



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

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## A. General Application Information

1. Applicant Information	
1-A. Name, Address, and Federal ID for Applicant	
<b>i. Legal Name:</b>	Critical Hub Networks, Inc.
<b>ii. Employer/Taxpayer Identification Number (EIN/TIN):</b>	██████████
<b>Street 1:</b>	1314 Ponce de Leon Ave Ste 400
<b>Street 2:</b>	
<b>City:</b>	San Juan
<b>County:</b>	San Juan
<b>State:</b>	PR
<b>Country</b>	United States
<b>Zip/Postal Code:</b>	00907-4047

1-B. Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
<b>Prefix:</b>	Mr.
<b>First Name:</b>	Carlo
<b>Middle Name:</b>	
<b>Last Name:</b>	Marazzi
<b>Suffix:</b>	
<b>Telephone Number:</b>	787-728-9000
<b>Fax Number:</b>	787-728-9777
<b>Email:</b>	cmarazzi@caribe.net
<b>Title:</b>	President



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<b>1-C. Other Required Identification Numbers</b>	
<b>i. Organizational DUNS:</b>	0144096570000
<b>ii. CCR # (CAGE):</b>	5EMC6
<b>iii. Funding Opportunity Number:</b>	1
<b>iv. Catalog of Federal Domestic Assistance Number:</b>	<b>BTOP CFDA Number:</b> 11.557 <b>BIP CFDA Number:</b> 10.787 <b>BTOP CFDA Title:</b> Broadband Technology Opportunities Program <b>BIP CFDA Title:</b> Broadband Initiatives Program

**1-D Eligible Entities**

Please classify your organization. (Note: If there are multiple organizations involved in the project, designate the lead applicant that would enter into a Loan or Grant agreement with the Agency and assume operational and financial responsibility should an award be made). **For-Profit Corporation**

**1-E. RUS Borrower Status**

No

**1-F. Applicant Federal Debt Delinquency Explanation**

Is the Applicant Delinquent On Any Federal Debt? No

**Federal debt delinquency Explanation:**

-No Answer Required-

**2. Project Description & Project Title**

**2-A. Project Title:** Puerto Rico Bridge Initiative

**2-B. Project Description:** Creation of a high capacity broadband data bridge and peering network to provide fast, affordable broadband transit service to last mile service providers in underserved and unserved communities in the islands of Puerto Rico, Culebra and Vieques.

**3. Application ID for Multiple Submissions for Identified Service Areas:**

-No Answer Required-



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**4. Rural Area Determination**

At least 75 percent of the proposed service area to be funded falls within rural areas that are unserved or underserved.

**No**

**5. Applications for Rural Areas:** Please choose the funding program(s) to which you are submitting this application.

a) BIP broadband infrastructure category to which you are applying:

b) Would you like this Application for Rural Areas to also be considered for BTOP funding?

c) BTOP Infrastructure category for which you are applying.

**6. Applications for All Other Areas: Per the NOFA, all applications to fund broadband infrastructure projects in areas that are less than 75% rural must be submitted to NTIA for consideration under BTOP.**

BTOP broadband infrastructure category to which you are applying: **Middle Mile**

## **B. Eligibility Factors**

**7. Application Submission**

**BIP and BTOP Factors Selected By Applicant:**

**Applicant has submitted a completed application and provided all supporting documentation required for the application.**

**The Project will be substantially complete within 2nd year from the award date, and the project will be fully complete by the end of the 3rd year from the award date.**



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<p><b>For projects seeking more than \$1 million funding, the Applicant agrees to submit a certification, from a Professional Engineer, that attests that a) the system will deliver the stated performance; and b) the projected project will be substantially completed within two years, and fully completed within three years.</b></p>
<p><b>The Applicant provides two-way data transmission with advertised speeds of at least 768 kbps downstream and 200 kbps upstream.</b></p>
<p><b>Applicant understands and agrees to comply with the nondiscrimination and interconnection obligations outlined in the NOFA.</b></p>
<p><b>If applying for a last mile Broadband Infrastructure project, applicant understands and agrees to comply with the last mile coverage obligations as outlined in the NOFA.</b></p>

<b>Additional Factors for BIP Selected By Applicant</b>

<b>Additional BTOP Factors Selected By Applicant</b>
<ul style="list-style-type: none"> <li>• <b>Conformity with Statutory Purposes</b></li> <li>• <b>Cost Sharing/Matching</b></li> <li>• <b>Reasonableness of Project Budget</b></li> </ul>
The project advances at least one of the statutory purposes for BTOP
Applicant has provided documentation that the project would not have been implemented during the grant period without federal grant assistance.
Applicant has provided a budget that is appropriate to the proposed technical solution and only includes eligible costs.



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- **Demonstration the Project Could not be Implemented But For Federal Grant Assistance**  
Applicant is providing matching funds of at least 20 percent towards the total eligible project costs?  
**Yes**

<b>7-k. Cost Sharing/Matching Fund Explanation</b>
-No Answer Required-

## C. Executive Summary

### Executive Summary of Project for BIP and BTOP:

#### 8. Infrastructure Projects Executive Summary

The Commonwealth of Puerto Rico suffers from very slow and very expensive access to the mainland/worldwide peering networks that support the Internet. The Puerto Rico Bridge Initiative (PRBI) proposes an innovative, fast-acting strategy which will provide the islands with middle mile speeds and capacity comparable to the mainland. The PRBI strategy will close the vast digital divide in the underserved service areas of Puerto Rico, including its adjacent islands of Vieques and Culebra. Pursuant to the grant opportunities provided by the Broadband Technology Opportunities Program (BTOP) as directed by the American Recovery and Reinvestment Act (ARRA) of 2009, this project will create an undersea and terrestrial multi-gigabit fiber optic bridge and associated peering network that will be available to all ISPs serving Puerto Rico. PRBI will provide fast, affordable broadband connectivity to the national/worldwide Internet backbone networks.

#### PROBLEM AND NEED ADDRESSED

Puerto Rico's digital divide is deep. Compared with service in the mainland, broadband Internet service in Puerto Rico is: (a) 60% more expensive, as local ISPs pay 400% more for their backbone connectivity to the mainland; (b) 78% slower than the national median; and (c) less accessible and affordable, as less than 33% of households are subscribers.



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Puerto Rico is a victim of the basic economic principals of supply and demand. Due to the limited supply of undersea fiber optic cables connecting Puerto Rico to the mainland, the cost associated with these cables is very high, driving up the cost of backbone connectivity. In addition, Puerto Rico’s mountainous tropical topography with high elevations, steep hills, valleys and thick vegetation, result in very high costs for the deployment of last mile infrastructure.

This project is essential to make broadband service accessible and affordable to US citizens in Puerto Rico, nearly half of whom live below the poverty line. Puerto Rico’s 3.8 million residents live in 1.26 million households. There are 47,340 business establishments and 2,233 community anchor institutions on the island, including 1,619 schools, 33 universities, and 269 hospitals. The median family income is one third of the national median family income, and is half of Mississippi’s, the poorest state in the nation. Over 58% of children in Puerto Rico live in poverty. In the offshore island of Vieques, this number climbs to 81%.

High-speed broadband access and connectivity are vital for economic growth, job creation, global competitiveness, world-class education, innovation and creativity. The PRBI is designed to bring Puerto Rico to a level comparable to the mainland, in terms of affordability and accessibility to fast broadband service.

**OVERALL APPROACH TO ADDRESS THE NEED**

To address this problem, Critical Hub Networks proposes to create a “bridge” linking Puerto Rico to the Network Access Point of the Americas (“NAP”) in Miami, Florida via a 10 Gigabit undersea fiber optic cable. This “bridge” would serve several purposes:

- Provide backhaul to the Internet backbone, reducing the backhaul costs nearly 90%.
- Establish local peering in Puerto Rico, to keep Puerto Rico-bound traffic within Puerto Rico
- Establish peering between the PRBI and Content & Network Providers, improving connectivity to such content and reducing the associated transit costs.
- Bring broadband services to unserved and underserved areas of Puerto Rico through the expansion of Puerto Rico ISP broadband networks, and the reduction in end-user broadband fees.



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Critical Hub has obtained the concurrence of 85% of local independent ISPs in Puerto Rico, who are excited about the strategy and the opportunities that it will create for all. PRBI-supporting ISPs have agreed to provide a discount for high speed broadband to educational institutions, public safety and health care providers. Grant funding of the PRBI under the National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program (BTOP) will:

- Reduce end users broadband fees
- Facilitate the expansion of all local ISP broadband networks, increasing broadband availability in unserved areas and communities
- Provide a 25% discount to all educational, health and public safety service providers
- Improve speed & quality of access to bandwidth-demanding content through improved interconnectivity of networks within Puerto Rico, as well as at the Internet backbone
- Facilitate the FCC objectives of network openness, non-discrimination and interconnection

The PRBI project is not intended to generate any profits for Critical Hub. All PRBI fees are solely based on the recovery of costs to ensure the long-term sustainability of the project. Critical Hub will act as the managing and operating entity of the PRBI. Governance of the project will come from the PRBI Steering Committee, an 8-member panel composed of local government, community anchor institution and non profit representatives, as well as ISP representatives. The benefits of the PRBI to Critical Hub are the same benefits that all PRBI-connected ISPs will receive - reduced backhaul to the Internet backbone, local peering & network peering. These benefits will permit the expansion of Critical Hub's broadband service network and enhance its service offering with increased speeds and lower pricing. Any profits generated by PRBI will be used to further the goals of the project.

#### AREA TO BE SERVED

PRBI will provide middle mile services to all 78 municipalities in the Commonwealth of Puerto Rico, including the islands of Vieques and Culebra. Sixteen interconnection points will be established throughout Puerto Rico, the majority in rural, underserved communities.

#### QUALIFICATION OF CRITICAL HUB/CARIBE NET

Critical Hub Networks, Inc. is the owner & operator of Caribe.Net, Puerto Rico's first Internet





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Service Provider (ISP). With over 15 years of experience in the design, implementation, operations and management of ISP networks in Puerto Rico, Critical Hub Networks has the experience and capabilities required to carry out the Puerto Rico Bridge Initiative.

**JOBS TO BE CREATED**

In the short-term, the project would create approximately 54 direct jobs for professionals who would participate in the three-year project. Based on the Puerto Rico Planning Board's multiplier estimate, these direct jobs would in turn create 123 indirect and induced jobs, yielding a total of 177 direct, indirect and induced jobs.

More importantly, in the medium- and long-term, the project would increase the competitiveness of Puerto Rico in the global economy. The availability of reliable, fast, and affordable broadband service throughout the island would induce a substantial number of new businesses and investments opportunities, which in turn would generate additional jobs as a secondary effect and lay the foundation for Puerto Rico's future economic growth.

**OVERALL COST OF THE PROJECT**

[REDACTED]

**Description of BTOP Project Purpose (BTOP Applicants Only Next Three Questions)**

**9. BTOP Statutory Purpose:**

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Provide access to broadband service to consumers residing in “unserved” areas of the United States.
Provide improved access to broadband service to consumers residing in “underserved” areas of the United States.
Improve access to, and use of, broadband service by public safety agencies.
Stimulate the demand for broadband, economic growth, and job creation.

**10. Description of BTOP Project Purpose:**

The main purpose of the Puerto Rico Bridge Initiative (PRBI) is to provide Puerto Rico with the basic infrastructure required to change the stifled broadband market and open the venue for fast, affordable broadband Internet services. After careful evaluation, Critical Hub Networks, working with eleven other ISPs of Puerto Rico, found that investing BTOP funds in a fragmented way in individual networks will not achieve the major objectives of the American Recovery and Reinvestment Act to “lay the foundation for future growth” and to “provide investments needed to increase economic efficiencies”.

The following is the current situation of broadband service in Puerto Rico:

-- The Commonwealth of Puerto Rico is an insular territory of the United States, located between the Atlantic Ocean and the Caribbean Sea. Although it is only 3,500 square miles in size, it is home to 3.8 million residents, most of whom are U.S. citizens by birth, and 98% are Hispanic. The median family income is \$20,425, one third the mainland’s median family income (\$58,526) and half that of Mississippi (\$42,805).

-- Local broadband service is very slow. Puerto Rico lags far behind the fifty states and the District of Columbia. The Federal Communications Commission (FCC) defines “basic broadband” as broadband services having a minimum download speed of 768kbps. According to a recent report of the Communication Workers of America (CWA), the national median download speed is 2.3 Mbps, whereas in Puerto Rico, it is only 499 Kbps. In other words, Puerto Rico’s broadband services are 78% slower than the national median, and well below the range defined as “basic broadband” by the FCC.



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-- In Puerto Rico, broadband service is very expensive. The average cost for broadband services in Puerto Rico is \$60.97 per month, significantly higher than the national average of \$39.00 per month. This is due to several factors, most importantly, the high cost of connectivity from Puerto Rico to the continental United States. For instance, an ISP in the State of Florida pays \$4,600 per month for 100Mb backbone connection, whereas the Puerto Rico ISP pays \$23,600 per month for the same connection - over 400% more expensive. Therefore, services are deployed to wealthier communities and networks are oversubscribed.

As a result of the aforementioned conditions, while the mainland is striving to catch up to the faster, cheaper broadband offerings in some foreign nations, Puerto Rico is struggling just to reach the national benchmarks. This affects opportunities to incorporate broadband technology and improved services in education, public safety, health, and for vulnerable populations. It limits opportunities for economic growth and job creation. The problem is compelling. Federal assistance is the only viable means to fund the infrastructure necessary to offer true broadband within Puerto Rico and close the digital divide.

The Puerto Rico Bridge Initiative (PRBI) will put all Puerto Rican ISPs on an equal playing field with their counterparts in the mainland, and among themselves. Critical Hub Networks proposes to create a "bridge" linking Puerto Rico to the NAP of the Americas ("NAP") in Miami, Florida via a 10 Gigabit undersea fiberoptic cable. The NAP is one of the nation's primary interconnection points to the Tier-1 networks, or the networks which comprise the Internet backbone. Sixteen interconnections points throughout the island will serve as "on-ramps" to the bridge, the majority in underserved areas. The bridge will serve several purposes:

1. Backhaul to the Internet Backbone

For ISPs to offer higher broadband speeds in Puerto Rico, the cost of connecting to the Internet backbone must be reduced. The bridge proposes to reduce these costs by nearly 90%. Each ISP will have a port in the NAP, from which they can negotiate interconnection & transit for their ISP network with any network service provider (NSP) of their choice, such as Sprint, Level 3, AT&T, Verio, etc.

2. Local Peering Point in Puerto Rico

There have been previous attempts to establish local peering points within Puerto Rico with



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little success. Costs have always outweighed the benefits. Additionally, individual network-to-network peering is costly, with backhaul circuits and hardware required for each ISP network. However, there is currently a significant amount of traffic within Puerto Rico that travels first to Florida, due to the lack of physical interconnection of networks within the island. The costs and latency associated with this ocean crossing are growing as the demands for bandwidth increase.

The PRBI will create local peering between all PRBI-connected ISPs using the same port and backhaul circuit they use to connect to the bridge. This means additional cost savings, without any additional costs.

PRBI will also provide peering to Puerto Rico government agencies and dependencies, public safety providers and other critical community organizations. Agencies including the Department of Education, the Puerto Rico Treasury, the Police Department, hospitals, private & public education institutions, and 911 would be able to peer with the bridge.

### 3. Peering with Content & Networks in the US.

Currently, Puerto Rico ISP networks do not have sufficient within-island traffic for peering to represent a true cost savings. Aggregating PRBI-connected ISP traffic presents economies of scale for negotiating peering agreements with networks and content providers in the NAP.

### 4. Serving Unserved & Underserved Areas

As all of Puerto Rico is underserved, the PRBI will benefit underserved areas immediately. However, this is only the first step. The PRBI will require participating ISPs to commit to: (a) expand their networks into rural, unserved & underserved areas as determined by the State Broadband Map; (b) reduce their broadband per-megabit fees; and (c) offer a 25% discount to all health care providers, schools, libraries & public safety agencies.

The Puerto Rico Bridge Initiative provides the best use for the BTOP funds through a viable and effective project which addresses a compelling problem. PRBI will dramatically reduce the cost of the undersea middle mile for ISPs, who currently pay over 400% more than their counterparts in the mainland. This savings will translate into substantial expansion of users, bringing service to hundreds of thousands of households, schools, doctors, hospitals, and community centers which currently cannot afford broadband access service.



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The success of the PRBI will be measurable. By providing Puerto Rico with the basic infrastructure required to provide fast, affordable broadband Internet services, the outcome of the PRBI must bring about measurable results. The PRBI's objectives are:

- To reduce broadband per-megabit pricing by 50%
- To increase broadband availability in unserved areas by 30%
- To increase broadband subscribership by schools, libraries, health care & public safety providers by 20%
- To establish local peering between 75% of ISP networks in Puerto Rico

The impact of the PRBI is nearly immediate. This is a shovel-ready project. The PRBI's first interconnection point will be operational by start of the project's second quarter. The impact over the majority of the population will be felt within the first 6 months of operation. The Puerto Rico Bridge Initiative will not only offer broadband access to households, but also make fast, affordable broadband services available to all schools public and private, including the public school system administered by the Puerto Rico Department of Education, which serves 526,000 students throughout the island.

**11. BTOP Enhanced Services for Health Care Delivery, Education, and Children:**

The Puerto Rico Bridge Initiative has received the endorsement of the Puerto Rico Department of Education, the primary local and state education agency in Puerto Rico, which serves over 526,000 students with 45,260 teachers in 1,546 schools. Education is a powerful tool in the fight against poverty. 58% of children in Puerto Rico live below the poverty line. In rural communities such as Vieques, this number climbs to 81%.

High speed Internet defines what is possible on the Internet, particularly regarding education. Virtual schools and classrooms; electronic download of books and articles; distance learning for students; teacher and administrator professional development; real-time observation of historical events and scientific experiments; webinars – they all require high speed Internet in every school and every home.

The lack of high speed broadband services in many areas of Puerto Rico limits the possibilities of providing these essential resources which define education in the twenty-first century to all students & teachers.



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The PRBI and the Puerto Rico Department of Education will work together to provide affordable broadband in all schools, and to facilitate the fast, secure delivery of content which the Department of Education is developing for students and teachers. The content will be delivered via peering of the Department of Education’s network with the PRBI. Peering will allow the Department of Education to increase its capability of serving bandwidth-demanding content from its network directly to Puerto Rico students, teachers, and residents.

In addition to the Department of Education, the PRBI will provide peering for all Puerto Rico government agencies. Through these peering points, these government agencies will be able to deliver innovative tools and services directly to Puerto Rico residents. Distance learning, health care services, webinars, reporting & tax filings system are a few of the applications which will benefit from peering. Local peering will solve that problem, by reducing cost, bandwidth and latency issues.

All PRBI-connected ISPs have committed to providing a 25% discount to all public and private educational institutions, libraries, health care and public safety organization in Puerto Rico. Through these strategies we expect to reach the following objective by 2014: Increase broadband subscribership of schools & libraries, health care & public safety providers by 20%.

To ensure that the project achieves its goal, the PRBI will establish the Puerto Rico Bridge Initiative Steering Committee. The steering committee will be composed of 8 members – 2 government agency representatives, 2 community anchor institution and/or non-profit institution representatives, 3 ISP representatives and 1 representative from Critical Hub Networks. The Steering Committee will be responsible for establishing incentive programs for PRBI ISPs who expand their networks into rural & unserved areas of Puerto Rico and who further the goals of the Recovery Act, including the enhance of broadband service for health care delivery, education and children.

## **D. Proposed Funded Service Area**

### **12. Proposed Funded Service Area Maps:**

**12-A.** Service Area Map (Reference Number): **9CC5-7993-4FBA-B98B**

**12-B.** Is the applicant is seeking a waiver for providing less than 100% coverage of a census block. **No**



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**13. Proposed Funded Service Area (BIP - Last Mile Projects):**

Please refer to section M at the end of document.

**14. Proposed Funded Service Area (BTOP - Middle Mile Project):**

Please refer to section M at the end of document.

**15. Non-Funded Service Area( BIP Only):**

-No Answer Required-

**16. Coverage Waiver:**

Applicant is seeking a waiver for providing less than 100% coverage of a census block.

No

For Response of "Yes" please refer to upload section for additional supporting documentation.

**17. Methodology for Area Status:**

As a middle mile project, the Puerto Rico Bridge Initiative must demonstrate that one interconnection point terminates in a proposed funded service area that qualifies as unserved or underserved for Last Mile projects, as defined in the NOFA.

Proposed Funded Service Area: The Puerto Rico Bridge Initiative will provide middle mile services to link the entire Commonwealth of Puerto Rico with the continental United States. The Puerto Rico Bridge Initiative will offer service to all 78 municipalities of Puerto Rico, including the adjacent islands of Culebra and Vieques, via 16 interconnection points.

Methodology used and source of data:

Determination of non-rural: Based on the BIP Eligibility Map provided at <http://broadbandsearch.sc.egov.usda.gov/> as part of the BIP and BTOP application system (see Supplemental Information 1 Appendix E), we have concluded that Puerto Rico is not 75% rural. Therefore, we are only submitting for BTOP funding.

Determination of Underserved: While there is a lack of data regarding census block-level broadband penetration for Puerto Rico, there exists information regarding broadband penetration at a state-level, unifying all Puerto Rico census blocks into a single service area. Since our proposed funded service area is all of Puerto Rico including the islands of Culebra &



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Vieques, this data is applicable.

According to the FCC’s January 2009 report: “High-Speed Services for Internet Access: Status as of December 31, 2007”, there are 413,322 residential High Speed Lines in Puerto Rico. Additionally, the US Census of 2000 reported 1,261,325 occupied households in Puerto Rico.

Using this available data, the percentage of homes in Puerto Rico with high speed Internet is at best 32.7%. Our methodology was confirmed by the Puerto Rico Institute of Statistics, an agency of the Government of Puerto Rico (see Supplemental Information 1: Appendix F). Therefore, less than 40% of residents have broadband in the home, and all of Puerto Rico is found to be underserved.

Proposed interconnection points: The Puerto Rico Bridge Initiative will establish sixteen interconnection points throughout Puerto Rico, with at least seven in rural & underserved communities, and most in underserved communities. The attached Network Diagram illustrates the location of the interconnection points. Two typical interconnection points are:

-- Ceiba – Located in the eastern coast of Puerto Rico, this Interconnection point terminates in Block 1005 of Census Tract 1602, Ceiba Municipio, Puerto Rico. We have determined that this census block is underserved based on a survey conducted by Metrodata which found that less than 40% of residents have broadband services in their home. This area, economically devastated by the closing of the Roosevelt Roads Naval Station in 2004, is extremely poor, with over 45% of households in Tract 1602 living below the poverty level.

-- Maricao – The second least populous municipality in Puerto Rico with 6,449 residents, Maricao is located in the western part of the island, high in the mountains. Poor infrastructure makes it difficult to access the town, with no direct highway connection available. Seventy seven percent of children live below the poverty line in Maricao, and the average household income is just \$9,243. Due to the extreme tropical topography, high elevations, steep hills, valleys and thick vegetation, hundreds of homes are without physical access to communications infrastructure, including cellular phone service.

### **18. Middle Mile Benefits**

The Puerto Rico Bridge Initiative (PRBI) will provide middle mile services to all 78 municipalities of the Commonwealth of Puerto Rico, including the islands of Culebra and





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Vieques. PRBI will offer transit and peering to all Puerto Rico ISPs without discrimination. Over 85% of Puerto Rico independent ISPs have been contacted and have given their commitment to using the PRBI facilities upon their completion. The following ISPs have executed legal contracts with Critical Hub to connect with the PRBI upon its creation:

[REDACTED]

Given the competitive nature of the BTOP and BIP grant process, a few ISPs who are developing their own projects for funding under BTOP and BIP were unable to provide a formal letter of endorsement or verbal agreement. However, we are confident in their participation if the PRBI project is funded.

Puerto Rico is struggling to reach the current national broadband benchmarks. This affects opportunities to incorporate broadband technology and improved services in education, public safety, health, and vulnerable populations, and limits opportunities for economic growth and job creation. The problem is compelling. While broadband service remains unaffordable, it will be unavailable to millions of Puerto Rico residents who live below the poverty line. All Puerto Rico residents will benefit from the PRBI, with the expanded availability of fast, affordable broadband services from a choice of providers.

The benefit of the PRBI to the ISPs is clear: ISPs will reduce their annual per-megabit transit cost by hundreds of thousands of dollars. As shown in Attachment C - Competitor Tables (Question 21), Puerto Rico ISPs are paying \$185 per megabit or more for the middle mile backhaul from Puerto Rico to the mainland. By providing low-cost middle mile backhaul, private sector ISP partners will be able to deploy last-mile networks into unserved and underserved communities. It will allow ISPs to reduce per-megabit pricing, and it will encourage competition.

Peering and transit services will be offered to all Puerto Rico government agencies and dependencies, and to all private and public educational institutions, libraries, health service providers and public safety agencies. The benefits of peering will allow for the distribution of exciting interactive, bandwidth-intensive content and services directly to Puerto Rico ISP



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networks and users. All PRBI ISPs will also offer a 25% service discount to all educational institutions, libraries, health care and public safety providers.

PRBI has received the endorsement of the Puerto Rico Department of Education (see Q-41 Government and Other Key Partnerships). Through peering with the PRBI, the Department of Education will be able to deliver and integrate exciting, innovative, high-bandwidth multimedia content into the curriculum of all public schools of Puerto Rico. The support and collaboration with the Department of Education is essential to reaching the 58% of Puerto Rican children who only have access to computers within the school.

The Puerto Rico Bridge Initiative will directly impact 526,000 students and 45,260 teachers in schools across the island. In addition, based on existing subscriber data and projections provided by PRBI-endorsing ISPs and as detailed in Attachment H - Broadband Subscriber Estimates, the PRBI will serve 616,170 households, 171 community anchor institutions and critical community facilities through PRBI-connected ISPs by the end of 2014. PRBI will also directly serve 75% of Internet Service Providers and 17 non-ISP peering partners by the end of 2014.

## E. Proposed Service Offering

### 19. Broadband Service Offerings for Last Mile Project:

Please refer to upload section at the end of the document.

### 20. Service Offerings for Middle Mile Project:

Please refer to upload section at the end of the document.

## Competing Service Providers

### 21. Existing Broadband Service Providers and Services Offered:

Please refer to upload section at the end of the document.

## Non-Discrimination, Interconnection



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**22. Description of Network Openness:**

Critical Hub Networks is committed to the network neutrality principles contained in the FCC’s Internet Policy Statement (FCC 05-151 adopted August 5, 2005). As such, Critical Hub Networks and all PRBI ISPs will be required to adhere to these policies, and include the policies within an Acceptable Use and Network Management Policy to be displayed prominently on the PRBI’s website and the ISP’s website.

**Enforcement:** Critical Hub Networks will have a zero tolerance policy regarding violations to the FCC’s Internet Policy Statement. Any PRBI ISP found to be in violation of this policy will be given the opportunity to resolve the violation. However, if no action is taken, the ISP will be submitted to the PRBI’s Steering Committee, which will take appropriate action, including penalties, fee increases, and orders authorizing the suspension of PRBI services to said ISP.

**Interconnection Practices:** One of the primary goals of the PRBI is to establish an economic, feasible way of providing interconnectivity and network peering. PRBI will offer interconnectivity and network peering to all ISPs which provide broadband services in Puerto Rico. PRBI will also offer peering to non-ISP networks or content services which are deemed to (a) represent a significant amount of traffic which translates into cost savings for all PRBI networks; or (b) provides improved access for PRBI networks to local content or services which will result in enhancements to government services, health care, education, and public safety. Peering will be available where technically feasible without exceeding current or reasonably anticipated capacity limitations, on reasonable rates and terms to be negotiated with requesting parties. Critical Hub will negotiate with all parties making a bona fide request. Such negotiations will include terms such as business arrangements, capacity limits, financial terms, and technical conditions for interconnection. If no agreement can be reached, the parties may voluntarily seek an interpretation by the FCC of any FCC rules implicated in the dispute. If an agreement cannot be reached within 90 days, the party requesting interconnection may notify NTIA in writing of the failure to reach satisfactory terms with Critical Hub Networks.

**Network Management and Nondiscrimination Practices:** All PRBI ISPs will be required to display their Acceptable Use and Network Management Policy in a prominent location on their web page and provide notice to customers of any changes to this policy. PRBI ISPs may employ generally accepted technical measures to provide acceptable service levels to all customers, provided that those measures are included in the network management policy.



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These methods may include caching and application-neutral bandwidth allocation, measures to address distribution of harmful viruses, code, content or spam, denial of service attacks, illegal content, and other harmful activities. PRBI ISPs may not favor or prioritize any lawful Internet applications and content over others. PRBI ISPs must provide an email address to customers, such as abuse@ISPNAME.net to facilitate the reporting of policy violations.

**Non-Discrimination and Interconnection (BTOP applicants only for next three questions)**

**23. Non-Discrimination Obligations (applicable to Last Mile and Middle Mile Applicants):**

Adhere to the minimum non-discrimination requirements as set forth in the NOFA.

Display the nondiscrimination practices in a prominent location on the service provider's web page, and provide notice to customers of changes to these policies.

**24. Interconnection Obligations (applicable to Last Mile Applicants):**

**25. Interconnection Obligations Middle Mile Applicants:**

Adhere to the minimum interconnection requirements as set forth in the NOFA.

Display the interconnection policies in a prominent location on the service provider's web page, and provide notice to customers of changes to these policies.

Commit to offering wholesale access to network components and services such as wavelength or fibers at reasonable rates and terms.

Commit to binding private arbitration of disputes concerning interconnection obligations.



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### Cost Effectiveness and Affordability

**26. Cost per Household (BTOP only):**

-No Answer Required (LAST MILE ONLY)-

**27. Affordability**

Unaffordable is unavailable. In Puerto Rico, the average cost of Internet service is far higher than the national average, yet its median income is less than half that of the poorest state in the nation. Sample residential broadband services in Puerto Rico are as follows: Wireline DSL (1 Mbps down/512 Kbps up), \$39.95 plus phone line (PRTC); Wireless DSL (3 Mbps down/512 Kbps up), \$59.99 (Centennial); Cable High Speed Internet (4 Mbps down), \$55.95 (Onelink); Cable High Speed Internet (1 Mbps down), \$64.99 (Liberty Cablevision).

These rates are much higher than comparable services in the United States. In Washington, DC, sample residential broadband services are as follows: Wireline DSL (1 Mbps down/384 Kbps up), \$19.95 (Verizon); Wireline DSL (3 Mbps down/768 Kbps up), \$29.95 (Verizon); Cable High Speed Internet (12 Mbps down), \$42.95 (Comcast).

While Puerto Rico ISPs continue to pay 400% more than their counterparts in the mainland, they will not be able to reduce pricing or increase speeds.

Affordability is the heart of the Puerto Rico Bridge Initiative. The Puerto Rico Bridge Initiative will offer Broadband Providers backhaul to the Internet backbone at rates starting at \$15 per megabit. It will offer 16 interconnection points, to facilitate interconnectivity via both wired and wireless circuits. PRBI will also create a peering fabric which will (a) reduce the amount of bandwidth the ISP will need to purchase from the Internet backbone itself, and (b) reduce the backhaul bandwidth needed from Puerto Rico to the mainland.

Below is a cost analysis that compares the costs of a Puerto Rico ISP based in San Juan, Puerto Rico for backbone connection in Florida (SCENARIO 1), versus what they would pay through the PRBI (SCENARIO 2). In the first scenario, costs would be even higher if the ISP was located outside of the San Juan area, as currently available backhaul services are framed



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services, and are priced based on distance.

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[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]



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PRBI will save ISPs 70% off their total Internet backbone costs. This savings will provide ISPs with needed cash flow and bandwidth to increase bandwidth offerings to end users, expand their network coverage areas, and substantially reduce prices. Based on estimates from committed PRBI ISPs, per megabit pricing will be reduced by 50%. The additional 25% discount to all health care providers, schools, libraries & public safety agencies will make services even more affordable.

## F. Technology Strategy

### 28. Technology Type:

Wireline - xDSL
Wireline - Coaxial Cable
Wireline - Fiber-optic Cable
Wireless - Terrestrial Fixed
Wireless - Terrestrial Mobile
Other







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[REDACTED]

[REDACTED]

(b) Puerto Rico Spans

The grant funded wireless Puerto Rico Spans will create 15 additional interconnection points around the island of Puerto Rico through 14 wireless spans. These spans will be know as: Aguada Span, Mayagüez Span, Maricao Span, Adjuntas Span, Utuado Span, Ponce Span, Villalba Span, Barranquitas Span, Barceloneta Span, Ceiba Span, Rio Grande Span, Luquillo Span & Caguas Span. These spans will link from the interconnection point to either the NAP of the Americas in Florida or the primary Puerto Rico interconnection point in San Juan. These spans will be carried over a wireless network as shown in the attached Network Diagram. Each physical link will be built with point to point licensed links at either 18GHz or 11GHz, providing bandwidth from [REDACTED]. Based on our experience, we estimate that bandwidth will be an average of [REDACTED] between links. Wherever possible, we will create redundancy by creating rings or by using Critical Hubs Network's current network. Sixteen non-grant funded interconnection points will also be added to the network as well.

At each of the physical interconnection points of the wireless network, PRBI will install a router and switch capable of 3.2Gbps of throughput. This network will be integrated into the MPLS network for traffic delivery to [REDACTED], which will allow for the creation of the virtual spans. Infrastructure for the creation of this wireless network will be funded by the grant.

Final Operational System Network



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Once operational, the PRBI system will be able to pass █ gigabits of traffic from █, it will be able to deliver up to █ Megabits of traffic via the new wireless spans from █ to the rest of the island; Culebra and Vieques will be able to have service from the Ceiba Span interconnection point.

The system will also enable peering of the aggregated traffic of all interconnected PRBI networks in Puerto Rico to network and content providers at █. This will represent a large benefit to Puerto Rico ISPs. By aggregating all of the traffic, content providers such as Google, Yahoo and YouTube, as well as backbone network providers will realize a cost benefit via direct peering with the PRBI.

Puerto Rico providers that interconnect at the San Juan interconnection point via fiber will have access to a minimum of █ port and a maximum of █ Port. Those Puerto Rico providers that interconnect at one of the wireless interconnection points will have access to a minimum of 50Mb port and a maximum of █. Providers which require more than 1Gb of bandwidth will need to acquire the additional capacity via alternate means. We are requiring a minimum bandwidth to ensure that ISPs have the capacity necessary to offer higher bandwidth services to their end users. ISPs are to use the transit bandwidth for predominantly broadband access service, and not for data center or hosting service traffic.

The system will be monitored 24 hours a day, 365 days a year by both automated reporting and logging systems, and by trained Network Operations Center (NOC) staff. To facilitate effective network monitoring even during a system failure, we have provisioned an independent █

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Selection of Primary Vendors



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[Redacted text block]

[Redacted text block]

**30. Network Diagram:**

Please refer to upload section at the end of document.

**31. Certification by Professional Engineer:**

Please refer to upload section at the end of document.

**32. Buy American Waiver Request:**

Is the applicant seeking an individual waiver of the Buy American provision? **No**

**Buy American Waiver Request – Legal Justification**

-No Answer Required-



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**33. Choice of Service Provider:**

Does the project’s Infrastructure and the Company’s business plan allow more than one provider to serve end users in the proposed funded service area?

Yes

## G. Project Milestones and Completion Factors

### Timeline & Milestones

**34. Infrastructure Build-out Timeline:**

Please refer to upload section at the end of the document.

**35. Licenses, Regulatory Approvals and Agreements:**

Critical Hub Network, Inc. is a corporation in good standing and registered with the Commonwealth of Puerto Rico. To operate legally in Puerto Rico, the corporation must have the following state and local government permits: Municipal Business License (“Patente Municipal”), corporate registration with the State Department of Puerto Rico, Use Permit from the Planning Board, Fire Safety Certificate from the Fire Department, and a Health Safety Certificate from the Puerto Rico Department of Health.

Critical Hub Networks Inc. is in compliance with all requirements of the Municipality of San Juan, and Commonwealth of Puerto Rico. Critical Hub Networks Inc. operates as an unregulated Internet Service Provider, using unlicensed wireless technology for the delivery of its own broadband services.

Critical Hub Networks does not require a federal or Commonwealth regulatory license for providing backbone transport to interconnect ISPs. Critical Hub Networks will not provide a regulated telecommunications service to the interconnected ISPs. ISPs that do offer regulated telecommunication services to their customers will be required to demonstrate to Critical Hub



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Networks's satisfaction that the respective ISP has the regulatory authority required.

Tower Leases & Building Leases: For the deployment of the PRBI wireless interconnection points throughout Puerto Rico, PRBI will be using facilities which are already leased and in operation by Critical Hub Networks, Inc. as well as several new tower sites. [REDACTED]

FCC licenses: Some wireless interconnection points will use licensed wireless links for backhaul to the main interconnection point in San Juan. Critical Hub Networks will obtain the necessary FCC licenses if the project is funded. Our initial site survey has shown FCC license availability for all the paths which we will be installing.

**36. Construction and Vendor Contracts**

Critical Hub Networks will contract several vendors and contractors for the implementation of the Puerto Rico Bridge Initiative. These are:

[REDACTED]

[REDACTED]

[REDACTED]

We will also use various vendors and contractors for interconnection point site preparations, including the installation of generator, battery backup systems, fire suppression, security



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systems and barriers. Critical Hub Networks has quotations from several vendors for these services, but we have not made the final decision pending the successful approval of the grant. Given our previous experience with such installations, and the number of vendors with the needed expertise, we do not foresee any complications or delays in this process.

**Qualification of Management Team and Organizational Readiness**

**37. Management Team Resumes:**

Please refer to upload section at the end of the document.

**38. Organizational Readiness:**

With over 15 years experience in the design, implementation, operations and management of ISP networks, Critical Hub Networks has accumulated a vast amount of experience and capabilities required to carry out the Puerto Rico Bridge Initiative project. The operation and management of Caribe.Net, Critical Hub Network's ISP, have been overseen effectively by a single team throughout its history, with over 150 years of combined experience in Internet and telecommunication management. Carlo Marazzi, founder, President of the Board of Directors and General Manager of the company, will be the Project Manager and will dedicate a significant portion of his time to ensure the success of the PRBI.

Critical Hub's particular organizational systems which will be involved in the PRBI are as follows:

- Finance and Accounting

Critical Hub Networks' Accounting Department is prepared to comply with the federal rules and regulations which govern the BTOP grant funds.

For nine years, Critical Hub Networks, Inc. has been audited by RSM ROC & Company (RSM), a local full service Certified Public Accountants firm. RSM will be providing auditing and compliance consulting to ensure compliance with ARRA reporting requirements, BTOP reporting, and compliance with the Federal Code, including 15 CFR Part 14, 48 CFR Part 31.2 and 7 CFR Part 1773. RSM has previous experience with the management and auditing of federal funding.



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- Financial Management System. The existing general ledger accounting system will allow the management of the PRBI project and all federal funds separately from the company's existing operations.

- Payroll. Critical Hub Networks currently uses Automatic Data Processing, Inc. (ADP) for payroll processing, including federal & state tax deposits, reporting and compliance.

- Accounts Payable, Purchasing and Inventory. The current purchasing, inventory and payables systems will be supplemented to ensure compliance with federal procurement standard codes of conduct. Critical Hub Networks will establish a written code of conduct for employees involved in contracting. Existing procurement procedures will be enhanced to facilitate federal auditing.

- Billing/Accounts Receivable. Critical Hub Networks uses RODOPI for its billing support system. RODOPI has been in place for over ten years, and we are confident in its ability to manage the billing and customer care data related to the PRBI project. The RODOPI system will be upgraded for the project to permit provisioning and accounting of PRBI custom configurations.

- Sales. Critical Hub Networks Corporate/Wholesale Sales and Sales Support staff will be used for the execution and processing of all PRBI contracts. They are experienced with highly technical network services, and are ideally suited to work with knowledgeable customers.

- Customer Service. Critical Hub Networks' customer care support and ticketing systems are already in place & operational. Additional tools and training will be incorporated to further enhance their ability to provide telephone support to PRBI's highly technical and knowledgeable customers.

- Provisioning & Service Deployment. Critical Hub Networks will be using our existing provisioning systems to activate new sales contracts and service requests. Additional processes will be added for the PRBI to ensure compliance with federal reporting requirements.

- Network Operations. The existing Network Operations Center (NOC) will be responsible for



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the ongoing operations of the PRBI network upon the full completion of the project. The NOC currently manages Caribe.Net’s network, including customers such as ISPs, banks, universities, schools, state & municipal government agencies, health care providers, insurance companies, and businesses of all sizes. [REDACTED]

**Other**

**39. Organizational Chart:**

Please refer to upload section at the end of document.

**40. Legal Opinion:**

Please refer to upload section at the end of document

**41. Government and other Key Partnerships:**

The Puerto Rico Bridge Initiative has received the endorsement of the Puerto Rico Department of Education, the primary local and state education agency which serves over 526,000 students with 45,260 teachers in 1,546 schools. The PRBI and the Puerto Rico Department of Education will work together to provide affordable broadband in all schools, and to facilitate the fast, secure delivery of content which the Department of Education is developing for students and teachers. The content will be delivered via peering of the Department of Education’s network with the PRBI. Peering will allow the Department of Education to increase its capability of serving bandwidth-demanding content from its network to directly to Puerto Rico students, teachers, and residents.

To ensure that the project achieves its goal, the PRBI will establish the Puerto Rico Bridge Initiative Steering Committee. The steering committee will be composed of 8 members – 2 government agency representatives, 2 community anchor institution and/or non-profit institution representatives, 3 ISP representatives and 1 representative from Critical Hub Networks. These members will play an integral role in the project planning and ongoing operations.

The key to the Puerto Rico Bridge Initiative’s success lies in its partnerships with the private





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ISP community. [REDACTED]

**42. Recovery Act and Other Governmental Collaboration.**

Considering education the fundamental tool for the economic and social growth of Puerto Rico, the PRBI is making a special effort to assist this sector in achieving higher standards.

The Department of Education has endorsed and will be working together with the Puerto Rico Bridge Initiative (see Supplementary Information 1 - Appendix C). A recipient of hundreds of millions of dollars annually in federal funding, the Department of Education is the largest recipient of Recovery Act funding in Puerto Rico, with an announced investment of over \$1.5 billion (see [www.recovery.gov](http://www.recovery.gov) – Investment Amount by Agency, Territory: Puerto Rico). The Puerto Rico Department of Education is the primary local and state education agency, serving over 526,000 students and their families in 1,546 schools, with 45,260 teachers. Many of these schools are located in areas that are unserved or underserved by high-speed internet service. Peering with the PRBI will allow the Department of Education to deliver electronic books and articles, curricular resources, distance learning, webinars, real-time observation of scientific experiments and historical and other opportunities that define education in the twenty-first century.

To truly maximize federal spending, both the PRBI as well as last mile projects should be funded under BIP and BTOP. PRBI will collaborate will all ISPs, including ISPs which receive BIP or BTOP funding for last mile projects within Puerto Rico. Due to the competitive nature of the grant application process, we were not able to receive written endorsements from companies submitting proposals for last mile projects. However, PRBI is fully committed to working with all Puerto Rico ISPs, including those also receiving BIP and BTOP funding.

**Community Involvement (BTOP Applicants Only)**



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**43. Partnering with Disadvantaged Businesses**

The Puerto Rico Bridge Initiative will be working with many small Internet Service Providers in Puerto Rico. Of the ISPs which have to-date endorsed the project, the following

[REDACTED]

[REDACTED]

[REDACTED]

These providers offer broadband Internet services in rural, underserved areas of the island. The PRBI will allow them to further expand their networks, increase broadband speeds and reduce per-megabit fees. Their self-certification forms are attached to this application in Supplemental Information 1: Appendix B.

We expect that if the project is funded, several more Socially and Economically Disadvantaged Small Business Concerns will also use the PRBI network.

## **H. Project Budget**

**44. General Overall Budget**



**Broadband Infrastructure Application  
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<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

Budget	Loan Request	Grant Request	Equity	Debt	Bond	Other
Network & Access Equipment (switching, routing, transport, access)		██████	██████			
Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.)		██████	██████			
Buildings and Land – (new construction, improvements, renovations, lease)		██████	██████			
Customer Premise Equipment (modems, set-top boxes, inside wiring, etc.)						
Billing and Operational Support Systems (IT systems, software, etc.)		██████				
Operating Equipment		██████	██████			



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(vehicles, office equipment, other)						
Engineering/ Professional Services (engineering design, project management, consulting, etc.)		██████				
Testing (network elements, IT system elements, user devices, test generators, lab furnishings, servers/computers, etc.)		██████				
Site Preparation						
Other						
<b>TOTAL BROADBAND SYSTEM</b>		██████	██████			



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**Total Budget:** \$ 33,095,005

**45. Detailed Budget:**

Please refer to upload section at the end of the document.

**Sustainability**

**46. Reasonableness**

The Puerto Rico Bridge Initiative has the following major costs:

1. The primary project cost is the acquisition of capacity on an undersea fiber optic cable system ("wet circuit") and delivery via a dry fiber optic cable ("dry circuit") to the primary interconnection point in San Juan. The complete circuit to be acquired will be [REDACTED], which can carry 10 Gigabits of data per second, and is a fully protected ring with two distinct paths. The acquisition cost of the wet circuit is [REDACTED]. The acquisition cost of the dry circuit is [REDACTED]. The total cost is equivalent to [REDACTED] of the project budget. This cost is substantially less than the cost associated with its alternative - the construction of a new submarine cable system. Due to the limited number of submarine cable systems that offer service to Puerto Rico, and very little bandwidth available on the existing submarine cable systems, the acquisition costs are high when compared to other routes. A route between the continental U.S. and Puerto Rico is 8 times more expensive than a route between the continental U.S. and Europe. It is exactly this high cost which prevents Puerto Rico ISPs from providing affordable broadband service to the island residents.

Estimations of the current growth capacity on the island show that approximately 50% of the [REDACTED] circuit will be used within 2 to 3 years, and continuous growth would increase the circuit usage to 85% of its capacity within the next eight years. Grant funds will help to lower the cost of bandwidth in Puerto Rico, and will have a positive effect on the other submarine cable systems by pressuring them to lower their prices.

2. Direct professional services represent [REDACTED] of the total budget for the Puerto Rico Bridge Initiative project. Critical Hub Networks, Inc. has a team of highly qualified, experienced professionals to participate in the project. PRBI will offer mission-critical network services to all Puerto Rico ISPs. Any failure of the PRBI will result in the failure of an ISP network.



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Critical Hub Network takes this responsibility with partner ISPs very seriously. The implementation of the PRBI Network is essential to the growth & development of Puerto Rico - families, businesses, schools, medical providers, among others. In order to attract qualified individuals to the project, we will provide appropriate industry compensation.

3. The routers and switches that will be used to create the Puerto Rico Bridge Initiative account for 6% of the PRBI budget. We are carefully selecting carrier-class routers and switches with a proven track record, so we can ensure that the equipment will work for many years to come. The estimated life of a router or switch is approximately 8 years. [REDACTED]

4. The PRBI will invest [REDACTED], rooftop rights and tower space to facilitate the deployment of the PRBI project. Given the critical nature of the PRBI services, adequate site facilities, security, and site locations are essential to ensuring the continuity of service operation.

Critical Hub Networks is requesting approximately [REDACTED] million in funding for the project. The total project cost is approximately [REDACTED] million. The project will impact the local economy within the first two quarters of implementation. Within the first year, much of the benefits of increased broadband capacity, including per megabit pricing reductions will be observable. Given the island's population, the Puerto Rico Bridge Initiative grant funding will have a cost of \$6.91 per resident.

The Puerto Rico Bridge Initiative will be managed by a select group of individuals that will be careful stewards of the federal funds under Critical Hub Networks' control.



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**47. Historical Financial Statements:**

Please refer to upload section at the end of the document.

**48. Broadband Subscriber Estimates:**

Please refer to upload section at the end of the document.

**49. Other Services:**

Please refer to upload section at the end of the document.

**50. Pro Forma 5-Year Financial Forecast and Assumptions:**

Please refer to upload section at the end of the document.

**51. Commitment of Capital Funding Support**

Critical Hub Networks, Inc. has received the following sources of capital funding for the Puerto Rico Bridge Initiative Project for infrastructure purposes:

[REDACTED]

[REDACTED]

[REDACTED]



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[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]







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In order to allow for the repayment of its costs, Critical Hub would need to increase its per-megabit rates to ISPs substantially. However, it is exactly for this reason why Critical Hub Networks is seeking to create the PRBI with grant funds – the PRBI will make it possible to reduce the costs which ISPs incur in connecting to the Internet backbone, thus facilitating an increase in broadband network expansion within the island.

In terms of broadband service, Puerto Rico is the poster child for need-based federal funding. Puerto Rico’s low level of broadband penetration is a direct result of a high level of poverty, the usual and costly undersea middle-mile backhaul required to connect the islands with the mainland, and the high costs of deploying infrastructure in a mountainous, tropical island. Much of Puerto Rico’s rural interior is covered by dense vegetation and winding single - lane roads. Residents of these areas live in small, sparsely populated communities, often with limited access to electricity, water, or telephone services.

It is clear that broadband services are a key factor to improving education, and promoting economic recovery, especially in Puerto Rico. However, the high costs for deploying broadband services are a significant impediment that cannot be easily overcome, particularly when the existing residential client base has a median household income of just \$20,425.

At this time, Federal funding is the only viable means for jumpstarting the deployment of next-generation, affordable broadband services and ensuring universal service throughout the country – a primary goal of the Telecommunications Act of 1996: "Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." (47 U.S.C. § 254(b)(3))

**54. Unjust Enrichment**

Critical Hub Networks, Inc. has not applied for, nor received, any funding or federal support for the Puerto Rico Bridge Initiative project. We have only applied for funding through this BTOP application.

**55. Disclosure of Federal and/or State Funding Sources**



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Critical Hub Networks, Inc. has never requested or received funding from any other federal or state funding program for activities or projects related to the Puerto Rico Bridge Initiative project.

## I. Self Scoring – BIP Only Self Scoring

### 56. Self Scoring Sheet



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Criteria	Method	Points	Self Scores
<b><u>PROJECT PURPOSE</u></b>			
Proportion of Rural Residents Served in Unserved Areas	1 point for every 10,000 unserved households	Up to 5	
Rural Area Targeting	1 point for every 5% increase in the rural service area up the minimum 75% rural area requirement	Up to 5	
Remote Area targeting	1 point for every 50 miles a service area is located from a non-rural area	Up to 5	
Title II Borrower	If you are or were a Title II borrower	5	
Recovery Act and other governmental collaboration	1 point will be awarded for each governmental or Recovery program the applicant is partnering with	Up to 5	
<b><u>PROJECT BENEFITS</u></b>			
Performance of the offered services	If a last mile wireline project delivers 20M to household – if a last mile wireless projects delivers 2M to end-user – if a middle mile projects delivers 100M to end points	<b>10</b>	
Affordable of services offered	Points awarded based on the proposed rate structure and the logistics of the proposed service area	Up to 5	



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Choice of service provider	If the proposed infrastructure is available to be used by multiple service providers	5	
Critical Community Facilities	If discounted rate packages at least 25% lower than advertise rates are available to critical facilities	5	
<b><u>PROJECT VIABILITY</u></b>			
Applicant's organizational capability	Points will be awarded on the strengths and accomplishments of key management	Up to 12	
Community Support	If a letter of support has been received from a designated representative of the community for every community in the proposed service territory	2	
Ability to promptly start project	If the applicant can demonstrate that all licenses and regulatory approvals have been received, contractors and vendors are ready to enter into contracts, and equity has been deposited into applicant accounts	10	
Socially and economically disadvantaged small businesses (SDB), as defined by section 8(a) of the Small Business Act, 15 U.S.C. §637.	If the applicant is a Section 8(a) entity	1	
<b><u>PROJECT BUDGET AND SUSTAINABILITY</u></b>			
Reasonableness of the budget	Points will be awarded based the	Up to 5	



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	adequacy of the proposed budget		
Leverage of outside resources (outside funding/financing requested)	(i) 10 points if this ratio is greater than 100% (ii) 7 points if this ratio is between 100% and 75% (iii) 5 points if this ratio is between 75% and 50% (iv) 3 points if this ratio is between 50% and 25% (v) 1 points if this ratio is lower than 25%	10	
Extent of grant funding (Grant funds/loan funds)	(i) 0 points if this ratio equals 100% (ii) 1 points if this ratio is between 100% and 75% (iii) 3 points if this ratio is between 75% and 50% (iv) 5 points if this ratio is lower than 50% (v) 10 points if no grant funds are requested	10	
<b>Total Points</b>		100	



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## J. BTOP Certification Requirements

### Certification (Requested for BTOP)

Please refer to upload section at the end of the document regarding following uploads.

1. U.S. Department of Commerce, Broadband Technology Opportunities Program
2. SF-424D Assurances—Construction Programs (Schedule N)
3. CD-511, Certification Regarding Lobbying (Attachment O)
4. SF-LLL, Disclosure of Lobbying Activities (Attachment P)
5. CD-512, Certification Regarding Lobbying—Lower-Tier Covered Transactions (Attachment Q) This certification will not be required until the time of the grant award, because it applies to subcontractors, etc.

## K. BIP Certification Requirements

### Certification (Requested for BIP)

Please refer to upload section at the end of the document regarding following uploads.

1. Equal Opportunity and Nondiscrimination Certification
2. Certification Regarding Architectural Barriers
3. Uniform Relocation Assistance and Real Property Acquisition - Policies Act of 1970 Certification
4. Certification Regarding Debarment, Suspension, and Other Responsibility Matters – Primary Covered Transactions
5. Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements



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6. Network Design and Implementation Plan Certification (to be complete for projects requesting more than \$1 million in federal assistance)

## L. Schedules

### Schedule: A-1 Congressional Districts

**1. State the Congressional District of the Applicant's headquarters**  
Puerto Rico - At-Large

**2. State the Congressional District for each area covered by the Project.**  
Puerto Rico - At-Large

## M. Proposed Funded Service Area Details (BIP & BTOP)

### 13. Proposed Funded Service Area (BIP - Last Mile Projects):

**Proposed Funded Service Area Name:**  
**Census Blocks in Proposed Funded Service Area:**  
**Community Name:**  
**Rural Classification of the Community:**  
**BIP - Service Status:**

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
--

**BTOP - Service Status:**

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
---

**Total Square Miles of Community:**





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**Total Population :**  
**Total Number of Households:**  
**Total Number of Businesses:**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:**

**14. Proposed Service Area (BTOP - Middle Mile Project):**

**Middle Mile Span Name:** Adjuntas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Adjuntas" county, with in the Census County ID: 72001. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Adjuntas  
**Community Name:** Adjuntas County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
--

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
--

**Total Square Miles of Service Area:** 67  
**Total Population :** 19,143  
**Total Number of Households:** 6,715  
**Total Number of Businesses:** 121  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 22



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**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Aguada" county, with in the Census County ID: 72003. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Aguada  
**Community Name:** Aguada County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 31  
**Total Population :** 42,042  
**Total Number of Households:** 15,590  
**Total Number of Businesses:** 467  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 23

**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Aguadilla" county, with in the Census County ID: 72005. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Aguadilla  
**Community Name:** Aguadilla County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 37**  
**Total Population : 64,685**  
**Total Number of Households: 24,882**  
**Total Number of Businesses: 851**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 36**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Aguas Buenas" county, with in the Census County ID: 72007. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Aguas Buenas  
**Community Name:** Aguas Buenas County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 31**  
**Total Population : 29,032**  
**Total Number of Households: 10,412**  
**Total Number of Businesses: 153**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 18**



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**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Aibonito" county, with in the Census County ID: 72009. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Aibonito  
**Community Name:** Aibonito County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
 The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
 The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 31  
**Total Population :** 26,493  
**Total Number of Households:** 9,163  
**Total Number of Businesses:** 284  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 20

**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Añasco" county, with in the Census County ID: 72011. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Añasco  
**Community Name:** Añasco County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**



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The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 39**  
**Total Population : 28,348**  
**Total Number of Households: 10,723**  
**Total Number of Businesses: 220**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 21**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in "Arecibo" county, with in the Census County ID: 72013. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Arecibo  
**Community Name:** Arecibo County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 126**  
**Total Population : 100,131**



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**Total Number of Households: 38,974**  
**Total Number of Businesses: 1,137**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 62**

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Arroyo" county, with in the Census County ID: 72015. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Arroyo  
**Community Name:** Arroyo Country  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 15**  
**Total Population : 19,117**  
**Total Number of Households: 7,287**  
**Total Number of Businesses: 76**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 16**

**Middle Mile Span Name:** Barceloneta Span  
**Census Blocks in Middle Mile Span:** All blocks in "Barceloneta" county, with in the Census County ID: 72017. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Barceloneta  
**Community Name:** Barceloneta County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 19**  
**Total Population : 22,322**  
**Total Number of Households: 8,375**  
**Total Number of Businesses: 247**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 13**

**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Barranquitas" county, with in the Census County ID: 72019. Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Barranquitas  
**Community Name:** Barranquitas County  
**Rural Calssification of the Community:** Non-Rural  
**BIP - Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



**Broadband Infrastructure Application  
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<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Square Miles of Service Area: 34**  
**Total Population : 28,909**  
**Total Number of Households: 9,740**  
**Total Number of Businesses: 241**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 21**

**Middle Mile Span Name:** Adjuntas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Yauco" county, with in the Census County ID:  
 72153 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Yauco  
**Community Name:** Youco County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 68**  
**Total Population : 46,384**  
**Total Number of Households: 17,062**  
**Total Number of Businesses: 476**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 35**

**Middle Mile Span Name:** Ceiba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Yabucoa" county, with in the Census County ID:  
 72151 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Yabucoa  
**Community Name:** Yabucoa County





**Broadband Infrastructure Application  
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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 55  
**Total Population :** 39,246  
**Total Number of Households:** 13,688  
**Total Number of Businesses:** 207  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 26

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in “Bayamón” county, with in the Census County ID:  
72021 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Bayamón  
**Community Name:** Bayamón County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



**Broadband Infrastructure Application  
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**Total Square Miles of Service Area: 44**  
**Total Population : 224,044**  
**Total Number of Households: 79,476**  
**Total Number of Businesses: 3,552**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 95**

**Middle Mile Span Name:** Villalba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Villalba" county, with in the Census County ID: 72149 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Villalba  
**Community Name:** Villalba County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area: 35**  
**Total Population : 27,913**  
**Total Number of Households: 8,465**  
**Total Number of Businesses: 120**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 19**

**Middle Mile Span Name:** Ceiba Span



**Broadband Infrastructure Application  
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**Census Blocks in Middle Mile Span:** All blocks in "Vieques" county, with in the Census County ID: 72147 Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Vieques  
**Community Name:** Vieques County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 51**  
**Total Population : 9,106**  
**Total Number of Households: 4,388**  
**Total Number of Businesses: 105**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 13**

**Middle Mile Span Name:** Mayagüez Span  
**Census Blocks in Middle Mile Span:** All blocks in "Cabo Rojo" county, with in the Census County ID: 72023 Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Cabo Rojo  
**Community Name:** Cabo Rojo County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 70**  
**Total Population : 46,911**  
**Total Number of Households: 23,182**  
**Total Number of Businesses: 562**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 25**

**Middle Mile Span Name:** Barceloneta Span  
**Census Blocks in Middle Mile Span:** All blocks in "Vega Baja" county, with in the Census County ID: 72145 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Vega Baja  
**Community Name:** Vega Baja County  
**Rural Classification of the Community:** Non-Rural  
**BIP - Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 46**  
**Total Population : 61,929**  
**Total Number of Households: 21,990**  
**Total Number of Businesses: 419**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 30**



**Broadband Infrastructure Application  
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<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Caguas" county, with in the Census County ID: 72025 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Caguas  
**Community Name:** Caguas County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 59  
**Total Population :** 140,502  
**Total Number of Households:** 50,568  
**Total Number of Businesses:** 2,547  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 65

**Middle Mile Span Name:** Barceloneta Span  
**Census Blocks in Middle Mile Span:** All blocks in "Vega Alta" county, with in the Census County ID: 72143 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Vega Alta  
**Community Name:** Vega Alta County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 28**  
**Total Population : 37,910**  
**Total Number of Households: 13,526**  
**Total Number of Businesses: 439**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 18**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in "Utuado" county, with in the Census County ID:  
72141 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Utuado  
**Community Name:** Utuado  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 113**  
**Total Population : 35,336**  
**Total Number of Households: 12,471**  
**Total Number of Businesses: 205**



**Broadband Infrastructure Application  
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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 27**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in "Camuy" county, with in the Census County ID: 72027 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Camuy  
**Community Name:** Camuy County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area: 46**  
**Total Population : 35,244**  
**Total Number of Households: 12,520**  
**Total Number of Businesses: 285**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 18**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Trujillo Alto" county, with in the Census County ID: 72139 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Trujillo Alto  
**Community Name:** Trujillo Alto County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved



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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 21**  
**Total Population : 75,728**  
**Total Number of Households: 26,241**  
**Total Number of Businesses: 590**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 27**

**Middle Mile Span Name:** Rio Grande Span  
**Census Blocks in Middle Mile Span:** All blocks in "Canóvanas" county, with in the Census County ID: 72029 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Canóvanas  
**Community Name:** Canóvanas County  
**Rural Calssification of the Community:** Non-Rural  
**BIP - Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 33**





**Broadband Infrastructure Application  
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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Population : 43,335**  
**Total Number of Households: 15,071**  
**Total Number of Businesses: 371**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 27**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Toa Baja" county, with in the Census County ID:  
 72137 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Toa Baja  
**Community Name:** Toa Baja County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 23**  
**Total Population : 94,085**  
**Total Number of Households: 33,473**  
**Total Number of Businesses: 762**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 29**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Carolina" county, with in the Census County ID:  
 72029 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Carolina  
**Community Name:** Carolina County  
**Rural Classification of the Community:** Non-Rural



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<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 45**  
**Total Population : 186,076**  
**Total Number of Households: 71,347**  
**Total Number of Businesses: 2,337**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 52**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in “Toa Alta” county, with in the Census County ID: 72135 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Toa Alta  
**Community Name:** Toa Alta County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Total Square Miles of Service Area: 27**  
**Total Population : 63,929**  
**Total Number of Households: 21,075**  
**Total Number of Businesses: 327**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 23**

**Middle Mile Span Name:** Villalba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Santa Isabel" county, with in the Census County ID:  
 72133 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Santa Isabel  
**Community Name:** Santa Isabel County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 34**  
**Total Population : 21,665**  
**Total Number of Households: 7,569**  
**Total Number of Businesses: 134**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 15**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Cataño" county, with in the Census County ID:  
 72033 Due to space limitations the information it's detailed by census blocks in middle mile appendix.



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<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Last Mile Service Area Name:** Cataño  
**Community Name:** Cataño County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 5  
**Total Population :** 30,071  
**Total Number of Households:** 10,366  
**Total Number of Businesses:** 370  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 14

**Middle Mile Span Name:** Maricao Span  
**Census Blocks in Middle Mile Span:** All blocks in “San Sebastián” county, with in the Census County ID: 72131 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** San Sebastián  
**Community Name:** San Sebastián County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**

The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 70**

**Total Population : 44,204**

**Total Number of Households: 16,682**

**Total Number of Businesses: 460**

**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 38**

**Middle Mile Span Name:**

**Caguas Span**

**Census Blocks in Middle Mile Span:** All blocks in "Ponce" county, with in the Census County ID: 72035

Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:**

**Cayey**

**Community Name:**

**Cayey County**

**Rural Classification of the Community:** Non-Rural

**BIP - Service Status:**

**Underserved**

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**

The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**

The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 52**

**Total Population : 47,370**

**Total Number of Households: 17,782**

**Total Number of Businesses: 534**

**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 37**



**Broadband Infrastructure Application  
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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "San Lorenzo" county, with in the Census County ID: 72129 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** San Lorenzo  
**Community Name:** San Lorenzo County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 53  
**Total Population :** 40,997  
**Total Number of Households:** 14,594  
**Total Number of Businesses:** 263  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 29

**Middle Mile Span Name:** Ceiba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Ceiba" county, with in the Census County ID: 72037 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Ceiba  
**Community Name:** Ceiba County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 29**  
**Total Population : 18,004**  
**Total Number of Households: 6,742**  
**Total Number of Businesses: 89**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 10**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "San Juan" county, with in the Census County ID: 72127 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** San Juan  
**Community Name:** San Juan County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 48**  
**Total Population : 434,374**  
**Total Number of Households: 182,101**  
**Total Number of Businesses: 11,899**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 228**



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<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Middle Mile Span Name:** Mayagüez Span  
**Census Blocks in Middle Mile Span:** All blocks in “San Germán” county, with in the Census County ID: 72125 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** San Germán  
**Community Name:** San Germán County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
 The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
 The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 55  
**Total Population :** 37,105  
**Total Number of Households:** 14,335  
**Total Number of Businesses:** 399  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 25

**Middle Mile Span Name:** Ponce Span  
**Census Blocks in Middle Mile Span:** All blocks in “Salinas” county, with in the Census County ID: 72123 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Salinas  
**Community Name:** Salinas County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**





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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 69**  
**Total Population : 31,113**  
**Total Number of Households: 11,876**  
**Total Number of Businesses: 192**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 20**

**Middle Mile Span Name:** Villalba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Ciales" county, with in the Census County ID: 72039  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Ciales  
**Community Name:** Ciales County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 67**  
**Total Population : 19,811**



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Total Number of Households: 6,886**  
**Total Number of Businesses: 119**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 17**

**Middle Mile Span Name:** Maricao Span  
**Census Blocks in Middle Mile Span:** All blocks in "Sabana Grande" county, with in the Census County ID: 72121 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Sabana Grande  
**Community Name:** Sabana Grande County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 36**  
**Total Population : 25,935**  
**Total Number of Households: 9,982**  
**Total Number of Businesses: 180**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 15**

**Middle Mile Span Name:** Rio Grande Span  
**Census Blocks in Middle Mile Span:** All blocks in "Río Grande" county, with in the Census County ID: 72119 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Río Grande  
**Community Name:** Río Grande County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 61**  
**Total Population : 52,362**  
**Total Number of Households: 19,928**  
**Total Number of Businesses: 287**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 11**

**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Rincón" county, with in the Census County ID:  
72117 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Rincón  
**Community Name:** Rincón County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



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**Total Square Miles of Service Area: 14**  
**Total Population : 14,767**  
**Total Number of Households: 6,827**  
**Total Number of Businesses: 129**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 9**

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Cidra" county, with in the Census County ID: 72041  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Cidra  
**Community Name:** Cidra County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 36**  
**Total Population : 42,753**  
**Total Number of Households: 14,267**  
**Total Number of Businesses: 380**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 17**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in "Quebradillas" county, with in the Census County ID: 72115  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Quebradillas  
**Community Name:** Quebradillas County



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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area:** 23  
**Total Population :** 25,450  
**Total Number of Households:** 9,095  
**Total Number of Businesses:** 213  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 15

**Middle Mile Span Name:** Villalba Span  
**Census Blocks in Middle Mile Span:** All blocks in “Coamo” county, with in the Census County ID: 72043 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Coamo  
**Community Name:** Coamo County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area: 78**  
**Total Population : 37,597**  
**Total Number of Households: 13,249**  
**Total Number of Businesses: 300**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 27**

**Middle Mile Span Name:** Ponce Span  
**Census Blocks in Middle Mile Span:** All blocks in "Ponce" county, with in the Census County ID: 72113  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Ponce  
**Community Name:** Ponce County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 115**  
**Total Population : 186,475**  
**Total Number of Households: 66,471**  
**Total Number of Businesses: 2,502**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 145**

**Middle Mile Span Name:** Ponce Span



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**Census Blocks in Middle Mile Span:** All blocks in "Peñuelas" county, with in the Census County ID: 72111 Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Peñuelas  
**Community Name:** Peñuelas County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 44**  
**Total Population : 26,719**  
**Total Number of Households: 8,735**  
**Total Number of Businesses: 134**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 17**

**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Comerío" county, with in the Census County ID: 72045 Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Comerío  
**Community Name:** Comerío County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 28**  
**Total Population : 20,002**  
**Total Number of Households: 7,311**  
**Total Number of Businesses: 89**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 14**

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Patillas" county, with in the Census County ID: 72109 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Patillas  
**Community Name:** Patillas County  
**Rural Classification of the Community:** Rural  
**BIP - Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 47**  
**Total Population : 20,152**  
**Total Number of Households: 7,677**  
**Total Number of Businesses: 119**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 20**





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**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Corozal" county, with in the Census County ID: 72047 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Corozal  
**Community Name:** Corozal County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 43  
**Total Population :** 36,867  
**Total Number of Households:** 12,386  
**Total Number of Businesses:** 275  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 21

**Middle Mile Span Name:** Villalba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Orocovis" county, with in the Census County ID: 72107 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Orocovis  
**Community Name:** Orocovis County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 63**  
**Total Population : 23,844**  
**Total Number of Households: 7,946**  
**Total Number of Businesses: 141**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 21**

**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Naranjito" county, with in the Census County ID: 72105 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Naranjito  
**Community Name:** Naranjito County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 27**  
**Total Population : 29,709**  
**Total Number of Households: 9,758**  
**Total Number of Businesses: 320**



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 19**

**Middle Mile Span Name:** Ceiba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Culebra" county, with in the Census County ID: 72049 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Culebra  
**Community Name:** Culebra  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 12  
**Total Population :** 1,868  
**Total Number of Households:** 1,024  
**Total Number of Businesses:** 24  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 6

**Middle Mile Span Name:** Luquillo Span  
**Census Blocks in Middle Mile Span:** All blocks in "Naguabo" county, with in the Census County ID: 72013 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Naguabo  
**Community Name:** Naguabo County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 52**  
**Total Population : 23,753**  
**Total Number of Households: 8,875**  
**Total Number of Businesses: 132**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 18**

**Middle Mile Span Name:** Barceloneta Span  
**Census Blocks in Middle Mile Span:** All blocks in "Dorado" county, with in the Census County ID:  
72051 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Dorado  
**Community Name:** Dorado County  
**Rural Calssification of the Community:** Rural  
**BIP - Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 23**



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Population : 34,017**  
**Total Number of Households: 13,067**  
**Total Number of Businesses: 368**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 13**

**Middle Mile Span Name:** Barranquitas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Morovis" county, with in the Census County ID:  
 72101 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Morovis  
**Community Name:** Morovis County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 39**  
**Total Population : 29,965**  
**Total Number of Households: 9,462**  
**Total Number of Businesses: 175**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 22**

**Middle Mile Span Name:** Luquillo Span  
**Census Blocks in Middle Mile Span:** All blocks in "Fajardo" county, with in the Census County ID:  
 72053 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Fajardo  
**Community Name:** Fajardo County  
**Rural Classification of the Community:** Non-Rural



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 30**  
**Total Population : 40,712**  
**Total Number of Households: 17,136**  
**Total Number of Businesses: 553**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 24**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in “Florida” county, with in the Census County ID: 72054 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Florida  
**Community Name:** Florida County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Total Square Miles of Service Area: 15**  
**Total Population : 12,367**  
**Total Number of Households: 4,387**  
**Total Number of Businesses: 65**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 12**

**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Moca" county, with in the Census County ID: 72099  
Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Moca  
**Community Name:** Moca County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area: 50**  
**Total Population : 39,697**  
**Total Number of Households: 14,253**  
**Total Number of Businesses: 300**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 23**

**Middle Mile Span Name:** Adjuntas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Guánica" county, with in the Census County ID: 72055  
Due to space limitations the information it's detailed by census blocks in middle mile appendix.



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Last Mile Service Area Name:** Guánica  
**Community Name:** Guánica County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area:** 37  
**Total Population :** 21,888  
**Total Number of Households:** 8,849  
**Total Number of Businesses:** 102  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 18

**Middle Mile Span Name:** Mayagüez Span  
**Census Blocks in Middle Mile Span:** All blocks in “Mayagüez” county, with in the Census County ID: 72097 Due to space limitations the information it’s detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Mayagüez  
**Community Name:** Mayagüez County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
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**BTOP - Service Status:** Underserved





**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

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<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 78**  
**Total Population : 98,434**  
**Total Number of Households: 39,364**  
**Total Number of Businesses: 1,683**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 64**

**Middle Mile Span Name:** Ceiba Span  
**Census Blocks in Middle Mile Span:** All blocks in "Maunabo" county, with in the Census County ID:  
72095 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Maunabo  
**Community Name:** Maunabo County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 21**  
**Total Population : 12,741**  
**Total Number of Households: 4,482**  
**Total Number of Businesses: 58**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 10**



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Middle Mile Span Name:** Caguas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Guayama" county, with in the Census County ID: 72057 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Guayama  
**Community Name:** Guayama County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 65  
**Total Population :** 44,301  
**Total Number of Households:** 16,368  
**Total Number of Businesses:** 564  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 35

**Middle Mile Span Name:** Maricao Span  
**Census Blocks in Middle Mile Span:** All blocks in "Maricao" county, with in the Census County ID: 72093 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Maricao  
**Community Name:** Maricao County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**BTOP - Service Status:** Underserved

<p><b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.</p>
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**Total Square Miles of Service Area:** 37  
**Total Population :** 6,449  
**Total Number of Households:** 2,272  
**Total Number of Businesses:** 14  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 14

**Middle Mile Span Name:** Barceloneta Span  
**Census Blocks in Middle Mile Span:** All blocks in "Manatí" county, with in the Census County ID:  
72091 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Manatí  
**Community Name:** Manatí County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<p><b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.</p>
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**BTOP - Service Status:** Underserved

<p><b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.</p>
--

**Total Square Miles of Service Area:** 45  
**Total Population :** 45,409  
**Total Number of Households:** 17,113  
**Total Number of Businesses:** 693  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 34



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**Middle Mile Span Name:** Adjuntas Span  
**Census Blocks in Middle Mile Span:** All blocks in "Guayanilla" county, with in the Census County ID: 72059 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Guayanilla  
**Community Name:** Guayanilla County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.
--

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b> The rate of broadband subscribership for the proposed funded service area is 40% of households or less.
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**Total Square Miles of Service Area:** 42  
**Total Population :** 23,072  
**Total Number of Households:** 8,147  
**Total Number of Businesses:** 104  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 19

**Middle Mile Span Name:** Luquillo Span  
**Census Blocks in Middle Mile Span:** All blocks in "Luquillo" county, with in the Census County ID: 72089 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Luquillo  
**Community Name:** Luquillo County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
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**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 26**  
**Total Population : 19,817**  
**Total Number of Households: 9,327**  
**Total Number of Businesses: 124**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 15**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Guaynabo" county, with in the Census County ID:  
 72061 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Guaynabo  
**Community Name:** Guaynabo County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 27**  
**Total Population : 100,053**



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Number of Households: 36,826**  
**Total Number of Businesses: 2,009**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 37**

**Middle Mile Span Name:** Rio Grande Span  
**Census Blocks in Middle Mile Span:** All blocks in "Loíza" county, with in the Census County ID: 72087  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Loíza  
**Community Name:** Loíza County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:**

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 19**  
**Total Population : 32,537**  
**Total Number of Households: 10,927**  
**Total Number of Businesses: 78**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 15**

**Middle Mile Span Name:** Miami-San Juan Span  
**Census Blocks in Middle Mile Span:** All blocks in "Gurabo" county, with in the Census County ID: 72063  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Gurabo  
**Community Name:** Gurabo  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM	<b>Easygrants ID:</b> 570
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> Critical Hub Networks, Inc.
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Mr. Carlo Marazzi

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 28**  
**Total Population : 36,743**  
**Total Number of Households: 12,854**  
**Total Number of Businesses: 331**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 19**

**Middle Mile Span Name:** Rio Grande Span  
**Census Blocks in Middle Mile Span:** All blocks in "Las Piedras" county, with in the Census County ID: 72085 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Las Piedras  
**Community Name:** Las Piedras County  
**Rural Calssification of the Community:** Non-Rural  
**BIP - Service Status:** Underserved

**BIP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

**BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.**  
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



**Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)**

<b>Submitted Date:</b> 8/19/2009 7:34:30 PM		<b>Easygrants ID:</b> 570	
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program		<b>Applicant Organization:</b> Critical Hub Networks, Inc.	
<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Total Square Miles of Service Area: 34**  
**Total Population : 34,485**  
**Total Number of Households: 12,421**  
**Total Number of Businesses: 288**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 19**

**Middle Mile Span Name:** Maricao Span  
**Census Blocks in Middle Mile Span:** All blocks in "Las Marías" county, with in the Census County ID:  
 72083 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Las Marías  
**Community Name:** Las Marías County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 46**  
**Total Population : 11,061**  
**Total Number of Households: 4,124**  
**Total Number of Businesses: 58**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 15**

**Middle Mile Span Name:** Utuado Span  
**Census Blocks in Middle Mile Span:** All blocks in "Hatillo" county, with in the Census County ID:  
 72065 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Hatillo  
**Community Name:** Hatillo





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<b>Task:</b> Submit Application - Infrastructure Programs		<b>Applicant Name:</b> Mr. Carlo Marazzi	

**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area:** 42  
**Total Population :** 38,925  
**Total Number of Households:** 13,929  
**Total Number of Businesses:** 490  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities:** 19

**Middle Mile Span Name:** Maricao Span  
**Census Blocks in Middle Mile Span:** All blocks in "Lares" county, with in the Census County ID: 72081  
Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Lares  
**Community Name:** Lares County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.



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**Total Square Miles of Service Area: 61**  
**Total Population : 34,415**  
**Total Number of Households: 12,060**  
**Total Number of Businesses: 215**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 31**

**Middle Mile Span Name:** Mayagüez Span  
**Census Blocks in Middle Mile Span:** All blocks in "Hormigueros" county, with in the Census County ID: 72067 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Hormigueros  
**Community Name:** Hormigueros County  
**Rural Classification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 11**  
**Total Population : 16,614**  
**Total Number of Households: 6,423**  
**Total Number of Businesses: 168**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 10**

**Middle Mile Span Name:** Mayagüez Span



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**Census Blocks in Middle Mile Span:** All blocks in "Lajas" county, with in the Census County ID: 72079  
Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Lajas  
**Community Name:** Lajas County  
**Rural Calssification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 60**  
**Total Population : 26,261**  
**Total Number of Households: 10,947**  
**Total Number of Businesses: 178**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 19**

**Middle Mile Span Name:** Luquillo Span  
**Census Blocks in Middle Mile Span:** All blocks in "Humacao" county, with in the Census County ID: 72069  
 Due to space limitations the information it's detailed by census blocks in middle mile appendix.

**Last Mile Service Area Name:** Humacao  
**Community Name:** Humacao County  
**Rural Calssification of the Community:** Non-Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 45**  
**Total Population : 59,035**  
**Total Number of Households: 22,559**  
**Total Number of Businesses: 852**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 42**

**Middle Mile Span Name:** Rio Grande Span  
**Census Blocks in Middle Mile Span:** All blocks in "Juncos" county, with in the Census County ID: 72077 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Juncos  
**Community Name:** Juncos County  
**Rural Classification of the Community:** Non-Rural  
**BIP - Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 27**  
**Total Population : 36,452**  
**Total Number of Households: 13,064**  
**Total Number of Businesses: 253**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 20**



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**Middle Mile Span Name:** Ponce Span  
**Census Blocks in Middle Mile Span:** All blocks in "Juana Díaz" county, with in the Census County ID: 72075 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Juana Díaz  
**Community Name:** Juana Díaz County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 60**  
**Total Population : 50,531**  
**Total Number of Households: 16,490**  
**Total Number of Businesses: 287**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 31**

**Middle Mile Span Name:** Aguada Span  
**Census Blocks in Middle Mile Span:** All blocks in "Isabela" county, with in the Census County ID: 72071 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Isabela  
**Community Name:** Isabela County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.



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**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 55**  
**Total Population : 44,444**  
**Total Number of Households: 17,166**  
**Total Number of Businesses: 438**  
**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 24**

**Middle Mile Span Name:** Ponce Span  
**Census Blocks in Middle Mile Span:** All blocks in "Jayuya" county, with in the Census County ID:  
72073 Due to space limitations the information it's detailed by census blocks in middle mile appendix.  
**Last Mile Service Area Name:** Jayuya  
**Community Name:** Jayuya County  
**Rural Classification of the Community:** Rural  
**BIP – Service Status:** Underserved

<b>BIP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the census-designated community [or other area] is 40% of households or less.

**BTOP - Service Status:** Underserved

<b>BTOP - If Service Status is "Underserved" please select at least one applicable option from this list.</b>
The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

**Total Square Miles of Service Area: 45**  
**Total Population : 17,318**  
**Total Number of Households: 5,591**  
**Total Number of Businesses: 93**



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**Total Number of Critical Community Facilities, Anchor Institutions and Public Safety Entities: 13**

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**Uploads**

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

<b>Upload Name</b>
04) Q-20. Attachment B - Middle Mile Offerings
05) Q-21. Attachment C - Competitor Tables
07) Q-27. Affordability
08) Q-30. Network Diagram
09) Q-31. Attachment D - Engineer Certification*
10) Q-34. Attachment E - Build-Out Timeline
11) Q-37. Management Team Resumes
12) Q-39. Organization Chart
13) Q-40. Attachment F - Legal Opinion*
14) Q-41. Government and Other Key Partnerships
16) Q-45. Attachment G - Detailed Project Cost





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17) Q-47. Historical Financial Statements
18) Q-48. Attachment H - Subscriber Estimates
21) Q-50. Attachment K - Income Statement
22) Q-50. Attachment L - Balance Sheet
23) Q-50. Attachment M - Statement of Cash Flows
24) Q-50. Financial Assumptions
25) BTOP ONLY Authentication*
26) Pg-22. BTOP ONLY Certification Requirements*
27) Pg-23. BTOP ONLY Att. N - Assur-Construction*
28) Pg-24. BTOP ONLY Attachment O - Lobbying*
29) Pg-25. BTOP ONLY Attachment P - Disclosure*
30) Pg-26. BTOP ONLY Attachment Q - Lobbying*



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43) Supplemental Information 1
44) Supplemental Information 2
45) Supplemental Information 3

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