



COMMONWEALTH OF  
PUERTO RICO  
Telecommunications Regulatory Board  
Office of the Chairman

September 2, 2016

The Honorable Orrin Hatch  
Chairman  
US Senate Committee on Finance  
United States Senate  
104 Hart Office Building  
Washington DC 20510

Dear Chairman Hatch:

We appreciate the opportunity to address you as member of the Congressional Task Force on Economic Growth in Puerto Rico regarding the vital role of broadband Internet for the economic recovery of our Island.

Section 409 of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) established the Congressional Task Force on Economic Growth in Puerto Rico, which will issue a report by December 31, 2016, that examines the impact federal laws have on economic growth in Puerto Rico and that recommends changes to said federal laws and programs. In our view the Task Force must explore all feasible federal policy initiatives to improve the access and adoption of broadband in Puerto Rico.

### **Broadband Gaps in Puerto Rico**

Broadband infrastructure impacts economic recovery and growth directly. Various studies have found that broadband expansion has a significant impact on GDP growth. According to the World Bank, 10 percentage point increase in fixed broadband adoption would increase per capita GDP by 1.21-1.38%. In Puerto Rico, this means that 355,000 new Puerto Rico broadband connections would generate over \$1.3 billion in GDP on the Island.<sup>1</sup>

---

<sup>1</sup> The World Bank estimate is from Qiang, Christine Zhen-Wei, Carlo Rossotto, and Kaoru Kimura, "Economic Impacts of Broadband," in *Information and Communications for Development* (World Bank 2009), available at: [http://siteresources.worldbank.org/EXTIC4D/Resources/IC4D\\_Broadband\\_35\\_50.pdf](http://siteresources.worldbank.org/EXTIC4D/Resources/IC4D_Broadband_35_50.pdf). This World Bank estimate may understate the potential for economic growth in Puerto Rico that results from more widespread broadband adoption. A study of Latin American and Caribbean economies undertaken by the Inter-American Development Bank

Unfortunately, Puerto Rico is by far the least connected jurisdiction in the United States, with broadband adoption rates more akin to developing nations than metropolitan and rural areas of the United States. FCC data shows that home broadband access and adoption in Puerto Rico is lower than in any state. Nationwide, approximately 10% of the U.S. population does not have access to fixed broadband service of 25 Mbps download/3 Mbps upload, the broadband threshold the FCC deems necessary for high-quality video, voice, and data applications. In Puerto Rico, 62% of the population (over 2.6 million people) does not have access to 25/3 service. Moreover in Puerto Rico's rural areas, 98% of the population does not have access to 25/3 service.<sup>2</sup>

Adoption of broadband by Puerto Rico households, at any speed and technology, also trails the rest of the United States. According to the U.S. Census, only 45% of Puerto Rico households have purchased broadband Internet, far lower than the national average of 75%. Indeed, there are only five (5) cities in the United States with broadband adoption rates below 50%; and three of them are in Puerto Rico (San Juan, Mayaguez, and Ponce).

Broadband adoption at all income levels in Puerto Rico trails the mainland, yet the overwhelming reason Puerto Rico households do not adopt broadband at the same rate as the mainland, is income. Sixty-nine percent (69%) of the Puerto Rico households without broadband make less than \$20,000 per year. However

### **Puerto Rico Broadband Initiatives**

To solve both these broadband infrastructure and adoption gaps, the Puerto Rico government has undertaken a series of initiatives, working with the technology industry, broadband providers, and civil society organizations. Working with a nonprofit organization, Connect Puerto Rico, the government established the Puerto Rico Broadband Taskforce (PRBT) in 2010, comprised of government and private sector stakeholders, which immediately got to work in developing a plan and strategic steps to bridge the Puerto Rico digital divides. In 2012, the Puerto Rico Broadband Taskforce released a Broadband Strategic Plan, which outlines 25 goals and recommended 40 specific policy actions. In 2015, the government and the PRBT released the

---

in 2012 found that a 10% increase in fixed broadband adoption would increase GDP per capital by 3.19%. See Zaballos, Antonio García, and Rubén López-Rivas, "Socioeconomic Impact of Broadband," in *Latin American and Caribbean Countries* (Inter-American Development Bank 2012), available at: <http://publications.iadb.org/handle/11319/5754?localeattribute=>.

<sup>2</sup> 2016 Broadband Progress Report, FCC 16-6, App. D (rel. Jan. 29, 2016). This is an access gap of national importance – 1 in 15 of all Americans without access to 25/3 fixed broadband service live in Puerto Rico.

*Gigabit Island Plan*, which studied progress made since the first 2012 plan and outlined a series of further initiatives and policy changes.

The *Gigabit Island Plan* established clear goals. In particular, the Plan sets that by 2018:

- 90% of Puerto Rico households will have broadband available at 10 Mbps download speeds, and;
- 50% of Puerto Rico households will have broadband available at 1 Gbps download speeds

By 2020:

- 99% of Puerto Rico households will have broadband available at 10 Mbps download speeds;
- 70% of Puerto Rico households will have broadband available at 1 Gbps download speeds

At the time the *Gigabit Island Plan* was released in February 2015, 77.9% of Puerto Rico households had access to 10 Mbps download speeds, but no households had access to gigabit download speeds. The lack of availability of 10 Mbps service was concentrated in rural Puerto Rico, where over one-third of the households did not have access.

The goals of 10 Mbps download are consistent with the FCC Connect America Fund program, which has set broadband access of 10 Mbps download/1 Mbps upload as a national availability target. However, as discussed below, to date the FCC has not released the vast majority of Connect America Fund subsidies reserved for Puerto Rico network upgrades, while many areas in the mainland U.S. are already into their second year of network upgrades from those subsidies. The Plan outlined several strategic and policy initiatives to bridge the Puerto Rico Broadband Gap, including policies that would:

- Lower infrastructure costs, such as streamlining construction permitting and planning, ensuring ready and cost-effective access to poles, ducts, conduits, and rights-of-way, leveraging existing public assets to incentivize broadband expansion (such as streetlight, sewer and aqueduct conduits, and adopt “dig once” legislation that would lower the cost of infrastructure deployment;
- Continued mapping and assessment of broadband access, to mark progress against Gigabit Island Plan goals, including measurements of aggregate broadband use in Puerto Rico;
- Promote public-private partnerships to stimulate and aggregate broadband demand,
- Leverage federal programs for broadband expansion, including the Connect America Fund, Lifeline, and E-rate programs; and

- Stimulate broadband adoption, which will encourage additional broadband infrastructure investment.

Since the launch of these initiatives, broadband access and adoption in Puerto Rico has improved, but it is still well below the mainland. In 2010, when the Puerto Rico Broadband Taskforce began its work, home broadband adoption in Puerto Rico was 31%, but it grew to 46% by 2014, and use of mobile broadband service has grown sharply.

The Puerto Rico Telecommunications Board (PRTTB) has undertaken a number of Gigabit Island Plan initiatives under our “*PAIS Banda Ancha*” project. We have opened 35 **Community Internet Centers** and 49 **WiFi Public Squares** around the island, where residents can access and use the Internet free of charge. PRTTB has also transformed all 88 Puerto Rico State Election Commission Permanent Registration Board’s into free internet WiFi and e-government spots. One very important project (**Vía Digital**) promotes access and use of existing duct infrastructure owned by the Puerto Rico Department of Transportation and Public Works, for the installation of fiber optic cables by telecommunication companies; another, “**Tecno Abuelos**”, is an island-wide program where senior citizens are trained on how to access/use internet services using computers and smart devices.

### **Complementary Federal Initiatives and Policy Changes**

There are several federal programs and policies that would positively impact economic development in Puerto Rico by improving broadband access and adoption.

Puerto Rico was the host to three targeted FCC pilot projects designed to test whether low-income consumers would respond to adding monthly broadband subsidies to the federal Lifeline program. More consumers in Puerto Rico signed up for these three pilot discount plans than in the other eleven pilots in the rest of the U.S. combined.

*Lifeline Modernization.* Earlier this year, the FCC modernized its Lifeline universal service program to include broadband service. This \$2 billion federal program currently subsidizes local telephone service purchased by qualifying low-income families, and beginning in December, low-income households will be able to apply that \$9.25/month discount to broadband service.

Lifeline modernization is a tremendous opportunity for Puerto Rico. Today, 40% of Puerto Rico families participate in the Lifeline voice program, a participation rate higher than any state. The federal program works in conjunction with a parallel Commonwealth Lifeline fund administered by the PRTTB, which adds an additional subsidy (paid by Puerto Rico user fees) to the federal subsidy.

The Lifeline voice program has been a success—according to data, Puerto Rico families are nearly as connected to voice telephone service as on the mainland. Lifeline for Broadband can help realize that same goal for broadband Internet, but only if the federal agencies implementing the Lifeline program work closely with the Puerto Rico government and prioritize the needs of the island in that implementation process.

The FCC and the Universal Service Administrative Company (USAC) should be requested to:

- Make Puerto Rico one of the first five states or jurisdictions in which USAC will implement a streamlined eligibility, income verification, and enrollment process for the Lifeline program. Currently, the PRTRB and providers are tasked with the responsibility of ensuring that Lifeline subscribers are eligible for the program, and the FCC is replacing this process with a more-efficient, streamlined and centralized function that will be performed by USAC. USAC will be implementing this more-efficient system on a state-by-state basis. The FCC has asked USAC to report by December 2016 which states or jurisdictions will take these steps first. Because Puerto Rico has one of the largest Lifeline participation rates in the nation, it should be in this first wave of implementation.
- Freeze any phase-out of Lifeline voice subsidies in Puerto Rico until broadband adoption in Puerto Rico is commensurate with broadband adoption on the mainland. In the FCC's Modernization Order, the FCC ruled that it will begin to phase out Lifeline subsidies for voice telephone subscribers, starting in December 2017 and eliminate them entirely by December 2021. Today, 40% of the population of Puerto Rico benefits from the Lifeline voice program, a level higher than any other state, and this phase-out would disproportionately harm low-income Puerto Rico consumers. The FCC's rationale for phasing out voice subsidies is the growing use of broadband service; however, in Puerto Rico, broadband adoption trails the national average. The FCC should not phase out Lifeline voice subsidies at least until broadband adoption in Puerto Rico matches the national broadband adoption level.
- Work directly with the Puerto Rico Department of the Family and the PRTRB to ensure that all eligible households in Puerto Rico can enroll in Lifeline. Many federal aid programs that traditionally used to qualify households for benefits (like federal nutrition assistance and Medicaid) have lower income thresholds in Puerto Rico than the mainland, and therefore cannot be solely relied upon to qualify households in Puerto Rico for Lifeline.



*Connect America Fund*. The FCC is transforming its \$4 billion per year in high-cost universal service fund (the Connect America Fund) to directly support the construction and operation of broadband networks, in areas without broadband access today. As discussed above, the availability of broadband is lower in Puerto Rico than in any U.S. state, and the vast majority of these unserved areas are in rural areas of Puerto Rico. Since 2013, the FCC has only allocated \$31.5 million of one-time Connect America Fund subsidies to broadband expansion in Puerto Rico. Despite the fact that 7% of Americans that do not have access to 3 Mbps download/768 kbps upload broadband service (the criteria the FCC uses for Connect America Fund eligibility), to date the FCC has directed only *three-tenths of one percent* of the Connect America Fund to Puerto Rico.

This disparity can and should end. The Congressional Task Force should recommend that the FCC move expeditiously on allocating and awarding the \$36 million per year it has budgeted from the Connect America Fund for Puerto Rico broadband network upgrades in a manner that is consistent with *Gigabit Island Plan* goals. This substantial level of subsidies could be a game-changer for broadband access in Puerto Rico, if only the FCC were to take this action.

### **The Future: Integrated Puerto Rico Government Broadband Initiatives**

PRTRB proposes to expand on the *Gigabit Island Plan* with new initiatives that will boost economic growth. For example, “Broadband Opportunity Zones” on the island would directly incentivize fiber and other high-speed network construction.

The fundamental challenge of broadband investment in Puerto Rico is that because of relatively low home broadband adoption and use rates, the business case for investment in fixed cost broadband networks can be risky. However, one reason for Puerto Rico’s low income levels is the lack of ubiquitous high-speed broadband infrastructure. The *Gigabit Island Plan* is intended to break this cycle of disinvestment by targeting broadband investment and adoption simultaneously.

The Broadband Opportunity Zone initiative would, for the first time, directly tie infrastructure investment incentives to successful broadband adoption programs. These incentives could apply island-wide, they could be targeted to specific regions or areas that lack broadband infrastructure, such as areas that receive FCC Connect America Fund subsidies.

Incentives for private sector infrastructure deployment would include:

- Waive property taxes and other fees, or costs, for deployment of broadband infrastructure investment that is capable of delivering 1 Gbps download capacity to

households or businesses in the Broadband Opportunity Zone. These fee waivers could be graduated based upon service availability—in areas in which Gigabit service is not available, credits in excess of taxes could even be considered in certain designated Broadband Opportunity Zones.

- Accelerated permitting process, fee waivers, and siting decisions for both wired and wireless infrastructure
- Access to publicly owned fiber and conduits
- Regulation and preferred pricing for utility pole attachment rates, methods, and processes, including publicly owned utilities
- Further incentives would apply in locations in which the provider is using Connect America Fund subsidies to help fund the build-out, but only if the build-out results in 1 Gbps download speeds (as opposed to the 10 Mbps speed required for the Connect America Fund).

These incentives would be available to broadband providers that actively participate in digital inclusion programs, which result in expanded broadband adoption and use in Puerto Rico. To receive the full benefits of the infrastructure investments, the provider must, in the same Broadband Opportunity Zone in which it makes the infrastructure investment:

- Participate in both the FCC Lifeline and Puerto Rico Lifeline funds for both broadband and voice service and market those services aggressively.
- Reinvest a portion of the savings received by the incentives into locally based digital inclusion programs. The portion of this savings that is to be reinvested locally should be a function of the adoption gap and population affected. Providers could satisfy this reinvestment obligation by investing in free public Wi-Fi networks, broadband training initiatives, or other effective programs, and
- Include connectivity upgrades to community institutions like training and community Internet centers as part of business and consumer network upgrades.

Thank you for your time and consideration. We are available to meet at your convenience to discuss this critical matter for the future of Puerto Rico.

Sincerely,



Javier J. Rúa Jover, Esq.  
Chairman

Puerto Rico Telecommunications Regulatory Board