Local Telephone Competition and Broadband Reporting

Feb 22, 2010

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Overview

- This presentation describes how to use the Form 477 online application to file Local Telephone Competition and Broadband Data required by the FCC
- The Form 477 application is a web interface that allows providers of the following services to submit data to the FCC:
 - Broadband (complete Parts I and VI),
 - Wired and wireless local telephone (complete Parts II.A and V),
 - Mobile telephony (complete Part III), and
 - Interconnected VoIP (complete Parts II.B and V)

Overview (cont)

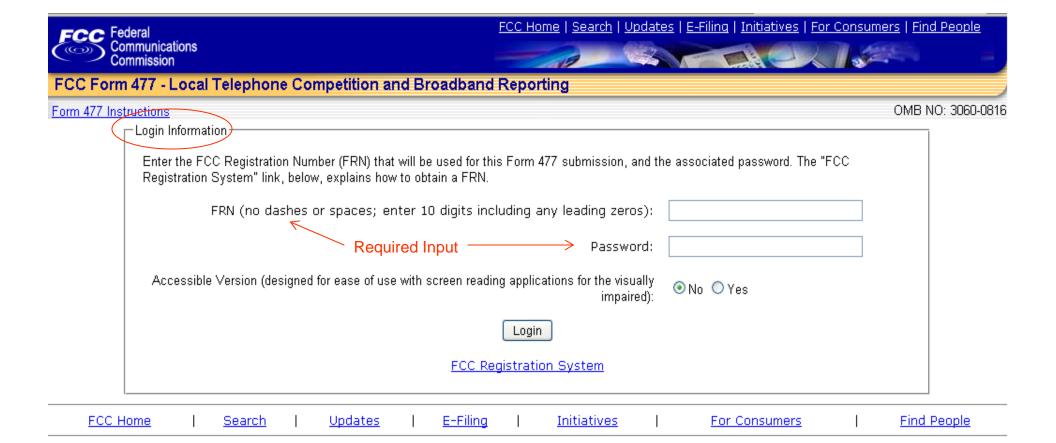
- The Form 477 application
 - Available at https://specialreports.fcc.gov/wcb/Form477/
 - Implements FCC orders 08-89 (23 FCC Rcd 9691) and 08-148 (23 FCC Rcd 9800)
 - Enhances broadband and local telephone competition data collection
- More information is at the URL <u>http://www.fcc.gov/Form477</u>
- Begin at the <u>Login</u> screen (next slide)

Federal Communications Commission

More FCC Contact Information...

445 12th Street SW

Washington, DC 20554



FCC Form 477 - Local Telephone Competition and Broadband Reporting Software Version 01.01.02 July 9, 2009

Phone: 1-888-CALL-FCC (1-888-225-5322)

Fax: 1-866-418-0232

E-mail: fccinfo@fcc.gov

TTY: 1-888-TELL-FCC (1-888-835-5322)

- Privacy Policy

- Website Policies & Notices

- Required Browser Plug-ins

- Freedom of Information Act

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Getting Started

- You must have an FCC Registration Number (FRN) in the Commission Registration System (CORES)
 - If you need an FRN, the URL for CORES is https://fjallfoss.fcc.gov/coresWeb/publicHome.do
 - You also may reach the CORES site if you click the FCC Registration System link at the bottom of the Login screen
- On the Login screen enter
 - Your FRN, no spaces or dashes, and
 - Password associated with this FRN
- Select "Accessible Version" for use with screen reading applications for the visually impaired
- Click the "Login" button
- You will now see the <u>Main Menu</u> (Form 477 Home Page)

OMB NO: 3060-0816

FRN 18461806 tom telephone

New Form

To start a new Form 477 submission, first use the drop-down lists to specify "Data as of" and "State". Next, use the "Operations" option buttons that will appear to specify "ILEC" (Incumbent Local Exchange Carrier) or "Non-ILEC", and then click "Create New." Filers must report data for different states in separate submissions. Filers must report data for ILEC and non-ILEC operations in separate submissions. IMPORTANT: You MUST create a new submission for your Dec 31, 2009 data. The "Data as of" date on your submission of Jun 30, 2009 data CANNOT be changed.

Data as of: Dec 3	1, 2009 💌 State: 🛮 Alabama	Opera	itions: 💿 ILEC 🔘 Non-ILEC	Create New
xisting Form 477 Submis Existing Form 477 Submissio			Click to Select State	
Status	State	Operations	View/Edit By Part	Revise/Submit
Original - In Progress	Arizona	Non-ILEC	View/Edit	Submit
Revised - In Progress	California	Non-ILEC	View/Edit	Submit
Original - In Progress	Hawaii	ILEC	View/Edit	Submit
Revised - In Progress	Montana	Non-ILEC	View/Edit	Submit
Revised - In Progress	South Carolina	Non-ILEC	View/Edit	Submit

Existing Forms

Executing Ferrit AT Constitution Dates and Constitution C					
Status	State	Operations	View/Edit By Part	Revise/Submit	
Revised - In Progress	Alabama	Non-ILEC	View/Edit	Submit	
Original - In Progress	Alabama	ILEC	View/Edit	Submit	
Original - In Progress	Florida	Non-ILEC	View/Edit	Submit	
Original - In Progress	Florida	ILEC	View/Edit	Submit	
Revised - In Progress	Kansas	ILEC	View/Edit	Submit	
Original - In Progress	Maryland	Non-ILEC	View/Edit	Submit	

New Submissions

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Creating a new Submission

- Select the state from the drop-down list (see slide 7)
- Click "Select State" to see



- Select ILEC or Non-ILEC for Operations
 - May be changed later but not if it will duplicate another form
- Click "Create New" to see the Cover Page
- Complete the <u>Cover Page</u> (next slide)
 - Select a name for item 4, the common-control name, <u>from the</u> <u>drop-down box</u>
 - Review the pre-selected choice for item 9
 - Enter contact information in items 6, 7, 10, and 11
 - Click the button "Save and Go to Submission Menu"

Form 477 Submission for FRN: 18461806, Company: tom telephone, State: AZ, Operations: Non-ILEC, Data as of Dec 31, 2009

Data Description	Value
Data as of	Dec 31, 2009
1. FRN	18461806
2. Company	tom telephone
3. Type of Operations	OILEC Non-ILEC
4. Use this drop-down list to select a single name, such as the holding company, to identify all commonly-owned or commonly-controlled filers. Commonly-controlled filers with no holding company should decide on a single name to use for this question. Select "not shown" if no appropriate name appears in the list.	@ Communications, Inc.
If you selected "not shown" above, type in the single name that will identify all commonly-owned or commonly-controlled filers.	
5. State	AZ
6. Contact person (person who prepared the submitted data)	Tom Jones
7. Contact person telephone number and email address	Phone. 602-555-1234 Email. tj@comm.com
8. Status of submission	Original - In Progress
9. Indicate whether you request non-disclosure of some or all of the information in this submission because you believe that this information is privileged and confidential and public disclosure of such information would likely cause substantial harm to the competitive position of the filer.	No ○Yes
10. Official (corporate officer, managing partner, or sole proprietor) whose signature certifies that he/she has examined the information contained in this Form 477 and that, to the best of his/her knowledge, information and belief, all statements of fact contained in this Form 477 are true and correct. For purposes of this Form 477, the entry of the official's name on this line shall constitute that official's electronic signature to this certification. Persons making willful false statements in a Form 477 can be punished by fine or imprisonment under the Communications Act, 47 U.S.C. 220(e).	Tom Doe
11. Certifying official telephone number and email address	Phone. 602-555-5555 Email td@comm.coml

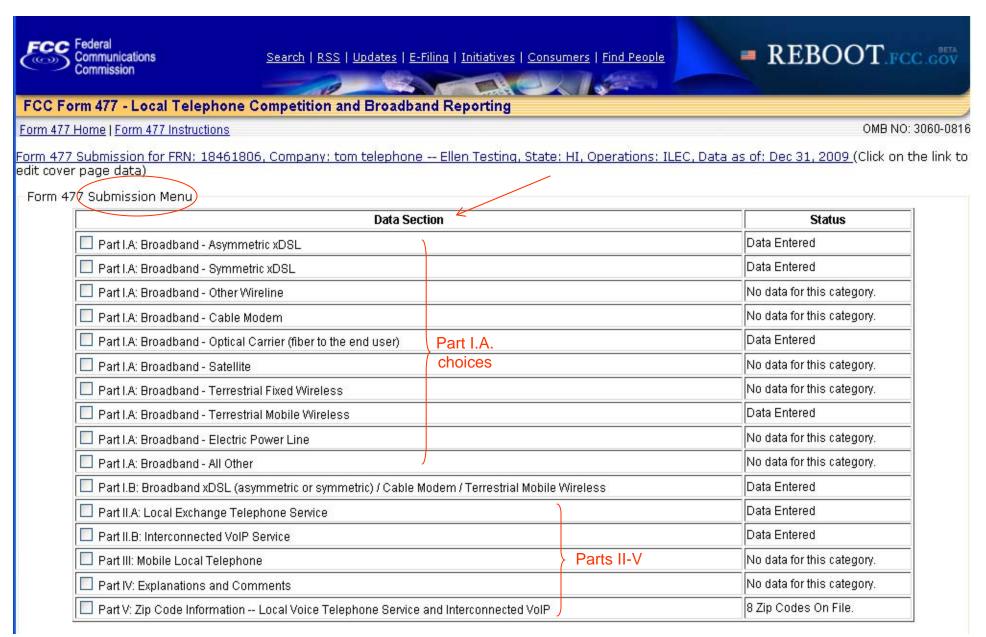
Previous Round Filings

- If you filed in a previous round
 - On the Cover Page you should see a list of previously entered state submissions in the section "Existing Form 477 Submissions:"
 - Under "Create New Form 477," "Dec 31, 2009" will be the default selection
 - Select a state for which you previously entered data
 - Click "Create New" to display the Cover Page
 - Note that all fields except 10 and 11 are pre-filled
 - Update as necessary and complete items 10 and 11
 - Click "Save and Return to Submission Menu"

Note: System will pre-fill only Cover Page information

Submission (Edit) Menu

- Clicking "Save and Return to Submission Menu" displays the <u>Submission</u> (or <u>Edit</u>) <u>Menu</u> (next two slides)
- Facilities-based providers of broadband connections to end users must file Parts I.A. and VI
- Wired and wireless local telephone service providers must complete Parts II.A and V
- Mobile telephony providers must complete Part III
- Interconnected VoIP providers must complete Parts II.B and V
- At any time you may print parts of the filing for which you have entered data



Submission Menu (2)

Part VI: Broadband Connection Counts by Technology, Census Tract, and Information Transfer Rate
Enter Census Tract Detail Data by Hand
View/Edit Census Tract Detail Data (24339 records)
Tierry Edit Collisas Tract Botal Bata (2 1003 1000143)
Print Form
Select one of the following and click OK to see a preview of what will print. Then use your browser's capability to print or save the document.
O Cover Page
O Part I
O Part II
O Part III
O Part IV
O Part V
O Part VI
Complete Report including all Part VI detail
● Complete Report without Part VI
<u> ○ Errors</u> Errors Warnings
OK OK
Options for this Submission
The current status for this Form 477 Submission is Original - In Progress.
Submit this submission as complete
Delete this Submission
Data File Upload For All Parts
Previously uploaded XML files:

Exiting a Page

- Most screens give the user several choices of what to do next upon completion
- Click
 - "477 Home" to return to the main menu
 - "Save and Return to Submission Menu" to save the data on the screen and continue with this filing
 - "Current Form 477" to return to the Submission Menu without saving
 - "Log Out" to log out of the system and display the Login screen
 - "Form 477 Instructions" (at any time) to see the instructions in another window

Broadband Data

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Entering Broadband Data

- Under "Data Section" of the Submission Menu
 - Click "Part I.A: Broadband xxx" where xxx is any of the 10 technologies listed
 - This displays the state totals section for that technology
 - See Asymmetric xDSL example on slide 19 and the Cable Modem screen (slide 20) following it
 - Screens for most other broadband technologies are the same
 - See slide 21 for exceptions

Broadband Example - xDSL

- Enter on the "Part I.A: Broadband xxx" form (next slide)
 - the total number of connections in the state in column (1)
 - This number must be an integer
 - the appropriate percentages of the connections listed in column
 into columns (2) through (5)
 - The system allows up to three figures after the decimal
 - Columns (1) through (5) must be filled in, even if they are "0"
 - the number of connections in each of the speed tiers for which you have connections in columns (6) through (13)
 - These numbers must be integers
 - Leave the remaining cells in columns (6) through (13) blank do not try to put "0" in them
- The sum of all entries in columns (6) through (13) must add up to the value reported for (1)
- Column (5) must be no greater than column (4)

3 mbps

Form 477 Home | Current Form 477 | Form 477 Instructions OMB NO: 3060-0816 Form 477 Submission for FRN: 18461806, Company: tom telephone -- Ellen testing, State: CA, Operations: Non-ILEC, Data as of Dec 31, 2009 Part I.A: Broadband (Asymmetric xDSL Technology In Part I.A, report connections (wired "lines") to end users that you (including affiliates) equipped to enable the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kbps in at least one direction. Report only in-service connections, The end user's Internet access service may be provided by you (including affiliates) or by an unaffiliated entity. For purposes of Part I.A, Internet Service Providers (ISPs) are not end users. Categorize the connection based on the technology employed by the part of the connection that terminates at the end user location. (Do not report anywhere in Form 477 any high-capacity connections between two locations of the same end user customer, ISP or communications carrier.) Col 1-5 \longrightarrow (2)(3) (4) (5)Total connections to end users that you (including Percentage of (1) that are billed Percentage of (1) that connect to affiliates) equipped as broadband over your own local Percentage of (1) that you loop facilities or the equivalent, or over UNE loops or (including affiliates) equipped (or incorporated in a service Percentage of (1) that residential end users and have other facilities you obtained from an unaffiliated entity, over your own local loop facilities billed) to end users by you, or your onnect to residential information transfer rates exceeding or the equivalent, (Enter 0 if the affiliates or agents, (Enter 0 if the end users, (Enter 0 if the 200 kbps in both directions, (Enter Do not convert lines into a voice-grade-equivalent measure. true value is 0 percent.) true value is 0 percent.) true value is 0 percent.) O if the true value is O percent.) 0.000 88.123 3556813 0.000 88.123 Break down the total connections reported in (1) to show the non-zero number in each of the following speed tiers. If the number of connections in a particular speed tier is zero, leave that data cell blank. Connections reported in EACH data cell below must equal the sum of Asymmetric xDSL connections reported in Part VI by Census Tract, for that download/upload combination, and the sum of ALL data cells below must equal the total connections reported in (1). Download information transfer rate to the end user (8 categories): (6) (7)(8) (9)(11)(12)(13)(10)Col 6-13 ——— Greater than or Greater than Greater than or 200 kbps and equal to 768 equal to 1.5 equal to 3 mbps equal to 6 mbps equal to 10 equal to 25 Greater than less than 768 and less than 6 kbps and less mbps and less and less than mbps and less mbps and less or equal to kbps than 1.5 mbps than 3 mbps mbps 10 mbos than 25 mbps than 100 mbps 100 mbos Upload information transfer rate from the end user (9 categories): Less than or equal to 200 kbps 1142530 532726 Greater than 200 kbps and less than 768 kbps 1160930 Greater than or equal to 768 kbps and less than 61063 128133 103633 15487 8399 Greater than or equal to 1.5 mbps and less than

Form 477 Home | Current Form 477 | Form 477 Instructions OMB NO: 3060-0816 Form 477 Submission for FRN: 18461806, Company: tom telephone, State: AZ, Operations: Non-ILEC, Data as of Dec 31, 2009 Part I.A: Broadband (Cable Modem) Technology In Part I.A, report connections (wired "lines") to end users that you (including affiliates) equipped to enable the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kbps in at least one direction. Report only in-service connections. The end user's Internet access service may be provided by you (including affiliates) or by an unaffiliated entity. For purposes of Part I.A, Internet Service Providers (ISPs) are not end users. Categorize the connection based on the technology employed by the part of the connection that terminates at the end user location. (Do not report anywhere in Form 477 any high-capacity connections between two locations of the same end user customer, ISP or communications carrier.) Col 1-5 \longrightarrow (i) (2) (3)(4) (5)Total connections to end users that you (including Percentage of (1) that connect to affiliates) equipped as broadband over your own local Percentage of (1) that you Percentage of (1) that are billed loop facilities or the equivalent, or over UNE loops or (including affiliates) equipped (or incorporated in a service Percentage of (1) that residential end users and have other facilities you obtained from an unaffiliated entity, over your own local loop facilities billed) to end users by you, or your - connect to residential information transfer rates exceeding 200 kbps in both directions, (Enter Do not convert lines into a voice-grade-equivalent or the equivalent, (Enter 0 if the affiliates or agents, (Enter 0 if the end users, (Enter 0 if the true value is 0 percent.) O if the true value is O percent.) measure. true value is 0 percent.) true value is 0 percent.) 100,000 100,000 89.000 89,000 22435 Break down the total connections reported in (1) to show the non-zero number in each of the following speed tiers. If the number of connections in a particular speed tier is zero, leave that data cell blank. Connections reported in EACH data cell below must equal the sum of Cable Modem connections reported in Part VI by Census Tract, for that download/upload combination, and the sum of ALL data cells below must equal the total connections reported in (1). Download information transfer rate to the end user (8 categories): Col 6-13 (7)(12)(13)(8) (9)(10) (11)Greater than or Greater than Greater than or 200 kbps and equal to 768 equal to 1.5 equal to 3 mbps equal to 6 mbps equal to 10 equal to 25 Greater than less than 768 kbps and less mbps and less and less than 6 and less than mbps and less mbps and less or equal to than 1.5 mbps than 3 mbps 10 mbps than 25 mbps than 100 mbps 100 mbps kbps mbps Upload information transfer rate from the end user (9 categories): Less than or equal to 200 kbps Greater than 200 kbps and less than 768 kbps Less than or equal to 200 kbps Greater than 200 kbps and less than 768 kbps

Other Broadband Screens

- Part I.A. "Symmetric xDSL" and "Other Wireline" data both contain only one row for columns (6) through (13) because they are symmetric (next slide)
- Part I.A. Terrestrial Mobile Wireless data contains a percentage residential in the statewide totals (slide 23)
 - Entering connections for a particular speed tier requires an associated percentage residential entry
 - These providers <u>do not</u> enter census tract connections
- ILECs completing Part I.A. for xDSL, and Terrestrial Mobile Wireless (TMW) and Cable Modem (CM) providers must complete Part I.B (slide 24)
 - ILECs and CM providers estimate <u>%</u> residential availability
 - TMW providers estimate <u>number</u> of broadband capable devices
 Note: this number is greater than the subscribers reported in I.A

	ent Form 477 Form 477	Instructions					OMB NO: 3060
n 477 Submissior	n for FR <u>N: 184</u> 61806, i	Company: tom tel:	ephone Ellen te:	sting, State: CA, Ope	rations: Non-ILEC,	Data as of Dec 31	., 2009
art I.A: Broadban	d - Symmetric xDSL						
	3,1111001011002		-Technology				
ormation transfer rate affiliated entity. For pu	ections (wired "lines") to en is exceeding 200 kbps in bo urposes of Part I.A, Interne ser location. (Do not report	oth directions. Report o t Service Providers (IS	nly in-service connect (Ps) are not end users.	tions. The end user's Inter . Categorize the connectior	net access service may n based on the technolo	be provided by you (in gy employed by the pai	cluding affiliates) or b rt of the connection th
Col 1-5 —			(2)	(3)	(4)		(5)
affiliates) equipped loop facilities or the other facilities you o	to end users that you (inclu as broadband over your ow equivalent, or over UNE lo btained from an unaffiliated es into a voice-grade-equiv measure.	n local Percentage ops or (including aff lentity, over your own l alent or the equival	îliates) equipped local loop facilities bill	ercentage of (1) that are b (or incorporated in a servi led) to end users by you, o filiates or agents. (Enter O true value is O percent.)	ce Percentage of (r your connect to resi if the end users. (Enter	1) that residential dential information tr O if the 200 kbps in	of (1) that connect to lend users and have ansfer rates exceeding both directions. (Ente e value is 0 percent.)
1	1632	0.00	0	0.000	6.189	6	.189
ak down the total con blank.	nnections reported in (1) to EACH data cell below must	equal the sum of Symn		owing speed tiers. If the nu ns reported in Part VI by C			
	ust equal the total connection		on transfer rate to and	d from the end user (8 cate	egories):		category, and the sar
. data cells below mu	ust equal the total connection		on transfer rate to and	d from the end user (8 cate	egories): (11)	(12)	(13)
Col 6-13, Sin (6) Greater than 200 kbj and less than 768	ist equal the total connections igle Row (7) ps Greater than or equal to 768 kbps and less	Informati (8) Greater than or equal to 1.5 mbps and less	(9) Greater than or equal to 3 mbps and less	(10) Greater than or equal to 6 mbps and less	(11) Greater than or equal to 10 mbps and less	Greater than or equal to 25 mbps and less	(13) Greater than or equa
Col 6-13, Sin (6) Greater than 200 kbj	ist equal the total connections in the second of the secon	Informati (8) Greater than or equal	(9) Greater than or equal	(10) Greater than or equal	(11) Greater than or equal	Greater than or equal	(13)

Form 477 Home

Save and Return to Submission Menu

<u>Log Out</u>

Form 477 Home | Current Form 477 | Form 477 Instructions

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Form 477 Submission for FRN: 18461806, Company: tom telephone -- Ellen Testing, State: HI, Operations: ILEC, Data as of Dec 31, 2009 Part I.A: Broadband (Terrestrial Mobile Wireless) Technology In Part I.A, report the number of subscribers whose device and subscription permit them to access the lawful Internet content of their choice at information transfer rates exceeding 200 kbps in at least one direction. For purposes of Part I.A, providers must exclude subscribers whose choice of content is restricted to only customized-for-mobile content, and exclude subscribers whose subscription does not include, either in a bundle or as a feature added to a voice subscription, a data plan providing the ability to transfer, on a monthly basis, either a specified or an unlimited amount of data to and from Internet sites of the subscriber's choice. Notes specific to Terrestrial Mobile Wireless: (1) Entities that use unlicensed devices to provide commercial broadband Internet access service that can be received at any location within a service footprint must report their subscribers in this category. By contrast, entities that use unlicensed devices to provide broadband Internet access connections to dispersed, fixed end user premises locations must report those subscribers in the Terrestrial Fixed Wireless category. (2) Do not report "Wi-Fi" and other wireless Ethernet, or wireless local area network, applications that only enable local distribution and sharing of a premises broadband facility. (1) (2)(3) (4) (5)Percentage of (1) that are not billed to a Subscribers whose billing address is in this Percentage of (1) that you Percentage of (1) that are retail Percentage of (1) that are not corporate, non-corporate business, government or institutional customer state and whose device and subscription (including affiliates) equipped subscriptions billed (or billed to a corporate, permit the subscriber to access the lawful over your own local loop incorporated in a service billed) to non-corporate business, account and that have information transfer Internet content of the subscriber's choice rates exceeding 200 kbps in both facilities or the equivalent. end users by you, or your government or institutional at information transfer rates exceeding 200 (Enter O if the true value is O affiliates or agents, (Enter O if the customer account, (Enter O if the directions, (Enter O if the true value is O kbps in at least one direction. true value is 0 percent.) true value is 0 percent.) percent.) percent.) 100 0.000 0.000 0.000 Break down the total subscribers reported in (1) to show the non-zero number in each of the following speed tiers. If the number of subscribers in a particular speed tier is zero, leave that data cell blank. For each speed tier with a non-zero number of subscribers, also report the percentage of subscribers that are "residential" in the specific sense that their subscriptions are not billed to a corporate, non-corporate business, government or institutional customer account. Download information transfer rate to the end user (8 categories): Download information transfer rate to the end user (8 categories): Connections (6) (7)(8) (9)(10)(11)(12)(13)Greater than Greater than or 200 kbps and equal to 768 equal to 1.5 equal to 3 mbps equal to 6 mbps equal to 10 equal to 25 Greater than % Residential less than 768 kbps and less mbps and less and less than 6 and less than mbps and less mbps and less or equal to 100 mbps kbps than 1.5 mbps than 3 mbps mbps 10 mbps than 25 mbps than 100 mbps Upload information transfer rate from the end user (9 categories): Less than or equal to 200 kbps Percentage Residential % % % % % %

%

Percentage Residential

Greater than 200 kbps and less than 768 kbps

%

%

Form 477 Home | Current Form 477 | Form 477 Instructions

Part I.B: Broadband - xDSL (asymmetric or symmetric)		
Complete Part I.B for xDSL (asymmetric or symmetric) ONLY IF you are an ILEC (or an affiliat and/or Part I.A for Symmetric xDSL.	te of an ILEC) that was required to complete F	Part I.A for Asymmetric x
For the purposes of completing Part I.B for xDSL (asymmetric or symmetric):		
(1) "Residential end user premises" include residential living units, individual living units in sur end user locations to which you (including affiliates and agents) market services that are prima	ch institutional settings as college dormitorie arily designed for residential use.	es and nursing homes, an
(2) The "service area" of an ILEC consists of those residential end user premises to which the wireless last mile equivalent) that it owns.	ILEC can deliver telephone service over loca	al loop facilities (or the fix
I.B. Report your best estimate of the percentage of residential end user premises in your servi connections (with information transfer rates exceeding 200 kbps in at least one direction) cou facilities. Providers of xDSL connections should base responses on the service area of the affi	ıld be provided using installed distribution	(a) Estimated % of residential end user premises
THIS IS THE END OF PART I.B for xDSL (asymmetric and symmetric).	SL or Cable Modem	
Part I.B: Broadband - Terrestrial Mobile Wireless		
Complete Part I.B for Terrestrial Mobile Wireless ONLY IF you (including affiliates) are required	d to complete Part I.A for Terrestrial Mobile (Wireless.
Report the number of business and residential subscribers whose mobile devices are capable of sending or receiving data at information transfer rates exceeding 200 kbps in at least one direction.	(a) Subscribers with devices capable of information transfer rates exceeding 20 direction	
I.B. Number of subscribers. Terrestrial Mobile Wireless	500	

OMB NO: 3060-0816

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Save and Return to Submission Menu

Broadband Census Tracts

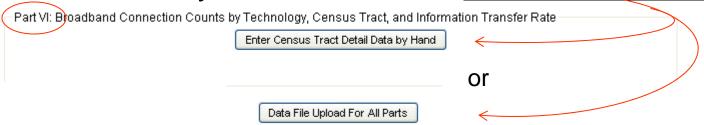
Section	<u>Slide</u>
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Broadband Census Tract Data

Applies to all broadband technologies except Terrestrial Mobile Wireless

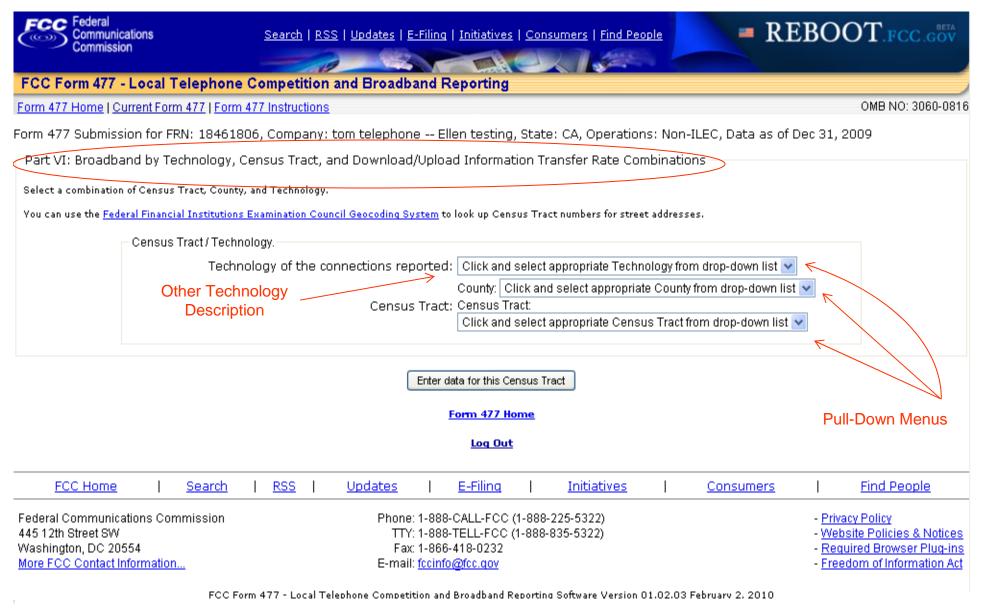
- Data elements
 - Number of connections by speed tier
 - Percentage of connections that are residential
- Choose data entry method from the <u>Submission Menu</u>



- Include census tracts within your defined service territory (see Instructions) that have no broadband customers
 - Enter "0" in any cell that permits connections and also in the corresponding cell for percentage residential

Manual Census Tract Data Entry

- Click "Enter Census Tract Data by Hand" to see next slide
- Enter technology, county and census tract from *pull-down* menus
- For "Other Technology" specify the technology in the second box
- Click "Enter data for this Census Tract" to see slide 29
 - Note: All boxes will be clear (not grey) if using Internet Explorer
- Enter number of connections and percentage residential for appropriate speed tiers for all but Terrestrial Mobile Wireless
 - Only speed tiers that have entries on the statewide screen will accept data
 - If % residential is left blank the number of connections will not be saved
 - If there are no connections for a census tract within your "defined service territory" (see Instructions) enter "0" in any cell that permits connections and also in the corresponding cell for percentage residential
- For Terrestrial Mobile Wireless (slide 30), check each box that indicates broadband service is available in this speed tier



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Form 477 Home | Current Form 477 | Form 477 Instructions

OMB NO: 3060-081

Form 477 Submission for FRN: 18461806, Company: tom telephone -- Ellen testing, State: CA, Operations: Non-ILEC, Data as of Dec 31, 2009

Census Tract Detail - Technologies except Terrestrial Mobile Wireless

If you reported broadband connections in Part I.A in a technology category other than Terrestrial Mobile Wireless, you must specify the technology category, identify the Census Tracts in this state in which you had connections in service using that technology, and, for each Census Tract, report the number of connections and the percentage residential in each relevant download/upload information transfer rate combination.

You can use the Federal Financial Institutions Examination Council Geocoding System to look up Census Tract numbers for street addresses.

Census Tract / Technology. Technology of the connections: Asymmetric xDSL Census Tract: State: CA County: Fresno Census Tract: 3.00 Connections DOWNLOAD INFORMATION TRANSFER RATE. % Residential Greater than or Greater than equal to 25 200 kbps and equal to 768 equal to 1.5 equal to 3 equal to 6 equal to 10 equal to 100 less than 768 kbps and less mbps kbbs than 1.5 mbps than 3 mbps than 6 mbps than 10 mbps than 25 mbps than 100 mbps **UPLOAD INFORMATION TRANSFER RATE:** Less than or equal to 200 kbps Number of Connections: Percentage Residential: 96 Greater than 200 kbps and less than 768 kbps Number of 44 99 34 Connections: 95,455 84.615 69,697 38.235 96 96 96 96 Percentage Residential: Greater than or equal to 768 kbps and less than 1.5 mbps Number of Connections: 96 96 100.000 100,000 96 96 96 96 Percentage Residential: Greater than or equal to 1.5 mbps and less than 3 mbps Number of Connections: % 96 96 96 96 Percentage Residential: Greater than or equal to 3 mbps and less than 6 mbps Number of Connections: 96 96 96 96 96 Percentage Residential: Greater than or equal to 6 mbps and less than 10 mbps Number of Connections: managed and managed acceptable

<u>Form 477 Home Cui</u>	<u>rrent Form 477 Form 477 Instructi</u>	<u>ons</u>						0	MB NO: 3060-0816
orm 477 Submissio	on for FRN: 18461806, Compa	ny: tom telep	hone Ellen	Testing, State	e: HI, Operati	ons: ILEC, Da	ata as of Dec	31, 2009	
-Part VI: Census T	ract Detail - Terrestrial Mobile	Wireless							
	trial Mobile Wireless subscribers in Pou must "click" check marks into the essibscriber's choice.								
You can use the <u>Feder</u>	al Financial Institutions Examination	Council Geocodii	<u>ng System</u> to lool	up Census Trac	t numbers for st	reet addresses.			
	Census Tract / Technology.								
	Tech	nology of the	connections:	Terrestrial Mol	oile Wireless				
		(Census Tract:	State: HI Count	y: Maui Census	Tract: 304.02			
	Speed tier is available								
in this census tract		DOWNLOAD INFORMATION TRANSFER RATE.							
		Greater than 200 kbps and less than 768 kbps	equal to 768	equal to 1.5	equal to 3	Greater than or equal to 6 mbps and less than 10 mbps	equal to 10 mbps and less	equal to ∠o	Greater than or equal to 100 mbps
UPLOA	D INFORMATION TRANSFER RATE:	Kopo	and the maps	andir o inibpo	andir o iniopo	andin 10 maps		and roo maps	
	Less than or equal to 200 kbps								
Greater th	an 200 kbps and less than 768 kbps			_ ✓	V				
Greater than or equal	to 768 kbps and less than 1.5 mbps								
	al to 1.5 mbps and less than 3 mbps								
	al to 1.5 mbps and less than 3 mbps qual to 3 mbps and less than 6 mbps								
Greater than or ec									
Greater than or equ	ual to 3 mbps and less than 6 mbps								
Greater than or equal	ual to 3 mbps and less than 6 mbps								
Greater than or equal Greater than or equal	ual to 3 mbps and less than 6 mbps ual to 6 mbps and less than 10 mbps al to 10 mbps and less than 25 mbps								

Save and Return to Submission Menu

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Uploading Census Tract Data

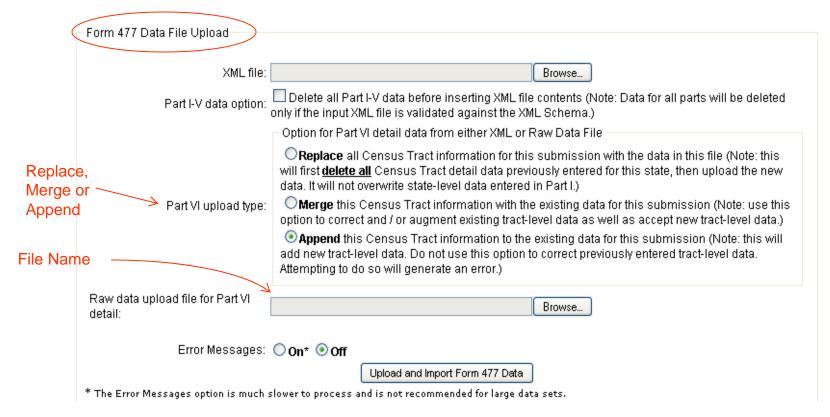
- Click "Data File Upload For all parts"
 - The screen on the next slide appears
- Browse to find the comma delimited file to upload
 - File must be csv or txt format
 - See file format specification on slides 34 and 35
 - Note: There can only be one record for a census tract, technology and speed tier combination
- If census data previously was entered, choose
 - Replace erases all existing census tract data
 - Merge replaces data with that in the new file
 - Append adds to existing data
- If no census data has been entered these choices will not appear on the upload screen

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Form 477 Submission for FRN: 18461806, Company: tom telephone -- Ellen Testing, State: HI, Operations: ILEC, Data as of Dec 31, 2009

You can submit Form 477 data in one or more upload XML files. To process multiple files, run the upload function for each file. Raw text Census Tract data can be uploaded as a separate file. If Part VI is included, individual upload files should contain not more than 100,000 rows for Part VI detail. If your submission contains more then 100,000 rows for Part VI, please upload the Part VI data in separate files.



Uploading Census Tract Data (cont)

- For "Other Technology" (bottom right of slide 35)
 - Choose a numeric code for this technology, or create one
 - Put "0" in field 5 and the numeric code in field 6 of the upload file
 - Provide an explanation of the numeric code in Part IV, Comments
- For Terrestrial Mobile Wireless
 - List those Census Tracts that best represent your mobile wireless broadband service area
 - Put "1" in field 7 and "0" in field 8 for each such census tract
- For large file uploads
 - There is a *limit of 100,000 records* per file
 - For more records use "Append" for subsequent files
 - Choose "Error Messages Off" to speed the process

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Upload File Format

Position	Value	Data Type	Description
1	County FIPS	Integer	County FIPS Code (3 digits). The County is a part of the Census Tract definition.
2	Census Tract	Decimal number	Census Tract value. Census tracts are represented as numbers with a decimal, such as "3042.00." Up to four digits before the decimal, up to two digits after.
3	Upload Rate	Integer	Upload Rate as defined in the "Rates" table detailed below.
4	Download Rate	Integer	Download Rate as defined in the "Rates" table detailed below.
5	Technology Code	Integer	Technology Code as defined in the table below. Note that positions 7 and 8 for "Terrestrial Mobile Wireless" Technology are treated differently than for all other technologies. For the purpose of this data upload, when compiling your file for submission enter "1" in position 7 and "0" in position 8 for any census tracts containing data for "Terrestrial Mobile Wireless."
6	Technology Code Other	Integer or empty	This is for Technology Types which do not exist in the assigned list of Technologies. Note that "Ethernet" is not a valid "Other" technology code. If you use Technology Code Other, then the value for "Technology Code" <u>must</u> be '0' (numeric zero). Leave this field blank for the standard technology codes.
7	Number of Connections	Integer	Number of connections in this census tract for this combination of technology code, upload rate, download rate.
8	Percentage Residential	Number between 0 and 100. Up to three numbers to the right of the decimal.	The percentage of connections for this combination of technology code, upload rate, download rate which are "Residential." The format for percentage data input is "XXX.XXX." For example, if 1/2 of the connections in a census tract are residential, enter "50" or "50.000" for this value. "0.50" will be translated as one half of one percent.

Upload File Codes

Upload Rates			
Rate Code	Description		
1	Less than or equal to 200 kbps		
2	Greater than 200 kbps and less than 768 kbps		
3	Greater than or equal to 768 kbps and less than 1.5 mbps		
4	Greater than or equal to 1.5 mbps and less than 3 mbps		
5	Greater than or equal to 3 mbps and less than 6 mbps		
6	Greater than or equal to 6 mbps and less than 10 mbps		
7	Greater than or equal to 10 mbps and less than 25 mbps		
8	Greater than or equal to 25 mbps and less than 100 mbps		
9	Greater than or equal to 100 mbps		

Download Rates			
Rate Code	Description		
2	Greater than 200 kbps and less than 768 kbps		
3	Greater than or equal to 768 kbps and less than 1.5 mbps		
4	Greater than or equal to 1.5 mbps and less than 3 mbps		
5	Greater than or equal to 3 mbps and less than 6 mbps		
6	Greater than or equal to 6 mbps and less than 10 mbps		
7	Greater than or equal to 10 mbps and less than 25 mbps		
8	Greater than or equal to 25 mbps and less than 100 mbps		
9	Greater than or equal to 100 mbps		

Technology Codes			
Technology Code	Description		
1	Asymmetric xDSL		
2	Symmetric xDSL		
3	Other Wireline		
4	Cable Modem		
5	Optical Carrier (fiber to the end user)		
6	Satellite		
7	Terrestrial Fixed Wireless		
8	Terrestrial Mobile Wireless		
9	Electric Power Line		
0	All Other		

Technology Codes (Other) This code requires the entry of "0" for "Technology Code"			
Other Technology Code	Description		
1	Optional Other Tech Value #1		
2			

Census Tract Data Reminders

- The number of connections reported in the individual Census Tracts in Part VI for each download/upload information transfer rate must sum to the total number reported for the state in Part I.A.
- If a "Number of Connections" is entered, then the corresponding "Percentage Residential" is required
- File uploads cannot contain records for speed tiers for which there are no state level entries
- The percentage residential information reported at the Census Tract and state levels must be internally consistent within the parameters set for reporting percentage breakouts (see General Note about Reporting Percentage Breakouts in the instructions)

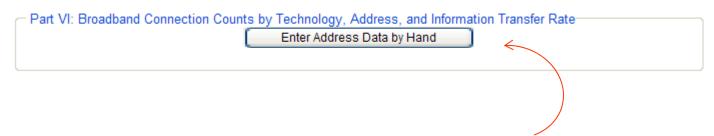
Uploading Part I-V Data

- Click "Data File Upload For all parts"
 - This links to a screen titled "Form 477 Data Upload" (See Slide 32)
 - At the bottom of the page is a link to instructions on preparing an XML file for upload
- Enter the XML file that contains Part I-V data
- If you already have entered Part I-V data that you wish to replace, check the box after the words "Part I-V data option:"
- You also may select a comma delimited Census Tract File as described in the preceding section

Entering Address Data

Applies only to filers having authorization to submit address data in lieu of census tract data

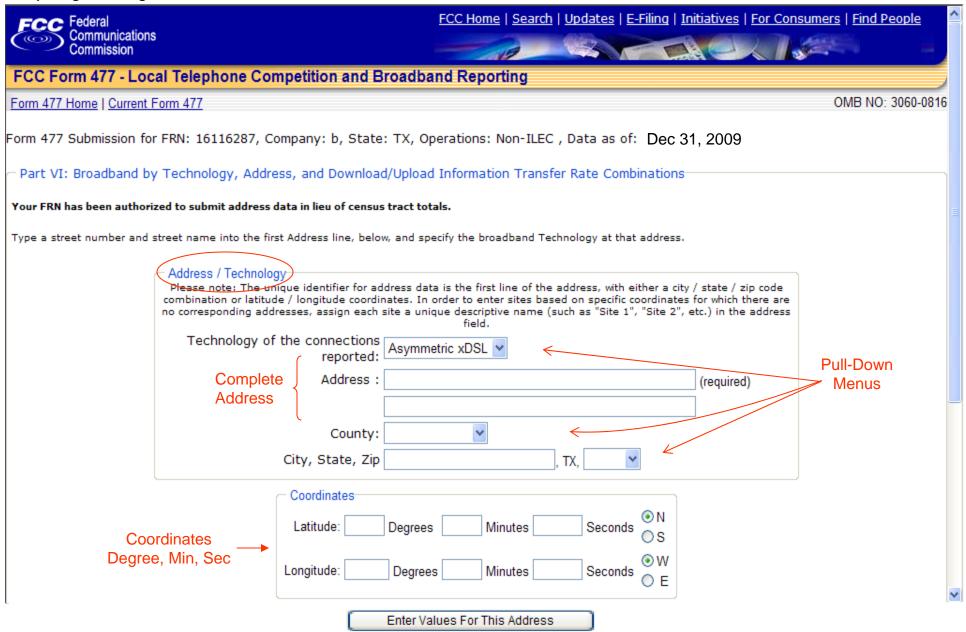
 After entering State Totals for at least one technology the following box appears below Part IV in the Submission Menu



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- Click "Enter Address Data by Hand"
- The following screen appears

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Entering Address Data (cont)

- In the appropriate boxes
 - Select the relevant technology from the pull-down menu
 - Enter
 - a full address or
 - the first line of an address <u>and</u> a set of latitude/longitude coordinates
 - Use the pull-down menus to choose the county and state
 - When entering Latitude and Longitude information enter values for degrees, minutes and seconds, even if they are zero

Telephony Data

Section	<u>Slide</u>
Local Exchange Service	42
Interconnected VoIP Service	44
Mobile Local Telephone	46
ZIP Code Information	48

Local Exchange Service

Applies to Providers of Local Exchange Service

Note: All ILECs must complete either Part II.A or II.B

- Under "Data Section" of the Submission Menu,
 - Click "Part II.A: Local Exchange Telephone Service"
 - The screen on the next slide appears
- On the Local Exchange Telephone Service screen
 - Enter the number of end user lines in (1)(a)
 - Enter the percentages in the remainder of column (1)
 - Entries are required even if they are "0"
 - Entries (1)(e) (1)(h) must sum to 100
 - Enter lines to other than end users in columns (2)-(4) which are
 - Resale, UNE-L and UNE-P, respectively

Completing and Filing FCC Form 477

Form 477 Home Current Form 477 F	Form 477 Instructions			OMB NO: 3060-0816	
Form 477 Submission for FRN: 18461806, Company: tom telephone, State: SC, Operations: Non-ILEC, Data as of Dec 31, 2009					
Part II.A: Local Exchange Telephone	Service				
	(1)	(2) Note This	(3)	(4)	
End-User Lines or Wireless Channels	Voice-grade equivalent lines and voice-grade equivalent wireless channels in service to your end user customers	Voice-grade equivalent lines you provided to unaffiliated communications carriers under resale arrangements including, among others, commercial agreements that replaced UNE-P and resold services such as local exchange, Centrex, and channelized special access	Lines you provided to unaffiliated communications carriers under any UNE loop arrangement where you did not also provide UNE switching for the line. (Do not convert UNEs to voice-grade equivalents.)	Lines you provided to unaffiliated communications carriers as UNE-P. (Do not convert UNEs to voice-grade equivalents,	
	7	·			
(a) Total number. See instructions on what to include.	312			A	
(b) Percentage of (a) that are residential lines	65	Resold Lines	UNE-L Lines	UNE-P Lines	
(c) Percentage of (a) for which you (including affiliates) are the presubscribed interstate long distance carrier	80	Nesolu Lilles	OINE-E EITIES	ONE-I LINES	
(d) Percentage of (a) used for residential service AND for which you (including affiliates) are the presubscribed interstate long distance carrier	60				
(e) Percentage of (a) provided over your own (including affiliates) local loop facilities or the equivalent	100				
(f) Percentage of (a) provided over UNE loops obtained from an unaffiliated carrier without also obtaining that carrier's UNE switching for that line	0				
(g) Percentage of (a) provided over UNE-Platform (but treat commercial agreements that replaced UNE-P as "provided by reselling," below)	0				
(h) Percentage of (a) provided by reselling unaffiliated-carrier services including, among others, commercial agreements that replaced UNE-P and resold services such as local	0				

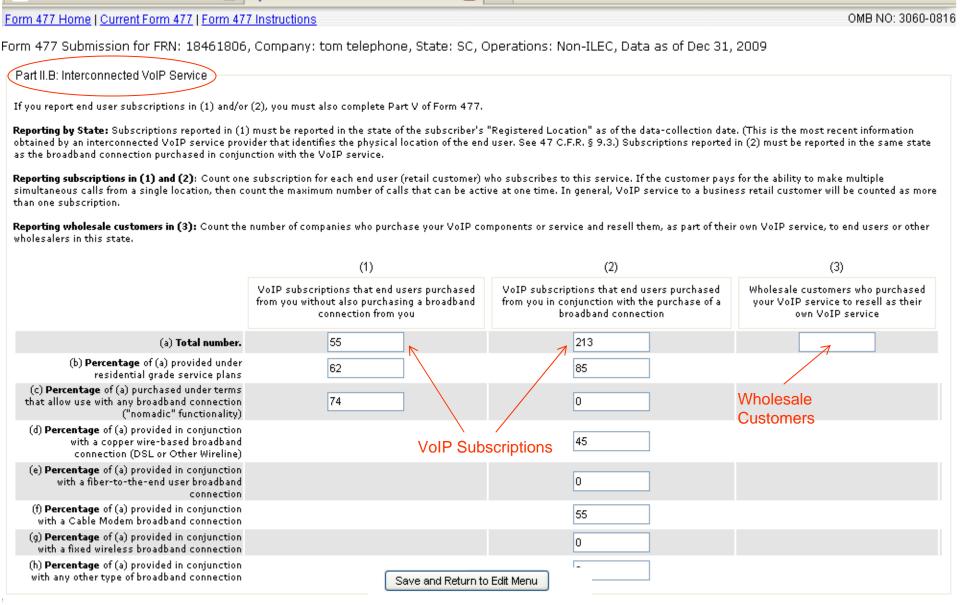
Interconnected VoIP Service

Applies to Providers of Interconnected VoIP Service

- Under "Data Section" of the Submission Menu,
 - Click "Part II.B: Interconnected VoIP Service"
- On the Interconnected VoIP screen (next slide)
 - Enter the number of VoIP subscriptions purchased without a separate broadband subscription in (1)(a)
 - Applies to cable operators who provide a customer VoIP but not broadband, as well as VoIP providers without end user connections
 - Enter the percentages in the remainder of column (1)
 - Entries are required even if they are "0"
 - Enter subscriptions purchased with broadband in (2)(a)
 - If (2)(a) is not "0," complete (2)(b) (h) even if these entries are "0"
 - If (2)(a) is not "0," the sum of (2)(d) (2)(h) must be 100
 - Enter wholesale <u>customers</u> in (3)(a), not their subscribers

Completing and Filing FCC Form 477

FC FCC Intranet Home



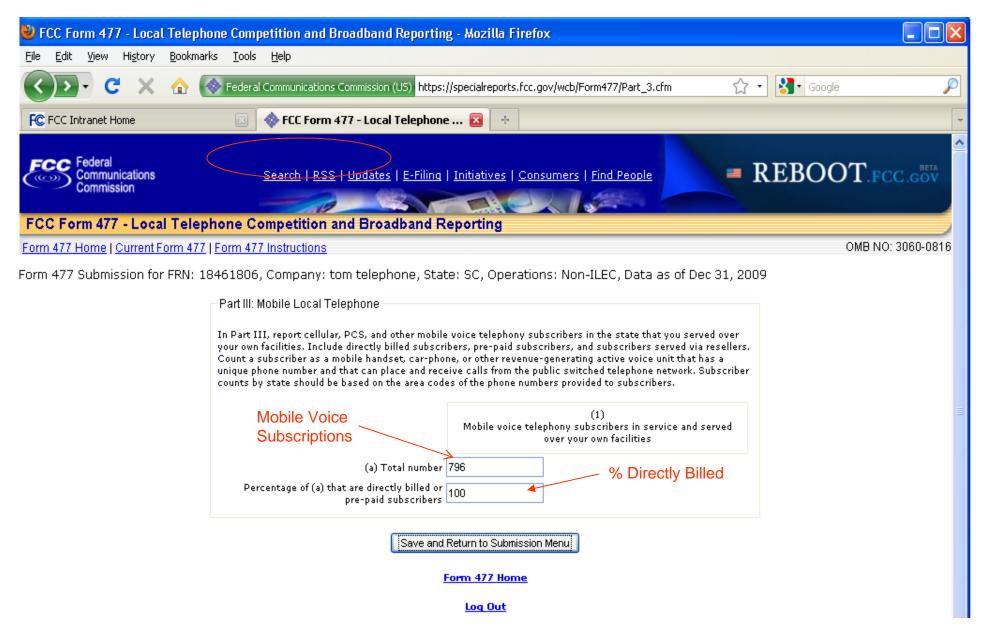
🐟 FCC Form 477 - Local Telephone ... 🔃

Mobile Local Telephone

Applies to Providers of Mobile Local Telephone Service

- Under "Data Section" of the Submission Menu,
 - Click "Part III: Mobile Local Telephone"
 - The screen on the next slide appears
- On the Mobile Local Telephone screen
 - Enter the number of mobile voice subscribers in (1)(a)
 - Enter the percentages that you directly bill or that are prepaid in (1b)
 - If you complete (1)(a) you must enter a percentage in (1)(b)
 - Percentages may have up to three figures after the decimal

Completing and Filing FCC Form 477



ZIP Code Information

Applies to Providers of Local Exchange Service and Interconnected VoIP

- Under "Data Section" of the Submission Menu,
 - Click "Part V: ZIP Code Information"
 - The screen on the next slide appears
- On the ZIP Code information screen
 - List all 5-digit ZIP Codes in the state in which you had end user customer local exchange lines or VoIP subscriptions
 - Do not include ZIP Codes for wholesale customers
 - ZIP Codes may be delimited by
 - Commas
 - Spaces
 - Carriage returns

Form 477 Home | Current Form 477 | Form 477 Instructions

OMB NO: 3060-0816 ^

Database Query for initiating new Part V record Failed.

Form 477 Submission for FRN: 18461806, Company: tom telephone, State: SC, Operations: Non-ILEC, Data as of Dec 31, 2009

Part V: Zip Code Information -- Local Voice Telephone Service and Interconnected VolP

If you reported local exchange telephone lines in service to your end user customers, in Part II.A (1), or VoIP subscriptions that end users purchased from you, in Part II.B (1) or (2), you must list the 5-digit ZIP Codes in the state in which you had end user customers. Do not include any ZIP Codes in which you offered your local exchange telephone or VoIP service but had no end user customers, and do not include any out-of-state ZIP Codes.

Type all five digit ZIP codes in the following text box, separated by either commas, spaces, or carriage returns:

29801, 29803, 29805
29926 29938
29575

ZIP Code
Formats

Save and Return to Submission Menu

Single File Upload

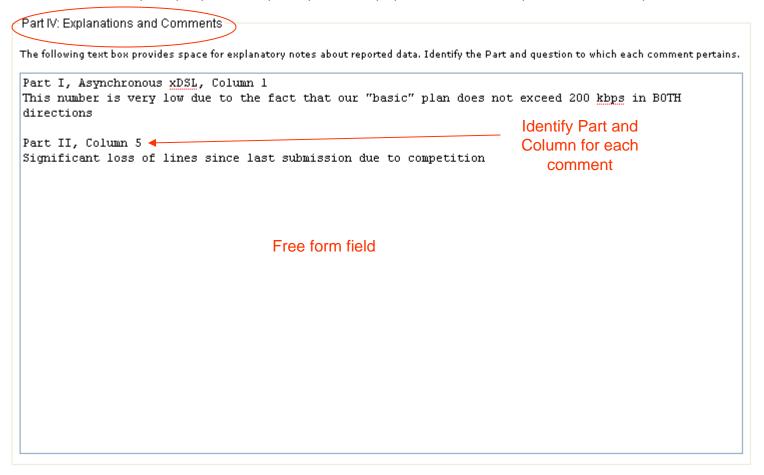
- Click "Data File Upload For all parts"
 - The screen on slide 32 appears
- Click "Upload File Formatting Instructions" at the bottom of the screen to obtain required format
- Browse to find the XML file to upload
- Check the box below the file name to delete previously inserted Part I-V data
- If desired, also add Part VI data as described in slide 31using the box next to "Raw data upload file for Part VI data

Explanations and Comments

- Under "Data Section" of the Submission Menu,
 - Click "Part IV: Explanations and Comments"
 - The screen on the next slide appears
- On the Explanations and Comments screen
 - Enter each comment on a separate line
 - Identify the Part and Question to which each comment pertains
- Examples of Comments
 - Explain significant differences from previous filings
 - Identify "Other Technologies" for which you have broadband connections

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Save and Return to Submission Menu

Submitting and Reopening a Form

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Previewing and Printing

- Near the bottom of the submission menu in the box entitled "Print Form:" (see slide 14)
 - Select items you wish to preview and print or save
 - Click OK
 - Note: By selecting "Errors/Warnings" you will preview any errors, allowing you to correct them before submitting the form
- You will see a page preview screen that shows what will be printed
- Use your browser's Print function to print this document
- You may also use your browser's Save function to save the document

Submitting a Form

- From the Submission menu,
 - Click the link "Submit this submission as complete"
 - This will bring up the "Change Status" menu



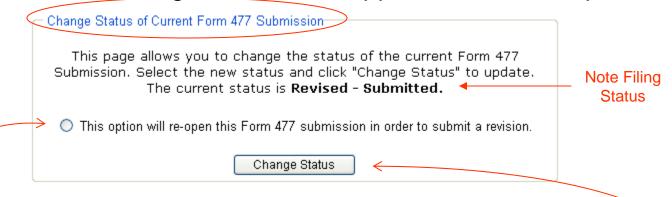
 Click the Submit as Complete button next to the text "This will officially submit the data in this Form 477 to the FCC as complete"

Submitting a Form (cont)

- The system will run tests in the background
 - If the form is valid
 - The system will display a page with the notice reading "This Submission was accepted"
 - The submission menu items will now be protected, only allowing viewing and not editing
 - If the form is not valid
 - The system will display error messages to help locate incorrectly entered data
 - Click the link entitled "Return to Current Submission Menu"
 - Note that the status is still listed as "Original In Progress" or "Revised – In Progress" as it was before trying to submit it

Re-opening a Submission

- Click the "View" Link from the main menu
 - You will see the Submission menu for a previously successful submission
- The status is "Original (or Revised) Submitted."
- Click the link "Revise this Submission"
 - The status change window will appear as, for example:



- Click the re-open option button
- Click "Change Status" to re-open the file for revision

Deleting an "Original – In Progress" Submission

- From the Submission Menu, it is now possible to delete a file <u>before</u> it has been officially submitted and accepted by the system
 - Below "Print Form" on the Submission Menu click "Delete this Submission" in the box entitled "Options for this Submission"
 - Confirm to remove it from the system
- An erroneous state cannot be corrected after the file has been successfully submitted
 - Instead, reopen that file for revision and leave it in the resulting "Revised – In Progress" status
 - To assure the file is not accidentally resubmitted delete all entries in Parts I III

Helpful Hints

- 1. Enter the FRN without spaces or hyphens at the Login screen
- 2. Always start a new state submission by entering applicable data in Parts I, II, and III before entering anything in Parts IV, V, and VI
- 3. The "Number of Connections" value must be an integer in Part I.A and in Part VI
- 4. If a "Number of Connections" is entered in Part VI, then you must enter the corresponding "Percentage Residential"
- 5. Percentages must be from 0 to 100, and can include up to three numbers after the decimal point
- 6. A Terrestrial Mobile Wireless upload file record should have one (1) and zero (0) as the last two entries respectively
- 7. For every broadband speed tier the sum of the entries for all census tracts in Part VI must equal the state total for that speed tier as shown in Part I.A

Helpful Hints (cont)

- 8. There can only be one upload record for a census tract, technology and speed tier combination There is a limit of 100,000 records for an individual upload file; multiple files may be uploaded using the Append option
- 9. Turn the "Error Messages" option off when uploading a large file or it may take a very long time
- 10. Click "View/Edit" at the bottom of the Submission Menu to see and/or modify census tract data you have entered
 - The button "Enter Census Tract Detail Data by Hand" is meant for submission of additional census tract data
- 11. If you enter data in Part I.A under "All Other" you must enter the technology when completing Part VI and also put this information into Part IV, Comments
- 12. If you enter data in Part II then you must enter ZIP codes in Part V

Useful Hyperlinks (Hot Links)

<u>Link</u>	<u>Purpose</u>
Form 477 Main	Display Main Menu
Form 477 Submission for FRN: xxx	Display Cover Page
Current Form 477	Display Submission Menu
Form 477 Instructions	Open new window with Form 477 instruction web page
View/Edit Census Tract Detail Data (nn records)	View or change previously entered census tract data
Submit this submission as complete	Submit, or reject and display error messages
Log Out	Logs user out and displays login menu

Resources

- Start with the FCC Form 477 Home Page
 - www.fcc.gov/form477/
 - Or go to the FCC Forms Page
 - www.fcc.gov/formspage.html
- Review the FCC Form 477 Instructions
 - http://www.fcc.gov/Forms/Form477/477inst.pdf
- Check the Frequently Asked Questions (FAQs)
 - http://www.fcc.gov/form477/techfaqs.html
- Consult the System Guide for system information
 - http://www.fcc.gov/Forms/Form477/477systemguide.pdf
- Send an email to
 - 477info@fcc.gov
- Call the Industry Analysis and Technology Division
 - 202-418-0940

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