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Form 477 Filing Summary

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### Filer Identification

Section	Question	Response
Filer Information	Provider Name	TDS TELECOMMUNICATIONS LLC
	Holding Company Name	Telephone and Data Systems, Inc.
	SAC ID	100005, 100007, 100010, 100011, 100024, 100031, 100034, 120045, 120047, 120049, 120050, 123321, 140058, 140061, 140062, 150089, 150092, 150114, 150118, 150129, 150133, 170183, 170206, 190217, 190253, 193029, 210338, 220338, 220346, 220351, 220375, 240533, 240535, 240544, 240551, 250284, 250311, 250314, 260411, 260412, 260417, 280448, 283301, 287449, 290559, 290566, 290575, 290578, 300585, 300607, 300613, 300645, 300662, 310672, 310677, 310685, 310726, 310738, 320744, 320776, 320777, 320778, 320788, 320809, 320816, 320829, 320830, 320837, 330844, 330849, 330851, 330856, 330859, 330875, 330880, 330881, 330909, 330914, 330915, 330917, 330930, 330943, 330945, 330952, 330954, 330955, 330958, 330963, 330968, 361350, 361362, 361413, 361433, 361507, 431984, 432010, 452171, 452174, 462184, 462207, 472230, 522404, 522427, 522430, 532404, 542321, 542322, 542323
499 ID	801201, 801264, 801558, 801561, 801576, 801840, 801945, 802068, 802134, 803232, 804465, 804768, 804819, 805377, 805434, 805437, 805446, 805449, 805455, 805461, 805467, 805473, 805479, 805485, 805560, 805563, 805566, 805569, 805572, 805575, 805578, 805581, 805584, 805585, 805587, 805590, 805593, 805596, 805602, 805866, 806409, 806523, 806526, 806529, 806532, 806535, 806538, 806541, 806544, 806547, 806550, 806553, 806556, 806559, 806565, 806568, 806574, 806577, 806580, 806583, 806586, 806589, 806592, 806598, 806604, 806607, 806610, 806613, 806619, 806622, 806625, 806628, 806631, 806634, 806637, 806766, 806775, 806781, 806784, 806787, 806790, 806793, 806796, 806799, 806802, 806805, 806808, 806814, 806817, 806820, 806823, 806862, 807207, 807810, 807813, 808275, 808374, 808410, 808419, 808425, 809001, 809034, 809218, 809570, 809790	
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Section	Question	Response
<b>Certifying Official Contact Information</b>	Certifying Official Name	Andrew Petersen
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### Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	Fixed_broadband_deploymenttileclast.csv	Mar 1, 2019 10:09:37	79877
Fixed Broadband Subscription	201 new output1 ilec_data_Crosstab.csv	Feb 26, 2019 07:19:35	8125
Fixed Voice Subscription	301 new output1 ilec_voice_Crosstab.csv	Feb 20, 2019 12:51:59	1113

### Fixed Broadband Deployment


#### Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
<b>Alabama</b>	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
<b>Arizona</b>	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
<b>California</b>	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
<b>Colorado</b>	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
<b>Florida</b>	TDS TELECOM	ADSL2	
		Asymmetric xDSL	

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State	DBA Name	Technology	Blocks
		Optical Carrier/Fiber to the End User	[REDACTED]
		VDSL	
Georgia	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Idaho	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
Indiana	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Kentucky	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Maine	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Michigan	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Minnesota	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Mississippi	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
New Hampshire	TDS TELECOM	ADSL2	

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State	DBA Name	Technology	Blocks
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
New York	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
North Carolina	TDS TELECOM	VDSL	
Ohio	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
Oklahoma	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Oregon	TDS TELECOM	Asymmetric xDSL	
Pennsylvania	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
South Carolina	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		VDSL	
Tennessee	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Vermont	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	
Virginia	TDS TELECOM	ADSL2	
		Asymmetric xDSL	
		Optical Carrier/Fiber to the End User	
		VDSL	

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State	DBA Name	Technology	Blocks	
Washington	TDS TELECOM	ADSL2		
		Asymmetric xDSL		
		Optical Carrier/Fiber to the End User		
		VDSL		
Wisconsin	TDS TELECOM	ADSL2		
		Asymmetric xDSL		
		Optical Carrier/Fiber to the End User		
		VDSL		
<b>Total</b>				

## Fixed Broadband Subscription

### Fixed Broadband Subscriptions by State, Technology and End-user Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Alabama	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Arizona	Asymmetric xDSL				
California	Asymmetric xDSL				
Colorado	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
Florida	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Georgia	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Idaho	Asymmetric xDSL				
Indiana	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Kentucky	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				

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State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Maine	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Michigan	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Minnesota	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Mississippi	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
New Hampshire	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
New York	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
Ohio	Asymmetric xDSL				
Oklahoma	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Oregon	Asymmetric xDSL				
Pennsylvania	Asymmetric xDSL				
South Carolina	Asymmetric xDSL				
	Symmetric xDSL				
Tennessee	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Vermont	Asymmetric xDSL				
	Symmetric xDSL				
Virginia	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
Washington	Asymmetric xDSL				

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State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Wisconsin	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
	Asymmetric xDSL				
	Optical Carrier/Fiber to the End User				
	Symmetric xDSL				
<b>Total</b>					

**Fixed Broadband Subscriptions by Bandwidths and End-user Type**

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
0.384	0.256			
0.768	0.512			
1.000	0.512			
1.500	0.512			
1.500	1.500			
2.000	2.000			
3.000	0.512			
3.000	3.000			
4.000	0.512			
4.000	4.000			
5.000	0.512			
6.000	0.512			
6.000	6.000			
7.000	0.768			
10.000	0.768			
10.000	2.000			
12.000	12.000			
15.000	0.768			
15.000	1.000			
15.000	2.000			
25.000	1.000			
25.000	1.500			
25.000	2.000			
25.000	5.000			
25.000	10.000			

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Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
25.000	25.000			
50.000	10.000			
50.000	19.000			
50.000	20.000			
50.000	50.000			
75.000	30.000			
100.000	15.000			
100.000	40.000			
100.000	50.000			
100.000	100.000			
150.000	40.000			
150.000	150.000			
300.000	120.000			
300.000	300.000			
600.000	400.000			
1000.000	400.000			
<b>Total</b>				

**Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type**

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Asymmetric xDSL	0.384	0.256			
	0.768	0.512			
	1.000	0.512			
	1.500	0.512			
	3.000	0.512			
	4.000	0.512			
	5.000	0.512			
	6.000	0.512			
	7.000	0.768			
	10.000	0.768			
	15.000	0.768			
	15.000	1.000			
	15.000	2.000			
	25.000	1.000			
	25.000	1.500			



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Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	25.000	2.000			
	25.000	5.000			
	50.000	10.000			
	50.000	19.000			
	100.000	15.000			
	100.000	40.000			
<b>Optical Carrier/Fiber to the End User</b>	0.768	0.512			
	1.000	0.512			
	1.500	0.512			
	2.000	2.000			
	3.000	0.512			
	3.000	3.000			
	4.000	0.512			
	5.000	0.512			
	10.000	2.000			
	15.000	2.000			
	25.000	5.000			
	25.000	10.000			
	50.000	10.000			
	50.000	20.000			
	50.000	50.000			
	75.000	30.000			
	100.000	40.000			
	100.000	50.000			
	100.000	100.000			
	150.000	40.000			
150.000	150.000				
300.000	120.000				
300.000	300.000				
600.000	400.000				
1000.000	400.000				
<b>Symmetric xDSL</b>	1.500	1.500			
	2.000	2.000			

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Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
	3.000	3.000			
	4.000	4.000			
	6.000	6.000			
	12.000	12.000			
	25.000	25.000			
	50.000	50.000			
	100.000	100.000			
<b>Total</b>					

**Fixed Voice Subscription**      **VGE Lines and VoIP Subscriptions by State and End-user Type**

State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Alabama				
Arizona				
California				
Colorado				
Florida				
Georgia				
Idaho				
Indiana				
Kentucky				
Maine				
Michigan				
Minnesota				
Mississippi				
New Hampshire				
New York				
Ohio				
Oklahoma				
Oregon				
Pennsylvania				
South Carolina				
Tennessee				

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State	Total VGE Lines	Consumer VGE Lines	Total VoIP Subscriptions	Consumer VoIP Subscriptions
Vermont				
Virginia				
Washington				
Wisconsin				
Total				

**Fixed Voice Subscription (VGE Lines)**

**VGE Lines Provided to Unaffiliated Providers by State**

State	Wholesale	UNE-L
Alabama		
Arizona		
California		
Colorado		
Florida		
Georgia		
Idaho		
Indiana		
Kentucky		
Maine		
Michigan		
Minnesota		
Mississippi		
New Hampshire		
New York		
Ohio		
Oklahoma		
Oregon		
Pennsylvania		
South Carolina		
Tennessee		
Vermont		
Virginia		
Washington		

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State	Wholesale	UNE-L
Wisconsin		
Total		

**VGE Lines Provided to End Users by State, Bundle and Product Type**

State	Total	by Bundle		by Product Type				
		Sold w/ Internet	Sold w/o Internet	Consumer		Bus-Govt		
				& No PIC	& PIC	& No PIC	& PIC	
Alabama								
Arizona								
California								
Colorado								
Florida								
Georgia								
Idaho								
Indiana								
Kentucky								
Maine								
Michigan								
Minnesota								
Mississippi								
New Hampshire								
New York								
Ohio								
Oklahoma								
Oregon								
Pennsylvania								
South Carolina								
Tennessee								
Vermont								
Virginia								
Washington								
Wisconsin								
Total								

**VGE Lines Provided to End Users by State, Ownership and Last-mile Medium**

State	Total	by Ownership			by Last-mile Medium			
		Owned	UNE-L	Resale	FTTP	Coax	Fixed Wireless	Copper

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State	Total	by Ownership			by Last-mile Medium			
		Owned	UNE-L	Resale	FTTP	Coax	Fixed Wireless	Copper
Alabama								
Arizona								
California								
Colorado								
Florida								
Georgia								
Idaho								
Indiana								
Kentucky								
Maine								
Michigan								
Minnesota								
Mississippi								
New Hampshire								
New York								
Ohio								
Oklahoma								
Oregon								
Pennsylvania								
South Carolina								
Tennessee								
Vermont								
Virginia								
Washington								
Wisconsin								
Total								

**Fixed Voice Subscription (iVoIP)**

Over-the-top VoIP Subscriptions by State and End-user Type

State	Total	Consumer	Business / Govt
Alabama			
Florida			
Georgia			

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State	Total	Consumer	Business / Govt
Indiana			
Kentucky			
Maine			
Michigan			
Minnesota			
New Hampshire			
New York			
Oklahoma			
South Carolina			
Tennessee			
Vermont			
Virginia			
Washington			
Wisconsin			
Total			

**All other VoIP Subscriptions by State, End-user Type, Bundle and Last-mile Medium**

State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Alabama									
Florida									
Georgia									
Indiana									
Kentucky									
Maine									
Michigan									
Minnesota									
New Hampshire									
New York									
Oklahoma									
South Carolina									
Tennessee									
Vermont									
Virginia									
Washington									

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State	Total	by End-user Type		by Bundle		by Last-mile Medium			
		Consumer	Business / Government	Sold w/ Internet	Sold w/o Internet	FTTP	Coax	Fixed Wireless	Copper
Wisconsin									
Total									