PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

News Media Information 202 / 418-0513
Internet: http://www.fcc.gov
TTY: 1-888-835-5322

DA 13-1846

Released: August 29, 2013

WIRELINE COMPETITION BUREAU ANNOUNCES AVAILABILITY OF VERSION 3.2 OF THE CONNECT AMERICA FUND PHASE II COST MODEL, AND ILLUSTRATIVE RESULTS; SEEKS COMMENT ON SEVERAL MODIFICATIONS FOR NON-CONTIGUOUS AREAS

WC Docket No. 10-90

Comment Date: **September 12, 2013**
Reply Comment Date: **September 19, 2013**

Today, the Wireline Competition Bureau (Bureau) announces the availability of the next version of the Connect America Cost Model (CAM v3.2),[1] which includes certain adjustments to the CAM to reflect the unique circumstances and operating conditions in the non-contiguous areas of the United States.[2] We seek comment on these changes, specifically the addition of the capability to model costs for undersea cable connecting non-contiguous areas to the contiguous United States,[3]

[1] Including Version 3.2, the Bureau has now released eight versions of the model to date. *See Wireline Competition Bureau Announces Availability of Version One of the Connect America Fund Phase II Cost Model*, WC Docket Nos. 10-90, 05-337, Public Notice, 27 FCC Rcd 15356 (Wireline Comp. Bur. 2012); *Wireline Competition Bureau Announces Availability of Version Two of the Connect America Fund Phase II Cost Model*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 280 (Wireline Comp. Bur. 2013); *Wireline Competition Bureau Announces Availability of Version Three of the Connect America Fund Phase II Cost Model*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 2316 (Wireline Comp. Bur. 2013); *Wireline Competition Bureau Announces Availability of Version 3.1 of the Connect America Fund Phase II Cost Model*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 5707 (Wireline Comp. Bur. 2013); *Wireline Competition Bureau Announces Availability of Version 3.1.2 of the Connect America Fund Phase II Cost Model and Adds Additional Discussion Topics to Connect America Cost Model Virtual Workshop*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 7293 (Wireline Comp. Bur. 2013); *Wireline Competition Bureau Announces Availability of Version 3.1.3 of the Connect America Fund Phase II Cost Model*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 8339 (Wireline Comp. Bur. 2013); *Wireline Competition Bureau Announces Availability of Version 3.1.4 of the Connect America Fund Phase II Cost Model, Illustrative Results, and Updated Methodology Documentation*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 9049 (Wireline Comp. Bur. 2013) (*Version 3.1.4 Public Notice*).

[2] When delegating to the Bureau the task of developing a forward-looking cost model, the Commission "direct[ed] the [Bureau] to consider the unique circumstances of [Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands and Northern Marianas Islands] . . . ." *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17737, para. 193 (2011) (*USF/ICC Transformation Order*), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir. filed Dec. 8, 2011). *See Wireline Competition Bureau Seeks Comment on Connect America Phase II Support for Price Cap Areas Outside of the Contiguous United States*, WC Docket No. 10-90, Public Notice, 28 FCC Rcd 1030 (Wireline Comp. Bur. 2013) (*Non-Contiguous Areas PN*). For purposes of this Public Notice, we refer to these areas as "areas outside the contiguous United States," or "non-contiguous areas."

[3] Alaska Communications Systems Group, Inc. (ACS) and Puerto Rico Telephone Company, Inc. (PRTC) have argued that the CAM should include undersea cables that connect the non-contiguous areas to the

(continued…)

plant mix values submitted by Alaska Communications Systems Group, Inc. (ACS) for Alaska,[4] and using the default value of "1" for the regional cost adjustment for the U.S. Virgin Islands, which has the effect of increasing labor costs. The Bureau also seeks comment on using the plant mix values that were filed separately in a model previously filed by Puerto Rico Telephone Company, Inc. (PRTC) and plant mix values recently submitted by Virgin Islands Telephone Corporation d/b/a Innovative Telephone (Vitelco) in the next version of the CAM.[5]

Description of Changes in CAM v3.2. CAM v3.2 updates the prior version (CAM v3.1.4) in a number of respects, and we seek comment on several of the changes. First, this version adds code changes and a new Undersea tab in the Capital Expenditures (Capex) workbook that includes inputs for undersea cable and landing stations. These changes and inputs are used to calculate the investment and cost for undersea and landing station facilities that connect areas outside of the contiguous United States, including Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands and Northern Mariana Islands,[6] to the contiguous United States.[7] Second, this version includes plant mix values for Alaska that were recently filed by ACS.

In addition, this version makes a number of other changes. It adjusts the regional cost adjustment table to reflect that Zip 3 = 008, which had been previously coded for Puerto Rico, is in the U.S. Virgin Islands and sets the value of the cost adjustment for Zip 3 = 008 to 1.0 (i.e., no adjustment) in the absence of R.S. Means data regarding labor costs for the Virgin Islands. It includes minor modifications to some existing investment calculations to more accurately reflect

(Continued from previous page)
contiguous United States. *See* Letter from Richard Cameron, ACS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337 (filed July 9, 2013); Letter from Tom Navin, Counsel to PRTC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337 (filed Jan. 10, 2013) (PRTC January 10 Submission). We note that the adjustments in CAM v3.2 are somewhat different than the adjustments that ACS and PRTC proposed. For example, ACS argues that the total annual cost factor for the submarine cable should be higher than what is incorporated in v3.2, *see* Letter from Richard Cameron, ACS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337, at 23-24 (filed July 30, 2013) (ACS July 30 Letter), filed under *Connect America Fund; High-Cost Universal Service Support*, WC Docket Nos. 10-90 and 05-337, Second Protective Order, 27 FCC Rcd 1494 (Wireline Comp. Bur. 2012) (Second Protective Order), and PRTC argues that "[t]hese costs include the cost of the off-island transport and Internet peering provided via undersea cable from Puerto Rico to the Internet peering location in Florida." PRTC January 10 Submission at Attach. A, 7.

[4] *See* Letter from Karen Brinkmann, Counsel to ACS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337 (filed July 25, 2013) (ACS July 25 letter) (submitting proposed modifications to the CAM, including Alaska-specific plant mix), filed under *Connect America Fund*, WC Docket No. 10-90, Third Supplemental Protective Order, 27 FCC Rcd 15277 (Wireline Comp. Bur. 2012) (Third Supplemental Protective Order).

[5] *See* Letter from Tom Navin, Counsel to PRTC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337 (filed Jan. 18, 2013) (PRTC January 18 Submission), filed under Second Protective Order; Letter from Russell M. Blau, Counsel to Vitelco, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90, at Exh. A (filed Aug. 27, 2013) (Vitelco Aug. 27 Submission) (submitting plant mix values), filed under Third Supplemental Protective Order.

[6] The price cap carriers serving these areas are ACS, Hawaiian Telcom, Inc. (HTI), PRTC, Vitelco, and Micronesian Telecommunications Corporation (MTC), respectively.

[7] Further information on this change is available in section 9.2 of the methodology documentation.

network infrastructure.[8] Finally, it includes several updates to the documentation and makes additional clean-up changes to the Capex workbook. These changes are reflected in two solution sets that can be accessed by accessing CAM v3.2, and visiting the Posted Data Sets page.[9]

Issue for Comment: Submarine Cable. CAM v3.2 includes the capability to model costs for undersea cable to non-contiguous areas. CAM v3.2 also adds a new "Undersea" tab in the Capex workbook, which includes the inputs used to calculate the investment and cost for undersea cable and landing station facilities needed to transport traffic to and from landing stations in non-contiguous areas to landing stations in the contiguous United States.[10] To help parties understand and comment on the adjustments incorporated in v3.2, we explain the modeling assumptions below.

First, we seek comment on CAM v3.2's approach to connecting the non-contiguous areas to the contiguous United States. As shown in the appended maps, CAM v3.2 models undersea cables: from Alaska to Oregon and Washington; from the Northern Marianas to Guam and from Guam to Oregon; from Hawaii to California; from the U.S. Virgin Islands to Puerto Rico and from Puerto Rico to Florida; and from Puerto Rico to Florida. The specific endpoints of the undersea cables are marked on the maps.

The length or "footage" of these undersea cable connections is a key cost driver. We seek comment on the footage estimates in Table 1. Note that to ensure resiliency, the footage for each connection includes the additional footage needed for path redundancy. In addition, each spur connects independently to a tandem location within the contiguous United States.

Table 1: Undersea Cable Footage[11]

AREA	UNDERSEA CABLE FOOTAGE
Alaska	21,206,745
Hawaii	26,029,830
North Marianas Islands	61,602,894
Puerto Rico	11,258,578
U.S. Virgin Islands	12,072,945

[8] For example, the cost of a splitter was removed when only one location is served (lowering total investment), and aerial structure cost was modified to accurately include the cost of guys (increasing total investment). The net result of such changes is an increase of 1.6% in total investment.

[9] These solution sets can be found under the Model Outputs section of the Posted Data Sets tab: SSYYYYMMDDCAM32ACF8UndSeaCpx and SSYYYYMMDDCAM32ACF9UndSeaCpx solution sets under Model Outputs.

[10] In calculating the undersea cable costs, CAM assumes that the Internet gateway peering point is located at the nearest regional tandem or on the regional tandem ring in the state or territory. In CAM v3.2, the nearest Internet gateway peering point for non-contiguous areas is in the contiguous United States. Further information regarding how CAM v3.2 implements undersea cable is available in section 9.2 of the methodology documentation.

[11] The footage for the Northern Marianas Islands to Guam portion is 1,436,601 and the footage for the Guam to Oregon portion is 59,398,874.

We also seek comment on CAM v3.2's assumption that the cost of materials and labor per foot of undersea cable is $11.05. This cost per foot is based on publicly available information regarding AKORN, an undersea cable between Alaska and Oregon.[12] It is the same for each undersea cable because, unlike land-based connections where costs vary by the soil type in a given area, CAM v3.2 assumes that the costs for undersea cable do not vary based on the body of water in which the cable is located.

Next, we seek comment on CAM v3.2's methodology for modeling whether a carrier would construct such an undersea cable or instead lease capacity on an existing international undersea cable. This version of the model input assumes that the presence and capacity of international undersea cables are driven primarily by international traffic demand, not by the traffic of the local exchange carrier (LEC) in areas with landing stations. This version of the model inputs assumes that, if the demand from the modeled network would outstrip capacity on these existing international undersea systems, without concurrent increases in demand for bandwidth that passes through the location, then construction of a new system would be economically justifiable. If, however, the capacity required would amount to only a fraction of available capacity, CAM v3.2 assumes that a carrier would lease capacity on an existing cable.[13]

To make that determination, Bureau staff first looked at existing capacity. As seen in Table 2, below, most of the non-contiguous areas have international cable routes with landing stations on them, and most of the cable routes have additional capacity available.[14]

---

[12] *See* Network Survivability for Alaska: AKORN *available at* http://akorn.alaskacommunications.com/# (last visited Aug. 12, 2013).

[13] It is assumed that the cost of transport back to the contiguous United States would be the fraction of cost associated with the fraction of the cable being consumed by peak demand of the modeled network. This assumes that the price for a LEC to buy capacity on an existing cable would be comparable to the cost of providing that access plus a rate of return comparable to the one assumed in CAM. Given that each non-contiguous area with an international cable route is served by multiple cable systems, we believe that this is a reasonable assumption. To the extent commenters disagree with these assumptions and instead argue that rates are substantially higher, they should provide specific information on these rates to the Bureau, including the route and amount of capacity being purchased.

[14] *See* Submarine Cable Almanac, Issue 6, May 2013, Submarine Telecoms Forum, Inc., *available at* http://www.subtelforum.com/Almanac-Issue6.pdf.

Table 2: International Cable Route and Capacity Table[15]

AREA	CABLE ROUTE NAME	TOTAL CAPACITY (Tbps)	LIT CAPACITY (Gbps)
Alaska	N/A	N/A	N/A
Hawaii	AAG	2.88	700
Hawaii	Southern Cross	6	2,000
Hawaii	TPC-5	0.01	10
Northern Marianas Islands (Guam)	AAG	2.88	700
Northern Marianas Islands (Guam)	TGN-Pacific	7.68	5,120
Puerto Rico	America Movil-1	0.10	40
Puerto Rico	Americas-II	0.21	80
Puerto Rico	ARCOS-1	1.02	80
Puerto Rico	PCCS	80	100
Puerto Rico	Sam-1	1.92	310
U.S. Virgin Islands	Americas-I	0.32	120
U.S. Virgin Islands	Americas-II	0.21	80
U.S. Virgin Islands	MAC	0.07	70

Moreover, to evaluate whether capacity on these existing undersea cables will be sufficient to meet future demand during Connect America Phase II, the same busy hour offered load assumptions incorporated into CAM v3.2 were used to compare demand (i.e. required capacity) to supply (i.e. lit and total capacity of the international fiber routes with landing sites on each non-contiguous area).[16] The comparison of future demand to current lit capacity (of the highest capacity fiber in the area) may over-state the extent to which new undersea systems are required, while the comparison to total capacity (of the highest capacity fiber in the area) may understate costs in the near-term. Therefore, the comparisons were averaged.

Table 3, below, shows the comparisons of capacity to both the lit and total capacity of the largest single cable, as well as the average of those comparisons. We seek comment on this approach to evaluating capacity and on the calculations reflected in the table.

[15] We note that substantial new capacity is coming on-line in 2014 for the U.S. Virgin Islands (MAC) and Puerto Rico (PCCS and America Movil-1, which is owned and being built by PRTC's parent company, America Movil). CAM v3.2 includes these fibers for total capacity, but not for lit capacity. Alaska and the Northern Marianas Islands do not have international cable routes. The cables routes listed in Table 2 for the Northern Marianas Islands are international cables routes that connect Guam to California. *See* TGN-Pacific Submarine Cable System Overview, *available at* http://submarinenetworks.com/systems/trans-pacific/tgn-pacific/tgn-cable-system. The speeds indicated in Table 2 are for each wavelength, not for the total cable.

[16] CAM v3.2 calculates the demand for the modeled network assuming that all end users are simultaneously consuming the total busy-hour offered load. Accordingly, estimated demand is based on CAM locations * Take Rate * Bandwidth (CAM BHOL input). CAM v3.2 does not compare the demand to the total capacity *in that area*. If demand would exceed the total capacity *of a given cable*, it would be more reasonable and economically rational to build a new cable than to lease more than one cable's worth of capacity.

Table 3: Comparisons of Demand to Supply[17]

AREA	DEMAND (Gbps)	HIGHEST TOTAL CAPACITY (Tbps)	% DEMAND to TOTAL CAPACITY	HIGHEST LIT CAPACITY (Gbps)	% DEMAND to LIT CAPACITY	AVERAGE
Hawaii	213.6	6	3.956%	2,000	11.867%	7.91%
North Marianas Islands (Guam to Oregon)	7.7	7.68	0.111%	5,120	0.166%	0.14%
Puerto Rico[18]	587.9	80	0.816%	310	100%	50.00%
U.S. Virgin Islands (Puerto Rico to Florida)	20.0	80	0.028%	310	7.168%	3.60%

Finally, CAM v3.2 estimates the cost that carriers will face in securing transport to and from the contiguous United States by applying the averages listed in Table 3 to the CAM-calculated cost of the total route. Because the Alaska route and the Northern Marianas to Guam portion of the Northern Marianas route are not shared with any international traffic, CAM v3.2 includes 50 percent of the costs of connecting Alaska to Oregon and Washington, the Northern Marianas to Guam,[19] and the U.S. Virgin Islands to Puerto Rico, which is the default middle mile allocation in CAM v3.2.[20] Table 4, below, shows the resulting cost per location per month. We seek comment on these averages and/or allocations and whether the resulting monthly cost per location is a reasonable estimate.

[17] CAM v3.2 multiplies electronic equipment capacities by 90% to account for typical engineering fill factors. Therefore, the percent demand to highest total capacity is based on (Est. Demand/(Highest Total Capacity*1000*90%)). Similarly, the percent demand to highest lit capacity is based on (Est. Demand/(Highest Lit Capacity *90%)). Because the Alaska route is not shared with traffic from any other countries, it is not reflected in this table.

[18] This version of the model input assumes that lit capacity is capped at 100 percent. Because there is unlit capacity available or coming on line, it would not be economically reasonable to build two or more new cables. Similarly, this version of the model input assumes that average capacity is capped at 50%; this implies that the modeled network includes half the cost of undersea cable, the same fraction assumed for all middle mile or inter-office facilities.

[19] If there were a direct cable from the contiguous United States to the Northern Marianas Islands, that would raise the cost per location in Northern Marianas such that all locations would fall above the extremely high cost threshold, and therefore receive no Connect America Phase II funding.

[20] CAM assumes that the other 50% of costs are allocated to special access and private line services, and supported by revenues from those services.

Table 4: Monthly Cost Per Location

AREA	INVESTMENT FOR THE ROUTE[21]	MONTHLY COST PER LOCATION[22]
Alaska	$85.6 million	$5.40
Hawaii	$24.4 million	$0.65
North Marianas Islands	$18.9 million	$15.44
Puerto Rico	$72.9 million	$0.72
U.S. Virgin Islands	$20.0 million	$6.34

Issue for Comment: Plant Mix. As noted above, CAM v3.2 includes in the Plant Mix input collection table the Alaska-specific plant mix values recently proposed by ACS.[23] These values are reproduced in Table 5, below.

Table 5: ACS Proposed Plant Mix Values[24]

		Distribution			**Feeder**			**IOF**		
State	**Density**	**Aerial**	**Buried**	**Underground**	**Aerial**	**Buried**	**Underground**	**Aerial**	**Buried**	**Underground**
AK	Rural	25.0%	61.0%	14.0%	25.0%	61.0%	14.0%	28.0%	58.0%	14.0%
AK	Suburban	23.8%	48.5%	27.7%	23.8%	48.5%	27.7%	24.0%	55.0%	21.0%
AK	Urban	20.0%	40.0%	40.0%	20.0%	40.0%	40.0%	15.0%	50.0%	35.0%

[21] The investment for the route is the investment attributable to the carrier whose costs are being calculated. The total investment for each route will be higher, reflecting costs not attributable to that carrier, including costs allocated to international routes and to any rate-of-return locations in that area.

[22] The monthly cost per location is estimated by taking the fraction of total investment due to undersea cable and multiplying that by the average monthly costs that scale with investment: depreciation (capital recovery), cost of money, tax, network operations opex and G&A (*i.e.*, excluding customer operations and marketing, and subtracting out bad debt from G&A).

[23] *See* ACS July 25 letter.

[24] The ACS filed plant mix values for suburban distribution and suburban feeder as filed did not total 100% (total of aerial, buried and underground plant mix values for distribution and feeder equaled 101 percent). The values shown in the table reflect a staff adjustment to force the filed values to equal 100%. Staff multiplied each of the values by 100/101 to reflect the same relationship and make the sum of aerial, buried and underground equal 100%.

ACS also submitted its current plant mix values which are reproduced in Table 6, below.

Table 6: ACS Current Plant Mix Values[25]

Plant Mix: All			
Density	**Aerial**	**Buried**	**Underground**
Rural	27%	63%	10%
Suburban	32%	64%	4%
Urban	33%	43%	24%
Plant Mix: Copper			
Density	**Aerial**	**Buried**	**Underground**
Rural	28%	68%	4%
Suburban	33%	64%	3%
Urban	35%	47%	19%
Plant Mix: Fiber			
Density	**Aerial**	**Buried**	**Underground**
Rural	19%	19%	61%
Suburban	16%	62%	22%
Urban	23%	21%	56%

The current plant mix submitted by ACS differs from what ACS proposes should be used in the CAM. For the other carriers, CAM v3.2 uses carrier-supplied plant mix values that reflect their current plant mix. We seek comment on whether to make any adjustments to the Alaska-specific plant mix values contained in CAM v3.2, in light of ACS's current plant mix.

We also seek comment on whether we should incorporate into the next version of the CAM the plant mix values for Puerto Rico that PRTC previously submitted in conjunction with its proposal for a standalone model and the plant mix values recently submitted by Vitelco.[26]

Issue for Comment: Cost Adjustment for the U.S. Virgin Islands. Because the source that CAM relies on for regional cost adjustments for the rest of the United States does not include values for the U.S. Virgin Islands, CAM v3.2 sets the value of the cost adjustment for Zip 3 = 008 to 1.0 (i.e., no adjustment). We seek comment on using this value for the U.S. Virgin Islands.

Other Proposals. We note that ACS has proposed additional modifications to the CAM that it contends would more appropriately reflect the costs of serving Alaska.[27] We are continuing to evaluate those proposals.

If parties, including carriers serving other non-contiguous areas, have other proposals or data that they wish to file concerning the treatment of non-contiguous areas in the CAM, such

[25] The ACS July 30, 2013 filed values for urban copper and fiber rural do not total 100%.

[26] *See* PRTC January 18 Submission; Vitelco Aug. 27 Submission.

[27] *See* ACS July 30 Letter (proposals to modify soil type and company size, and increase baseline capex); Letter from Karen Brinkmann, Counsel to ACS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 and 05-337 (filed Aug. 24, 2013) (proposing alternative threshold for Alaska).

information should be filed by the reply comment deadline specified on the first page of this Public Notice. All submissions should be in a form that can be readily incorporated into the CAM.[28]

Access to CAM v3.2. To access CAM v3.2, parties should follow the same procedures announced for previous versions. In particular, parties may access CAM v3.2 at http://www.fcc.gov/encyclopedia/caf-phase-ii-models or https://cacm.usac.org.[29] Additionally, authorized users who have signed the attachments to the protective order will have access to a system evaluator package that provides a test environment populated with a sample database, allowing users to view database structures, observe the processing steps of CAM for a subset of the country, and see changes in the database.

Updated Documentation. In conjunction with the release of CAM v3.2, the Bureau also announces the availability of updated methodology documentation for CAM v3.2, to assist the public in understanding the current model architecture, processing steps, and data sources.[30] The methodology documentation is available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-323071A1.pdf.

Illustrative Results. The Bureau also is releasing illustrative model outputs from running CAM v3.2 using different combinations of possible model inputs and support assumptions. To demonstrate a range of potential outcomes, we are providing illustrative model outputs with funding thresholds of $49.15, $52, and $55.40.[31] The reports show potential support amounts and number of supported locations, by carrier, by study area, and by state, using the default input values in CAM v3.2. The reports are available at http://www.fcc.gov/encyclopedia/connect-america-cost-model-

---

[28] Parties should contact Bureau staff indicated at the end of this Public Notice if they wish to file any information confidentially, in order to discuss how to submit that information in a way that can be incorporated into the next version of the CAM.

[29] In order to access any version of the model, parties must execute the relevant acknowledgement of confidentiality, licensing, and nondisclosure documents released as attachments to the Third Supplemental Protective Order.

[30] The methodology documentation has been, and will continue to be, revised to reflect any changes made in the CAM. This documentation replaces the version 3.1.4 methodology documentation that was previously posted. *See Version 3.1.4 Public Notice*.

[31] The Bureau sought comment in the virtual workshop on setting the appropriate thresholds that will determine which census blocks lacking an unsubsidized competitor are funded. *See* "Support Thresholds," *WCB Cost Model Virtual Workshop 2012*, http://www.fcc.gov/blog/wcb-cost-model-virtual-workshop-2012-support-thresholds (last visited June 24, 2013). The illustrative funding threshold of $52 in CAM v3.2 was selected to be consistent with the default assumptions in that version of the model regarding take rate (80 percent) and assumed average revenue per user ($65). The illustrative funding threshold of $49.15 is the figure that would result if one uses an 8 percent rate of return, and the extremely high-cost threshold were to be set at a level so that the number of locations above this threshold do not exceed one percent of all locations, consistent with the expectation of the Commission that no more than one percent of all locations would be addressed by the Remote Areas Fund. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17837-38, para. 533. The illustrative funding threshold of $55.40 is the figure that would result if one uses a 9 percent rate of return, and the extremely high-cost threshold were to be set at a level so that the number of locations above this threshold do not exceed one percent of all locations. If one were to use a 9 percent rate of return, and a $52 funding threshold, that would result in more than one percent of all locations above the funding threshold.

illustrative-results. Because the Bureau has not yet finalized and adopted a cost model,[32] the illustrative results that we are releasing are not final support amounts.

PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Act Analysis

The *Non-Contiguous Areas PN* included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. § 603, exploring the possible significant economic impact on small entities of the policies and rules proposed therein.[33] We invite parties to file comments on the IRFA in light of this additional Public Notice.

B. Paperwork Reduction Act

This document does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4).

C. Filing Requirements

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments are to reference **WC Docket No. 10-90 and DA 13-1846,** and may be filed by paper or by using the Commission's Electronic Comment Filing System (ECFS).[34]

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.

- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

    - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of <u>before</u> entering the building.

---

[32] The Bureau released an order adopting key engineering assumptions for the CAM earlier this year. *See Connect America Fund; High-Cost Universal Service Support*, WC Docket Nos. 10-90, 05-337, Report and Order, 28 FCC Rcd 5301 (Wireline Comp. Bur. 2013). It has not selected input values.

[33] *See Non-Contiguous Areas PN*, 28 FCC Rcd at 1038-46, App.

[34] *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

In addition, we request that one copy of each pleading be sent to each of the following:

(1) Dania Ayoubi, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 6-A322, Washington, DC 20554; e-mail: Dania.Ayoubi@fcc.gov;

(2) Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 5-A452, Washington, DC 20554; e-mail: Charles.Tyler@fcc.gov.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

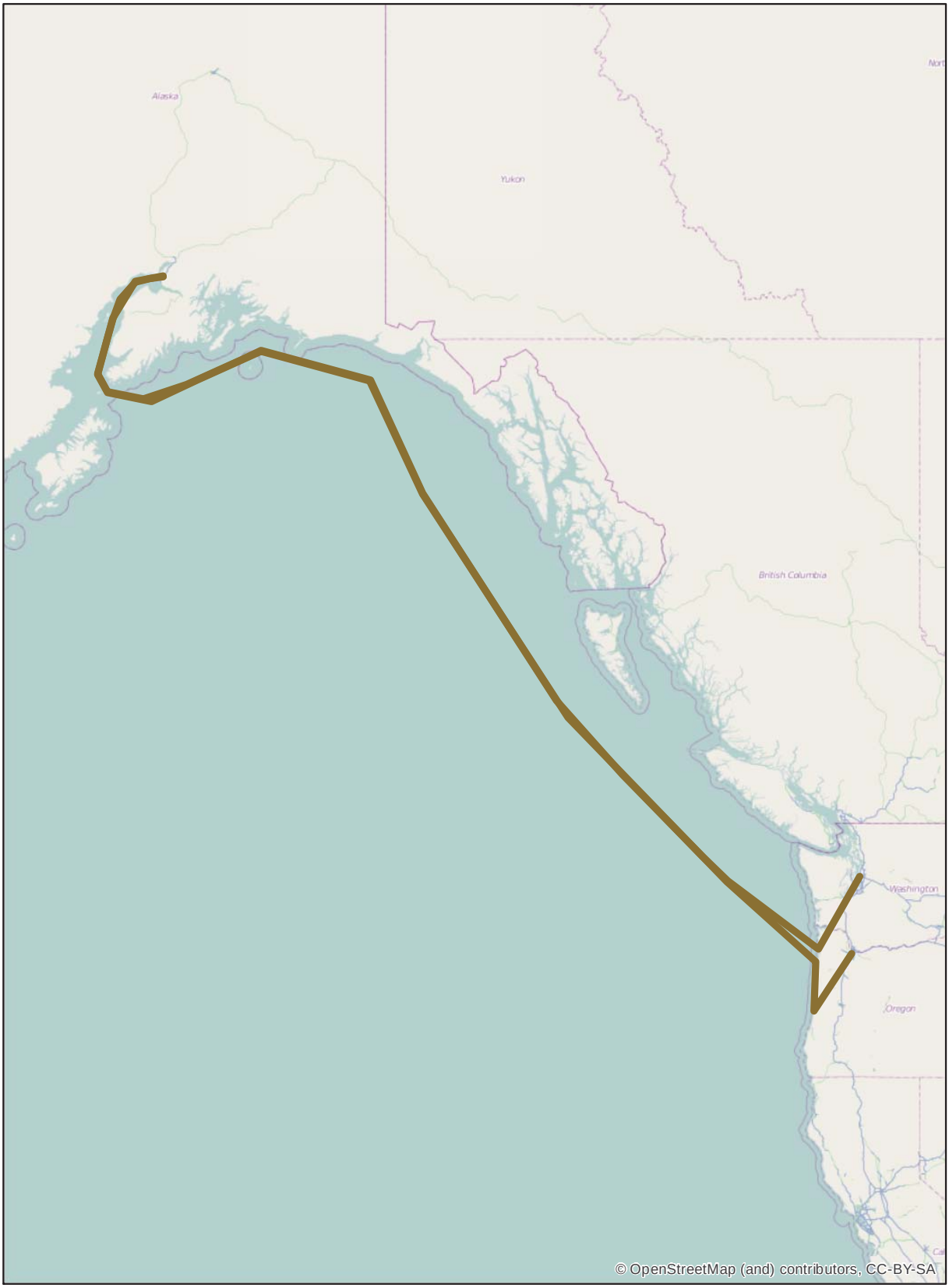
The proceeding this Notice initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[35] Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

For additional information on this proceeding, contact Katie King (Katie.King@fcc.gov) or Dania Ayoubi (Dania.Ayoubi@fcc.gov) of the Wireline Competition Bureau, Telecommunications Access Policy Division, (202) 418-7400.

- FCC -

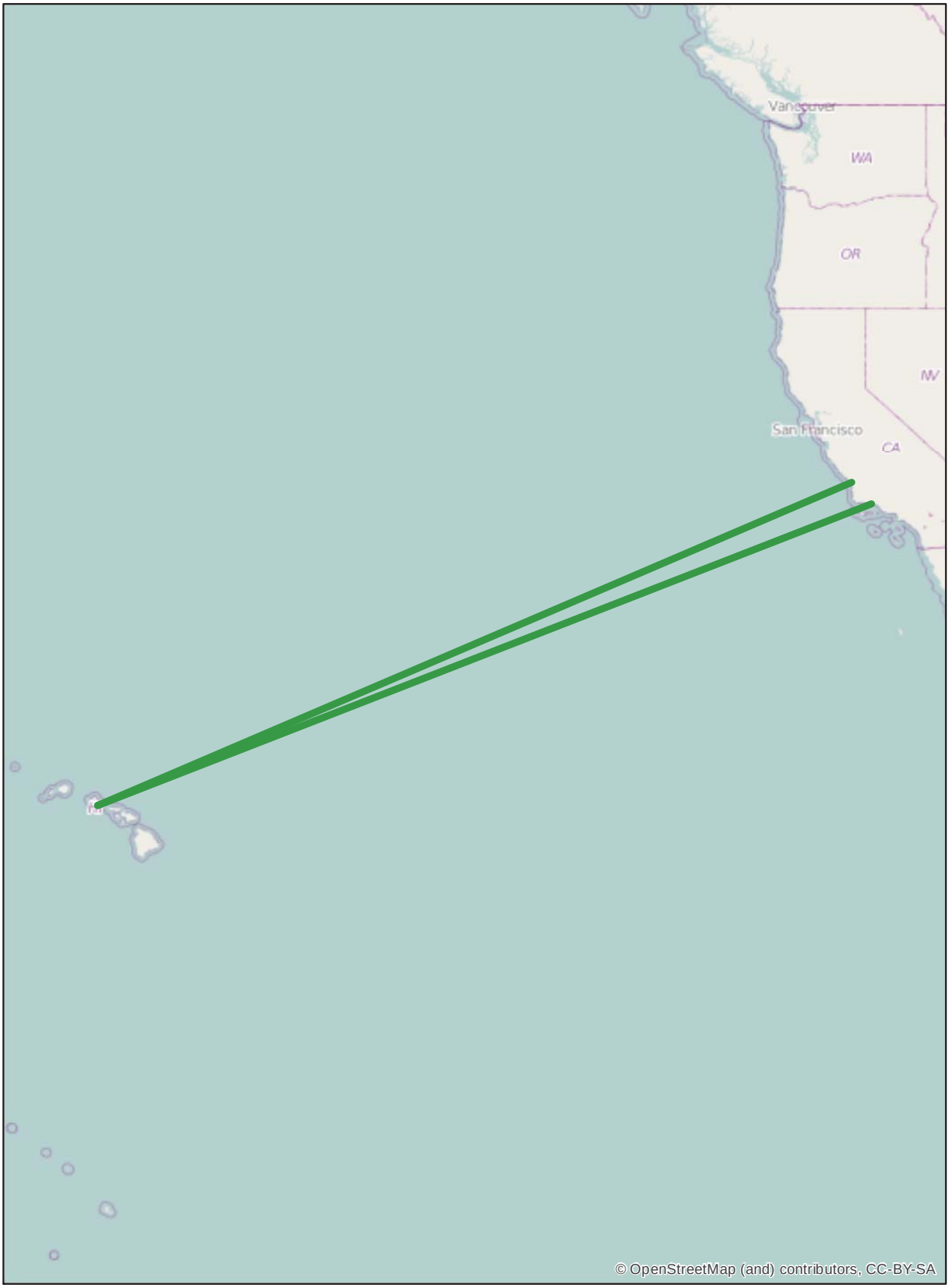
[35] 47 C.F.R. §§ 1.1200 *et seq.*

ACS Undersea Route

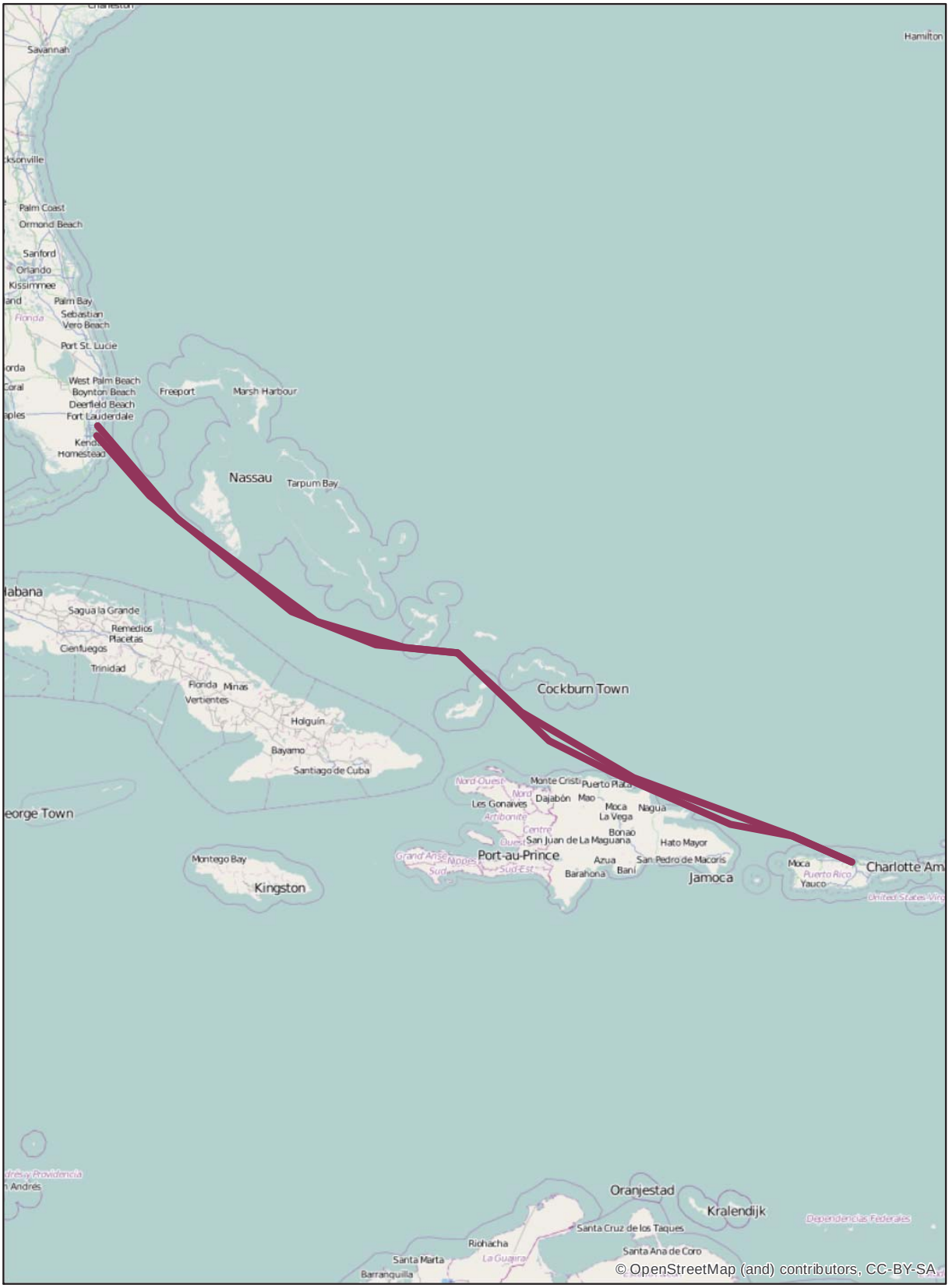
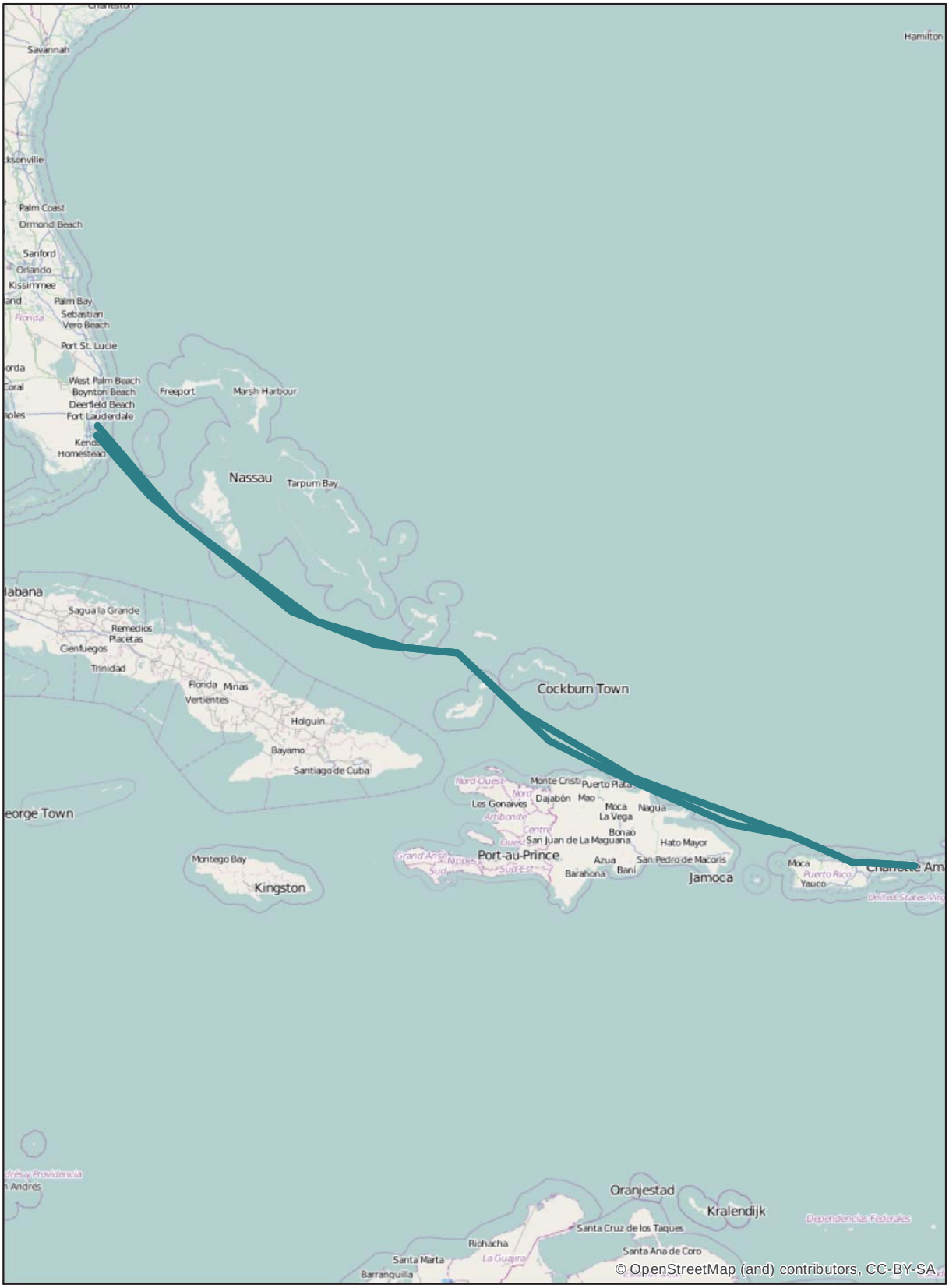


FSMTC Undersea Route

HTC Undersea Route



PRTC Undersea Route



VIT Undersea Route