June 21, 2011

Ms. Marlene H.Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

 Re: WC Docket No. 10-90 Connect America Fund; GN Docket No. 09-51 A National Broadband Plan for Our Future; WC Docket No. 07-135 Establishing Just and Reasonable Rates for Local Exchange Carriers;
 WC Docket No. 05-337 High-Cost Universal Service Support; CC Docket No. 01-92 Developing a Unified Intercarrier Compensation Regime; CC Docket No. 96-45 Federal-State Joint Board on Universal Service; WC Docket No. 03-109 Lifeline and Link-Up

Dear Ms. Dortch,

On May 6, 2011, and May 26, 2011, Doug Kitch and Vincent Wiemer of Alexicon Telecommunications Consulting met separately with members of the Wireline Competition Bureau. *Notices of Ex Parte Presentation* were filed to document these meetings in accordance with the Commission's rules. Alexicon provides consulting services to approximately two dozen rural incumbent local exchange carriers. The purpose of these meetings was to describe how certain aspects of the Commission's Universal Service Fund and Intercarrier Compensation reform proposals would have an impact on those companies' ability to continue to provide affordable telecommunications services to their rural, lightly-populated communities and to deploy and maintain broadband infrastructure throughout their rural service areas. Alexicon presented an alternative comprehensive plan including a detailed model it has developed for Universal Service Fund and Intercarrier Compensation Reform.

During the meetings, Wireline Competition Bureau personnel asked several questions about Alexicon's proposed plan. The purpose for this letter is to supplement the record to address those questions and to provide the following overview of The Alexicon Plan for Universal Service Fund and Intercarrier Compensation Reform.

### The Alexicon Plan for Universal Service Fund and Intercarrier Compensation Reform

### Introduction

Alexicon Telecommunications Consulting provides management consulting services to approximately two dozen independent local exchange carriers serving rural areas. Alexicon's clients include privately-owned, co-operatives, and tribal companies in ten states and represent communities ranging from 250 to 40,000 access lines. Alexicon advises its clients on rate-of-return (RoR) regulation, universal service funding (USF), intercarrier compensation (ICC), and interconnection issues among other services.

#### **Goals and Principles**

The goals of The Alexicon Plan are to: (1) modernize universal service fund and intercarrier compensation mechanisms; (2) create incentive-based USF for small RoR carriers to deploy broadband; (3) modernize USF rules to advance Internet protocol (IP) technology; (4) provide efficiency within the USF system; and (5) accomplish these goals in a manner consistent with current ratemaking and Universal Service Funding algorithms.

In order to comply with the principles set forth in Section 254 of the Communications Act, Universal Service Funds must be sufficient to provide: (1) quality services at just, reasonable, and affordable rates; (2) access to advanced services; and (3) access in rural and high cost areas that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas. Furthermore, explicit funds should provide specific, predictable and sufficient support to preserve and advance universal service.

The Commission's current focus on advanced services, specifically broadband deployment, does not relinquish it of the responsibility to preserve and support services currently supported by the USF, including local exchange telecommunications service. New support mechanisms must recognize and sufficiently provide for both traditionally-supported telecommunications services as well as advanced services. In order to address the Commission's long-term vision of ubiquitous broadband deployment, Alexicon believes that the support algorithms must recognize the causes of the higher costs of deployment and support provision of broadband service in rural, high cost areas. The higher costs of broadband deployment in rural areas are a function of several factors, including population density, geographic location, the costs related to economies of limited scale and scope which result in higher costs for deploying broadband-capable loops; central office, field unit and customer premises electronics; as well as bandwidth access (often referred to as "middle mile cost").

### The Alexicon Plan – Summary

The Alexicon Plan for Universal Service Fund and Intercarrier Compensation Reform consists of four parts:

<u>The Broadband High Cost Loop Fund</u> consists of three component funds for rural carriers, non-rural carriers serving rural areas, and mobile carriers. The Fund provides support for the deployment of broadband services as well as current voice telephony services. Support is based on actual costs and calculated through a revised high cost loop algorithm. The Broadband High Cost Loop Fund would replace the current High Cost Loop Fund for Rural Carriers, Non-rural carriers, and Competitive Eligible Telecommunications Carriers (CETCs). Identical CETC support and Safety Net Additive Support would be eliminated. Safety Valve Support is included in the Rural Carrier Broadband High Cost Loop support which would be calculated without Section 54.305 "parent trap" rule support limitations. Forward-Looking High Cost Model Support would be replaced by the Non-rural Carrier Broadband High Cost Loop Fund.

<u>Middle Mile Support</u> would be provided through the inclusion of middle mile costs as a 47 CFR Part 32 transmission cost (account 6232) which would allow recovery through the Broadband HCL Fund and ratemaking.

<u>Local Switching Support</u> would be reformed by ratcheting down the Dial Equipment Minutes (DEM) weighting threshold from the current levels to support only companies with less than 15,000 lines. Identical support for CETCs would be eliminated.

<u>Intercarrier Compensation Reform</u> would be accomplished through separate plans for rateof-return and price cap carriers. RoR carriers would modify the current MAG shift adjustment to move the entire traffic sensitive switched access revenue requirement to the common line element. The common line costs are recovered through Interstate Common Line Support. Price cap carriers would transition to an IP-based compensation model by entering into commercial agreements for indirect interconnection as a "transit" provider. A default rate for any traffic received without a compensation agreement would be established as an interim measure and applied uniformly in a technology neutral manner to wired, wireless, circuit-switched, and Voice over the Internet Protocol (VoIP) traffic. Interstate Access Support would be eliminated.

## The Broadband High Cost Loop Fund

The current high cost loop USF algorithm has been an effective tool in providing universal service support to high cost loop areas. As the Commission itself has acknowledged, the current system has enabled many rural telecommunications providers to deploy broadband-capable networks. This is because the current algorithm supports one of the primary barriers to ubiquitous broadband deployment – loop costs. Alexicon proposes that the current high cost loop algorithm be modified to support the central office and field unit circuit equipment as well as cable and wire facilities allocated to broadband services.

Furthermore, Alexicon proposes three components of the Broadband High Cost Loop Fund:

- 1. Rural Carrier Broadband High Cost Loop Fund
- 2. Non-rural Carrier Broadband High Cost Loop Fund
- 3. Mobile Broadband High Cost Loop Fund

## Rural and Non-Rural Carrier Broadband High Cost Loop Algorithm

Each component fund is based on the same algorithm and is calculated on actual company costs. For rural carrier and non-rural carrier funds the details of the proposed Broadband High Cost Loop Data Descriptions, Cost Company Broadband Loop Algorithm, National Average Broadband Cost Per Loop (NABCL) Algorithm, Expense Adjustment Algorithm, and the Broadband High Cost Loop Recovery Adjustment are attached as Appendix B.

In summary, Alexicon proposes including the following accounts in the algorithm:

- Category 4.11 Wideband Exchange Line Circuit Equipment allocated to the Interstate jurisdiction as defined in 47 CFR § 36.126 (b) (1) (i).
- Category 4.22 Interexchange Circuit Equipment Used for Wideband Services including Satellite and Earth Station Equipment used for Wideband Service allocated to the Interstate jurisdiction as defined in 47 CFR § 36.126 (b) (2) (ii).
- Category 2 Wideband and Exchange Trunk Cable and Wire Facilities allocated to the Interstate jurisdiction as defined in 47 CFR § 36.152(a)(2) and 47 CFR § 36.155.

No revisions to Part 36 Separations Rules would be needed to accommodate the inclusion of these broadband accounts in the Broadband High Cost Loop Fund algorithm. In support, the description and accounting of broadband circuit and cable & wire facility already required of cost settlement companies is described in the National Exchange Carrier Association's Cost

Reporting Guideline Paper entitled *Separations Treatment of ADSL and SDSL Services* (revision released December 17, 2009).

The proposed algorithm computes the gross allocators that attribute expenses to the broadband category equipment in the same manner as Category 4.13 circuit equipment and Category 1 cable & wire facility. Total Broadband Unseparated Costs equals the sum of operating expenses, depreciation, operating taxes, and return on investment attributed to Categories 1 and 2 cable & wire facility and Categories 4.11, 4.13, and 4.22 circuit equipment. Study Area Broadband Cost per Loop (SABCL) is calculated as the Broadband Unseparated Costs divided by Study Area Total Loops.

The National Average Broadband Cost per Loop (NABCL) would be calculated as total Nationwide Broadband Unseparated Costs divided by Nationwide USF Loops. The Expense Adjustment Algorithm would maintain the current 65% / 75% recovery thresholds for study areas reporting fewer than 200,000 access lines and the 10% / 30% / 60% / 75% recovery thresholds for study areas reporting 200,000 access lines or more.

## Mobile Broadband High Cost Loop Algorithm

Alexicon proposes that the Broadband High Cost Loop Algorithm also be applied to mobile carriers. Mobile carriers can produce equivalent cost study data as Wireline companies. This assertion is evidenced by several wireless cost studies submitted by mobile carriers in response to the May 1, 2008 Commission Order that froze CETC support.<sup>1</sup> The Order provided a limited exception for CETCs that submitted their own cost data "demonstrating that its costs meet the support threshold in the same manner as the incumbent LEC." Most recently, GVNW Consulting, Inc. refreshed the record in *Ex Parte Presentation* in WCB Docket No. 05-337 filed May 28, 2011 with regard to its WiPan proposal. Alexicon supports the WiPan proposal for the calculation of Mobile Broadband High Cost Loop support with the noted modifications of adding broadband equipment categories as proposed for Wireline carriers and the use of a mobile national average cost per loop threshold instead of an average cost per minute threshold.

## The Broadband High Cost Loop Recovery Adjustment

Alexicon recognizes that the proposed broadband equipment categories are currently recovered through interstate special access charges. Consequently, an adjustment to the calculation of special access charges is needed to avoid excessive cost recovery. The proposed Broadband High Cost Loop Fund algorithm would allow the identification of the exact amount of support

<sup>&</sup>lt;sup>1</sup> See In the Matter of High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, Alltel Communications, Inc., et al. Petitions for Designation as Eligible Telecommunications Carriers, RCC Minnesota, Inc. and RCC Atlantic, Inc. New Hampshire ETC Designation Amendment, Order ("FCC Cap Order"), WC Docket No. 05-337 and CC Docket No. 96-45, released May 1, 2008.

attributed to the broadband equipment categories. This amount can be reduced from interstate special access element revenue requirement and added to the other element revenue requirement in a manner similar to the way line port costs are shifted in the MAG adjustment. The proposed adjustment would result in decreased rates for broadband services charged to consumers by reducing the subject revenue requirement.

## Benefits of the Proposed Broadband High Cost Loop Fund

Alexicon's proposed Broadband High Cost Loop Fund has several advantages. First, it would leverage an existing, proven algorithm. Second, it would provide incentives for broadband deployment by supporting the causes of higher costs for broadband deployment. Third, it also would directly reduce the cost of service to consumers through the broadband recovery adjustment. Fourth, it would provide a specific and predictable funding mechanism.

Alexicon has already developed a fully operational model capable of calculating the Study Area Broadband Cost per Loop (SABCL) of every rural and non-rural cost company in the nation which we shared with the Wireline Competition Bureau in our ex parte presentation on May 6, 2011. The model calculates Broadband High Cost Loop Support per Study Area based on the proposed data descriptions and algorithms. The model has the capability to calculate a revised National Average Broadband Cost per Loop (NABCL) in order to account for support with a capped fund. For illustrative purposes, we have loaded the model with each company's actual cost and loop data from the NECA 2010 USF Data Submission. In addition we have added estimated amounts for the proposed broadband equipment categories using costs and relative amounts from NECA's Rate of Return Prospective Cost Analysis Summary. Based on these assumptions and calculations, Alexicon estimates demand for the rural company component of the proposed Broadband High Cost Loop fund to be \$816 million. This is the type of specific and predictable funding mechanism called for in Section 254.

## Removal of Artificial Mechanisms from the Fund Calculations

Alexicon also notes the need to remove artificial mechanisms from the calculations of support. These artificial mechanisms have inevitably led to consequences contrary to universal service goals. For example, identical support for CETCs has resulted in support funds provided to carriers without proof of those carriers' need for support in order to provide service at affordable rates. No carrier should be allowed to receive high cost support without a demonstration that it actually incurs high costs in order to provide service. This is one of the main reasons Alexicon is adamant that cost-based algorithms are necessary for the efficient and effective calculation of

high cost support as opposed to proxy or model-based mechanisms. Identical support for CETCs has ballooned the demand for universal service support.

Additionally, an artificially fixed rural national average cost per loop (NACPL) has unintended consequences for the high cost loop fund. A fixed NACPL of \$240.00 is used to calculate expense adjustment levels for rural ILECs subject to the availability of funds under the indexed capping mechanism. In order to keep total rural high cost support below the fund cap, the effective NACPL is adjusted. For example, the capped NACPL calculated from calendar year 2009 data reported by rural carriers was \$458.36.<sup>2</sup> However, the actual rural NACPL was \$505.49. If no fixed rural NACPL were in place and the algorithm was instead based on the actual NACPL, the Rural High Cost Loop Support for 2011 would have totaled \$759.6 million; \$146.2 less than the capped amount.

### Middle Mile Support

The 2009 report of then Acting Chairman Copps "Bringing Broadband to Rural America: Report on a Rural Broadband Strategy" includes a discussion of the issues involved with the "middle mile" that connects the last mile broadband provider to a node on the Internet backbone. This cost to obtain Internet bandwidth access is one of the largest barriers to reasonable and affordable consumer broadband rates in rural areas. For example, middle mile costs paid by rural telephone clients of Alexicon range from \$18 per megabyte per month to ten times that amount. Alexicon proposes the inclusion of middle mile costs as a part 32 transmission cost (acct 6232) which would allow for the recovery of costs through the Broadband HCL Fund and ratemaking.

#### Local Switching Support

In the NPRM the Commission makes the following statement: "LSS was originally created to help small telephone companies that lack economies of scale to afford large switches, but since then the industry has moved to software-based routers and switches which can be more easily scaled to a company's size and even shared among companies."<sup>3</sup> Alexicon contends phasing out LSS entirely would be contrary to the Commission's initial intent for this funding mechanism, which was "to help small telephone companies that lack economies of scale." As discussed further below, Alexicon notes there are 910 companies that currently have less than 5,000 access lines and 186 companies that serve between 5,000 and 10,000 access lines.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> National Exchange Carrier Association, Inc. Overview and Analysis of 2010 USF Data Submission

<sup>&</sup>lt;sup>3</sup> NPRM, Para 21

<sup>&</sup>lt;sup>4</sup> USAC website, Local Switching Support Projected by State by Study Area, Second Quarter 2011

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Alexicon believes a better alternative in addressing LSS would be to ratchet down the Dial Equipment Minutes (DEM) weighting threshold from the current levels.<sup>5</sup> This recommendation focuses local switching support as it was intended to the smallest rate-of-return ILECs that still face significant fixed costs due to their limited customer base. Alexicon suggests modified thresholds of: <5,000 = weighted DEM of 3; between 5,000 and 10,000 = weighted DEM of 2.5; and between 10,000 and 15,000 = weighted DEM of 2 should be the primary focus of LSS funding, with access lines above 15,000 receiving no funding from LSS. If this recommendation had been in effect for calendar year 2011, it would have reduced the LSS fund by approximately \$190 million.

## **Intercarrier Compensation Reform**

### The Intercarrier Compensation System

ICC is a system of payments between carriers to compensate each other for the origination, transport and termination of telecommunications traffic. For RoR carriers ICC recovers the cost of the network used to perform these functions. There are two forms of intercarrier compensation: (1) access rates, a uniform mechanism to recover the cost of providing access services needed to originate or terminate interstate and foreign telecommunications, were established following the AT&T divestiture in1984; and (2) reciprocal compensation, which is applied to the transport and termination of telecommunications within the same local calling area, was established in the 1996 Telecommunications Act.

There are several factors that complicate ICC. Rate application depends on call jurisdiction (interstate, intrastate, local); the type of carriers involved (ILECs, CLECs, IXCs, CMRS, VoIP); and the type of traffic (wireline voice, wireless voice, ISP-bound, data).

## Problems with the ICC System

The NPRM notes the following fundamental problems with the intercarrier compensation system:

- The per-minute structure is outdated;
- Rates vary for different types of providers or origination location despite same function performed (and facilities used);
- Above cost rate structure creates incentives to retain old technologies and engage in regulatory arbitrage;
- Technological changes result in declining compensable minutes.

<sup>&</sup>lt;sup>5</sup> CFR Part 36.125

Alexicon notes the following additional problems for RoR carriers:

- Compensation agreements are designed for direct interconnection situations and most RoR companies are indirectly connected with IXC, VoIP, CLECS, and CMRS carriers
- Indirect business relationships create compensation issues
- Vast balance of traffic differences for small carriers
- Separations rules create disparate Interstate/Intrastate rates for RoR carriers

## Intercarrier Compensation Reform Goals and Principles

ICC reforms should reflect the fundamental shifts in technology, consumer behavior, and competition; create proper incentives for carriers to invest in broadband technologies; and eliminate regulatory arbitrage opportunities that lead to phantom traffic and improper access stimulation.

Alexicon believes the following principles should apply to ICC reform:

- Reforms must be technology-neutral and jurisdictionally consistent to create a level field for competition and regulation. A unified rate should apply to all carriers (ILEC, CLEC, CMRS, VoIP) and all jurisdictions (interstate, intrastate, local) to eliminate regulatory arbitrage opportunities.
- Rules must be flexible to account for continually changing technologies as well as the different incentives of Price Cap and RoR carriers; they should be consistent with the transition to an all-IP network.
- Explicit support mechanisms are needed to maintain affordable service in high-cost, insular, and Tribal areas.
- The distribution channel for voice and broadband should be paid for by the cost causers/beneficiaries.
- Bill-and-Keep is not appropriate because most carrier relationships have uneven balances of traffic originated/terminated.

Furthermore, the recovery of costs/revenues affected by ICC reform should not be "offset" by non-regulated revenues for the following reasons:

- FCC does not have the authority to require recovery of costs of Telecommunications Services subject to Title II with revenues of Title I services;
- Cross-subsidization of regulated services by non-regulated services is specifically contrary to the 1996 Act and Part 64 rules;
- Would create a perverse incentive to reduce/eliminate non-regulated revenues; and

• Would disregard business realities and affiliate transaction rules. Non-regulated services already pay the higher of cost or market for the use of any regulated service/facility.

## Alexicon's ICC Reform Proposal – Rate of Return Carriers

Interstate Common Line Support (ICLS) helps to offset interstate access charges and is designed to permit each rate-of-return carrier to recover its common line revenue requirement, while ensuring that its subscriber line charges remain affordable to its customers. ICLS recognizes that a portion of the common line is used for interstate purposes. Because the Commission is including broadband as an advanced universal service and declaring its authority over broadband as an interstate service, the interstate usage of the common line will increase in the future. Interstate Common Line Support (ICLS) is the obvious mechanism for recovery of other access rate amounts shifted due to Intercarrier Compensation Reform. Alexicon recommends modifying the current MAG shift adjustment for RoR carriers to move all traffic sensitive switched access rate goal. This will provide an explicit, predictable and sufficient support mechanism that preserves current universal service policies.

Special access services can be offered on a tariffed or de-tariffed basis as they are currently. The transition to special access IP services is well underway and does not have the same per-minute measurement issues as switched access services.

#### Advantages to Alexicon's Rate-of-Return ICC Reform Proposal

Moving all traffic sensitive switched access revenue requirements to common line would provide RoR carriers an effective switched access rate of \$0. The \$0 switched access rate would solve phantom traffic and VoIP compensation issues because there would be no access rate to avoid. It also would solve improper access stimulation issues because increased access minutes would have no effect on revenues. It would also eliminate the Commission's expressed concerns of decreasing minutes and increasing access rates. In addition, the billing costs saved can be passed down to consumers.

Alexicon's proposal also properly focuses RoR ICC reform on cost recovery. It permits each RoR carrier to recover its common line and traffic sensitive switched access revenue requirements. This is consistent with the 1996 Act's dual goals of "moving toward cost-based rates and protecting universal service."

The proposal is also technology neutral and forward-looking. It allows for a seamless transition to an all-IP network because the traffic measurement issues associated with IP-traffic would be eliminated. It would also remove disincentives to transition to IP networks.

Using ICLS for recovery would efficiently leverage an existing explicit support mechanism. Alexicon's plan also does not require a transition period. It can also be quantified: the traffic sensitive revenue requirement for NECA pool members according to NECA 7/1/10 – 6/30/11 Tariff Review Plan is \$506,149,000. This does not include RoR carriers filing their own tariffs which we estimate may be additional \$100 million.

#### Challenges to Alexicon's RoR Proposal

The Commission has recognized the need for complimentary State reforms and that States may need support to do so. Interstate/intrastate access parity, which would be needed to avoid arbitrage situations, would result in significant lost ICC revenues.

Current separations rules recognize that a portion of the common line is used for interstate purposes (25% Subscriber Plant Factor allocation of common line). Due to broadband, the interstate portion of common line usage will increase so the allocation to interstate should also increase. Alexicon proposes to increase the Subscriber Plant Factor from its current frozen 25% level to 33.33%. This change would shift \$474,876,000 from state/local jurisdiction to interstate (based on NECA 7/1/10 to 6/30/11 TRP Common Line Pool Revenue Requirement) and would reduce the costs that states will need to rebalance. State ICC Reforms could be accomplished through a combination of state universal service funds and rebalanced local rates. Increased ICLS could be funded through a combination of increased SLCs and increased FUSCs levied equitably on an expanded broadband contribution base.

#### <u>Alexicon's ICC Reform Proposal – Price Cap Carriers</u>

Price cap carriers would transition to an IP-based compensation model by entering into commercial agreements for indirect interconnection as a "transit" provider. A transit provider is paid to arrange delivery of Network Customer traffic to anywhere and to accept delivery of traffic from anywhere for Network Customer. Alexicon believes some regulation and oversight will always be necessary.

A default rate for any traffic received without a compensation agreement would be established as an interim measure and applied uniformly in a technology neutral manner to wired, wireless, circuit-switched, and VoIP traffic.

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ICC Reform should be technology neutral - there should be no difference between wired or wireless; circuit-switched or VoIP compensation for terminating other providers' traffic. Technology neutrality and unified rates eliminate regulatory arbitrage scenarios. The Commission should impose regulatory obligations that are necessary to protect public safety and achieve other important public-interest objectives, such as CALEA, E-911, number portability, and access for persons with disabilities to all carriers.

## Fund Size

Alexicon contemplates the proposed funds would be sized as follows:

Total High Cost Support	\$ 4,882 M
Interstate Common Line Support	\$ 2,182 M
Local Switching Support	\$ 200 M
Broadband HCL Subtotal	\$ 2,500 M
Mobile Fund (capped)	\$ 500 M
Non-Rural Carriers (capped)	\$ 750 M
Rural Carriers (capped)	\$ 1,250 M
Broadband High Cost Loop Support:	

A detailed comparison of the current High Cost Fund components with Alexicon's proposed funds is attached as Appendix A. In summary, Alexicon proposes:

*The Broadband High Cost Loop Fund* which consists of three component funds for rural carriers, non-rural carriers serving rural areas, and mobile carriers. The Fund provides support for the deployment of broadband services as well as support for voice telecommunications services. Support for each component fund is based on actual costs and calculated through a revised high cost loop algorithm and actual component national average cost per loop. The components would initially be capped at \$1,250 million for rural carriers, \$750 million for non-rural carriers, and \$500 million for mobile carriers. The Broadband High Cost Loop Fund components replace the current High Cost Loop Fund for rural carriers, Non-rural carriers, and Competitive Eligible Telecommunications

Carriers (CETCs); Safety Net Additive; Safety Valve Support and Forward-Looking High Cost Model Support. Identical support for CETCs and Section 54.305 "parent trap" rule support limitations for acquired exchanges are eliminated.

*Local Switching Support* featuring a revised Dial Equipment Minute weighting system that would focus on support to carriers with fewer than 15,000 access lines. This proposal would reduce the size of the current fund by approximately \$190 million. Identical support for CETCs is eliminated reducing the fund by an additional \$92.5 million.

*Interstate Common Line Support* would be the mechanism to permit each rate-of-return carrier to recover its interstate common line and traffic sensitive revenue requirements, while ensuring that its subscriber line charges remain affordable to its customers. The proposed shift of traffic sensitive revenue requirement would increase the annual size of ICLS funds by an estimated \$600 million. The proposed increase in the Subscriber Plant Factor from 25% to 33% would result in an additional \$475 million shift from state recovery to interstate recovery annually.

## Conclusion

The Alexicon Plan for Universal Service Fund and Intercarrier Compensation Reform provides a comprehensive solution to meet the Commission's goals to:

- Modernize universal service fund and intercarrier compensation mechanisms;
- Create proper incentives to deploy broadband;
- Modernize USF and ICC rules to advance IP technology;
- Provide efficiency within the USF system and Intercarrier Compensation regime;
- Enact reforms that reflect the fundamental shifts in technology, consumer behavior, and competition; and
- Remove regulatory arbitrage opportunities that lead to phantom traffic and improper access stimulation.

The Plan efficiently leverages the successful parts of current programs. Substantial public resources have already been invested in rural networks, participation in the rule making proceeding, and related mechanisms. These investments should be leveraged for the public benefit whenever possible. Technology neutral applications and the recognition of differences between rural and non-rural carriers provide solutions for all carriers. Furthermore, our suggested fund reconfiguration, fund sizes and actual cost methodology will promote ubiquitous broadband deployment with a total annual fund size increase of 17.5%.

Sincerely,

Douglas K. Kitch, CPA, Principal Alexicon Telecommunications Consulting

## Current High Cost Support Mechanism Fund Size Projections for 2011

	Total 2011		1Q2011		2Q2011		3Q2011		4Q2011 (est.)	
	in millions		in millions		in millions		in millions		in millions	
High Cost Loop Support:										
Rural Carriers (capped)	\$	905.93	\$	226.35	\$	226.37	\$	226.47	\$	226.74
CETCs (capped)		323.55		79.28		77.81		83.23	\$	83.23
Non-Rural Carriers		0.00		0.00		0.00		0.00		0.00
Safety Net Additive		90.02		20.62		22.64		23.38		23.38
Safety Valve Support		7.68		1.45		1.57		2.33		2.33
<b>Total High Cost Loop Support</b>	\$	1,326.91	\$	327.70	\$	328.39	\$	335.41	\$	335.41
Local Switching Support:										
Incumbent Carriers	\$	292.41	\$	73.04	\$	73.11	\$	73.13	\$	73.13
CETC (capped)		92.56		21.97		22.79		23.90		23.90
Total Local Switching Support	\$	384.97	\$	95.01	\$	95.90	\$	97.03	\$	97.03
Interstate Common Line Support:										
Incumbent Carriers	\$	1.106.57	\$	279.89		278.06	\$	274.31	\$	274.31
CETC (capped)	Ŧ	510.21	Ŧ	123.80		122.31	Ŧ	132.05	Ŧ	132.05
Total Interstate Common Line Support	\$	1,616.78	\$	403.69	\$	400.37	\$	406.36	\$	406.36
Interstate Access Support Mechanism		533 65		137 55		134.02		131.04		131.04
Forward-Looking High Cost Model Support		293.60		75.04		73.84		72.36		72.36
Total High Cost Support	\$	4,155.91	\$	1,038.99	\$	1,032.52	\$	1,042.20	\$	1,042.20

## Alexicon Proposed Support Mechanism Annual Fund Sizes

Broadband High Cost Loop Support:	in millions	Notes:
Rural Carriers (capped)	\$ 1,250.00	Funds based on Broadband High Cost Loop algorithm
CETCs	-	Included in Rural Carrier Fund; funds based on own costs
Non-Rural Carriers (capped)	750.00	Funds based on Broadband High Cost Loop algorithm
Mobility Fund (capped)	500.00	Funds based on Mobile Broadband High Cost Loop algorithm
Safety Net Additive	-	Fund eliminated
Safety Valve Support	 -	Included in Rural Carrier Fund, acquired exchanges funded 100%
Total Broadband High Cost Loop Support	\$ 2,500.00	
Local Switching Support:		
Incumbent Carriers	\$ 200.00	DEM weighting racheted down as proposed
CETC	-	Identical support eliminated
Total Local Switching Support	\$ 200.00	
Interstate Common Line Support:		
Incumbent Carriers	\$ 1,106.57	
Incumbent Carriers Traffic Sensitive Shift	\$ 600.00	TS Switched Access moved to Common Line
ICLS State Cost Shift	\$ 475.00	SPF increased from 25% to 33% (\$475M)
CETC	-	Identical support eliminated
Total Interstate Common Line Support	\$ 2,181.57	
Interstate Access Support Mechanism	-	Fund eliminated
Forward-Looking High Cost Model Support	-	Fund eliminated, included in Broadband Non-Rural Carrier Fund
Total High Cost Support	\$ 4,881.57	

## I. EXCHANGE CARRIER/DATA IDENTIFICATION

- (010) Exchange Carrier Study Area Code.
- (020) Contact Name: Person to contact for questions about this data.
- (030) Contact Telephone Number: Number of the person identified in Data Line (020).
- (040) Data Collection Period.

## **II. WORKING LOOPS**

Working loops reported for USF must be as of the end-of-period identified on Data Line (040).

- (060) Total Loops: Enter the count of total Loops defined as Exchange Line Cable and Wire Facilities Subcategories 1.1 through 1.3. [Part 36.154 (a)]
- (070) Category 1.3 Loops: Enter the count of Category 1.3 Loops excluding Category 1.3 TWX (Teletypewriter Exchange service) loops. [Part 36.154 (a)]

## **III. INVESTMENT, PLANT OPERATIONS EXPENSE AND TAXES**

#### **Net Plant Investment**

- (160) Account 2001 Telecommunication Plant in Service [Part 32.2001]
- (170) Account 1220 Material and Supplies [Part 32.1220]
- (190) Account 3100 Accumulated Depreciation [Part 32.3100]
- (195) Account 3400 Accumulated Amortization Tangible [Part 32.3400]
- (210) Account 4340 Net Non-current Deferred Operating Income Taxes [Part 32.4340]

Note: Net Non-current Deferred Operating Income Taxes associated with the use of accelerated depreciation should be included in the amount reported for Account 4340 in the USF data collection.

(220) Net Plant Investment -Sum of Data Lines (160) + (170) minus Data Lines (190) through (210)

#### **Selected Plant Accounts**

- (230) Account 2210 Central Office Switching Equipment [Part 32.2210]
- (235) Account 2220 Operator System Equipment [Part 32.2220]
- (240) Account 2230 Central Office Transmission Equipment [Part 32.2230]
- (245) Total Central Office Equipment Sum of Data Lines (230) through (240)
- (250) Circuit Equipment Category 4.13
   [Part 36.126]
   Enter the investment in Central Office Equipment Category 4.13 including power and common equipment. Development of this amount must be consistent with Responsible Accounting Officer Letter 21, dated September 8, 1992.
- (255) Account 2410 Cable and Wire Facilities Total [Part 32.2410]
- (260) Account 3100 (2210) Accumulated Depreciation Central Office Switching Equipment [Part 32.3100]
- (265) Account 3100 (2220) Accumulated Depreciation Operator System Equipment [Part 32.3100]
- (270) Account 3100 (2230) Accumulated Depreciation Central Office Transmission Equipment [Part 32.3100]
- (275) Account 3100 (2210 through 2230) Total Accumulated Depreciation -Central Office Equipment Sum of Data Lines (260) through (270)
- (280) Account 3100 (2410) Accumulated Depreciation Cable and Wire Facilities [Part 32.3100]

#### **Selected Plant Accounts - continued**

(285) Circuit Equipment - Category 4.11 Wideband Exchange Line Circuit Equipment -Interstate

[Part 36.126 (b) (1) (i)]

Enter the investment in Central Office Equipment Category 4.11 including power and common equipment allocated or assigned to the Interstate jurisdiction.

(290) Circuit Equipment - Category 4.22 Interexchange Circuit Equipment Used for Wideband Services including Satellite and Earth Station Equipment used for Wideband Service - Interstate

[Part 36.126 (b) (2) (ii)]

Enter the investment in Central Office Equipment Category 4.22 including power and common equipment allocated or assigned to the Interstate jurisdiction.

- (310) Account 4340 (2210) Net Non-current Deferred Operating Income Taxes -Central Office Switching Equipment [Part 32.4340]
- (315) Account 4340 (2220) Net Non-current Deferred Operating Income Taxes -Operator System Equipment [Part 32.4340]
- (320) Account 4340 (2230) Net Non-current Deferred Operating Income Taxes -Central Office Transmission Equipment [Part 32.4340]
- (325) Account 4340 (2210 through 2230) Net Non-current Deferred Operating Income Taxes - Central Office Equipment Sum of Data Lines (310) through (320)
- (330) Account 4340 (2410) Net Non-current Deferred Operating Income Taxes -Cable and Wire Facilities [Part 32.4340]

#### Plant Specific Operations Expense

- (335) Account 6110 Network Support Expense Total [Part 32.6110]
- (340) Account 6110 Benefits Network Support Expense The amount of Benefits included in Account 6110
- (345) Account 6110 Rents Network Support Expense The amount of Rents included in Account 6110

#### Plant Specific Operations Expense - continued

- (350) Account 6120 General Support Expense Total [Part 32.6120]
- (355) Account 6120 Benefits General Support Expense The amount of Benefits included in Account 6120
- (360) Account 6120 Rents General Support Expense The amount of Rents included in Account 6120
- (365) Account 6210 Central Office Switching Expense Total [Part 32.6210]
- (370) Account 6210 Benefits Central Office Switching Expense The amount of Benefits included in Account 6210
- (375) Account 6210 Rents Central Office Switching Expense The amount of Rents included in Account 6210
- (380) Account 6220 Operator Systems Expense Total [Part 32.6220]
- (385) Account 6220 Benefits Operator Systems Expense The amount of Benefits included in Account 6220
- (390) Account 6220 Rents Operator Systems Expense The amount of Rents included in Account 6220
- (395) Account 6230 Central Office Transmission Expense Total [Part 32.6230]
- (400) Account 6230 Benefits Central Office Transmission Expense The amount of Benefits included in Account 6230
- (405) Account 6230 Rents Central Office Transmission Expense The amount of Rents included in Account 6230
- (410) Accounts 6210-6230 Central Office Expense Total Sum of Data Lines (365) + (380) + (395)
- (430) Account 6410 Cable and Wire Facilities Expense Total [Part 32.6410]

#### Plant Specific Operations Expense – continued

- (435) Account 6410 Benefits Cable and Wire Facilities Expense The amount of Benefits included in Account 6410
- (440) Account 6410 Rents Cable and Wire Facilities Expense The amount of Rents included in Account 6410
- (445) Total Plant Specific Expense -Sum of Data Lines (335) + (350) + (365) + (380) + (395) + (430)

#### Plant Nonspecific Operations Expense

- (450) Account 6530 Network Operations Expense Total [Part 32.6530]
- (455) Account 6530 Benefits Network Operations Expense The amount of Benefits included in Account 6530

#### **Depreciation and Amortization Expense**

- (510) Account 6560 (2210) Depreciation and Amortization Expense -Central Office Switching Equipment [Part 32.6560]
- (515) Account 6560 (2220) Depreciation and Amortization Expense -Operator System Equipment [Part 32.6560]
- (520) Account 6560 (2230) Depreciation and Amortization Expense -Central Office Transmission Equipment [Part 32.6560]
- (525) Account 6560 (2210 through 2230) Depreciation and Amortization -Central Office Equipment Sum of Data Lines (510) through (520)
- (530) Account 6560 (2410) Depreciation and Amortization Expense -Cable and Wire Facilities [Part 32.6560]

#### **Corporate Operations Expense**

- (535) Account 6710 Executive and Planning Expense Total [Part 32.6710]
- (540) Account 6710 Benefits Executive and Planning Expense The amount of Benefits included in Account 6710
- (550) Account 6720 General and Administrative Expense Total [Part 32.6720]
- (555) Account 6720 Benefits General and Administrative Expense The amount of Benefits included in Account 6720
- (565) Total Corporate Operations Expense
   Sum of Data Lines (535) + (550)
   Note: Corporate Operations Expense will be limited in accordance with §36.621(a)(4)

#### **Other Expense and Revenues**

(600) Benefits - The Benefits Portion included in all Plant Specific Operations Expense, Plant Non-specific Operations Expense, Customers Operation Expense and Corporate Operations Expense.

Note: Include the following accounts in the total reported for Data Line (600):

Account 6110 - Benefits - Network Support Expense [Data Line (340)]
Account 6120 - Benefits - General Support Expense [Data Line (355)]
Account 6210 - Benefits - Central Office Switching Expense [Data Line (370)]
Account 6220 - Benefits - Operator Systems Expense [Data Line (385)]
Account 6230 - Benefits - Central Office Expense - Transmission Equipment [Data Line (400)]
Account 6410 - Benefits - Cable and Wire Facilities Expense [Data Line (435)]
Account 6510 - Benefits - Other Property Plant and Equipment Expense [Not separately reported]
Account 6530 - Benefits - Network Operations Expense [Data Line (455)]
Account 6540 - Benefits - Access Expense [Not separately reported in Data Collection]
Account 6610 - Benefits - Marketing Expense [Not separately reported in Data Collection]
Account 6620 - Benefits - Service Expense [Not separately reported in Data Collection]
Account 6710 - Benefits - Executive and Planning Expense [Data Line (540)]
Account 6720 - Benefits - General and Administrative Expense [Data Line (555)]

### **Other Expense and Revenues**

(610) Rents - The Rents portion included in all Plant Specific Operations Expense.

Note: Include the following accounts in the total reported for Data Line (610):

Account 6110 - Rents - Network Support Expense [Data Line (345)]

Account 6120 - Rents - General Support Expense [Data Line (360)]

Account 6210 - Rents - Central Office Switching Expense [Data Line (375)]

Account 6220 - Rents - Operator Systems Expense [Data Line (390)]

Account 6230 - Rents - Central Office Expense - Transmission Equipment [Data Line (405)]

Account 6410 - Rents - Cable and Wire Facilities Expense [Data Line (440)]

#### **Operating Taxes**

(650) Account 7200 - Operating Taxes Include the sum of all Account 72xx subaccounts. [Part 32.7200]

### **IV. PART 36 - COST SEPARATIONS STUDY DATA**

- (700) Cost Study Average Investment in Cable and Wire Facilities Enter the average investment in Account 2410.
- (710) Cost Study Average in Cable and Wire Facilities Category 1: Exchange Line Cable and Wire Facilities excluding Wideband
  Enter the average investment assigned to Exchange Line Cable and Wire Facilities excluding Wideband Category 1 (total Categories 1.1 through 1.3). Development of this amount must be consistent with Responsible Accounting Officer Letter 21, dated September 8, 1992.
  [Part 36.152(a)(1)]

 (720) Cost Study Average in Cable and Wire Facilities - Category 2: Wideband and Exchange Trunk Cable and Wire Facilities (Interstate) Enter the average investment assigned to Wideband and Exchange Trunk Cable and Wire Facilities - Category 2 (Interstate).
 [Part 36.152(a)(2) and Part 36.155]

### V. AMORTIZABLE TANGIBLE ASSETS

Complete this section if any portion of a study area's unseparated Cable & Wire Facilities -Category 1 or Category 2 and/or Central Office Equipment - Categories 4.11, 4.13 and 4.22 has been acquired under a capital lease.

(800) Account 2680 - Amortizable Tangible Assets [Part 32.2680]

#### **AMORTIZABLE TANGIBLE ASSETS - continued**

- (805) Account 2680 (2230) Amortizable Tangible Assets Central Office Transmission Equipment Enter amount for equipment acquired under a capital lease (Account 2681). The type of equipment, <u>if owned</u>, would be booked to Account 2230. [Part 32.2680, Part 32.2681]
- (810) Account 2680 (2230) Amortizable Tangible Assets Central Office Transmission Equipment Assigned to Category 4.13

Enter amount for equipment assigned to Category 4.13, acquired under a capital lease (Account 2681). The type of equipment, <u>if owned</u>, would be booked to Account 2230 and assigned to Category 4.13 in the Part 36 Cost Study. [Part 32.2680, Part 32.2681]

#### (811) Account 2680 (2230) Amortizable Tangible Assets - Central Office Transmission Equipment Assigned to Category 4.11

Enter amount for equipment assigned to Category 4.11, acquired under a capital lease (Account 2681). The type of equipment, <u>if owned</u>, would be booked to Account 2230 and assigned to Category 4.11 in the Part 36 Cost Study. [Part 32.2680, Part 32.2681]

(812) Account 2680 (2230) Amortizable Tangible Assets - Central Office Transmission Equipment Assigned to Category 4.22

Enter amount for equipment assigned to Category 4.22, acquired under a capital lease (Account 2681). The type of equipment, <u>if owned</u>, would be booked to Account 2230 and assigned to Category 4.11 in the Part 36 Cost Study. [Part 32.2680, Part 32.2681]

(815) Account 2680 (2410) Amortizable Tangible Assets - Cable & Wire Facilities

Enter amount for equipment acquired under a capital lease (Account 2681). This type of facility, <u>if</u> <u>owned</u>, would be booked to Account 2410. [Part 32.2680, Part 32.2681]

(820) Account 2680 (2410) - Amortizable Tangible Assets - Cable & Wire Facilities Assigned to Category 1

Enter amount for equipment assigned to Category 1 and acquired under a capital lease (Account2681). This type of facility, <u>if owned</u>, would be booked to Account 2410 and assigned to Category 1 in the Part 36 Cost Study. [Part 32.2680, Part 32.2681]

(830) Account 6560 (2680) Depreciation and Amortization Expense - Amortizable Tangible Assets [Part 32.6560]

# COST COMPANY BROADBAND LOOP COST ALGORITHM

Line	Formula	Description
1.	(DL255 * (DL710/DL700)) + DL820	Cable & Wire Facilities plus C&WF portion of Capital Leases assigned to Category 1
1a.	(DL255 * (DL720/DL700)) + DL821	Cable & Wire Facilities plus C&WF portion of Capital Leases assigned to Category 2
2.	DL250 + DL810	Central Office Equipment plus COE portion of Capital leases assigned to Category 4.13
2a.	DL285+DL290 +DL811+DL812	Central Office Equipment plus COE portion of Capital leases assigned to Category 4.11 and Category 4.22
3.	AL1/(DL255 + DL815)	"A" Factor Cable & Wire Facilities. C&WF Category 1 divided by Total C&WF
3a.	AL1a/(DL255 + DL815)	"A2" Factor Cable & Wire Facilities. C&WF Category 2 divided by Total C&WF
4.	AL2/(DL230 + DL235 + DL240 + DL805)	"B" Factor Central Office Equipment. COE Category 4.13 divided by Total COE
4a.	AL2a/(DL230 + DL235 + DL240 + DL805)	"B2" Factor Central Office Equipment. COE Categories 4.11 & 4.22 divided by Total COE
5.	AL1/DL160	"C" Factor Cable & Wire Facilities Category 1(Gross Allocator) C&WF Category 1 divided by Total Plant in Service
5a.	AL1a/DL160	"C2" Factor Cable & Wire Facilities Category 2 (Gross Allocator) C&WF Category 2 divided by Total Plant in Service
6.	AL2/DL160	"D" Factor Central Office Equipment Category 4.13 (Gross Allocator) COE Category 4.13 divided by Total Plant In Service
ба.	AL2a/DL160	"D2" Factor Central Office Equipment Categories 4.11 & 4.22 (Gross Allocator) COE Categories 4.11 & 4.22 divided by Total Plant In Service

## Appendix B

# Broadband High Cost Loop Fund Loop Cost and Expense Adjustment Algorithms

Line	Formula	Description
7.	AL5 * DL170	Materials & Supplies assigned to Cable & Wire Facilities Category 1
7a.	AL5a * DL170	Materials & Supplies assigned to Cable & Wire Facilities Category 2
8.	AL6 * DL170	Material & Supplies assigned to Central Office Equipment Category 4.13
8a.	AL6a * DL170	Material & Supplies assigned to Central Office Equipment Categories 4.11 & 4.22
9.	AL3 * ((DL280 + DL330) + (DL815/DL800) * DL195)	Accumulated Depreciation plus Accumulated Amortization plus Net Noncurrent Deferred Operating Income Taxes assigned to C&WF Category 1
9a.	AL3a * ((DL280 + DL330) + (DL815/DL800) * DL195)	Accumulated Depreciation plus Accumulated Amortization plus Net Noncurrent Deferred Operating Income Taxes assigned to C&WF Category 2
10.	AL4 * ((DL260 + DL265 + DL270 + DL310 + DL315 + DL320) + (DL805/DL800) * DL195)	Accumulated Depreciation plus Accumulated Amortization plus Net Noncurrent Deferred Operating Income Taxes assigned COE Category 4.13
10a.	AL4a * ((DL260 + DL265 + DL270 + DL310 + DL315 + DL320) + (DL805/DL800) * DL195)	Accumulated Depreciation plus Accumulated Amortization plus Net Noncurrent Deferred Operating Income Taxes assigned COE Categories 4.11 & 4.22
11.	[Reserved]	
12.	[Reserved]	
13.	AL3 * (DL430 - DL435 - DL440)	Cable & Wire Facilities Maintenance Expense assigned to Category 1
13a.	AL3a * (DL430 - DL435 - DL440)	Cable & Wire Facilities Maintenance Expense assigned to Category 2
14.	AL4 * (DL365 + DL380 + DL395 - DL370 - DL375 - DL385 - DL390 - DL400 - DL405)	Central Office Equipment Maintenance Expense assigned to Category 4.13
14a.	AL4a * (DL365 + DL380 + DL395 - DL370 - DL375 - DL385 - DL390 - DL400 - DL405)	Central Office Equipment Maintenance Expense assigned to Categories 4.11 & 4.22

# Appendix B

# Broadband High Cost Loop Fund Loop Cost and Expense Adjustment Algorithms

Line	Formula	Description
15.	(AL5 + AL6) * (DL335 + DL350 - DL340 - DL345 - DL355 - DL360)	Network Support Expenses plus General Support Expenses assigned to C&WF Category 1 and COE Category 4.13
15a.	(AL5a + AL6a) * (DL335 + DL350 - DL340 - DL345 - DL355 - DL360)	Network Support Expenses plus General Support Expenses assigned to C&WF Category 2 and COE Categories 4.11 & 4.22
16.	(AL5 + AL6) * (L450 - L455)	Network Operations Expenses assigned to C&WF Category 1 and COE Category 4.13
16a.	(AL5a + AL6a) * (L450 - L455)	Network Operations Expenses assigned to C&WF Category 2 and COE Categories 4.11 & 4.22
17.	AL3 * (DL530 + ((DL815/DL800) * DL830))	Depreciation and Amortization Expense assigned to C&WF Category 1
17a.	AL3a * (DL530 + ((DL815/DL800) * DL830))	Depreciation and Amortization Expense assigned to C&WF Category 2
18.	AL4 * ((DL510 + DL515 + DL520) + ((DL805/DL800) * DL830))	Depreciation and Amortization Expense assigned to COE Category 4.13
18a.	AL4a * ((DL510 + DL515 + DL520) + ((DL805/DL800) * DL830))	Depreciation and Amortization Expense assigned to COE Categories 4.11 & 4.22
19.	(AL5 + AL6) * (DL535 + DL550)	Corporate Operations Expense assigned to C&WF Category 1 and COE Category 4.13, limited in accordance with \$26 (21(a)(4))
	(Adjusted for Corporate Operations Expense Limitation)	infinited in accordance with $\$30.021(a)(4)$
19a.	(AL5a + AL6a) * (DL535 + DL550)	Corporate Operations Expense assigned to
	(Adjusted for Corporate Operations Expense Limitation)	4.11 & 4.22, limited in accordance with §36.621(a)(4)
20.	(AL5 + AL6) * DL650	Operating Taxes assigned to C&WF Category 1 and COE Category 4.13
20a.	(AL5a + AL6a) * DL650	Operating Taxes assigned to C&WF Category 2 and COE Categories 4.11 & 4.22
21.	(AL5 + AL6) * (DL600 - DL540 - DL555)	Benefits other than Corporate Operations Expense assigned to C&WF Category 1 and COE Category 4.13
21a.	(AL5a + AL6a) * (DL600 - DL540 - DL555)	Benefits other than Corporate Operations Expense assigned to C&WF Category 2 and COE Categories 4.11 & 4.22

Line	Formula	Description
22.	(AL5 + AL6) * DL610	Rents assigned to C&WF Category 1 and COE Category 4.13
22a.	(AL5 + AL6) * DL610	Rents assigned to C&WF Category 2 and COE Categories 4.11 & 4.22
23.	(AL1 + AL7 - AL9) * 0.1125	Return Component for C&WF Category 1
23a.	(AL1a + AL7a - AL9a) * 0.1125	Return Component for C&WF Category 2
24.	(AL2 + AL8 - AL10) * 0.1125	Return Component for COE Category 4.13
24a.	(AL2 + AL8 - AL10) * 0.1125	Return Component for COE Categories 4.11 & 4.22
25.	Sum of AL13 thru AL24	Total Broadband Unseparated Costs
26.	AL25/DL060	Study Area Broadband Cost per Loop (SABCL)

#### NATIONAL AVERAGE BROADBAND COST PER LOOP (NABCL) ALGORITHM

#### • Cost Study Area Broadband Unseparated Costs =

Total Broadband Unseparated Costs \* (Study Area USF Loops / Study Area Total Loops)

#### • Nationwide Broadband Unseparated Costs =

Sum of Cost Study Area Broadband Unseparated Costs + Sum of Average Schedule Study Area Broadband Unseparated Costs

#### • National Average Broadband Cost Per Loop (NABCL) =

(Nationwide Broadband Unseparated Costs) / (Nationwide USF Loops)

#### EXPENSE ADJUSTMENT ALGORITHM

#### Study Areas Reporting 200,000 or Fewer Loops

- In excess of 115% NABCL, but not greater than 150% NABCL, 65% SABCL x USF Loops
- In excess of 150% NABCL, 75% SABCL x USF Loops

#### Study Areas Reporting More Than 200,000 Loops

- In excess of 115% NABCL, but not greater than 160% NABCL, 10% SABCL x USF Loops
- In excess of 160% NABCL, but not greater than 200% NABCL, 30% SABCL x USF Loops
- In excess of 200% NABCL, but not greater than 250% NABCL, 60% SABCL x USF Loops
- In excess of 250% NABCL, 75% SABCL x USF Loops

#### BROADBAND HIGH COST LOOP RECOVERY ADJUSTMENT

• Interstate Categories Unseparated Costs =

Sum of 13a, 14a, 15a ,16a, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a

Note: Sum of Unseparated Broadband Costs attributed to CWF Category 2 and COE Categories 4.11 & 4.22

- Interstate Categories Broadband Cost per Loop = Interstate Categories Unseparated Costs / USF Loops
- Percentage of SABCL attributed to Interstate Categories =

Interstate Categories Broadband Cost per Loop / SABCL

#### • Broadband High Cost Loop Recovery Adjustment =

Percentage of SABCL attributed to Interstate Categories

x Total Broadband HCL Support per Loop

x USF Loops