the computer centers as a direct training opportunity as we use teams of college students to set up and maintain the new hardware. These student teams will come from MSU, Mott Community College, Jackson Community College, and Lansing Community College. This will provide students with concrete hands-on internship opportunities to apply the theoretical knowledge they have learned in the classroom. All interns



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

will work under the guidance of faculty supervisors and local technology staff (where applicable) to ensure the quality of the final installations.

Target Areas:

This is a statewide proposal, though we used the following criteria to prioritize the selected locations. First, we chose locations in Michigan’s Cities of Promise, a group of eight economically challenged urban centers that are part of the governor’s economic development focus. Second, we included centers in tribal areas. Third, we chose locations where first round broadband infrastructure awardees are providing access to community anchor institutions. Finally, we chose locations based on partnerships for second round comprehensive community infrastructure proposals.

Qualification:

As a first round computer center grant recipient, Michigan State University already has a background in administering and conducting a similar grant. This proposal is intended to be an extension of our first round grant, covering regions not reached in our first round proposal. Furthermore, Michigan State University is well positioned to administer this program based on the institutional capacity for grant administration and our prior experience with related projects. Last year, MSU managed \$405 million in externally funded projects. We have the institutional structure to provide grant oversight and compliance, legal oversight, connections throughout the state, and online course development support. Our department has been working for several years in related fields, providing experience in how to effectively provide enhanced broadband capacity and to understand how to most effectively use these limited resources.

In addition, we have established partnerships throughout the state to help us successfully implement this project. First, we are closely collaborating with the Library of Michigan to help administer the program in our Libraries. Second, we are working with Jackson Community College, Lansing Community College, and Mott Community College. These community colleges will be serving both as recipients of computers and will be contributing students to the internship program. Third, we are partnering with Community Outreach Services Corporation, a small business with experience working in public housing facilities and providing technology training in low-income regions. These other community partners will help to enhance our capacity to successfully expand the computer center capacity throughout Michigan.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Jobs Created:

This program will directly create 60 unpaid internship positions to train students in the deployment of the computer centers. A majority of this internship work will be conducted as part of classroom experience, but we will be creating 1 FTE for oversight and additional support. Based on the computations from the Council of Economic Advisors, we will also create 52 indirect jobs and 30 induced jobs.

Overall Cost:

Our program has a total cost of \$7,600,956. This cost includes \$6,060,415 in funds requested And \$1,540,541 in matching cash and in-kind.

11. Project purpose:

Michigan—like other parts of the country—is facing a high unemployment rate. However, two factors make Michigan’s situation particularly challenging. First, Michigan has the country’s highest unemployment rate, at 14.6%, almost 50% higher than the national average. Second, the nature of the unemployment is different as it faces structural unemployment in the shift away from manufacturing, creating chronic unemployment. Even as the broader economy rebounds, this limits Michigan’s potential economic growth.

The solution to this problem is through workforce retraining. Yet this presents new challenges. For example, according to the 2000 census, Michigan had 635,000 college students, including those in graduate school. To retrain the half million unemployed would require a doubling of college enrollment. Yet it is arguable whether a traditional university education is even the ideal solution to this problem. Michigan’s colleges and universities simply do not have the capacity to retrain all of these individuals, who also may not have the flexibility to return to school.

Any solution to this challenge requires a variety of different approaches. For example, President Obama recently announced an initiative to expand the direct capacity of community colleges. Another approach, which is growing in popularity throughout Michigan, is to use online classes provided by community colleges and other economic development organizations. These can be accessed at libraries, community centers, community colleges, etc. Although this approach can be efficient, it has strained the capacity of Michigan’s computing centers to the point that recent



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

surveys indicated that the average Michigan library is over its Internet use capacity 82% of the time. This makes an expansion of library computing capacity vital to the future economic growth of the state of Michigan.

A second way to provide the job training services required is to use the installation of these computer centers as a training opportunity in itself. Teams of college students will be responsible for the setup, network configuration, and user training for the computer centers. These students will be drawn from classes at MSU and three community colleges. This will reduce the workload of the local libraries and other computer center staff for installing the computers and provide valuable, practical education to the college students.

We are also working with several public housing centers to expand their computing capacity. These centers provide service to vulnerable populations such as low-income individuals and the elderly. These groups lack the resources and facilities to access broadband apart from the computing facilities proposed by this program. Finally, we are also working with the Hannahville Indian Community to increase the computing capacity in their tribal region.

The general approach documented in this proposal is replicable around the state and throughout the country. The technology standards are based on Colorado State Library's Public Technology Standard, which is documented and freely available to the public. The educational materials delivered to the public for retraining purposes are made available through both commercial and open source databases, as well as new materials being developed as part of a parallel Sustainable Adoption grant also being written by Michigan State University. All elements and results of this initiative will be evaluated with the results and best practices published for general information and continuous improvement.

This proposal is designed to meet the third and fifth statutory goals. For the third goal, it will provide education, both by being a delivery platform for educational materials and because students will work through internships to establish the new computing facilities. Also as part of this third statutory goal, it supports libraries—one of the key community anchor institutions—in serving vulnerable and underserved regions.

It will also satisfy the fifth statutory goal by stimulating broadband adoption. Based on recent Pew Internet surveys, approximately half of those who currently do not subscribe to broadband claim that they will never do so. One way to break through this barrier is to show these



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

consumers the potential benefits of broadband. In this way, the local public library becomes a try-before-you-buy opportunity for broadband skeptics to determine if they wish to adopt broadband at home.

This proposal is designed to work synergistically with a Sustainable Adoption proposal from Michigan State University, operating in conjunction with other broadband infrastructure providers who are proposing new infrastructure in Michigan. The adoption proposal includes substantial efforts to provide educational materials for high school students, the unemployed and underemployed, small businesses, etc. A large portion of the materials developed under the adoption proposal will be in the form of online tutorials and other classes that will be freely accessible via the Michigan e-Library. This in turn will make more training material available via the library computers.

We are also proposing work in coordination with other broadband infrastructure providers. This increases the probability that the chosen libraries will have high-capacity broadband lines available, as well as increasing the demand for this new broadband infrastructure by expanding the demand from libraries.

In summary, the enclosed proposal will be a platform for the delivery of training materials to address Michigan's economic challenges. It is a synergistic proposal with our parallel adoption program that will provide educational materials that libraries can access. It is also operating in parallel with other broadband infrastructure proposals to increase the access to and demand for this new infrastructure.

12. Recovery Act and Other Governmental Collaboration:

Collaboration with federal government programs:

- We are coordinating with the RUS to provide Library rural development grants/loans to improve the overall facilities for the computer centers.

Collaboration with state government programs:

- A large portion of the coordination for this program was handled through the Library of Michigan, Michigan's state library.
- We are a member of the State of Michigan Planning Consortium for Broadband.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

- This proposal is the official statewide adoption proposal for the State of Michigan and has been an outcome of a process involving representatives for all major state agencies. This creates efficiencies in identifying partners and other key institutions.
- Our approach is designed to satisfy new state requirement that all high school students must have an online experience, creating added value from our educational materials.

Collaboration with local government programs:

- Community Colleges are key partners for interns to deploy these computers
- Close collaboration with city of Pontiac to manage computer centers in that city.
- Collaboration with Hannahville Indian Community for their computer center
- Collaboration with other community centers and public housing agencies

13. Technology Strategy:

Computer Labs

Given the limited resources and high demand for additional or upgraded computing resources among computer centers in Michigan, we have chosen to focus on the low hanging fruit for this proposal. We are implementing a plan to graft the additional capacity onto existing facilities with no additional construction needed. This created a constraint in that the libraries only had a fraction of the necessary free space to place the needed computers. To work around this problem, we are using a hybrid model of desktop workstations and laptop computers that can be used anywhere within the facility.

For the desktop workstations, we will provide network access by attaching the new computers to the existing network. In most cases, this will merely require the addition of a higher capacity switch or other minor network hardware. The existing electrical systems will be sufficient for the additional computers. We will attach networked printers. All of these workstations will have jacks for headphone for patrons who wish to listen to music, watch movies, or otherwise use multimedia applications. However, for sanitary reasons, we will expect that patrons will bring their own headphones for their own personal use.

In cases where there is insufficient space or the electrical system would not be able to safely handle additional load, we will use a system of laptop computers. This will require the installation of wireless networks throughout the building. Then patrons will be able to use other seating spaces throughout the library. This wireless network will also connect with the main



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

network to allow wireless access to the printers. This wireless network will also be accessible to patrons who choose to bring in their own laptops to work in the library. In this way, we will be able to maximize the use of the space in our libraries.

Curiously, these wireless networks have provided a second unplanned benefit. An increasing number of our library partners report that some patrons will bring their laptops and work in adjacent buildings—or even the parking lot—to gain Internet access after normal library hours. As a result, even when the library is not open, the community is able to benefit from its wireless network connection.

When working with libraries, we must also be sensitive to additional privacy concerns. In particular, it is important to keep patron records completely independent of the public network. As a result, the public networks will be segmented from the network for the staff computers and other devices necessary for the library operations.

Each facility will also have a firewall to protect it from outside intrusion and to protect staff systems from malicious attacks by patrons within the or community center.

As the privacy concerns of the patrons is of great value to the librarians, the logging of computer use at the library will not be attached to a given patron name or account. Instead, only aggregate data will be collected and analyzed to understand general demand usage patterns and to support the continuous improvement of the services provided. The system will, however, be configured to allow some network management to prevent the overuse/abuse of a small number of patrons from crippling the entire network.

Training

Our proposal also includes a training component. This takes several forms: internships, online resources, and training classes. The internships are a tool for giving IT students hands-on experience. In the current economic environment, many of these students are unable to find paid positions during college, thereby limiting their potential experience before they must search for fulltime jobs, limiting their job prospects. Hence, to help supplement the existing tech support staff at some locations, and to serve as a short-term substitute for locations with highly limited tech support staff, we will use student teams to install the computers. These students will be



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

drawn from Michigan State University, Lansing Community College, Mott Community College, and Jackson Community College.

The second form of training is through online resources. Due to budget cuts at many locations, computer centers have been dropping their subscriptions to LearningExpress. This resource provides basic training materials. First, it includes helpful college preparation materials to help with the GED, ACT (now the required test for all Michigan high school juniors), SAT, AP, and CLEP. In addition, there are other more specialized materials, such as those for ASVAB, EMS, Law Enforcement, Nursing and Allied Health, etc. In addition, this system includes tools to help creating résumés, search for jobs, provide advice on interviewing, etc. This resource will be available through the Michigan e-Library, which is open to all Michigan residents. Purchasing this resource centrally through the e-library will generate a total cost avoidance for individual libraries and schools of \$2,367,000.

The final training source is through basic technology classes offered in the libraries. These training classes focus on basic computer skills taught by local librarians, community college faculty, business leaders, etc. The libraries participating in our project estimate a total of over 350 FTE's dedicated to training and support on their computers. (Though we only declared a small fraction for our required in-kind cost share.)

Evaluation

We will be working with each library and location to evaluate the usage of the computers. This will involve the computer center users taking a voluntary survey asking a few short questions regarding their use of the computers, their waiting time, the availability of desired software, etc. This will be conducted by the local staff, but we will aggregate the information and use it to continuously improve our implementation.

14. Public Availability:

The majority of the computers purchased under this program will be available to members of the general public. The exception to this rule is the public housing facilities, which is discussed in more detail below.

All of the libraries and community centers included in this proposal make their computers open to the general public. Certain computers may have restrictions placed on them, based on criteria



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

such as children's use, teen use, gaming, job searching, etc. Yet all of the libraries and community centers included in this proposal maintain public computer labs.

Although the libraries generally have open policies on their computers, some resources may be available only to library patrons. For most people in the service area, this should not lead to restricted access, as library cards can be obtained for free for all constituents living within their service area. For patrons coming from outside areas, however, there may be a nominal fee to gain access to some resources. These fees are applied to the operating costs of the library, which includes providing essential funds for the sustainability of the computing center.

The exception is for the public computer centers is those operated inside public housing facilities. These include low income housing and elder care housing. To ensure a safe and secure environment, these facilities will only be available to residents of the housing facility. This installation, however, is still consistent with the NOFA's guidelines of providing access to vulnerable populations and hence it is reasonable to provide the computer center even though access is restricted.

15. Restrictions on Center Use:

With the exception of the public housing centers as noted in the previous question, all of the computers are for public use. At certain times of the day, the library computers may be restricted for use for a training class. Also, certain computers may be designated for use by children, teens, adults, etc. Within these minor restrictions, however, the computers are for general public use.

16. Involvement of Community College:

We have partnerships with three community colleges under this proposal: Mott Community College, Lansing Community College, and Jackson Community College. This collaboration will take two forms.

First, two of these community colleges have public computer centers that we will expand. Jackson Community College will be improving capacity at their library, cyber cafes, and creating a mobile computing lab to help them operate training programs throughout the community. Mott Community College will be installing computers at three of their facilities, one of which is a general community center, one is a Hispanic Center, and one is a center for people with disabilities. In total, we will be place 164 computers in community college related facilities.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

The second role that they will play is with the installation of the computers. We will be using student interns to help install the computers. These interns will be drawn from Michigan State University, Lansing Community College, Jackson Community College, and Mott Community College.

17. Is the applicant seeking a waiver of the Buy American provision pursuant to section x.Q of the NOFA?

➤ No

18. Is the applicant delinquent on any federal debt?

➤ No

➤ If Yes, justification for delinquency:

19. Are you seeking a waiver of any requirement set forth in the NOFA that is not mandated by statute or applicable law?

➤ No

C. Partners

20. Are you partnering with any other key institutions, organizations, or other entities for this project?

➤ Yes

If YES, key partners are listed below:

Project Role: Contractor Name: Berry, Judy Email: berryj4@lcc.edu Address 1: POB 40010 411 N Grand Avenue Address 2: Address 3: City: Lansing State: Michigan Zip Code: 48901 Organization: Lansing Community College Organization Type: Non-profit Institution Small business: No Socially and economically disadvantaged small business concern: No



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

<p>Project Role: Contractor Name: Cawhorn, Judith Email: judith.cawhorn@mcc.edu Address 1: 1401 East Court Street Address 2: Address 3: City: Flint State: Michigan Zip Code: 48503 Organization: Mott Community College Organization Type: Non-profit Institution Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Contractor Name: Woods, Rebekah Email: WoodsRebekahS@jccmi.edu Address 1: 2111 Emmons Road, GP211B Address 2: Address 3: City: Jackson State: Michigan Zip Code: 49201 Organization: Jackson Community College Organization Type: Non-profit Institution Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Contractor Name: Wiltse, Janeen Email: neen34@aol.com Address 1: 3176 Pikewood Court Address 2: Address 3: City: Commerce Township State: Michigan Zip Code: 48382 Organization: Community Outreach Services Corporation Organization Type: For-profit Entity Small business: Yes Socially and economically disadvantaged small business concern: No</p>



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

--

21. Description of the involvement of the partners listed above in the project.

A key element of this proposal is the internships for students. This will help provide hands-on training to help develop the technology skills of Michigan's workforce. The scale of this program is sufficiently large, however, that we can support student teams from several organizations. Hence, we have partnered with Jackson Community College, Lansing Community College, and Mott Community College. Faculty members from each of these institutions will work with student teams as part of their standard system administration classes and internship infrastructure to provide the teams of students. We estimate that we will have approximately 15 students from each of these three community colleges plus 15 students from Michigan State University. In addition, these student teams will coordinate with local

Our other partner is Community Outreach Services Corporation. This is a unit of Paragon Management, a public housing management company. This is a female owned small business. In addition to standard housing management, they have prior experience providing training classes and managing computer centers in public housing facilities. As a result, they were a logical partner to help us with our public housing centers and other low-income community centers.

We will be providing \$20,000 per partner to help compensate for faculty time and transportation costs related to the installation.

D. Congressional Districts

22. Applicant Headquarters

- Michigan

23. Project Service States

Michigan

**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

24. Project Service Areas

Michigan - 1

Michigan - 2

Michigan - 3

Michigan - 4

Michigan - 5

Michigan - 6

Michigan - 7

Michigan - 8

Michigan - 9

Michigan - 10

Michigan - 11

Michigan - 12

Michigan - 13

Michigan - 14

Michigan - 15

25. Will any portion of your proposed project serve federally recognized tribal entities?

➤ Yes

26. Indicate each federally recognized tribal entity your proposed project will serve.

Hannahville Indian Community



Broadband USA

**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

27. Have you consulted with each of the federally recognized tribal entities identified above?

> Yes

E. Demographics

Demographics

28. Will your proposed project be specifically directed to serve vulnerable population groups?

> Yes

If "Yes" which vulnerable population groups will your proposed project serve? Check as many as apply:

Hispanic

Black/African-American

Asian

Native American or Native Alaskan

Disabled

Low Income

Unemployed

Senior Citizen (55 and over)

Youth

Other:

29. Vulnerable Populations



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

Our site selection was designed to cover several vulnerable populations:

- Low income minorities: we have placed many computer centers in urban centers, which have been particularly hit by the economic decline. We are also focusing on the Governor's Cities of Promise, which has a strong emphasis on declining urban areas. We also have facilities the specifically address the needs of certain minority populations such as Hispanic and Hmong groups.
- Native American: we are working with the Hannahville Indian community to expand their computer center capacity.
- The elderly: We have included computer centers in elder care facilities as part of our emphasis on public housing centers.
- Youth: Many of our libraries include special sections just for children and/or teens. These include computers reserved for youth in these targeted age groups.
- Disabled: our computer centers are placed in locations where they will be accessible to those with disabilities and will include software to customize the user interface to their needs.

30. Accessibility

All purchasing of computer equipment and furniture under this program will be designed to be accessible to people with disabilities and will follow recommendations of the American Library Association (ALA) for the use of assistive technology. Our specific software adoption plans include:

- Screen magnification software
- Screen readers
- Text readers
- Online keyboards

In addition, all new furniture investments will include adjustable surfaces to make them more accessible. Finally, also in line with ALA recommendations, the local librarians trained in working with people with disabilities and will ensure that outreach and education programs are also made available to people with disabilities.

**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

31. Other Languages

Although most of our activities will be language-independent, a majority of our work will be done in English. In those cases that target specific minorities populations, such as the Hispanic community centers, we will also provide computers in which the default language will meet the needs of the target population.

Outreach

32. Public Computing Centers Outreach

The outreach program will be designed to reach two types of constituents. The first group is unemployed workers who can use the library resources to file their claims, search for jobs and use the training resources. The second group is families who may wish to take advantage of the new broadband capacity, such as for educational games for children.

In both cases, there are existing systems to communicate with the target constituencies. For the unemployed, we will work with the local Michigan Works organization, which is the primary government workforce development agency in Michigan. They have some computing center capacity of their own which they will be able to use to access educational/retraining materials, but they already send their overflow demand to local libraries. The added library capacity will help further relieve the strain on their capacity.

The other outreach mechanism is through the normal library communication systems. The libraries have existing newsletters, local promotions, and ties with schools. We will use these to advertise the additional capacity and resources available in the computer centers.

We will also tie the outreach for this proposal into the mechanisms of our parallel sustainable adoption proposal.

In this way, we can leverage the existing networks of community connections to market the additional resources with no additional cost.

33. How many total users do you expect to generate through the use of BTOP funds at your public computer center(s)?



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

➤ 285000

Training and Education

34. Peripherals and equipment

Desktop computers and monitors

- LAN card
- Web cam
- Headset port (for hygiene purposes, patrons must bring/buy their own headset)

Laptop computers (in cases where insufficient lab space is available)

- Wireless network
- Web cam
- Headset port

Printing & Scanning

- Black & White laser printer
- With network card

Scanner

- Attached to a computer

Networking gear

- Switches
- Wireless access points
- Firewall
- Ethernet cable

35. Workstation software

Productivity Suite

- Microsoft Office
- Open Office
- Acrobat reader



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Web Browsers

- Internet Explorer
- Firefox

Media Players

- Windows media player
- Quicktime

Other utilities

- WinZip
- Virus scanner
- CD/DVD burner

Web filtering tools (exact package will vary from center to center)

Training information

- Materials as developed under sustainable adoption proposal
- Materials online via the Michigan eLibrary

36. Training and education programs

Our training program will have two components: 1) the internship component training college students in the technical and management issues of setting up computer centers, and 2) the training delivered using the computer center as a platform.

Internships

As part of Michigan State University’s Information and Communication Technology for Development (ICTD) initiative, we require students in the ICTD specialization to have a hands-on fieldwork experience. These ICTD students will be responsible for the initial testing and configuration of the machines, the deployment of the machines in the local library, and providing a first round of training for librarians and patrons. This will give the students additional experience and an opportunity to apply the theoretical classroom learning. In addition, our prior experience has shown that these student-teachers are often very effective instructors, especially when working with users with little or no computer background. Students in this program will



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

have prior coursework in system administration and network management. In addition, they will be supervised by IT faculty and, when applicable, by the local IT staff.

Additional students will come from comparable locations at Jackson Community College, Lansing Community College, and Mott Community College. These students will have a comparable education background, be overseen by faculty in their IT departments, and will also be supervised by local IT staff.

Training Delivery

These computers will also expand the libraries' capacity to delivery technology and other training classes. They already have a wealth of educational materials through existing resources, such as the Michigan e-Library and local educational applications. The local librarians also run training classes that range from the use of online business resources to introductory computer classes. The additional seats from these new computers will enable a larger number of patrons to take these classes.

Additional training materials will be provided as documented in our sustainable broadband adoption.

- 37. **If you are providing educational or training programs, how many people in total will these programs reach on an annual basis?**
 - > 87500

- 38. **How many hours of training will be provided to each participant?**
 - > 1

- 39. **How many Full Time Employee (FTE) instructors or facilitators will you employ for these courses?**
 - > 350

F. Project Budget



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

40. Project Budget	
Federal Grant Request	\$6,060,415
Total Match Amount	\$1,540,541
Total Budget	\$7,600,956
Match Percent	20.3%

41. Projects Outside Recommended Funding Range:

➤

42. Sustainability:

Library Computer Centers:

In the late 1990's and early 2000's, as libraries began to substantially expand their computing capacity, it became quite common for libraries to rely on grants to fund computer purchases and upgrades. Yet, because this funding model was not sustainable, the Library of Michigan, which also coordinated those grant application processes, began pressuring individual libraries throughout Michigan to include computing expenses in their standard budget.

Today, this is a widely held practice. As evidence, the cost match contribution of the libraries to this program is coming from this portion of their budget. Although the libraries have budgeted for sustainable computing, the surge in demand due to unemployment has far exceeded these budgets. Hence, this grant is necessary to realign supply and demand. Nonetheless, as noted in the letters of support, the libraries involved are including funds in their annual budgets to maintain the new hardware.

In addition, the tech support and training services offered by the librarians are now considered a normal part of their operating procedures. This grant is designed to expand the computing capacity of the libraries so that their staff can reach more consumers. This is evidenced by the lack of a request for salaries to pay for trainers in this budget. The training by the librarians is not exceptional to this program and will continue to operate after the end of this grant period.

Other centers:



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

The other types of community computer centers have been a bit more of a challenge for the sustainability aspect. We addressed the immediate need of tech support for the training centers by requiring any participants to hire tech support staff (not included in this budget), establish a partnership with a local organization, or otherwise find staff to ensure that the computers are properly maintained after the installation of the system. This pledge is included in the letters of support.

In addition, to provide sustainability in terms of replacing the computers, we primarily selected locations with related activities and revenue flows that would allow for the long-term sustainability of the hardware. For example, the computers could be placed in a church or other non-profit organization where the operating budget could still be used to upgrade the computers. Although this will be particularly challenging in the public housing centers, these organizations have all pledged to sustain the computer systems after installation.

43. Matching Funds									
Applicant is providing matching funds of at least 20% towards the total eligible project costs?	Yes								
Describe the matching contributions	<p>“Cash” Match</p> <p>Travel Michigan State University will contribute funds for 7 of 28 trips to Traverse City, MI. This will include costs for:</p> <table> <tr> <td>---Minivan Rentals</td> <td>\$476</td> </tr> <tr> <td>---Mileage costs</td> <td>\$1260</td> </tr> <tr> <td>---Per Diem Costs</td> <td>\$1848</td> </tr> <tr> <td>---Lodging</td> <td>\$4620</td> </tr> </table> <p>Supplies MSU will contribute \$310,000 toward computer databases to support the partner sites</p> <p>(Total MSU cash match - \$318,204)</p>	---Minivan Rentals	\$476	---Mileage costs	\$1260	---Per Diem Costs	\$1848	---Lodging	\$4620
---Minivan Rentals	\$476								
---Mileage costs	\$1260								
---Per Diem Costs	\$1848								
---Lodging	\$4620								



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

	<p>Indirect Cost MSU will contribute indirect cost (foregone) of \$95,806</p> <p>PARTNERS ---Over 150 library partners and over 45 non-library partners will contribute cash match to purchase 229 laptop and 229 desktop computers (est. \$1000/ea) for on-site use. Purchase of these computers is a pre-condition to allow MSU to purchase the balance of computers at these sites.</p> <p>(Total partner cash match - \$458,300)</p> <p>Total cash match: \$872,310 Percent of total budget: 11.48%</p> <p>In-Kind Match</p> <p>Salary & Fringe Kurt DeMaagd will contribute 10% AY effort for the duration of the project. He will be the leader of the management team for the course and will also be the primary instructor and faculty leader for the student teams.</p> <p>Robert LaRose will contribute 5% AY effort for the duration of the project. He will be another member of the management team and will be responsible for the data collection, evaluation, and recommendations for continuous improvement.</p> <p>Cliff Lampe will contribute 5% AY effort for the duration of the project. is the third member of the management team and will help coordinate training programs.</p> <p>Pam Whitten will contribute 3% AN effort for the duration of the</p>
--	---



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

	complement this work by serving as the foundation for improved training materials.
Disclosure of federal and/or state funding sources	Funds of \$895K are awarded from a prior DOC-NTIA BTOP proposal entitled "Evidence-based Computer Centers"; see section on Unjust Enrichment for an explanation

44. Budget Narrative	
Budget narrative	<p>Salaries Kurt DeMaagd requests 10% AY time and will contribute 10% AY effort for the duration of the project. He will be the leader of the management team for the course and will also be the primary instructor and faculty leader for the student teams.</p> <p>Robert LaRose requests 5% AY time and will contribute 5% AY effort for the duration of the project. He will be another member of the management team and will be responsible for the data collection, evaluation, and recommendations for continuous improvement.</p> <p>Cliff Lampe requests 5% AY time and will contribute 5% AY effort for the duration of the project. He is the third member of the management team and will help coordinate training programs.</p> <p>Pamela Whitten requests 3% AN time and will contribute 3% AN effort for the duration of the project. She is the final member of the management team and will help provide oversight with community partners.</p> <p>Funds are requested for 80 student-hours. Students will support faculty with data entry and other services. TOTAL: \$78,183</p> <p>Fringe Full-time faculty and administrative staff are on a specific ID fringe cost system, where fringes are a function of salary. TOTAL: \$23,340</p>



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

	<p>project. is the final member of the management team and will help provide oversight with community partners.</p> <p>(Total MSU in-kind match: \$50,281)</p> <p>PARTNERS ---Over 150 library partners and over 45 non-library partners will contribute administrative staff time and IT personnel time as a pre-condition to receiving the bulk of computers slated for deployment at the sites. This in-kind match will equal approximately \$330,000 from Library partners and \$287,950 from non-library partners.</p> <p>(Total partners' in-kind match: \$617,950)</p> <p>Total in-kind match: \$668,231 Percent of total budget: 8.79%</p> <p>TOTAL MATCH: \$1,540,541 Percent of total budget: 20.27%</p>
<p>Unjust enrichment</p>	<p>We have not applied for any federal support for costs in the same area as this request. We are the winner of a public computer center grant under the first round of the BTOP program.</p> <p>However, locations that were awarded in that round were not eligible to participate in our second round application. In addition, although we are partnering with other comprehensive community infrastructure and last mile applicants, our grants are non-overlapping. We have focused solely on the computers, leaving any expanded broadband capacity for the domain of the infrastructure applicants.</p> <p>Part of this program is based on a pilot study funded by the USDA. We will be sharing the curriculum developed during that study with our proposed program here, but there will be no fees or other redundant costs as a result of this. Instead, the prior USDA work will</p>



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

	<p>Travel Funds are requested for 21 trips to Traverse City. 7 trips will be supported with matching funds. Costs include:</p> <ul style="list-style-type: none"> -- Mileage \$\$ for MSU minivans \$5040 -- rental charge for MSU minivans \$1904 -- per diem \$1848 -- lodging \$18,480 <p>TOTAL: \$32,816</p> <p>Supplies Funds are requested for purchasing 1116 laptops and 1116 desktops at \$1000/ea (\$2,232,000); Printer/Networks (\$1,116,000) and workstations for use on the partner sites (\$1,116,000); Computer databases will be purchased with a combination of requested and match funds (\$400,000); partners will purchase 229 laptops and 229 desktops at \$1000/ea (\$458,300). TOTAL: \$5,322,300</p> <p>Other Funds are requested to pay tech support consultants from the regional colleges to perform tech support at the sites (\$80,000);</p> <p>Partners will provide administrative staff time and IT personnel time as a pre-condition to receiving the bulk of computers slated for deployment at the sites. This in-kind match will equal approximately \$330,000 from Library partners and \$287,950 from non-library partners. (\$617,950) TOTAL: \$697,950</p> <p>Indirect Cost MSU charges 26% indirect cost against a modified total direct cost base of \$5,178,338. This yields requested indirects of \$1,250,562 and cost-share (indirects foregone) of \$95,806. TOTAL: \$1,346,368</p>
--	---



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Budget reasonableness	Salaries
	<p>The salary requirements for this proposal are minimal. Because we will be working with student teams and much of that work will fall under the students' course requirements and the faculty teaching requirements, we are minimizing the total installation and project management costs. We are only requesting 0.5 FTE in Michigan State University faculty time and an additional \$80,000 to compensate the community colleges for their time and expenses in administering the program. In addition, we will be working with the existing tech support staff who will be providing additional installation and deployment support without any added expense to our budget.</p>
	Hardware
	<p>We have minimized total costs by choosing only those locations that did not need any construction costs. In addition, we are partnering with other last mile and comprehensive community infrastructure applicants to cover the costs of expanding broadband coverage in these areas. Furthermore, many locations already have their own on-staff trainers, community college partnerships, and relationships with local business leaders to provider their training expenses. As a result, we have been able to focus on only funding the cost of the hardware and any directly related networking gear, desks, chairs, etc.</p> <p>Hardware will be purchased through the university using the existing purchasing processes. One of Michigan State University's advantages is that its large size, educational and tax-exempt status enables us to pay below market prices for most computer hardware. All prices are as determined by the university's Computer Store or purchasing venues as appropriate. All purchases will be run through the standard university purchasing channels to ensure a reasonable budget.</p>
	Travel



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

	<p>The travel costs are minimal. A small amount is requested for the student teams travelling to the sites to install the hardware. A portion of the cost of the travel expense is covered through a cash match from the university.</p>
<p>Demonstration of need</p>	<p>Michigan State University receives annual funding from tuition & fees, endowments, and State appropriations (the latter of which have been slashed, a result of the State's depressed economy). These revenues are dedicated almost entirely to University operations. This includes salaries of academic and administrative staff, as well as non-salary funds dedicated to University infrastructure, maintenance, supplies and services. Unlike a private company, MSU does not invest in ventures such as that proposed here in order to realize a profit. Rather, MSU leverages external funding for research and outreach. It serves as a liaison and conduit to deploy funds locally and to help those throughout the State.</p> <p>The work scope described in this proposal will require a budget in excess of \$7.5 million. Though Michigan State University is the official grantee, projects such as this are managed at a departmental level. The MSU Department of Telecommunications, Information Studies and Media, which supports most of the faculty dedicated to this project, has only enough supplies and services budget to sustain regular operations—less than \$100,000 for the current fiscal year. Regarding personnel time, TISM faculty are charged with teaching 40% time, research 40% time and administrative and other duties 20% time. These faculty are all very research active, and all have ongoing grants that they manage. There is a limit to what they can cost-share to any one particular project.</p> <p>MSU and its partners will contribute cash and in-kind effort to this project valued at over \$1.5 million. But resources simply are not available to fund an entire effort of this magnitude. Thus, the faculty and administrators participating in this effort propose to leverage this requested investment of Federal dollars and, thru their experience, knowledge, and management & design expertise, they will deliver on</p>



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

	the promise of this proposal.
--	-------------------------------

45. Funds to States/Territories

States	Amount of Federal Grant Request
Michigan	6,060,415

Funds to States/Territories Total: \$6,060,415

G. Historical Financials

46. Matching Funds			
	2007	2008	2009
Revenue	1,116,000,000	1,198,000,000	1,263,000,000
Expenditures	1,556,000,000	1,694,000,000	1,775,000,000
Net Assets	2,518,000,000	2,582,000,000	2,282,000,000
Change in Net Assets from Prior Year	251,000,000	64,000,000	-300,000,000
Bond Rating (if applicable)			

H. Public Computer Center Summary

47. Jobs	
How many direct jobs-years will be created from this project?	1
How many indirect jobs will be created from this project?	53
How many jobs will be induced from this project?	31

48. Methodology used to estimate jobs:



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

One compute 1 FTE as the sum of times from the MSU faculty dedicated to the project plus the time from the subcontracted community college faculty dedicated to this project directly.

The remaining computations are completed based on the Council of Economic Advisors formula. With the total project cost of \$7,787,737, divided by the CoEA recommended \$92,136 = 85. That is then broken into 54 direct and indirect jobs, and 31 induced. Since we only directly hire 1 of the direct jobs, we compute the other 53 as indirect jobs.

49. Proposed # of Public Computer Centers	
Schools (k-12)	0
Libraries	162
Medical and Healthcare Providers	1
Public Safety Entities	0
Community Colleges	7
Public Housing	5
Other Institutions of Higher Education	0
Other Community Support Organization	31
Other Government Facilities	0

Total Proposed Public Computer Centers 206

Current Total Persons in Service Area 4940028

50. Minority Serving Institutions	
Historically Black Colleges and Universities	0
Tribal Colleges and	0



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Universities	
Alaska Native Serving Institutions	0
Hispanic Serving Institutions	2
Native Hawaiian Serving Institutions	0
TOTAL MINORITY SERVING INSTITUTIONS	2

51. Weekly Usage Summary	
Total Current # of Persons Served per 120-hour Business Week	222544
Total Proposed # of Persons Served per 120-hour Business Week	381502
Total Current # of Persons Served per 48-hour Weekend	33411
Total Proposed # of Persons Served per 48-hour Weekend	54761

52. Broadband Workstation Summary	
Number of Current Workstations proposed to be upgraded	52
Total Current # of Broadband Workstations	3639
Total Proposed # of Broadband Workstations	5819
Average Current Facility	44.00 Mbps



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

Broadband Connection Speed	
Average Proposed Facility Broadband Connection Speed	44.00 Mbps

I. Project Readiness

53. Licenses and Regulatory Approvals

We are not performing any construction or performing other activities that require licenses or federal approval.

54. Organizational Readiness

Michigan State University, as a major land-grant research university, is well positioned to conduct a research program on the scale and scope described in this proposal. As a first round public computer center grant recipient, we already have experience working under the rules of the BTOP grants. In addition, MSU has received a total of approximately \$34 million in stimulus grants under all programs. As a result, MSU has the experience to successfully implement this program.

More generally, in the 2008-2009 academic year, we managed \$405 million in externally funded research projects, including projects from the National Science Foundation, the U.S. Department of Health and Human Services, the National Institutes of Health, and the U.S. Department of Agriculture. To manage these grants, the university has built up substantial capacity manage and implement the project. This includes our Contracts and Grants Administration, with experience handling the administrative duties, reporting requirements, and ensuring that all grants are administered according to the university and sponsor regulations.

In addition to the administrative support described above, MSU has various resources in place that we will leverage to more implement this program. The MSU Extension service has offices in all 83 counties in the state to provide practical, university-based knowledge. MSU is the only university in the state with this capacity. Furthermore, MSU Global extends academic and professional degree and certificate programs to off-campus learners, with more than 13,000 enrollments in 29 degree and certificate programs. We have an established history of off-campus and online work throughout Michigan and the world.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

Specific to the tasks of this project, the department of Telecommunication, Information Studies, and Media has an established history of working with broadband in rural development. This includes USDA and Kellogg Foundation Projects, providing us with an history of implementing broadband adoption programs in Michigan. Our Information and Communication Technology for Development initiative is a project that provides our students with hands-on experience in deploying and using broadband technologies in rural areas ranging from Michigan to Tanzania.

Finally, we have the partnerships in place to implement this project. We are working with Jackson Community College, Jackson Community College, and Mott Community College to team up with their students to do installation work in their general area. In addition, we are partnering the Community Outreach Services Corporation to help us with our housing center and low-income housing area installations. Community Outreach Services has experience with both managing housing center projects and providing training services to low-income individuals

55. Project Timeline and Challenges

The following timeline assumes a September 30, 2010 award date:

The first quarter will be spent in the initial project planning. This includes:

- Prepare detailed project work plan
- Update computer specs based on latest price/performance data
- Begin purchasing processes

The remaining quarters will be spent with the actual computer center deployment. For the deployment, we have broken our coverage area into the same 14 regions as defined by the Michigan Association of regions (also known as the Councils of Government). In general, each of the four schools—Michigan State University, Jackson Community College, Lansing Community College, and Mott Community College, will each take one region per quarter for four quarters, with the following two exceptions. First, due to the high population in the Detroit area, we will spend two quarters there. Second, to provide a contingency period in case the first round grant runs long, the MSU student will not be given an assignment in the first quarter for this grant. Hence, the coverage will be as follows:

First quarter, 2011:
Mott CC: GLS Region V
Lansing CC: Tri-County Region



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Jackson CC: Region II

- Second quarter
- Mott CC: Southeast Michigan, part I
- Lansing CC: Northwest Michigan
- Jackson CC: Southwestern Michigan
- MSU: Western Upper Peninsula

- Third quarter
- Mott CC: Northeast Michigan
- Lansing CC: Western Michigan Shoreline
- Jackson CC: Southeast Michigan, part II
- MSU: Central Upper Peninsula

- Fourth quarter
- Mott CC: East-Central Michigan
- Lansing CC: West Michigan
- Jackson CC: South-central Michigan
- MSU: Eastern Upper Peninsula

Challenges

One of the greatest challenges is that the expected broadband deployments will not reach our targeted libraries. Although that would reduce the total value of the computer centers, we will do our best to mitigate such problems. For example, although several infrastructure providers have plans to bring 20Mbit connections or greater to most of the libraries in this proposal, many currently only have T1 access. In such an event, we can adjust our computer center configuration and substitute a caching proxy server for one of the desktop machines. This would help speed the access to some of the rich media educational resources at a minimal cost to the computing capacity of the center.

The second risk is in using student labor to deploy these systems. This has an added element of risk in that the faculty for this project will primarily step back and allow the students to manage



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

the project. Although this is rational to maximize the learning experience, it does create added risks. Yet, the faculty members have a history of working on projects such as this, including projects in rural Africa where the resources and timelines become even more challenging. In addition, we will be coordinating our work with local IT staff (if applicable) who can pick up the slack if needed.

56. SPIN Number

J. Environmental Questionnaire

57. Does this PCC application have construction or ground disturbing activities?

No

If no, please answer the questions below. If yes, please do not answer the questions below and instead proceed to the next page to answer the expanded environmental questionnaire.

58. Does the proposed action involve the procurement of materials? If so, will the materials be installed, stored or operated in an existing building or structure? If yes, please click "Add" to include the list of equipment and peripherals to be procured.

Yes

In addition to the electronic equipment described in the next question, we will be purchasing computer desks and chairs for the computers. In addition, we will be purchasing computers, printers, and networking equipment (which will be recycled at the end of their life).

59. Does the proposed action involve procurement of electronic equipment? If yes, will the equipment be disposed of in an environmentally sound manner at the end of its useful life?

Yes

60. Does the proposed action involve construction, remodeling, or renovation? If so, will these activities be limited to only minor interior renovations to a structure, facility, or installation? If yes, click "Add" to include a description of the proposed renovations with your project summary.



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

No

61. Does the proposed action involve the production and/or distribution of informational materials, brochures, or newsletter?

Yes

62. Does the proposed action involve training, teaching, or meeting facilitation at an existing facility or structure? If yes, click "Add" to explain.

Yes

This grant program will fund teams of student interns. As part of the installation of the computers, they will also offer brief training classes. Not funded directly under this program, the computer centers will also all be offering technology training classes on the computers.

63. Does the proposed action involve ground or surface disturbance to accommodate new fiber optic cable? If yes, please click "Add" to include a description of the extent of service upgrade, a list of the permits required, and linear footage of underground fiber optic cabling required.

No

64. Does the proposed action involve an upgrade of broadband service to an existing facility or structure? If yes, please include a description of the extent of service upgrade, a list of the permits required, and linear footage of underground fiber optic cabling required?

No

K. Environmental Questionnaire – Part 2

65. Project Description



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM	Easygrants ID: 6547
Funding Opportunity: Public Computer Centers	Applicant Organization: MICHIGAN STATE UNIVERSITY
Task: Submit Application - Public Computer Centers	Applicant Name: Ms. Kurt DeMaagd

66. Property Changes

67. Buildings

68. Wetlands

69. Critical Habitats

70. Floodplain

71. Protected Land

72. Coastal Area

73. Brownfield



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	

Uploads

The following pages contain the following uploads provided by the applicant:

Upload Name	File Name	Uploaded By	Uploaded Date
Management Team Resumes and Organization Chart	PCCBios.pdf	DeMaagd, Kurt	03/13/2010
Government and Key Partnerships	Binder2.pdf	DeMaagd, Kurt	03/15/2010
Historical Financial Statements	2008-2009.pdf	DeMaagd, Kurt	03/15/2010
Public Center Detail	PCCDetails.xls	DeMaagd, Kurt	03/13/2010
Detailed Budget	Detailed Budget.xls	DeMaagd, Kurt	03/15/2010
BTOP Certifications	certification.pdf	DeMaagd, Kurt	03/15/2010
SF424 Budget (A or C)	SF-424A.pdf	DeMaagd, Kurt	03/15/2010
SF424 B and D Assurances	424assumrance.pdf	DeMaagd, Kurt	03/15/2010



**Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers**

Submitted Date: 3/15/2010 1:39:01 PM		Easygrants ID: 6547	
Funding Opportunity: Public Computer Centers		Applicant Organization: MICHIGAN STATE UNIVERSITY	
Task: Submit Application - Public Computer Centers		Applicant Name: Ms. Kurt DeMaagd	