

**Testimony of
Albert S.N. Hee, President
Sandwich Isles Communications, Inc.**

Before the Senate Committee on Indian Affairs

**Oversight Hearing on Universal Service Reform:
Ensuring a Sustainable and Connected Future for Native Communities**

June 7, 2012

Chairman Akaka, Vice Chairman Barrasso, and distinguished members of the Committee, thank you for holding this hearing to address the impacts of the Federal Communications Commission's (FCC) Connect America Fund Order (Order) on native communities across the country. My name is Al Hee and I am President of Sandwich Isles Communications, Inc. (SIC), a Rural Local Exchange Carrier (RLEC) serving Hawaii's indigenous people on Hawaiian Home Lands (HHL), Hawaii's "tribal lands", which were created by Congress through the Hawaiian Homes Commission Act of 1921 (HHCA). It is especially an honor for me to sit before you, as I am also a beneficiary of the HHCA. Thank you for this opportunity to share the devastating, albeit unintended, impacts the FCC's Order will have on the native Hawaiians who have come to rely on advanced telecommunications service since 1995.

On March 3, 2011, the FCC adopted a Notice of Inquiry (NOI) In the Matter of Improving Communications Services for Native Nations (CG Docket No. 11-41). In this filing, the FCC Chairman Julius Genachowski stated for the record that, "...communications services like broadband, wireless communications and radio aren't just valuable as a means to deliver entertainment and diversions. They are vital platforms for community-building, cultural preservation, and the promotion of public health, education and economic opportunity in Native Nations."

We agree and believe that broadband is the great equalizer for our people. It will allow native Hawaiians to leapfrog the digital divide that has historically held us back, enabling us to succeed in the 21st century and beyond. Success and self-sufficiency in today's environment means native Hawaiians must have access to broadband technology so they can fully participate in a capitalist society. Affordable broadband helps native Hawaiians to overcome their geographic isolation by providing access to healthcare, education, commerce, public safety, and social interaction. It also provides native Hawaiians with an unprecedented opportunity to further our cultural revitalization -- preserving, protecting, and promoting our culture for generations to come.

Unfortunately, the rule changes adopted in the FCC's Order have effectively created an environment where small RLEC's, like ours, serving Native Americans on tribal lands cannot participate and, therefore, will quickly face bankruptcy with the implementation of strict limits on support funds beginning July 1, 2012. And while facing the potential for bankruptcy is daunting as a businessman, what I fear most, as a native Hawaiian, is the possibility that I may be forced to tell the more than 6,400 native Hawaiians who have come to rely on my company for life-saving telephone service and life-changing broadband connectivity that we can help them no more. This is what really brings me here today, the concern that all the progress we have made and will continue to make as a people may be at risk. Ubiquitous broadband isn't just a buzz word anymore, reserved for policymakers and technology pundits, it is fast becoming a reality in urban America and I humbly ask for your support to ensure it becomes a reality in rural, tribal America as well -- where the need is greatest.

Technology has evolved, so the need has shifted from plain old telephone service to broadband access. However, what has not changed is the need is still greatest in America's rural/tribal areas. What has also not changed is the driving force behind the decision making in America's large carriers. While companies like AT&T and Verizon, may want to do the right thing and serve the rural/tribal areas, history has proven that when faced with a choice between social responsibility and economic interests, economic interests consistently prevail. If this were not the case, Congress would never have felt compelled to enact legislation that created the Universal Service Fund programs...the need would not have existed. The brutal reality is that after many years of waiting for the large national carriers to do the right thing and serve ALL Americans, Congress came to the stark realization that without government intervention, rural/tribal areas would be left behind. I fear Congress' visionary mandate is now in jeopardy and I fear that history is repeating itself. I believe that when the large national carriers are once again faced with decisions on what areas they will and will not serve, economic interests will far outweigh any sense of social responsibility to ensure all Americans have access to reliable and affordable telecommunications services. And our native people will suffer.

Furthermore, while Congress' clear mandate in the Telecommunications Act of 1996, has not changed, the FCC has changed its rules. These rule changes violate the Telecommunications Act of 1996, in that they do not provide Universal Service support funds that are "predictable and sufficient," as required by Section 254(b)(5). SIC has been operating and borrowing monies based on the support being "predictable and sufficient", as interpreted under the old rules. The new rules do not allow for the building of a robust communications platform on tribal lands to meet some critical longer term goals of Native peoples, including, public safety, healthcare, and education. Broadband holds the promise of resolving the many problems faced by Native peoples and providing our people with the opportunities to become contributing members of society. Needless to say, time is of the essence to stay the initial and calamitous effects of the Order as it relates to Native Americans.

So in the interest of providing constructive and meaningful feedback that can offer immediate relief, I respectfully provide an immediate solution to preventing the loss of critical telecommunications services Hawaiian homesteaders have come to rely on. An automatic approval of the FCC's waiver for tribal RLEC's, like SIC, with current obligations incurred following the FCC's old rules. Even changes to laws provide for grandfathering, recognizing that new laws are meant to be prospective, not punitive. In this situation, the FCC's rule changes are punishing our native Hawaiian customers, even though we followed the rules. In the true spirit of Universal Service, we borrowed millions of dollars to build-out infrastructure to the areas no one else would serve—to serve the customers no one else would serve. We did this after rigorous financial and technical planning and analysis, concluding that the FCC's rules, at the time, provided adequate recovery to ensure we could recover our costs and pay back our debt. We now cannot meet our current obligations and service to our customers is threatened, because the FCC changed their rules without a grandfather clause. The unintended consequence is that, without a grandfather clause, the FCC's new rules are punitive, not prospective. The immediate solution is to grant automatic waivers for tribal RLEC's with current obligations incurred following the FCC's old rules. We are not asking for a blank check in perpetuity. We are simply requesting that the FCC help ensure native Hawaiians continue to have access to reliable and affordable telecommunications services by allowing us to meet our current obligations, obtained lawfully and in full compliance with FCC's rules.

While this will address our immediate needs, we have an ongoing obligation to provide reliable and affordable telecommunications service to our indigenous people. So we must figure out how we'll be able to continue serving native America into the future. The FCC has created a Mobility Fund. However as it stands, despite tribal priorities outlined to give preference to tribally owned telecommunications

companies, our small rural telecoms will have a difficult time even participating. The auction process outlined by the FCC includes a requirement to obtain a letter of credit equal to the amount bid. For small rural telecoms, like ours, this is a nearly impossible proposition, as we would be required to maintain liquid assets equal to the amount guaranteed in the letter of credit. Furthermore, we must wait a full year to even participate in the Tribal Mobility Fund. And even if we could bid, what good will the wireless towers and infrastructure do without spectrum to reach our native customers?

Furthermore, tribal governments should be allowed to maintain authority over decisions that impact tribal areas. While the FCC's new rules include a tribal engagement obligation, tribal governments should be allowed to maintain their sovereignty, specifically as it relates to the Tribal Mobility Fund. Moreover, any large telco with vast resources could easily under bid a small RLEC and earn the right to serve tribal areas, despite their utter lack of experience serving rural and remote native nations and cultural understanding. Meeting the distinct challenges and unique needs of native peoples should be at the heart of any decision affecting tribal lands. For these reasons, tribal governments should have the ultimate decision-making authority with regard to the Tribal Mobility Fund, and specifically as it relates to what companies can best meet their tribal needs.

Indigenous Americans cannot sustain themselves on reservations and other Tribal land areas without a robust communications platform to help overcome the geographic isolation that frequently comes with these set-aside lands. Our company provides broadband communications services that in addition to promoting economic development, facilitate the long term economic needs of our native Hawaiian communities, provide growth of businesses and job creation on HHL. The Order will extinguish our ability to provide these services to our communities.

It may be helpful for this Committee to have additional background information regarding SIC's unique circumstances, which must be factored into any analysis of SIC's USF requirements.

SIC's Unique Geographic Service Area

If you draw a rectangle around the main Hawaiian Islands and immediate ocean area, you will encompass an area of 79,625 square miles, which is roughly the size of the state of Nebraska (77,354 sq miles). This is SIC's geographic service area. This territory has unique and historic antecedents that are relevant to SIC's service obligations.

In 1920, in an effort to redress the rapidly declining economic, social and health status of native Hawaiians, Congress placed 200,000 acres of federally-owned lands into a trust to be administered by the Hawaiian Homes Commission, a subdivision of the new territorial government. See Hawaiian Homes Commission Act, 42 Stat. 108 (1921). Hawaii law defines "native Hawaiian" as any descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778. See Hawaiian Homes Commission Act § 201(7). This land is now known as Hawaiian Home Lands. Upon Hawaii's admission to statehood in 1959, the United States Congress transferred responsibility for the 200,000 acre land trust to the State of Hawaii to continue the Hawaiian homesteading program, with federal oversight, requiring the new State to adopt the provisions of the HHCA into its constitution. See Act of Mar. 18, 1959 (Admission Act), Pub. L. No. 86-3, 73 Stat. 4 (providing for the admission of the State of Hawaii into the United States).

HHL is now made up of approximately 203,500 acres of land located on six of the eight main Hawaiian Islands and consists of more than 70 non-contiguous parcels. Located primarily in the most remote rural areas with few in urban areas, HHL properties are separated by both private and government owned properties and open-ocean.

Hawaii's "tribal lands" have unique geographic features that create difficulties for service providers: their remoteness, accessibility, geological makeup, archaeological and historical findings, environmental concerns, terrain conditions, lack of proximity to existing utility infrastructure and right of way availability; all such features play a significant role in creating higher costs for service providers such as SIC. Hawaii is an archipelago and coordination and collaboration between its own counties is more challenging than any other state as counties themselves are islands or groups of islands separated by miles of open-ocean.

SIC's Uniquely High Cost Considerations

Building infrastructure of any type in Hawaii is a time consuming and high cost activity; these burdens are greater still throughout HHL. The difficulty of doing business in Hawaii begins with its unique geographical situation. It is the only state that is not located on the North America continent and is also one of only two states that do not share a border with another state. These unique geographic factors create higher construction costs due to high labor rates, high material costs (all materials are imported), ocean freight costs (inter-state and inter-island transshipment of all materials), higher utility costs (electricity is more than three times the national average) and highest fuel costs compared to other states.

Obtaining permits in Hawaii is time consuming and costly; the process is especially difficult throughout SIC's unique service areas. Construction permitting is subject to very stringent federal and state regulatory processes that have been put in place to protect natural and historical resources. According to the Bishop Museum, Hawaii is the endangered species capitol of the world, with hundreds of species of plants and animals listed as endangered and more than 270 species extinct. Hawaii is also a very rich ground for archaeological preservation laws since native Hawaiians populated the entire state at one time. As an island state, the population and major roads are located within a few miles of the coastline. The proximity to the coastline adds another layer of regulatory laws not typically found in other states. The premium added to the average cost of construction in Hawaii, ranges from 30% to 100%, depending on the specific activity or material. For example, there is a 35% increase between the average continental United States cost of constructing a single concrete 10' x 18' shelter slab foundation (\$5,795) and the Hawaii cost (\$7,850). See Figure 1 (at the end of this testimony).

Today, Hawaii's population has grown to approximately 1.4 million people, and 20% of the population is Native Hawaiian. Approximately 9,800 families currently reside on HHL properties with another 25,000 waiting for the Department of Hawaiian Home Lands (DHHL) to deploy the basic infrastructure necessary for homesteaders to move in. Much like other indigenous people in the continental United States, Native Hawaiians are over-represented with respect to many negative socio-economic indicators – lack of education, low-income, single parent households, homelessness, prison populations and harmful health statistics. Historically low deployment and unique obstacles make cost a significant challenge requiring large financial support to deploy affordable broadband capable of delivering effective, or even minimal public safety and emergency communications services.

The Nature and History of Telecommunications Service in Hawaii

Historically, Hawaii has been served by numerous small telephone companies beginning in 1878, two years after Alexander Graham Bell's invention. Consolidation of telephone service began in 1884 on Oahu under the Mutual Telephone Company, four years before Hawaii was annexed by the United States. In 1918, the islands of Maui and Hawaii were consolidated under Mutual Telephone, with Kauai in 1928 and Molokai in 1931. Since that time Hawaii was served by a single monopoly telephone company. In 1954, Mutual Telephone Company changed its name to Hawaiian Telephone Company. Hawaiian Telephone Company was eventually purchased by GTE in 1976 and changed the company name to GTE

Hawaiian Telephone. In 2000, GTE merged into Verizon Communications resulting in another name change to Verizon Hawaii. Verizon sold the Hawaii wireline telephone operations in 2005 to an investment group headed by the Carlyle Group which renamed the company to Hawaiian Telecom and then later gave up its ownership interest allowing Hawaiian Telecom to emerge from bankruptcy (2008-09). During the relatively brief period of time in which SIC has been in business, three of the four facilities-based wireline telephone companies in Hawaii have gone either bankrupt or out of business (an RLEC-TelHawaii (1999), competitive local exchange carrier (CLEC)-GST Hawaii (2000), and the ILEC-Hawaiian Telecom (2008)).

SIC's Origins as a Telecom Carrier for native Hawaiians; Unique Service Obligations

The last fifteen years have been arguably the most dynamic period in the communications industry. Two major regulatory changes occurred with the Telecommunications Act of 1996 and the new Connect America Fund (FCC 11-161). Evolutionary technology changes became revolutionary with electrons giving way to light, copper to fiber, circuit switching to internet protocol, and wireline to wireless. Monopolies gave way to competition and competition now included new industries, cable and wireless. Performance measurements such as the "five nines (99.999%)" gave way to mobility and speed. Industry stalwarts, ATT, Bell Atlantic, Bell Labs, Nortel, etc., survived by changing or went bankrupt and were replaced by the likes of Verizon, Alcatel-Lucent and Cisco. Values of telecommunications companies experienced a meteoric rise and a precipitous plummet when the "bubble" burst. Total Universal Service Funds (USF) also rose with the market driven by new programs (health, schools and libraries, low income, competitive eligible telecommunications carrier (CETC)). However, without new contributors the contribution factor nearly tripled. When the market burst, the contributors sought relief. This is the period in which SIC began. In addition to the turmoil and uncertainty created by these changes, SIC also dealt with (i) an ILEC that has changed ownership three times and gone bankrupt, (ii) turmoil in the insurance and financial industries, and (iii) Hawaii's high cost of doing business and low population density. All of the above factors, along with a century old monopoly ILEC that had very little, if any, interest in serving those areas that were financially marginal, resulted in areas outside the Honolulu urban core, especially HHL, having demonstrably inferior communications infrastructure with no hope of improvement.

The FCC's National Broadband Plan identified a significant lack of broadband infrastructure serving tribal lands. The situation in Hawaii emulates these problems with 87% of HHL without any service infrastructure. The rural and remote nature of HHL properties means higher costs to construct any type of network facilities, with no means to recover these expenses. Carriers cannot make a business case to invest in communications infrastructure throughout virtually all areas of HHL, absent government financial support. The ILEC did not land its inter-island cable on the island of Molokai where 60% of the population is Native Hawaiian.

The ILEC was unwilling and unable to provide modern communications service to HHL at reasonable rates. GTE was aware of the Rural Utilities Service of the United States Department of Agriculture (RUS)-USF programs when it took over Hawaiian Telephone, and used the RUS program to fund its Micronesian Telephone Company subsidiary, but chose not to utilize these programs in Hawaii. In 1990, DHHL wanted to build 12 homes in Maku`u an area on the island of Hawaii. As was its practice, the ILEC, GTE Hawaiian Telephone, demanded payment for its facilities (\$1,000,000.00) plus land rights to locate a central office, merely to obtain party line service. Party line is not suitable for fax, direct-dial long distance or dial up internet access. It was not until the late 1990's that the Hawaii Public Utilities Commission (HPUC) ordered party line service in Hawaii eliminated. DHHL was unable to come up with the money and deferred building, denying native Hawaiians another opportunity for rehabilitation.

After no other carrier stepped forward to provide comprehensive communications services to HHL, as a native Hawaiian, HHCA beneficiary, I accepted the challenge to carry out Congress's mandates, as expressed in the HHCA and the Communications Act of 1934, for native Hawaiians living on HHL. Pursuant to "License Agreement No. 372" (License), an exclusive license was awarded by DHHL on May 9, 1995 to Waimana Enterprises, Inc. (Waimana). Waimana was granted an exclusive right and privilege to build, construct, repair, maintain and operate a broad band telecommunications network to serve all lands under the administration and jurisdiction of the DHHL. In May of 1996, that authorization was assigned in part to SIC, a wholly-owned subsidiary of Waimana, to satisfy the wireline voice requirements of the License.

Working closely with RUS, SIC designed a 20-year plan to bring universal service to all areas of HHL not currently being served. This plan was markedly different from the sort of universal communication service plan a typical RLEC would undertake. Bringing universal communication service to all unserved areas of HHL required a transport network that would include undersea cables as well as terrestrial cables connecting each HHL. Although the number of customers would be comparatively small, because of the lack of adequate existing transport, and the time needed to build transport, each island would need to have its own central office(s) and numerous remotes until adequate transport could be built. The lack of adequate transport from the ILEC (Hawaiian Telcom and its predecessors) and the high cost to build transport, especially on the neighbor islands, was extensively verified by the ILEC (Hawaiian Telcom) in its Waiver Application to obtain High Cost USF filed with the FCC on December 7, 2007.

Due to the magnitude and complexity of the plan, SIC sought and received RUS approval for its entire plan to bring universal service to all HHL areas. SIC did this primarily to mitigate the risk of not being able to complete its plan and to make sure everyone involved understood the plan's enormity and significance. As a lender, RUS approved the entire plan and loans after intense and comprehensive engineering, financial and legal review and based on FCC's then-current rules, providing adequate USF support to recover costs and repay the loans. Completion of the plan would be the best opportunity to be financially self-sustaining after the capital costs were paid for, while not completing the plan would necessitate continued financial support from the government. Ultimately, as the plan would be implemented, the architecture of the system would allow minimized operating costs through the retirement of most central offices and redundant loops reducing the need for people, equipment and inventory on each island to make costly emergency truck rolls to restore service until a permanent repair could be made.

This plan to ensure a universal level of communications service would be available to those who live and/or work on HHL and was unlike any undertaking by another RLEC. When measured in miles of network, scope of facilities, advanced technology that would be deployed, environmental and regulatory agencies needed to be coordinated to construct the facilities in one of the most high cost, sensitive environments in the United States and the hundreds of millions of dollars needed to be borrowed and managed to complete this project, this plan was one of the most complex and difficult.

Since the inception of the RUS-approved network construction plan, SIC has borrowed and/or invested more than \$400 million on telecommunications infrastructure to serve more than 2,400 access lines throughout Kauai, Oahu, Molokai, Maui, Lanai and Hawaii Island. SIC now provides homesteaders with access to local and long distance telephone service as well as high speed Internet access. To accomplish all of this, SIC had to: (i) install 504 miles of terrestrial and undersea fiber optic conduit consisting of nearly 26,000 miles of fiber strands connecting the isolated parcels and islands, (ii) construct 24 remote Digital Loop Carrier ("DLC") sites on six islands, (iii) build 12 Central Offices that house 12 switches

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and DLCs on five islands, and (iv) erect nine microwave towers with 12 dishes and seven radios on two different islands.

SIC has been reviewed and audited by independent auditors as well as various regulatory agencies. Each year RUS requires SIC to provide an independent auditor's report. Additionally, RUS, NECA and USAC have each audited SIC several times. None of the audits have found a reportable problem or have required SIC to change its organization or the way it is doing business.

Again, despite the dramatic changes to the industry itself, the regulatory rules governing the industry, and the significant increase in the size of the Universal Service Fund, Congress has not changed its mandate that all Americans are entitled to a universal level of communications service as expressed in the Communications Act of 1934 and reaffirmed in both the Telecommunications Act of 1996 and the FCC's recent Connect America Fund Order (FCC 11-61). Congress has also not changed its mandate that USF support shall be sufficient and predictable. The fact that SIC's plan met the law and rules at the time, was affirmed by RUS's approval of SIC's plan and by the FCC's granting SIC a study area waiver. The law has not changed, and SIC's plan and method of operation has not changed. The only change has been in the rules implementing the law. Absent a waiver to ensure preservation of existing service as provided for under the Connect America Fund Order (FCC 11-61), SIC cannot survive, this means the native Hawaiian customers who rely on our service will be left stranded.

SIC believes that equity and hardship and the harmful effects of the FCC's Order on native Hawaiians ability to receive reliable, affordable and consistent telecommunications service should compel the Committee to support SIC's recommendations for immediate relief -- automatic approval of the FCC's waiver for tribal RLEC's, like SIC, with current obligations incurred following the FCC's old rules. This relief is contemplated in the FCC's Order and provides the best immediate solution to prevent the loss of service to our native Hawaiian customers, while a long-term solution is developed.

Sandwich Isles Communications stands ready to work with the Federal Communications Commission and this Committee to achieve meaningful solutions for indigenous people in Hawaii and across the country.

Thank you for the opportunity to provide testimony.

Figure 1: EXAMPLE COST COMPARISON – HAWAII vs CONTINENTAL US

Supporting Cost Detail for the fact that all systems cost significantly more in Hawaii than US Mainland						
STRUCTURAL CONCRETE		QUANTITY	HAWAII		US NATIONAL AVG	
4000 PSI			UNIT COST	EXTENDED COST	UNIT COST	EXTENDED COST
35.03	PER CUBIC YARD	5.3 CY	\$ 244.00	\$ 1,293.20	\$ 116.00	\$ 614.80
FORMING						
65.2000	COST/SQ FT CONTACT AREA	352 SQ FT	\$ 16.30	\$ 5,737.60	\$ 12.40	\$ 4,364.80
STEEL REINFORCING WIRE						
6X6 W2.9XW2.9						
50.0400	PER HUNDRED SQUARE FEET	180 SQ FT	\$ 93.00	\$ 167.40	\$ 96.00	\$ 172.80
STEEL REINFORCING IN PLACE						
03.60.0900	PER TON	325 LBS	\$2,975.00	\$ 483.44	\$3,125.00	\$ 507.81
PLACING CONCRETE						
70.4600	PER CUBIC YARD	5.3 CY	\$ 19.60	\$ 103.88	\$ 16.05	\$ 85.07
MANUAL SCREED FINISH						
03.30.0010	PER SQUARE FOOT	180 SQ FT	\$ 0.36	\$ 64.80	\$ 0.29	\$ 52.20
				\$ 7,850.32	\$ 5,797.48	

