

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



At a recent Winter NARUC meeting, CostQuest Associates (CQA) agreed to provide access to the adopted FCC Price Cap CACM model for use in state Universal Service proceedings.

To provide a distinction between the adopted FCC Price Cap Connect America Model (CACM or CAM) and these State level results, we are naming this product offering SBCM.

This document describes different mechanisms to gain access to SBCM or its outputs. It also describes access to SBCM results as well as additional services which can be provided to assist Users in multi-party proceedings who wish to use SBCM.

### What is SBCM?

SBCM mirrors the FCC's adopted CACM/CAM. Results can be run using either the FCC default input collection or modified inputs of the User's choice.

The modeled network is a Fiber to the Premise, GPON, cVoIP network. Additional information on the modeled network is available in the published Methodology, <http://www.fcc.gov/document/connect-america-cost-model-methodology>.

Customization of the platform such as new Service Area boundaries or new Network Designs (Fiber to the DSLAM, 12kft) can be performed, but they are not included in the listed prices. For additional information regarding customization, please contact CQA.

### Access Methods

SBCM and its outputs are licensed exclusively for use in state Universal Service (USF) proceedings which have been registered with CQA.

SBCM is licensed through two mechanisms. The first mechanism is online access ("Online") to the model which includes the ability to load inputs, process solution sets, generate support model detail reports, and generate census block group level modeled cost and investment output.

The second mechanism is outputs only ("Outputs"). In this second case, a tabular snapshot of results based on the adopted FCC CACM/CAM inputs is provided at the census block group (CBG) level and includes subscriber counts along with modeled cost and investment. For an additional fee for each new snapshot, custom inputs (such as a capex or CapCost workbook) can be run and corresponding output generated.

### Online Access Standard Inputs / Outputs

- All current CACM reports will be available within SBCM.
- Support Model detail reports will be available at Census Block Group level.
- With Online access, Users can run support, audit and system parameter reports via a web interface.
- Standard, public domain input collections will be available for download.

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



### Online Access Fees and Use

Interested parties can license Online access and output annually for \$5,000 per state for the Service Areas owned by a particular company. If the Service Areas owned by a particular company has less than 50,000 demand points in a state, the license and access fee will be \$2,000 annually per state for the Service Areas owned by a particular company. Under this license, SBCM output can be provided to State Regulators for use in named state USF proceedings which have been registered with CQA.

For State Agencies, the agency can obtain a license to all Service Areas in the state for internal use only for \$2,500 per year. Access and output may not be shared with outside parties or used in a state USF proceeding.

If a group of carriers or a State Agency wish to license Online access and output for a state USF proceeding, the fees would be \$30,000 annually per state. Use and output will be restricted to the state USF proceeding and to only those parties that sign and return the appropriate agreements. With this level of access, all parties, including the presiding State Agency and agents of the State Agency, intervenors, and all carriers in the stated proceeding will be granted Online access without additional fee upon signing the appropriate agreements. In addition, inputs and outputs can be managed and shared among the proceeding users. Derivative<sup>1</sup> output for a registered proceeding can only be shared as part of the registered proceeding with non-licensed individuals so long as that output is not a simple summary of the licensed model outputs and is summarized at a level at or above a company or study area level. A specific example of an appropriate derivative use within the proceeding would be taking the SBCM outputs and providing a table of supported locations and total support by company or by Study Area Code to distribute to others involved in the proceeding.

The following table provides an overview of the various Online Access methods.

Online Access and Outputs Licensing Service Level	State Agency	Access Only	Access and Proceeding / Hearing Management
<b>Online Access</b>	Available July 2014	Available July 2014	tbd
<b>Root FCC Version</b>	Latest public version	Latest public version	Can be controlled by agreement
<b>Inputs</b>	Latest version of adopted FCC Price Cap CACM model. Users can load new inputs as needed. Inputs are private to that User.	Latest version of adopted FCC Price Cap CACM model. Users can load new inputs as needed. Inputs are private to that User.	Will provide repository for hearing input management. Users can load their inputs privately and publish to others within hearing.
<b>Input Sharing</b>	All inputs are private to User.	All inputs are private to User.	Inputs can be shared to other users and organizations sharing access. Sharing inputs is performed by CostQuest via support ticket.

<sup>1</sup> In this case the derivative is assumed to be a support model wherein only Census Block Groups with average cost greater than or equal to the FCC benchmark (currently \$52.50) are displayed in the public disclosure. Should the support benchmark be less than \$52.50, please contact CostQuest prior to publication.

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



Online Access and Outputs Licensing Service Level	State Agency	Access Only	Access and Proceeding / Hearing Management
<b>Solution Set Sharing</b>	All solution sets are private to User.	All solution sets are private to User.	Solution sets can be shared to other Users and organizations sharing access. Sharing solution sets is performed by CostQuest via support ticket.
<b>Tabular outputs</b>	As generated by User	As generated by User	As generated by User
<b>Output licensing</b>	Internal Use only; no derivative output rights are granted.	Use of output in registered docket; derivative output rights are granted.	Use only in registered docket; derivative output rights are granted.
<b>Geographic Availability</b>	All Service Areas in Licensed State	Named company Service Areas in Licensed State	Licensed State
<b>Storage Limit</b>		20 Gb / Organization, retained for 60 days and then processed solution set dropped	20 Gb/ Organization
<b>Yearly Organizational License Fee</b>		\$2000 per Organization for named company Service Area when number demand points (Node4WorkingCust) in Service Areas in Licensed State < 50,000. Otherwise, \$5000 per Organization	As negotiated, licensing fees not to exceed \$30,000 for all Organizations in / state.  Additional fees may be necessary depending upon the level of support needed and complexity of deliverable management requirement
<b>Support</b>	Level 1 support only. Level 2 support billed on an hourly basis.	Level 1 support only. Level 2 support billed on an hourly basis.	Level 1 support only. Level 2 support billed on an hourly basis.
<b>License Restrictions</b>	Internal use only.	Platform can be used in registered proceedings	Platform can be used for specified proceeding and results can be filed in registered proceedings
<b>Term of Use</b>	Consistent with licensing agreement.	Consistent with licensing agreement. Direct tabular model outputs may be used for 2 years from license effective date.	Consistent with licensing agreement. Direct tabular model outputs may be used for 2 years from license effective date.
<b>Yearly Regulator License Fee</b>	\$2500 / State Agency Organization / State	Not applicable. A state regulator can only view output filed in a	Included

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



Online Access and Outputs Licensing Service Level	State Agency	Access Only	Access and Proceeding / Hearing Management
		regulatory proceeding by User	
<b>Intervenor</b>		Not applicable. An intervenor can only view output filed in a regulatory proceeding by User	Included

### Definitions:

- A State (or Licensed State) is defined as a collection of Service Areas which share a common 5 and 6th character of the Service Area Code. (CHYNWYMA and LARMWYMA are both Wyoming). Service Areas are defined consistent with the adopted FCC Model.
- A State Agency is a Governmental agency of a State, such as a Public Service Commission. It does not include non-Governmental organizations, public private partnerships, Colleges, Universities, think-tanks and consultants to any of the above.
- Company Service Areas in Licensed State refers to those Service Areas which are operated by a particular Local Exchange Carrier per the adopted FCC Price Cap CACM model. Service Areas modeled are based upon GeoResults 4Q2012 Service Area boundaries.
- A User is a licensed User of the system. A User is identified by a unique email address. There may be one or more Users in each Organization.
- An Organization is a common collection of Users covered by one organizational payment agreement. For example all Users at the Public Service Commission of Wisconsin are members of the Public Service Commission of Wisconsin, Organization.
- Prior to receiving access all Organizations will need to have a payment agreement in place with CQA. In addition, all system Users must sign return the appropriate agreements.
- CQA requires a valid PO or other billing mechanism to cover any Level 2 support fees. Level 2 support will be billed at \$250 per hour (rate may be adjusted annually by no more than 5%); if CQA anticipates a support request taking more than 4 hours, a request for approval will be sent to requesting User.
- Fees will be billed upon yearly anniversary of agreement unless otherwise terminated in writing.

### Online Access Users and Storage

- An Organization will be created for each collection of users under a common set of agreements.
- Organizations receive 20 Gb in storage.
- After 60 days, solution sets will be removed automatically (they can be recreated but they would need to be reprocessed) unless the solution set is part of a proceeding.

### Outputs Only Fees and Use

Outputs only users are licensed on a per proceeding basis. The intent of this mechanism is to allow licensees to have access to and use a one-time snapshot of results based on the adopted FCC CACM/CAM inputs, provided at the census block group (CBG) level that includes subscriber counts along with modeled cost and investment. For an additional fee for each new snapshot, custom inputs (such as a capex or CapCost workbook) can be run and corresponding output generated. The use case in mind is using FCC adopted processing and modeling assumptions but State specific Capital Costs or sharing values and the users own support calculator. All Users who interact with the CQA provided outputs

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USE



must sign licensing agreements. Derivative<sup>2</sup> output for a registered proceeding can only be shared as part of the registered proceeding with non-licensed individuals so long as that output is not a simple summary of the licensed model outputs and is summarized at a level at or above a company or study area level. A specific example of an appropriate derivative use within the proceeding would be taking the SBCM outputs and providing a table of supported locations and total support by company or by Study Area Code to distribute to others involved in the proceeding.

<b>Outputs Only Licensing Service Level</b>	<b>Licensed User</b>
<b>Online Access</b>	Not applicable, tabular output generated when requested
<b>Root FCC Version</b>	Latest public version
<b>Inputs</b>	Latest version of adopted FCC Price Cap CACM model. If users provide a custom input workbook, outputs specific to that workbook will be generated for an additional fee.
<b>Input Sharing</b>	Not applicable
<b>Solution Set Sharing</b>	Not applicable
<b>Tabular outputs</b>	CBG Report format below
<b>Output licensing</b>	CBG Report available to all licensed users in the registered state proceeding.
<b>Geographic Availability</b>	All Service Areas in Licensed State
<b>Storage Limit</b>	Not applicable
<b>License Fee</b>	\$15,000 per State, for baseline file. Once the baseline file is delivered, custom input workbooks can be run to create custom output files for an additional \$5000/file.
<b>Support</b>	Level 1 support provided as part of license fee. Level 2 support billed on an hourly basis.
<b>License Restrictions</b>	Use of CBG report is available to licensed users in registered state proceeding. Derivatives of CBG report (not simple summaries) may be presented to non-licensed users as described above.
<b>Term of Use</b>	Consistent with licensing agreement. Direct tabular model outputs may be used for 2 years from license effective date.

### Outputs Only Report Format

Field	Type	Definition	Can be made public at SAC Level or Above
<b>CBG</b>	Group By	Census 2010 Census Block Group	No
<b>ServiceArea</b>	Group By	GeoResults Service Area code	No

<sup>2</sup> In this case the derivative is assumed to be a support model wherein only Census Block Groups with average cost greater than or equal to the FCC benchmark (currently \$52.50) are displayed in the public disclosure. Should the support benchmark be less than \$52.50, please contact CostQuest prior to publication.

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



<b>SAC</b>	Group By	Study Area Code	Yes
<b>ShortName</b>	Group By	Abbreviation for company (LEC)	Yes
<b>Name</b>	Group By	Company Name	Yes
<b>CableServed</b>	Group By	A flag indicating if this CBG (or portion) is Cable served as defined by FCC.	Yes
<b>TelcoServed</b>	Group By	A flag indicating if this CBG (or portion) is Telco served as defined by FCC.	Yes
<b>FixedWirelessServed</b>	Group By	A flag indicating if this CBG (or portion) is Fixed Wireless served as defined by FCC.	Yes
<b>RoRorPC</b>	Group By	A category indicating if the Named company is subject to Rate-of-Return or Price Cap regulation	Yes
<b>TotalActiveSubscribers</b>	Sum	Number of locations passed by modeled network.	Yes
<b>TotalActiveSubscribers_Res</b>	Sum	Number of residential locations passed by modeled network.	No
<b>TotalActiveSubscribers_Bus</b>	Sum	Number of business locations passed by modeled network.	No
<b>MonthlyNetOpsOpex</b>	Sum	Monthly Opex related to network operations.	No
<b>MonthlyCustOpsMktOpex</b>	Sum	Monthly Opex related to customer operations.	No
<b>MonthlyGenAdminOpex</b>	Sum	Monthly Opex related to General and Administrative expenses.	No
<b>MonthlyDEP</b>	Sum	Monthly depreciation expense.	No
<b>MonthlyTAX</b>	Sum	Monthly tax expense.	No
<b>MonthlyCOM</b>	Sum	Monthly cost of money.	No
<b>TotalCost</b>	Sum	Total cost (monthly, capex+opex)	Yes
<b>Node0Inv</b>	Sum	Investment related to Node 0 (central office equipment, middle mile and cloud)	No
<b>Node2Inv</b>	Sum	Investment related to Node 2 (feeder fiber and splitter)	No

# STATE BROADBAND COST MODEL (SBCM)

## CONNECT AMERICA MODEL FOR STATE USF



<b>Node3Inv</b>	Sum	Investment related to Node3 (distribution fiber and fiber service terminal)	No
<b>Node4Inv</b>	Sum	Investment related to Node 4 (drop, ONT)	No
<b>TotalInv</b>	Sum	Total Investment	Yes
<b>Node0MMUnderseaInv</b>	Sum	Investment related to middle mile and undersea system.	No

### Support:

Level 1 support during a state proceeding will be available by Email. Level 1 support includes

- Email/Phone based support to a named User during East Coast normal business hours
- Assistance in creating a User id/User account
- Assistance with operational procedures of running a report, exporting report
- Assistance with the import of inputs
- Feedback on input problems
- Assistance with running a solution set
- Alerts when User storage quota near maximum
- Sharing of input collections and solution sets via support ticket

### Additional Fees:

- Level 2 support, such as input development, capcost development, methodology explanation beyond printed materials
- Hearing support – witnessing, workshops
- Data Development
- Input development
- New Network Design(s)
- Custom Service Area boundaries

### Getting Started

Please contact CQA for more information regarding SBCM.

Mike Wilson

[mwilson@costquest.com](mailto:mwilson@costquest.com)

Phone: 425-772-2261