

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas	)	
	)	
CAF II Cost Model Version 3.2	)	DA 13-1846

**REPLY COMMENTS OF  
THE STATE OF HAWAII**

The State of Hawaii, by its attorneys and through its Department of Commerce and Consumer Affairs (“DCCA”), respectfully submits these reply comments in response to the Commission’s Public Notice (“Notice”) regarding the Connect America Fund Phase II Cost Model Version 3.2 (“CAM v3.2”).<sup>1</sup> Hawaii appreciates the Commission’s continued diligence at crafting a comprehensive cost model that takes into account the unique circumstances and operating conditions of non-contiguous areas such as Hawaii.

Hawaii writes to support the comments filed by Hawaiian Telecom, Inc. (“HTI”),<sup>2</sup> which highlight selected additional modifications necessary to ensure that the CAM accurately reflects

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<sup>1</sup> *Connect America Fund, Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas CAF II Cost Model Version 3.2, WC Docket No. 10-90*, Public Notice, DA 13-1846 (rel. Aug. 29, 2013) (“Notice”).

<sup>2</sup> Comments of Hawaiian Telcom, Inc., *Connect America Fund, Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas CAF II Cost Model Version 3.2*, WC Docket No. 10-90 (Sept. 12, 2013) (“HTI Comments”); Hawaiian Telcom, Inc. Ex Parte Letter, *Connect America Fund, Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas CAF II Cost Model Version 3.2*, WC Docket No. 10-90 (Sept. 11, 2013) (“HTI Ex Parte”).

the increased costs associated with deploying broadband in Hawaii, including construction in challenging volcanic terrain, the substantial undergrounding of telecommunication plant required due to tourism in the state, the substantial cost of shipping and storage of construction materials, and the necessity of extensive use of undersea cables, both between islands and to the mainland. Importantly, although these changes are necessary to fulfill the Bureau's mandate to take into account the unique characteristics of Hawaii, the State generally supports the CAM and urges the Commission to move forward expeditiously with finalizing and commencing support according to the CAM as soon as possible.

**I. THE COMMISSION SHOULD TAKE THIS OPPORTUNITY TO ENSURE THAT THE FUND FULLY ACCOUNTS FOR THE NEEDS AND CHALLENGES OF HAWAII AND AREAS LIKE IT**

The Commission has a statutory mandate to make available communications to *all* regions of our nation.<sup>3</sup> Pursuant to this statutory mandate, the Commission has inquired, time and again, in this proceeding and others, as to the “unique challenges” facing broadband deployment in rural, remote, insular, tribal, and non-contiguous areas.<sup>4</sup> Each of these areas faces similar challenges in the cost of constructing infrastructure, the ability to secure enough customers to make a business case, or both.

Hawaii has participated at length in the Commission's proceedings regarding various aspects of the universal service program, particularly those concerned with high cost areas. In its comments, the State has explained repeatedly that these areas comprise a significant portion of

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<sup>3</sup> See 47 U.S.C. § 151.

<sup>4</sup> See e.g. *Notice at 1; Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Ninth Broadband Progress Notice of Inquiry, FCC 12-91 ¶¶ 1 n.1, 39, 41 (rel. Aug. 21, 2012) (“*Ninth Broadband NOI*”).

Hawaii, which makes attaining universal service in the State at once critical and particularly challenging.<sup>5</sup>

Despite the Commission's declared interest in ensuring that the universal service program provides for the unique needs of these areas, however, Hawaii is concerned that the substantial record of need and recommendations by rural, remote, insular, and non-contiguous areas appears to be largely unsuccessful thus far in producing quantitative improvements in the universal service funding available to these areas.<sup>6</sup> For instance, the goal of the Mobility Fund was explicitly to "ensur[e] availability of mobile broadband networks in areas where a private-sector business case is lacking."<sup>7</sup> However, as Hawaii explained, the structure of the Mobility Fund Phase I and Phase II did not provide sufficient recurring support to create a business case in any unserved areas of Hawaii, as the Mobility Fund failed to draw any bidders in Hawaii.<sup>8</sup>

Likewise, the Remote Areas Fund is planned "to ensure that even Americans living in the most remote areas of the nation, where the cost of providing terrestrial broadband service is extremely high, can obtain service."<sup>9</sup> Hawaii believes that the Remote Areas Fund holds significant promise to do what other programs have thus far been unable to, which is to bring sufficient and sufficiently long-term support to those high cost areas of Hawaii that continue to

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<sup>5</sup> Comments of the State of Hawaii, *Connect America Fund, Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas*, WC Docket No. 10-90 (filed March 25, 2013) ("*Hawaii Non-Contiguous Areas Comments*").

<sup>6</sup> *Comments of HTI* at 1.

<sup>7</sup> *Connect America Fund et al., WC Docket No. 10-90, et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161*, ¶ 28 (2011) ("*USF/ICC Transformation Order*").

<sup>8</sup> Letter from Bruce A. Olcott, Counsel for The State of Hawaii, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90 et al., at 11 (December 5, 2012).

<sup>9</sup> *Wireline Competition Bureau Seeks Further Comment on Issues Regarding the Design of the Remote Areas Fund*, WC Docket No. 10-90, DA 13-69 (Jan. 17, 2013) (quoting *USF/ICC Transformation Order*, ¶¶ 533-534).

lag behind the rest of the nation in broadband deployment and adoption. Despite its promise, however, the RAF has yet to take shape, even as the CAF Phase II moves ahead.

Most importantly, Hawaii has noted a concerning trend in the Commission's consideration of how to address rural, remote, and non-contiguous areas. Proposals to "adjust"<sup>10</sup> or "modestly relax"<sup>11</sup> service obligations in remote and non-contiguous areas imply a mindset that such areas can or should be resigned to the chronic underinvestment that they have experienced to date. Hawaii strongly believes that the goal of universal service, and the Connect America Fund Phase II in particular, is best served by providing the support required to elevate these challenging areas to service levels commensurate with the rest of the country.

For this reason, Hawaii believes that the CAM is more than just a cost model. The design of the CAM represents an opportunity, perhaps the best and last opportunity for the foreseeable future, for the Commission to provide adequate and appropriate support to Hawaii and other areas that have demonstrated the particular challenges of broadband deployment in remote, insular, and non-contiguous areas. To ensure that 21<sup>st</sup> century broadband service is universally available, and to avoid formalizing existing discrepancies between contiguous and non-contiguous areas, DCCA urges the Commission to apply the suggestions of HTI and other commenters to produce a CAM that can truly fulfill the promise of the universal serve program for those areas that need it most.

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<sup>10</sup> *Connect America Fund, Phase II Support for Price Cap Carriers Serving Non-Contiguous Areas, WC Docket No. 10-90*, Public Notice, DA 13-162, ¶ 14 (rel. Feb. 8, 2013) ("*CAF Non-Contiguous Areas NOI*").

<sup>11</sup> *USF/ICC Transformation Order*, ¶ 47.

## II. THE CAM SHOULD BE MODIFIED TO ACCOUNT FOR INCREASED INFRASTRUCTURE CONSTRUCTION COSTS DUE TO HAWAII'S CHALLENGING TERRAIN

As an archipelago of volcanic islands with highly varying topography, the deployment and maintenance of broadband infrastructure on Hawaii can be dramatically more complicated, and more costly, than in comparably populated areas in the contiguous United States.<sup>12</sup> The CAM appropriately attempts to account for the additional costs in non-contiguous areas such as Hawaii. As HTI notes, however, the revisions in CAM v3.2 do not yet adequately capture the unique circumstances of Hawaii, and the Commission should implement the modifications described to better match the true costs of providing service in Hawaii.

First, the soil type for Hawaii should be set to hard rock. As HTI explains, this is literally true for much of the islands, which are covered in highly dense “blue rock” from recent lava flows.<sup>13</sup> It would also account for the greater expense resulting from Hawaii’s specialized equipment and techniques required to accommodate poorly grounded soil, the corrosive effects of ubiquitous salt air, and even live volcanic activity.<sup>14</sup> This change would best represent the true cost of deploying communications infrastructure in the state, and would be consistent with the Commission’s goal of modeling forward-looking costs in a granular, geographically specific manner.<sup>15</sup>

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<sup>12</sup> See, e.g., *Hawaii Non-Contiguous Areas Comment* at 2-3; Comments of the State of Hawaii, Ninth Broadband Progress Notice of Inquiry, WT Docket, GN Docket No. 12-228 at 2-3 (Sept. 20, 2012); Hawaii Broadband Strategic Plan - December 2012, Department of Commerce and Consumer Affairs at 71-73 (available at <http://hawaii.gov/dcca/broadband/arr-1/Hawaii%20Broadband%20Strategic%20Plan%20-%20Dec.%202012.pdf>).

<sup>13</sup> *HTI Comments* at 9.

<sup>14</sup> *Id.*

<sup>15</sup> See *USF/ICC Transformation Order*, ¶188.

Second, the CAM plant-mix values should be adjusted for Hawaii to reflect the substantially increased undergrounding required in the State. As HTI has explained, Hawaii’s tourism industry, the lifeblood of the local economy, requires that the State protect its natural beauty and geographic wonders for future generations.”<sup>16</sup> HTI provides Hawaii-specific plant-mix values, demonstrating that these requirements result in significant divergence between Hawaii’s plant-mix percentages and the national average. The CAM appropriately relies on national average plant mix percentages only where state-specific figures are unavailable.<sup>17</sup> The Commission should therefore incorporate the Hawaii plant mix figures provided by HTI to ensure that the CAM accounts for the increased cost of deployment in Hawaii.

### **III. THE CAM SHOULD BE MODIFIED TO ACCOUNT FOR THE INCREASED COST OF MATERIALS AND DATA TRANSPORT DUE TO HAWAII’S EXTREME GEOGRAPHIC ISOLATION**

In addition to the inherently increased costs of infrastructure construction on the challenging topography and geology of volcanic islands, Hawaii is “the most isolated population center on Earth.”<sup>18</sup> This extreme isolation of the state results in increased costs associated with transporting both materials and data to the islands. The CAM should include adjustments to account for these increased costs.

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<sup>16</sup> *HTI Comments* at 7.

<sup>17</sup> *Connect America Fund, High-Cost Universal Service Support, WC Docket Nos. 10-90, 05-337, Report & Order, DA 13-807, ¶64 (Apr. 22, 2013) (“CAM Framework Order”)*. The Commission has recently accepted plant mix values filed by Alaska for similar reasons. *Notice* at 2.

<sup>18</sup> *Guide to State and Local Census Geography 2010*, U.S. Census Bureau, available at [http://www.census.gov/geo/reference/pdfs/guidestloc/All\\_GSLCG.pdf](http://www.census.gov/geo/reference/pdfs/guidestloc/All_GSLCG.pdf).

Because HTI must import nearly all of its goods, including construction materials for communications infrastructure, the CAM understates the true cost of CAPEX in Hawaii.<sup>19</sup> In addition, the delay in transporting materials from the mainland forces HTI to maintain above-average inventories of critical materials to respond to damaged facilities in a timely manner.<sup>20</sup> These increased storage requirements result in higher OPEX as well. The CAM should therefore include an adjustment to reflect these higher costs.

Finally, Hawaii has higher than average costs for undersea cables, both between the mainland and Hawaii and within the islands of the State. Hawaii is pleased that the CAM v3.2 adds the important capability to model costs for undersea cables. As HTI explains, however, the adjustments still substantially underestimate HTI's costs. In particular, the cost for Internet peering in Hawaii is roughly 10 times higher than the CAM average mainland peering costs.<sup>21</sup> Similarly, the CAM incorporates other assumptions regarding the utilization percent and cost sharing of undersea cables that do not accurately reflect the true cost of undersea cables in Hawaii. The CAM should therefore incorporate the modifications recommended by HTI.<sup>22</sup>

#### **IV. CONCLUSION**

As the Commission appropriately acknowledges, the CAM must account for the unique circumstances and operating conditions of non-contiguous areas like Hawaii. The further modifications discussed above will ensure that the CAM most accurately reflects the true

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<sup>19</sup> *HTI Comments* at 9.

<sup>20</sup> *Id.*

<sup>21</sup> *HTI Ex Parte* at 4.

<sup>22</sup> *HTI Comments* at 2-6, *HTI Ex Parte* at 6.

operating costs of broadband deployment in the State. Hawaii therefore urges the Commission to incorporate these modifications and to proceed to a finalized CAM as soon as possible.

Respectfully submitted,

**THE STATE OF HAWAII**

By:  \_\_\_\_\_

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