Proj #	Bay PRP 2014-026
Project Name	Bay Technology Initiative
Project Proposer, affiliation, web site	Becca Hardin / Tom Neubauer Bay EDA / Bay Defense Alliance www.bayeda.com
Project Description	Project will expand high speed data infrastructure to Bay County by installing conduit/fiber and hardware, which will result in economical, ultra high speed broadband connection that will enhance economic development while benefiting Bay County's military installations, education, healthcare and local governments. A final report for the project, as well as final plan and permitting from Bruce, Florida to Bay County users such as NSA PC, GCSC, FSUPC and Bay District Schools is complete.
Proj. Size (acres)	
Economic	In the new global economy, access to broadband has become as essential to community economic prosperity as electricity and roads. With every percentage point increase in broadband penetration, employment expands by nearly 300,000 jobs, resulting in innovation expansion and job creator expectations.
Environmental	Broadband reduces our carbon footprint while promising substantial economic pay-offs. By including accessible, ultra-high speed Internet as an essential part of our energy plan, we build a green economy, greatly reduce energy use and greenhouse gas emissions, and spur green economic growth.
Social	Equal economic opportunity and educational advancement will thrive as we develop our technological capabilities. As important as it is to our country to ensure access to what we think of as more traditional resources for our citizens, closing the digital divide strengthens the entire county.
Other	The educational advantage possible with high speed Internet has become indispensable to students preparing to enter the 21st Century workforce. This project will enhance every level of education from kindergarten through high school and college to graduate school.
Project Location	Conduit/fiber connection at Bruce, Florida, east along Hwy. 20, south on Hwy. 79, east on Hwy. 98 to Tyndall Air Force Base with connection points available to WestBay, PCB, NSA< GCSC, FSU-PC, BayDistrict Schools, Hospitals, City of Panama City and future use by economic development initiatives.
Est total project cost	$1,777,000
Amount requested	$1,000,000
Describe what funds will be used for	Funds will be used in order to procure a contractor, complete construction as well as purchase hardware required for connections, as well as administration for the of first phase of construction along with final plan and permitting for future connectivity.
Long term funding needed? Source? Availability?	
Est yrs completion	0-2
Matching $ available?	Yes

Match source? Secured?	Funding will build upon the initial funding provided by Florida Defense Infrastructure Grant program that provided $250,000 and the Florida Defense Support Task Force grant of $500,000. Future leveraged funding contributions by local and private partners is anticipated.
Amount match secured	$750,000
% proj cost from match	40
Partners anticipated?	Yes
Partner names	FSU-PC, GCSC, Bay District Schools
Funds request other source?	Yes
If yes, name source, decision date	Partners have committed to in-kind contributions.
Proj fully funded by other source?	
FULL PROPOSAL FORM	
Project number (proposal)	Bay PRP 2014-026
Submittal date proposal	2/6/2015
Project name (proposal)	Bay Technology Initiative
Applicant name	Bay Technology Initiative
Project description (proposal)	Project will expand high speed data infrastructure to Bay County by installing conduit/fiber and hardware, which will result in economical, ultra high speed broadband connection that will enhance economic development while benefiting Bay County's military installations, education, healthcare and local governments. A final report for the project, as well as final plan and permitting from Bruce, Florida to Bay County users such as NSA PC, GCSC, FSUPC and Bay District Schools is complete.
Project location description	Please see attached PDF with a map to accompany proposal. Fiber will run, approximately, along the highlighted routes. Red lines indicate where conduit will be installed. Blue lines indicate where Bay County conduit exists. The plan is to install community owned/dedicated fiber from Bruce, Florida, a LambdaRail point of presence (PoP) to Naval Support Activity Panama City. Once established to NSA-PC, connection will extend to Gulf Coast State College, Florida State University Panama City and Bay District Schools with the goal of reaching to Tyndall Air Force Base.
1. Restore nat res	
2. Mitigate	
3. Implement plan	

4. Workforce/Jobs	The U.S. Federal Communications Commission says, in the new global economy, access to broadband has become as essential to community economic prosperity as electricity and roads. With every percentage point increase in broadband penetration, employment expands by nearly 300,000 jobs, resulting in innovation expansion and job creator expectations, according to May 2013 US Broadband Policy and Competitiveness, (Steven J Markovich). Corporate site selectors expect high speed broadband availability. It is not a perk or special benefit. For communities, it is a critical piece of infrastructure for attracting new capital investment. Specifically, a company is likely to require a direct fiber connection and redundancy. As with electric service, the reliability of the service is heavily scrutinized to ensure the operation will not be placed offline (especially for information-intensive projects like data centers) or that the risk of being offline is minimal. The competitiveness of the service is also important. Locations with numerous providers have an advantage because competitiveness will drive up speeds and drive down cost. Locations with inadequate connectivity are quickly passed over for projects requiring broadband. The term "digital divide" speaks to the disparity between geographic areas without these opportunities. The gap will continue to grow as long as locations with low or no broadband connectivity do not invest in development. In January, President Barack Obama delivered a speech from Cedar Falls, Iowa, to highlight the need for the availability of fast, affordable fiber optic Internet service. President Obama said “today, high-speed broadband is not a luxury, it’s a necessity. … This is about helping local business grow and prosper and compete in a global economy. It’s about giving the entrepreneur, the small businessperson on Main Street a chance to compete with the folks out in Silicon Valley, or across the globe.” (White House transcripts)
5. Improve state park	

6. Infrastructure	This project would primarily benefit the economy by expanding high speed data access to defense, education, and industry. The Port of Panama City could be a benefactor of this access due to its proximity to access points between the NSA PC access and Gulf Coast State College. The Port of Panama City has provided berthing for large ships in the past such as the USS Momsen and USS Mesa Verde, with commissioning ceremonies held at Port Panama City. Opportunities exist for expansion of opportunities for other ships to be hosted at the Port, like the Littoral Combat Ship, and other Navy ships. Access to dark fiber resources at the Port of Panama City could benefit defense related functions, existing port tenants, such as manufacturers and logistics related activities, subsequently supporting the Port Authority's objectives to add capacity and increase trade through the Port of Panama City. From an environmental perspective, www.speedmatters.org notes the benefits of high speed internet and the environment to include: • Reduction in carbon footprint by reducing travel and commuting requirements due to the ability to meet and collaborate remotely. It references estimation from The Climate Group that finds that broadband enabled travel substitution could save $20 to $40 billion annually in gross fuel savings in the United States by 2020. • Telemedicine, long-distance and business communication programs, and e-commerce replace carbon intensive activities. • Introduction in smart buildings, smart grids, smart meters, and smart appliance technologies provides opportunities in energy savings. • Provides sustainable economic development opportunities in rural communities. • It notes that the full benefits of environmental solutions cannot fully be noted while approximately 20 million Americans (six to eight million households) lack access to broadband or access is cost prohibitive. http://www.speedmatters.org/benefits/archive/energy_and_environment/
7. Flood protect	
8. Planning	Access to dark fiber provides new opportunities in planning assistance for existing and future community needs. From a modeling and simulation aspect, for purposes of weather related planning, models can run scenarios for weather and ease of evacuation routes and planning. As we learned from the snow impacts of evacuations in Atlanta, GA, last year, timing of evacuations can contribute to a perfect storm of weather related events. Other planning opportunities include traffic routes, GIS planning, and scoping of impact of increased development on community infrastructure requirements. Planning assistance opportunities may also be pursued as they relate to defense, research and development, education, and health related technology opportunities.

9. Promote tourism	There are a multitude of opportunities for this project to promote tourism in the Gulf Coast Region. First, also detailed in section J of this application, is the Bay Tourist Development Council's Sport Village Project. Expanding sports venues in our area – coupled with access to cutting edge broadband technology – offers tremendous opportunity for our area. Building upon the access, there are many special events surrounding recreational fishing tournaments, concerts, art fairs, car shows, bike rallies, and other special events that could greatly benefit from this access
10. Promote seafood	
1.1 Diversify (1)	President Obama delivered his remarks in January from Cedar Falls, Iowa, as a preview to his State of the Union Address. He chose Cedar Falls, IA, due to the fact that decades ago, Cedar Falls made a commitment to investing in smart technology. Five years ago Cedar Falls upgraded to a fiber network throughout the city. Today, residents and businesses have access to a gigabyte of fiber optic internet access at competitive rates. Communities big and small are recognizing the need for high speed internet access and its correlation with economic growth. The longer we delay, the more we provide other communities a competitive advantage. Though we aren't the first, it's time to move forward versus playing catchup. Bay County is the only Northwest Florida defense community without the ability to connect to the Florida LambdaRail. Having an economic diversification opportunity such as this provides our community to enhance defense related opportunities, as we face the possibility of another Base Realignment and Closure round is possible in 2017, and as we continue to brace for downsizing even outside of a BRAC. This is no longer a grass roots, community effort but a push toward economic growth promoted by the White House. High speed is no longer the future, it is an expectation. Without it, we're making other communities look more appealing for industry and taking our jobs with them. In order to appeal across the board to aerospace, medical technology, logistics, advanced manufacturing, tourism development projects and defense, the formula the Bay Technology Initiative is promoting is bringing in advanced technology, enhancing existing defense, education, and industry resources, and providing the infrastructure to build upon and attract new business.

1.1 Diversify (2)	From a defense perspective, the Bay Technology Initiative will help enhance opportunities for research and development, modeling, simulation, and faster sharing of data for military installations and related industry, which anticipates enormous benefit from access to dark fiber. To date, the Bay Defense Alliance has helped secure $750,000 in State of Florida defense grants ($250,000 Defense Infrastructure Grant and a $500,000 Florida Defense Support Task Force Grant) on behalf of fiber installation. This speaks to the state and military's commitment to the need for this capability. On behalf of education, the Bay Technology Initiative will enable Florida State University Panama City, Gulf Coast State College, and Bay District Schools to have access to affordable top level connections. This will allow these institutions to collaborate, connect, utilize and develop new innovative broadband applications in offering services in support of their scientific research, education, and 21st century economy initiatives. It will permit capabilities that are on par with the best and brightest in the nation, which will translate into a world class workforce. From a health information technology perspective, imagine the ability to view an MRI in "real time" at another location. For instance, if no one was available to review a 2 a.m. MRI at Gulf Coast Medical Center, or at Tyndall AFB, they could contract with another hospital in our community, or in a different time zone to view the images. This would take hours to send over current technologies, but viewable in "near real time" once we have BTI's capabilities.
1.2 Infrastruc	From an economic development perspective, the possibilities for Bay Technology Initiative's capabilities are far reaching. State of the art, high speed broadband functionality appeals to a wide range of industry that will bring with it the infrastructure requirements of its given service. Technology based industry lends itself to further expansion of port, airport, defense, and educational opportunities in the community.
1.3 Airport	The benefits to the Northwest Florida Beaches International Airport (ECP) could be direct and indirect. The benefit could be direct due to its proximity of to the infrastructure installation, which will travel down Highway 79 from the Bruce point of presence (PoP). ECP is located approximately four miles from Highway 79 on Highway 388. Indirect benefits would include increased air travel to and from ECP as a result of increased jobs in defense, educational, and industry due to the presence of high speed data availability.

1.4 Job train	The Bay Technology Initiative works closely with the BayEDA and with CareerSource Gulf Coast. BTI will seek to leverage the outstanding services of CareerSource Gulf Coast for in-demand job training and training infrastructure requirements to seek, hire, and retain an active, skilled workforce. CareerSource Gulf Coast is currently working on a Florida Defense Support Task Force grant that will help it capture the skill sets of transitioning service members in our area in an attempt to attract new industries looking for a trained, existing workforce, as well as retaining the talents of our service members. BTI seeks to leverage all opportunities to strengthen is workforce while leveraging all of the investments of state and local grant funding for maximum return on investment.
1.5 Workforce dev	As referenced above, BTI will seek to leverage the established expertise of CareerSource Gulf Coast and other local resources for flexible workforce development and job training requirements as a result of the economic growth opportunies anticipated under this proposal.
1.6 Facil tourism/econ dev	Just as noted in section 9, and later in section J, the presence of this high speed broadband capability provides opportunity for additional facilities, attractions, ecotourism opportunities, cultural events, and other economic development opportunities. Bay Technology Initiative foresees opportunities for sporting events, concerts, fishing tournaments, and benefits to existing sporting events such as the Gulf Coast Triathlon and Ironman. Faster access to data, and the communication of this capability, can be promoted to tourists for potential opportunities at future relocation to the area.
1.7 Rec, transport, wage	Through Gulf Coast State College and Florida State University Panama City, access would be made available for any qualifying initiative that supports these efforts.
1.8 Protect nat res	
1.9 Promote fishing	
1.10 Commun resil	High speed technology provides opportunities that we cannot always envision in abstract terms. The mere presence of the technology affords new challenges and chances to diversify the current economy. This technology could provide an entrepreneur faster access than currently possible, providing necessary speeds needed for research and development work. Or, in case of looming natural disasters, the ability to back up data quickly in a cloud based environment, much more quickly than currently possible.
2.1 Protect SAB	
2.2 Improv wtr qual	
2.3 Protect seagrass	
2.4 Wildl hab	
2.5 Acq lands	
2.6 Preserve dunes, shore	
2.7 Protected spp	Through Gulf Coast State College and Florida State University Panama City, access would be made available for any qualifying initiative that supports these efforts.

2.8 Water data	Through Gulf Coast State College and Florida State University Panama City, access would be made available for any qualifying initiative that supports these efforts.
3.1 Deer Pt Lk wtr qual	
3.2 Stabil roads	
3.3 Sewer AWT	
3.4 Septic to central	
3.5 Stormwtr	
3.6 LID	
3.7 Coast resil	Ultra high speed internet capability provides advanced technology opportunities for research, development in efforts to prevent coastal flooding and modeling and simulation what if scenarios – running coastal erosion patterns, weather scenario models that may be analyzed to help protect key public assets in the event of severe weather events.
3.8 Support port	Bay Technology Initiative's efforts on behalf of economic development and the vast appeal of this technology is likely to have a positive impact on Port of Panama City capacity and increased trade. Through larger economic growth in the area, BTI anticipates expansion of Port of Panama City opportunities.
Budget justification	This funding will leverage State of Florida defense funding for the ultimate goal of bringing ultra high speed internet service to Bay County for the benefit of defense, education, and industry. The State of Florida has provided $250,000 in Defense Infrastructure Grant funding for the initial scoping of project requirements, installation points, and the engineering work necessary to move to the next phases of installation. This project is anticipated to take approximately 18 months to reach completion. The State of Florida has allocated $500,000 through a Florida Defense Support Task Force Grant for installation of dark fiber for defense benefit. This funding will be combined with RESTORE grant funding for the majority of the costs required for implementation to NSA PC and subsequent stakeholder connection points for FSU PC, GCSC, and Bay District Schools. The full cost of the project is estimated at $1,777,695 , assuming the use of existing Bay County conduit. Construction costs will leverage $1,000,000 of the requested RESTORE funding, $500,000 from the Florida Defense Task Force grant, and the balance of funds remaining will be shared by BTI stakeholders. Initial port/connection fees are anticipated to be covered with the funds remaining from the initial $250,000 Defense Infrastructure Grant from the State of Florida, pending approval of Enterprise Florida.

Ongoing costs	Ownership of this service is anticipated to be by a cooperative agreement among BTI stakeholders, and then distributed to affiliates who opt in to the service. These BTI stakeholders would bear future and recurring costs, and allocated on a percentage basis to affiliate users. Future and recurring costs include annual connection fees, future maintenance costs. Though future maintenance costs are to be determined, they are anticipated to include maintenance, troubleshooting, and repair of any unanticipated damage. For this purpose, the cooperative will carry insurance to mitigate these future costs. The cost would be borne by the cooperative BTI membership and shared at a percentage to be determined by the stakeholder board. Costs would be borne by Bay County as a member of the BTI group.
Objective and measures	1. Grant award: Evaluation of funds received, establishment of POAM for plans forward. 2. Publish RFP for bids for project installation. 3. Evaluation of bids and finalization of timeline. 4. Construction and installation of infrastructure. 5. Availability of service.
Nat Res Proj	
Best Avail Science	
Env issues	There are no anticipated federal acts or executive orders that would pose an issue for this proposed project.
Econ Dev proj?	Yes

Econ Dev description	Bay Technology Initiative's proposal is inherently an economic development project. This project exemplifies the community's commitment to smart growth, investment in advanced, clean and green technology, and a resulting benefit to the overall economy and workforce. The Bay Technology Initiative recognizes the link between high technology and job growth. The more technological advantages the community offers, the greater the opportunities are for all. BTI has made initial steps in trying to quantify the economic impact of this project, reaching out to the Haas Center for the possibility of an economic impact study. Though, limited data exists to quantify the direct impacts, research indicates – from a variety of sources – that the following positive impacts exist as a result of high speed broadband investment: • Among U.S. states, every 1 percent increase in broadband penetration projected an annual employment increase of 0.2 to 0.3 percent, according to the Council on Foreign Relations http://www.cfr.org/digital-infrastructure/us-broadband-policy-competitiveness/p30687 • According to Area Development, results of a corporate survey indicate that fourth on the list of site selection factors was, "Connected" Locations Support Innovative Companies", stating, "Locations offering a robust telecom infrastructure — with adequate speed, choices, and bandwidth — are becoming hotbeds for technology development and entrepreneurship." http://www.areadevelopment.com/corpSurveyResults/ • A 10% increase in broadband penetration is associated with 3.6% increase in efficiency (Thompson and Garbacz (2008) – Ohio University), http://www.itu.int/ITU-D/treg/broadband/ITU-BB-Reports_Impact-of-Broadband-on-the-Economy.pdf BTI will work to quantify all impacts resulting in this investment in technology and the growth as return on investment.
Job Creation?	Yes

Describe how jobs created	Yes, the Bay Technology Initiative project is anticipated to result in job growth through economic development opportunities – building upon existing workforce and attracting new employers to our area. Though this is difficult to quantify before implementation, the best multiplier we can anticipate at present – though we believe it to be conservative – is by using a multiplier gleaned from www.speedmatters.org, which estimates that for each additional $5 billion in investment in broadband, 250,000 jobs are created. If we use this model, $1,750,000 invested from local and state funding is estimated to have a .0002% creation of jobs, using this multiplier, we would anticipate approximately 127 jobs as a result, assuming years one through three. For each recurring year, we would estimate approximately a .2% to .3% increase in each subsequent year. Jobs are anticipated to be created through expanded opportunities within the existing economy as well as attracting new business and industry to our area. These new opportunities are anticipated to pay 42% above the average manufacturing job – with a focus in the advanced technology arena. Bay Technology Initiative is estimating the average salary of these 127 new jobs to be $67,394. When multiplied by the anticipated new jobs, this equals $8.59 million economic impact to Bay County, resulting in a significant return on investment.
No. jobs created	127
No. jobs created Yr 1	88
No. jobs created Yr 2	18
No. jobs created Yr 3	21
Avg wage	$67,394
Total proj cost	$1,000,000
Complement. proj descr.	This project is complementary to the Bay Tourist Development Council's Sport Village Project. Stable, high-speed internet access is critically important to special events and sports tournaments. Currently, the TDC is underwriting $15,600 per year to provide this service to users of the Aaron Bessant Park Amphitheater. A similar investment is required at Frank Brown Park. With the expansion of sporting venues, the TDC has an immediate need for the expansion of our Internet backbone. In the long term, the TDC's proposed special event center has the potential to include a college-level educational component that incorporates the wide variety of disciplines, including sports medicine, sports management, and tourism administration.
Proj readiness descr	Bay Technology Initiative is working on required memorandums of understanding with Bay County, in order to use existing conduit, for maximum efficiencies related to project cost. Once finalized, the project – with the assumption of necessary state and local permits for construction, issuance and response to requests for proposals, etc. – the project will can commence.
Permits required?	Yes
Permits status	State and local permits are anticipated for regular construction purposes. No federal permits are anticipated.
Land acq?	
Acquire fee simple?	
Acquire easement?	

Fee and easement descri	
Terms of easement	
Entity to hold title	
Easement acres	
Fee simple acres	
Appraisal avail?	
Appraised value	
Title opinon avail?	
Material risks	There are no material risks anticipated for this project at present.
Likelihood of success	Bay Technology Initiative fully anticipates this project accomplishing its main purpose once implemented. Our justification for this statement is due to significant commitment on the part of the stakeholders and significant investment on the part of the State of Florida. We have recognized a longstanding need and our stakeholders and beneficiaries are eager to put this plan into action.
Contract out work?	Yes
Contracting strategy	Bay Technology Initiative will be required to contract out the construction and installation of dark fiber line for this project. BTI will work with Bay County for contracting strategy, establishment of construction schedule and monitoring contractor performance.
Applic manage proj?	Yes
L 1. Proposed mgr	Bay Technology Initiative
L 2. Mgr agreed?	Yes
L 3.Mgr experience	Members of the Bay Technology Initiative will support management of this project through members of the BTI team, leveraging the skills and specialized grant management support of the Bay Economic Development Alliance and the Bay Defense Alliance. The Bay Defense Alliance has received grants from Bay County, the State of Florida, and local donations. Per state requirements, it is held to annual audit requirements and has provided quarterly reports to the State of Florida for the Defense Reinvestment Grant, assisting Bay County with Defense Infrastructure reporting requirements, and Florida Defense Support Task Force Grants, as well as local contributions from Bay County and Tyndall Federal Credit Union's Community Service Grant. The grants managed by the BDA are annual Defense Reinvestment Grants.
L 4. Post proj maint	Bay Technology Initiative will provide ongoing maintenance of this project through in-kind and community partnerships.
L 5. Mgmt approach	The Bay Technology Initiative will manage this project, with authority provided by its stakeholders and community partners, in order to go forth and oversee this project -- with the commitment of fulfilling required reports in the management of grant funding and ongoing maintenance requirements for preservation of the project going forward.

Outreach descr	Since 2009, stakeholders have ultimately worked toward this effort, strategizing the most efficient and economical pursuit of the goal of bringing high speed broadband technology to Bay County. Thanks to funding provided by the State of Florida Defense Infrastructure Grant program, and countless hours of stakeholder effort, we are ready to forge ahead with the next steps. Thanks to the Florida Defense Support Task Force Program, $500,000 is available to supplement RESTORE grant funding for implementation. The Bay Technology Initiative has demonstrated history in its efforts to continuously reach out to potential stakeholders and to champion this project toward fruition.