UNIVERSAL SERVICE

MONITORING REPORT

CC DOCKET NO. 98-202

2008

(Data Received Through June 2008)

Prepared by Federal and State Staff for the

Federal-State Joint Board on Universal Service in

CC Docket No. 96-45

This report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th Street SW, Washington, DC 20554. Call Best Copy and Printing, Inc. at (202) 488-5300 to purchase a copy. The report can also be downloaded from the Wireline Competition Bureau Statistical Reports (formerly FCC-State Link) Internet site at <www.fcc.gov/wcb/stats>. It is available in print image (pdf) files and compressed (zip) files in word processor (MS Word) and spreadsheet (MS Excel or Lotus 123 .wk4) formats.

Table of Contents

Index of Tables and Charts	o 5
Introduction and Summary 6 to	o 8
Service List	o 12
1. Industry Revenues and Contributions 1-1	to 1-55
2. Low-Income Support	to 2-50
3. High-Cost Support	to 3-264
4. Schools and Libraries Support	to 4-17
5. Rural Health Care Support	to 5-13
6. Subscribership and Penetration 6-1	to 6-97
7. Rates and Price Indices	to 7-23
8. Network Usage 8-1	to 8-30
9. Quality of Service	to 9-13
10. Infrastructure	to 10-22
11. Revenues, Expenses and Investment	to 11-28

Access Charges - Interstate - Per Line	.Table 7.11
Access Charges - Interstate - Per Line - by Carrier	. Table 7.13
Access Charges - Interstate - Per Minute	.Table 7.12
Access Charges - Interstate - Per Minute - by Carrier	.Table 7.14
Adjustment Formula	
Carrier Telecommunications Revenues Reported on FCC Form 499-Q	Table 1.9
Changes in Local Exchange Carriers	Table 3.36
Consumer Price Indices - Levels	Chart 7.1
Consumer Price Indices - Annual Percentage Changes	Chart 7.2
Consumer Price Indices - Annual Percentage Changes - Telephone Components	Chart 7.3
Consumer Price Indices - Average Annual Rates of Change	. Table 7.1
Consumer Price Indices - Monthly	Table 7.4
Contribution Base Revenues by Program	
Customer Perception Surveys - Percentage of Customers Dissatisfied	.Table 9.4
Customer Perception Surveys - Sample Sizes	Table 9.5
Embedded High-Cost Loop Fund Formulas	Table 3.3
Expenses and Taxes	. Table 11.2
Expenses - Total Operating	.Table 11.9
High-Cost Loop Support Payments by State or Jurisdiction	Table 3.6
High-Cost Loop Support Payments by Study Area	. Table 3.22
High-Cost Model Support Payments by Non-Rural Study Area	.Table 3.25
High-Cost Model Support Payments by State or Jurisdiction	. Table 3.9
High-Cost Support Fund Payment History	
High-Cost Support Fund Payment History - ILECs and CETCs	
High-Cost Support Fund Payments - Total	
High-Cost Support Fund Payments - Total - ILECs and CETCs	
High-Cost Support Payments - Total by State or Jurisdiction	
High-Cost Support Payments - Total by State - ILECs and CETCs	
High-Cost Support Payments - Total by Study Area	
High-Cost Support Mechanisms – Monthly Support per Loop by State	
ILEC High-Cost Loop Support Data - 2004 - by State or Jurisdiction	
ILEC High-Cost Loop Support Data - 2004 - by Study Area	
ILEC High-Cost Loop Support Data - Percentage Changes by State or Jurisdiction	
ILEC High-Cost Loop Support Data - Percentage Changes by Study Area	
ILEC Loops - by State or Jurisdiction	
ILEC Loops - by Study Area	
Income - Net	
Information for Allocating CLEC Revenues	
Information for Allocating Incumbent Local Exchange Revenues	
Information for Allocating Interstate Access Revenues	
Information for Allocating Interstate Toll	
Information for Allocating Intrastate Access Revenues	
Information for Allocating LEC Intrastate Toll	
Information for Allocating Mobile Wireless Revenues	
Information for Allocating Non-LEC Intrastate Toll	. rabie 1.25

Information for Allocating SLC Revenues	Table	1.21
Installation, Maintenance, and Customer Complaints	Table	9.1
Interstate Access Support Payments by State or Jurisdiction	Table	3.12
Interstate Access Support Payments by Study Area	Table	3.28
Interstate Common Line Support Trued-up Payments by State or Jurisdiction	Table	3.11
Interstate Common Line Support Trued-up Payments by Study Area	Table	3.27
Investment - Average Net	Table	11.6
Investment - Gross	Table	11.3
Investment - Other	Table	11.13
Investment Reserves	Table	11.4
Lifeline and Link Up Support Payments		
Lifeline Assistance - Payments - by State or Jurisdiction	Table	2.8
Lifeline Assistance - Subscribers - by State		
Lifeline Assistance - Subscribers - Tribal and Non-Tribal - by State	. Table	2.7
Lifeline Monthly Support - by State		
Lifeline Subscribers and Link Up Beneficiaries	Table	2.1
Link Up Assistance - Beneficiaries - by State		
Link Up Assistance - Beneficiaries - Tribal and Non-Tribal - by State	Table	2.10
Link Up Assistance - Payments - by State	Table	2.11
Local Switching Support Trued-up Payments by State or Jurisdiction	Table	3.13
Local Switching Support Trued-up Payments by Study Area	Table	3.29
Long-Term Support Payments by State or Jurisdiction	Table	3.10
Long-Term Support Payments by Study Area	Table	3.26
Low-Income Average Benefits by State or Jurisdiction	Table	2.12
Low-Income Program Dollars by Study Area	Table	2.5
Low-Income Support Payments	Table	2.2
Low-Income Support Payments by State or Jurisdiction	Table	2.4
Minutes - Interstate Access – ILEC by Study Area		
Minutes - Interstate Access – ILECs by Tier	Table	8.1
Minutes - Interstate Access - ILEC Quarterly Total	Table	8.2
Minutes - Interstate Access - ILEC Total - Chart	Chart	8.1
Non-Operating Items - Total	Table	11.10
Other Operating Income or Losses	Table	11.8
Penetration - Households		
Penetration - Individual Adults	Chart	6.8
Penetration by Household Size	Table	6.11
Penetration by Household Size - Critical Values		
Penetration by Household Size - Chart	Chart	6.5
Penetration by Householder's Age		
Penetration by Householder's Age - Critical Values		
Penetration by Householder's Age - Chart		
Penetration by Income		
Penetration by Income - Chart		
Penetration by Income - Adjusted for Inflation		
Penetration by Income by State - Adjusted for Inflation	Table	6.14

Penetration by Income by State - Sample Sizes	Table 6	5.20
Penetration by Income - Critical Values	Table 6	5.16
Penetration by Labor Force Status	Table 6	5.13
Penetration by Labor Force Status - Critical Values	Table 6	5.19
Penetration by Labor Force Status - Chart		
Penetration by Lifeline Assistance Level	Table 6	5.7
Penetration by Lifeline Assistance Status		
Penetration by Selected Characteristics	Table 6	5.3
Penetration by State - Households	. Table 6	5.9
Penetration by State - Housing Units	Table 6	5.4
Penetration by State - Changes	Table 6	5.5
Penetration by State - Changes - Map	Chart 6	5.3
Penetration by State - Comparison by Level of Lifeline Assistance	Table 6	5.8
Penetration by State - Critical Values	Table 6	5.15
Penetration by State - Map	Chart 6	5.2
Penetration Estimates - Historical	Table 6	5.2
Plant In-Service - Total	Table 1	11.12
Pool Results - NECA - Common Line	Table 3	3.4
Pool Results - NECA - Traffic Sensitive	Table 3	3.5
Price Indices - Annual Changes	. Table 7	7.2
Price Indices - Local and Long Distance Services - Annual Changes	Table 7	7.3
Producer Price Indices		
Rates - Local Business - Single Line	Table 7	7.7
Rates - Local Residential		
Revenue per Minute - Average		
Revenues and Other Operating Items	Table 1	11.1
Revenues by Type of Carrier	Table 1	8.1
Revenues from Telecommunications Service Provided for Resale	Table 1	1.5
Revenues from Telecommunications Service Provided to End Users	Table 1	1.6
Revenues - Total	. Table 1	1.7
Revenues - Total Operating	. Table 1	1.7
Rural Health Care - Disbursements by Service Speeds Acquired	Table 5	5.3
Rural Health Care - Disbursements per Person by State	. Table 5	5.4
Rural Health Care Funding Commitments and Disbursements by State	Table 5	5.2
Rural Health Care Funding Disbursements by Funding Year	Table 5	5.1
Safety Net Additive Support Payments by State or Jurisdiction	Table 3	3.7
Safety Net Additive Support Payments by Study Area	Table 3	3.23
Safety Valve Support Payments by State or Jurisdiction	Table 3	3.8
Safety Valve Support Payments by Study Area		
Schools & Libraries Commitments & Disbursements by Applicant & Service Type	pe Table	4.1
Schools & Libraries Commitments & Disbursements by State & Applicant Type	Table 4	1.2
Schools & Libraries Commitments & Disbursements by State & Service Type	Table 4	1.3
Schools & Libraries Commitments & Disbursements per Student by State		
Schools & Libraries Commitments per Student		
Schools & Libraries Disbursements by Service Provider Type		

Schools & Libraries Disbursements per Student	Chart 4.1	
Schools & Libraries Disbursements per Student	Table 4.7	
Standard Deviation Analysis of Residential Rates - 2003	Table 7.9	
Standard Deviation Analysis of Residential Rates - Historical	Table 7.10	\mathcal{C}
State Code Reference	Table 8.5	
Subscribership - Household - United States	Table 6.1	
Switch Downtime and Trunk Blocking	Table 9.2	
Switch Downtime Causes	Table 9.3	
Switching Systems	Table 10.1	1
Taxes	Table 11.1	11
Telecommunications Industry Revenues by Service	Table 1.2	
Telecommunications Industry Revenues - Total	Table 1.1	
Telecommunications Revenues by Type of Carrier		
Telecommunications Revenues - Interstate		
Telecommunications Revenues - Intrastate	Table 1.15	5
Telecommunications Revenues - Total - by State	Table 1.13	3
Telecommunications Revenues - 2002		
Telephone Calls and Billed Access Minutes of Large ILECs	Table 8.3	
Transmission Systems	Table 10.2	2
Universal Service Program Requirements and Contribution Factors	Table 1.10)
Universal Service Support - Distribution of Universal Service Payments	Chart 1.1	
Universal Service Support Mechanisms		
Universal Service Support Mechanisms - by State	Table 1.12	2
Unseparated ILEC NTS Revenue Requirement - by State or Jurisdiction		
Unseparated ILEC NTS Revenue Requirement - by Study Area		
Unseparated ILEC NTS Revenue Requirement per Loop - by State or Jurisdictio		
Unseparated ILEC NTS Revenue Requirement per Loop - by Study Area	. Table 3.35	5

Universal Service Monitoring Report CC Docket No. 98-202 2008

Introduction and Summary

This is the twelfth report in a series of reports prepared by federal and state staff members for the Federal-State Joint Board on Universal Service in CC Docket No. 96-45 (Universal Service Joint Board). This report is based on information available to us as of June 2008. These reports contain information designed to monitor the impact of various universal service support mechanisms, and the methods used to finance them. These mechanisms were adopted by the Federal Communications Commission (Commission), based on recommendations from the Universal Service Joint Board. These reports are part of a monitoring program created by the Commission in 1997 to replace a similar program in CC Docket No. 87-339 that resulted in a series of nineteen *Monitoring Reports*. The current program incorporates most of the information that was collected under the previous program, and also new materials from the reports of the administrator of the universal service support mechanisms, the Universal Service Administrative Company (USAC). To enhance our monitoring ability, we have created an open docket, which allows data, materials, comments, and studies to be submitted by any interested party at any time.

The monitoring program has proven to be valuable, not only as a report on the effects of the Commission's regulatory policies, but also as a complete census of all incumbent local exchange carriers. Because smaller carriers generally are exempt from most Commission reporting requirements, the *Monitoring Report* incorporates data from several sources, including the National Exchange Carrier Association (NECA) and USAC. USAC collects information from all eligible (including competitive) local exchange carriers to administer the universal service support mechanisms. NECA, at the direction of the Commission, collects information in order to administer the access charge pools and also provides information to USAC that is utilized in administering the Universal Service Fund. The *Monitoring Report*, therefore, contains the only available comprehensive data on all incumbent local exchange carriers, including data on such matters as the number of telephone lines, calling volumes, and certain types of costs. It also includes some information on other carriers.

This report presents data for the eleven subject categories selected for monitoring. The first section provides information on the contributions to the universal service support mechanisms and industry revenues, on which those contributions are based. The next four sections provide information

The last report was released on December 28, 2007. *Universal Service Monitoring Report*, CC Docket No. 98-202, 2007 (Data Received Through June 2007), prepared by the Federal and State Staff for the Federal-State Joint Board on Universal Service in CC Docket No. 96-45.

² Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9218, para. 869 (1997) (Universal Service First Report and Order). See 47 C.F.R. § 54.702(i).

³ CC Docket No. 98-202.

on the various support mechanisms: low-income support; high-cost support; schools and libraries support; and rural health care support. The remaining six sections provide information on matters that might be affected by the support mechanisms: subscribership and penetration; rates and price indices; network usage and growth; quality of service; infrastructure; and revenues, expenses, and investment. The *Monitoring Report* is published once a year.

The following are highlights of some of the material in this report. Section 1 provides an update on industry revenues and the universal service program requirements and contribution factors. Section 2 includes the latest data on the Lifeline and LinkUp programs. Section 3 includes the most recent projected payments for all of the high-cost support mechanisms, based on the quarterly reports from USAC. It also includes information from the latest filing by NECA for the high-cost loop fund. Section 4 includes updated data on the schools and libraries support mechanism. Section 5 includes updated data on the rural health care support mechanism. Section 6 includes the most recent Census data on subscribership from the Current Population Survey and the American Community Survey. It also includes data on telephone penetration by income by state and a discussion of the impact of Lifeline programs on penetration. Section 7 includes updated Consumer Price Index and Producer Price Index data and other updated rate information. Section 8 includes the latest NECA data on access minutes. Section 9 includes updated data on the quality of service from the Commission's Automated Reporting Management Information System (ARMIS) reports. Section 10 includes updated data on infrastructure from the ARMIS reports. Section 11 includes the latest information on revenues, expenses, and investment from the ARMIS reports.

This entire report is available electronically through the Wireline Competition Bureau Statistical Reports⁴ Internet site, which can be reached at www.fcc.gov/wcb/stats. It is available in both page image (.pdf) format and in a compressed (.zip) format, which, when unzipped yields word processing and spreadsheet files. In addition, information received well in advance of the next *Monitoring Report* will be made available on an interim basis in separate staff reports or in raw data files (such as most NECA filings used in the *Monitoring Report*) on the Wireline Competition Bureau Statistical Reports Internet site. In addition, the ARMIS data are available on the ARMIS Internet site, which can be reached at www.fcc.gov/wcb/eafs/.

For ease of public reference, parties submitting materials for this docket should provide a duplicate copy to the FCC's Reference Information Center,⁵ where copies of all materials filed in the docket are available for public reference.

This report has been prepared by the federal staff listed below and reviewed by the state staff listed below. These staff members can be contacted for further information:

General Information: Alex Belinfante (Federal) (202) 418-0944

Alan Feldman (Federal) (202) 418-0943

4 Formerly FCC-State Link.

5 Courtyard Level, 445 12th Street SW, Washington, DC 20554.

Industry Revenues and Contributions: Jim Lande (Federal) (202) 418-0948

Jim Eisner (Federal) (202) 418-7302 Craig Stroup (Federal) (202) 418-0989 Kay Marinos (Oregon) (503) 378-6730 Roberta Bass (Florida) (850) 413-6044

Low-Income Support: Suzanne Mendez (Federal) (202) 418-0941

Jim Eisner (Federal) (202) 418-7302 David Dowds (Florida) (850) 413-6542 Natelle Dietrich (Missouri) (573) 751-7427

High-Cost Support: Alex Belinfante (Federal) (202) 418-0944

Michael Lee (Montana) (406) 444-6185 Joel Shifman (Maine) (207) 287-1381 Robert Haga (California) (415) 703-2538

Schools and Libraries Support: Craig Stroup (Federal) (202) 418-0989

John Vu (Federal) (202) 418-2333

Jennifer Richardson (Indiana) (317) 232-2785 Peter Pescosolido (Connecticut) (860) 827-2616

Rural Health Care Support: Craig Stroup (Federal) (202) 418-0989

John Vu (Federal) (202) 418-2333

Vicki Helfrich (Mississippi) (601) 961-5453 George Young (Vermont) (802) 828-2358

Subscribership and Penetration: Alex Belinfante (Federal) (202) 418-0944

Earl Poucher (Florida) (850) 487-8242 Kathy Hagans (Ohio) (614) 466-9583

Rates and Price Indices: Jim Eisner (Federal) (202) 418-7302

Joel Shifman (Maine) (207) 287-1381 David Dowds (Florida) (850) 413-6542

Network Usage: Alex Belinfante (Federal) (202) 418-0944

John Ridgeway (Iowa) (515) 281-4034

Quality of Service: Jonathan Kraushaar (Federal) (202) 418-0947

Earl Poucher (Florida) (850) 487-8242 Brad Ramsay (NARUC) (202) 898-2207

Infrastructure: Jonathan Kraushaar (Federal) (202) 418-0947

Lori Kenyon (Alaska) (907) 263-2123

Revenues, Expenses, and Investment: Barbara Van Hagen (Federal) (202) 418-0849

Denise Parrish (Wyoming) (307) 777-7427

SERVICE LIST

All items filed in CC Docket No. 98-202 must be filed with the Secretary, Federal Communications Commission, 445 12th Street, SW, Room TW-B204, Washington, D.C. 20554, and the following Commissioners and staff members (e-mail addresses of staff members follow their mailing addresses):

DOCKET NO. 96-45 JOINT BOARD MEMBERS

Chairman Kevin J. Martin Federal Communications Commission 445 12th Street SW, Room 8-B201 Washington, DC 20554

Commissioner Michael J. Copps Federal Communications Commission 445 12th Street SW, Room 8-B115 Washington, DC 20554

Commissioner Ray Baum Public Utility Commission of Oregon 550 Capitol Street, N.E., Suite 215 P. O. Box 2148 Salem, OR 97308-2148

Commissioner Larry S. Landis Indiana Utility Regulatory Commission 101 West Washington St., Suite 1500E Indianapolis, IN 46204 Commissioner Deborah Taylor Tate Federal Communications Commission 445 12th Street SW, Room 8-A204 Washington, DC 20554

Commissioner John D. Burke Vermont Public Service Board 112 State Street, 4th Floor Montpelier, VT 05620-2701

Assistant Attorney General Simon ffitch Office of the Attorney General Public Counsel Section 800 5th Avenue, Suite 2000 Seattle, WA 98104-3188

Commissioner Lisa Polak Edgar Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0809

DOCKET NO. 96-45 FEDERAL-STATE JOINT BOARD STAFF

Kay Marinos Public Utility Commission of Oregon 550 Capitol Street, N.E., Suite 215 Salem, OR 97301 kay.marinos@state.or.us

Roberta Bass Florida Public Service Commission 2540 Shumard Oak Boulevard Gerald Gunter Bldg. Tallahassee, FL 32399-0809 roberta.bass@psc.state.fl.us Jennifer A. Richardson Indiana Utility Regulatory Commission 101 West Washington St., Suite 1500E Indianapolis, IN 46204 jrichardson@urc.state.in.us

George Young Vermont Public Service Board Drawer 20 112 State Street, 4th Floor Montpelier, VT 05620-2701 george.young@state.vt.us Lori Kenyon Regulatory Commission of Alaska 701 West 8th Avenue, Suite 300 Anchorage, AK 99501 Lorraine.Kenyon@Alaska.gov

Joel Shifman
Maine Public Utilities Commission
242 State Street
State House Station 18
Augusta, ME 04333-0018
joel.shifman@maine.gov

John Ridgway Iowa Utilities Board 350 Maple Street Des Moines, IA 50319-0069 john.ridgway@iub.state.ia.us

Vicki Helfrich Mississippi Public Utilities Staff 501 North West Street, Suite 301-B Jackson, MS 39201 vicki.helfrich@psc.state.ms.us

Robert Haga California Public Utility Commission 505 Van Ness Avenue San Francisco, CA 94102 RWH@cpuc.ca.gov

Michael Lee Montana Public Service Commission 1701 Prospect Ave. P.O. Box 202601 Helena, MT 59620-2601 mlee@mt.gov

Brad Ramsay NARUC 1101 Vermont Ave. NW, Suite 200 Washington, DC 20005 jramsay@naruc.org Peter Pescosolido Connecticut Department of Public Utility Control 10 Franklin Square New Britain, CT 06051 Peter.Pescosolido@po.state.ct.us

Natelle Dietrich Missouri Public Service Commission Governor's Office Building 200 Madison Street Jefferson City, MO 65102 natelle.dietrich@psc.mo.gov

Denise Parrish Wyoming Office of Consumer Advocate 2515 Warren Avenue, Suite 304 Cheyenne, WY 82002 dparri@state.wy.us

Earl Poucher Florida Office of the Public Counsel 111 West Madison, Room 812 Tallahassee, FL 32399-1400 poucher.earl@leg.state.fl.us

Kathy Hagans
Office of Ohio Consumers' Counsel
10 W. Broad St., Suite 1800
Columbus, OH 43215
hagans@occ.state.oh.us

David Dowds
Florida Public Service Commission
2540 Shumard Oak Boulevard
Gerald Gunter Building
Tallahassee, FL 32399-0850
ddowds@psc.state.fl.us

Amy Bender

Office of Chairman Martin

Federal Communications Commission 445 12th Street SW, Room 8-B201

Washington, DC 20554

amy.bender@fcc.gov

Scott Deutchman

Office of Commissioner Copps

Federal Communications Commission 445 12th Street SW, Room 8-B115D

Washington, DC 20554 scott.deutchman@fcc.gov

Alex Minard, Acting Legal Counsel

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 5-C434 Washington, DC 20554

alexander.minard@fcc.gov

Jennifer McKee, Acting Chief

Telecommunications Access Policy Division Telecommunications Access Policy Division

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 5-A441

Washington, DC 20554 jennifer.mckee@fcc.gov

Gary Seigel

Wireline Competition Bureau

Federal Communications Commission 445 12th Street SW, Room 5-C408

Washington, DC 20554

gary.seigel@fcc.gov

Greg Orlando

Office of Commissioner Tate

Federal Communications Commission 445 12th Street SW, Room 8-A204

Washington, DC 20554

greg.orlando@fcc.gov

Dana Shaffer, Chief

Wireline Competition Bureau

Federal Communications Commission 445 12th Street SW, Room 5-C352

Washington, DC 20554

dana.shaffer@fcc.gov

Jeremy Marcus, Acting Associate Chief

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 5-A426

Washington, DC 20554 jeremy.marcus@fcc.gov

Katie King

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 5- B544 Washington, DC 20554

katie.king@fcc.gov

Ted Burmeister

Telecommunications Access Policy DivisionTelecommunications Access Policy Division

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 5-B438

Washington, DC 20554 theodore.burmeister@fcc.gov

OTHER FEDERAL STAFF

Alex Belinfante

Industry Analysis & Technology Division

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 6-A132 Washington, DC 20554

alex.belinfante@fcc.gov

Alan Feldman, Deputy Chief

Industry Analysis & Technology Division

Wireline Competition Bureau

Federal Communications Commission

445 12th Street SW, Room 6-A223

Washington, DC 20554

alan.feldman@fcc.gov

Jonathan Kraushaar Industry Analysis & Technology Division Wireline Competition Bureau Federal Communications Commission 445 12th Street SW, Room 6-A262 Washington, DC 20554 jonathan.kraushaar@fcc.gov

Barbara Van Hagen Industry Analysis & Technology Division Wireline Competition Bureau Federal Communications Commission 445 12th Street SW, Room 6-C120 Washington, DC 20554 barbara.vanhagen@fcc.gov

Craig Stroup
Industry Analysis & Technology Division
Wireline Competition Bureau
Federal Communications Commission
445 12th Street SW, Room 6-A104
Washington, DC 20554
craig.stroup@fcc.gov

Suzanne Mendez Industry Analysis & Technology Division Wireline Competition Bureau Federal Communications Commission 445 12th Street SW, Room 6-A144 Washington, DC 20554 suzanne.mendez@fcc.gov Jim Lande
Industry Analysis & Technology Division
Wireline Competition Bureau
Federal Communications Commission
445 12th Street SW, Room 6-A134
Washington, DC 20554
jim.lande@fcc.gov

Jim Eisner
Industry Analysis & Technology Division
Wireline Competition Bureau
Federal Communications Commission
445 12th Street SW, Room 6-A102
Washington, DC 20554
james.eisner@fcc.gov

John Vu Industry Analysis & Technology Division Wireline Competition Bureau Federal Communications Commission 445 12th Street SW, Room 6-A360 Washington, DC 20554 john.vu@fcc.gov