Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
T +1 202 637 5600
F +1 202 637 5910
www.hoganlovells.com

Trey Hanbury
Partner
T: 202.637.5534
trey.hanbury@hoganlovells.com

REDACTED FOR PUBLIC INSPECTION – SUBJECT TO REQUEST FOR CONFIDENTIAL TREATMENT PURSUANT TO 47 C.F.R. §§ 0.457 AND 0.459

July 16, 2015

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: ***Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002,*** **AU Docket No. 14-252**
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, **GN Docket No. 12-268**

Dear Ms. Dortch:

T-Mobile USA, Inc. ("T-Mobile") and Sprint Corp. ("Sprint") (collectively the "Parties")[1] hereby submit the attached ex parte letter regarding a July 14, 2015 ex parte meeting between representatives of T-Mobile, Sprint and members of the FCC's Incentive Auction Task Force. Pursuant to Exemption 4 of the Freedom of Information Act ("FOIA") and the rules of the

[1] T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

Federal Communications Commission ("FCC" or "Commission"),[2] The Parties request confidential treatment for the information that has been redacted in the attached ex parte filing ("Confidential Information").[3] The Confidential Information relates to competitively sensitive simulations for various permutations of broadcast pricing in the reverse auction portion of the FCC's upcoming incentive spectrum auction ("Incentive Auction") and potential bidder demand across various markets in the forward portion of the Incentive Auction. The Confidential Information is confidential commercial information, including information that is protected from disclosure by FOIA Exemption 4 and the Commission's rules protecting information that is not routinely available for public inspection and that would customarily be guarded from competitors.[4]

1. Identification of the specific information for which confidential treatment is sought.
The Parties request that the redacted information contained in the attached ex parte filing be treated as confidential pursuant to Exemption 4 of FOIA and Sections 0.457(d) and 0.459 of the Commission's rules, which protect confidential commercial and other information not routinely available for public inspection. The Confidential Information contains commercially sensitive information related to simulations of potential broadcaster and wireless carrier bidding in the reverse and forward portions of the Incentive Auction.[5]

2. Identification of the Commission proceeding in which the information was submitted or a description of the circumstance giving rise to the submission. The Confidential Information was presented during an *ex parte* presentation to the FCC's Incentive Auction Task Force regarding the above referenced dockets. The Confidential Information was used to illustrate potential bidder demand in certain markets in order to demonstrate problems with the Commission's bidding trigger. The Parties' policy arguments are described in the unredacted portion of the ex parte notice attached to this request in a manner that would allow any interested party to thoroughly respond without revealing information that could allow the dominant carriers or broadcasters to game the auction to the detriment of the Parties or other forward auction participants.

---

[2] 5 U.S.C. § 552(b)(4); 47 C.F.R. §§ 0.457(d) and 0.459; see also 18 U.S.C. § 1905 (prohibiting disclosure "to any extent not authorized by law" of "information [that] concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association").

[3] The redacted information is contained in Appendix A.

[4] 47 C.F.R. §§ 0.457(d) and 0.459.

[5] The Commission has broadly defined commercial information, stating that "'[c]ommercial' is broader than information regarding basic commercial operations, such as sales and profits; it includes information about work performed for the purpose of conducting a business's commercial operations." *Southern Company Request for Waiver of Section 90.629 of the Commission's Rules, Memorandum Opinion and Order*, 14 FCC Rcd 1851, 1860 (1998) (citing Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1290 (D.C. Cir. 1983)).

3. Explanation of the degree to which the information is commercial or financial, or contains a trade secret or is privileged. The Confidential Information contains competitively sensitive predictions of potential bidder demand in the forward auction portion of the FCC's Incentive Auction. The confidential information contains competitively sensitive simulations created independently by each of T-Mobile and Sprint and was shared among them with agreement not to disclose publicly or to third parties except to FCC for purposes of the ex parte presentation only. The information relates to each companies' predictions as they relate to the behavior of broadcasters in the reverse auction. It is therefore competitively-sensitive, business confidential and/or proprietary commercial information concerning each companies' operations that would not routinely be made available to the public. The numbers included in the data set do not reflect either party's actual predictions regarding the results of the Incentive Auction. However, aspects of both entities' demand for wireless spectrum could be inferred by the data sets. If the Confidential Information is disclosed, AT&T and Verizon, the dominant carriers in the U.S. wireless market, both of which are expected to participate in the forward portion of Incentive Auction could use it to determine T-Mobile and Sprint's demand for spectrum licenses across all markets, and could use that information to increase prices for T-Mobile and Sprint through foreclosure strategies. Similarly, broadcasters in the reverse portion of Incentive Auction could use it to determine T- Mobile and Sprint's demand for spectrum licenses across all markets, and then use that information to increase prices for T-Mobile, Sprint, and the other forward auction participants in the forward portion of the Incentive Auction.

4. Explanation of the degree to which the information concerns a service that is subject to competition. The Confidential Information concerns the Parties' participation in the FCC's upcoming Incentive Auction. The FCC's spectrum auctions are highly competitive by their very nature. Previous FCC spectrum auctions have been very competitive and have resulted in billions of dollars of revenue.[6] As top-four wireless carriers in the U.S., the Parties will likely participate in the auction.

5. Explanation of how disclosure of the information could result in substantial competitive harm. Since this type of information generally would not be subject to public inspection and would customarily be guarded from entities with opposing interests that are participating in the auction, including the dominant carriers and broadcasters, the Commission's rules recognize that release of the information is likely to produce competitive harm. The FCC's Incentive Auction is comprised of a reverse auction and a forward auction. In the reverse auction, broadcasters may submit the prices at which they would be willing to sell their spectrum licenses in the forward auction, for a portion of the license sales price. In the forward auction, bidders, likely

---

[6] *See e.g. Summary for Auction 97*, FCC.GOV (last visited Apr. 23, 2015), http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=97 (The FCC's Auction 97, known as the AWS-3 Auction had net revenues of over $41 billion and 70 qualified bidders, 31 of which won spectrum licenses.).

including the Parties, decide at what prices they are willing purchase those licenses.[7] The Confidential Information is based on the Parties' estimations of potential bidder demand for licenses and the potential willingness of broadcasters to sell their licenses. Although the Confidential Information is based on hypothetical numbers and does not reflect actual predications or expectations, disclosure could cause substantial competitive harm because it would allow the dominant carriers to use the Parties' internal theoretical calculations to assess potential bidder demand for the licenses and game the forward auction by strategically bidding according to the market by market analysis contained in the Confidential Information to raise the license prices in the markets the Parties have the most demand specific to their spectrum needs and preventing the Parties' from winning those licenses in order to foreclose the Parties from being able to compete. This would harm consumers by decreasing the Parties' ability to offer competitive choices in the U.S. wireless market. Disclosure of the Confidential Information could also allow broadcasters to use these internal theoretical calculations to assess potential bidder demand for their licenses and game the reverse auction by increasing their sell price according to the market by market analysis contained in the Confidential Information. This would harm the overarching goals of the Incentive Auction by enabling broadcasters to increase the asking price of their spectrum licenses above market rates, thereby decreasing the supply of spectrum licenses available at auction and decreasing the amount of money that the U.S. Treasury receives from the auction revenues due to higher broadcaster pay-outs.

6.-7. Identification of any measures taken by the submitting party to prevent unauthorized disclosure, and identification of whether the information is available to the public and the extent of any previous disclosure of the information to third parties. The Confidential Information as compiled is not available to the public and has not otherwise been disclosed previously to the public. T-Mobile and Sprint both take precautions to ensure that this type of information is not released to the general public or obtained by third parties through other means. T-Mobile and Sprint agreed to only share the Confidential Information with each other for the purposes of making the ex parte presentation to FCC staff and have agreed not to distribute the Confidential Information otherwise.

8. Justification of the period during which the submitting party asserts that material should not be available for public disclosure. The Parties request that the Confidential Information remain confidential indefinitely. The Parties expect that they will participate in future FCC spectrum auctions where spectrum demand will fall along similar lines. There is no way to know how many spectrum auctions the FCC may hold in the future. Any insight broadcasters or the dominant carriers may glean from disclosure of the Confidential Information may be used in future auctions as well as the impending Incentive Auction to disadvantage the Parties.

---

[7] *See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions,* GN Docket No. 12-268, Report and Order, 29 FCC Rcd 6567 (2014), *affirmed, National Association of Broadcasters v. FCC,* No.14-1154 (D.C. Cir. June 12, 2015) ("*Incentive Auction R&O*").

9. Any other information that the party seeking confidential treatment believes may be useful in assessing whether its request for confidentiality should be granted. Under applicable Commission and federal court precedent, the information provided by the Parties on a confidential basis should be shielded from public disclosure. Exemption 4 of FOIA shields information that is (1) commercial or financial in nature; (2) obtained from a person outside government; and (3) privileged or confidential. The Confidential Information satisfies this test. The Commission should accord confidential treatment to the Confidential Information to encourage parties to candidly share confidential commercial information in the future that the FCC can use to evaluate arguments relevant to the policy issues.

Please contact me if you have any questions or require more information related to this request.

Respectfully submitted,

/s/ Trey Hanbury

Trey Hanbury
Counsel to T-Mobile USA, Inc.

Hogan Lovells US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
T +1 202 637 5600
F +1 202 637 5910
www.hoganlovells.com

Trey Hanbury
Partner
T: 202.637.5534
trey.hanbury@hoganlovells.com

REDACTED FOR PUBLIC INSPECTION – SUBJECT TO REQUEST FOR CONFIDENTIAL TREATMENT PURSUANT TO 47 C.F.R. §§ 0.457 AND 0.459

July 16, 2015

EX PARTE VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: ***Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002,*** **AU Docket No. 14-252**
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, **GN Docket No. 12-268**

Dear Ms. Dortch:

On Tuesday, July 14, 2015, representatives of Sprint Corporation ("Sprint") and T-Mobile USA, Inc.[8] ("T-Mobile") met with members of the Incentive Auction Task Force[9] to discuss concerns with the timing of the spectrum reserve becoming effective.

---

[8] T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

The Commission established the spectrum reserve as the only mechanism to guard against excessive spectrum concentration in the 600 MHz incentive auction. Unfortunately, as numerous parties have noted, staff proposals associated with the triggering of the reserve threaten to subvert the fundamental purpose of the reserve: preventing AT&T and Verizon from driving auction prices to supra-market prices to foreclose rivals' acquisition of critical low-band spectrum.[10]

The proposal to trigger the reserve only after satisfaction of both a price target and a cost target that covers all mandated auction costs creates a number of new strategic bidding opportunities for the two largest carriers. With the latter target expected to exceed tens of billions of dollars, triggering of the reserve could require a large number of rounds – even after satisfaction of the price target meant to ensure that reserve-eligible bidders have paid competitive market prices for spectrum. Among other problems, this potential lag creates real opportunities for AT&T and Verizon to skew auction prices by concentrating all of their eligibility in a subset of key markets. By withholding demand from a wider range of markets, AT&T and Verizon can ensure that the prices rise to foreclosure levels in a few critical markets prior to satisfaction of the Final Stage Rule.[11]

During the meeting with staff, the participants discussed problems with the current proposal. Sprint and T-Mobile representatives illustrated specific ways in which AT&T and Verizon could accomplish foreclosure goals under the current proposal and reviewed the illustrative broadcast clearing costs and auction bidding information detailed in the attached spreadsheets. The parties also explained how corrective measures could significantly reduce the strategic bidding

---

[9] The following people participated in the meeting: Kathleen O'Brien Ham (by phone), Steve Sharkey, and Christopher Wieczorek of T-Mobile; Dr. Andrzej Skrzypacz (by phone) and Dr. Gregory Rosston (by phone), on behalf of T-Mobile; Trey Hanbury of Hogan Lovells US LLP, counsel to T-Mobile; Lawrence Krevor, Rick Engelman, and Rafi Martina of Sprint; Dr. Gregory Attiyeh (by phone), on behalf of Sprint; Jim Schlichting, Gary Epstein, Evan Kwerel, Chris Helzer, John Leibovitz, Howard Symons, Martha Stancill, Mary Margaret Jackson, Joel Taubenblatt, Margaret Wiener , and Madelaine Maior (by phone) of the Incentive Auction Task Force; Dr. David Salant (by phone) of Auction Technologies, a consulting firm that is advising the Commission; and Dr. Paul Milgrom, and Dr. Ilya Segal (both by phone) of Auctionomics, a consulting firm that is advising the Commission.

[10] *See* Letter from Trey Hanbury, Counsel to T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, AU Docket No. 14-252, GN Docket No. 12-268 (July 10, 2015); Letter from Lawrence R. Krevor, Vice President, Legal and Government Affairs – Spectrum, Sprint Corp., *et al.*, to Marlene H. Dortch, Secretary, Federal Communications Commission, AU Docket No. 14-252, GN Docket No. 12-268 (July 9, 2015).

[11] Under the Commission's proposed rules, clock prices only increase in a Partial Economic Area when demand in that market exceeds supply. Thus, by concentrating their demand on a few markets, AT&T and Verizon can delay satisfaction of the Final Stage Rule, as fewer markets experience round-over-round clock price increases to contribute to the cost target.

opportunities described above. Under a proposal submitted by T-Mobile, the reserve would be triggered upon satisfaction of the price target and either the cost target or an average of $2.00 per MHz-POP in the top 40 PEAs, whichever occurs first.

Adoption of this proposal or other possible measures, such as Sprint's proposal to cap bidding at approximately forty percent of the available blocks (four blocks in a ten-block clearing target), would help mitigate the risk of foreclosure while still requiring reserve-eligible bidders to compete aggressively and pay market prices for spectrum. The Commission has already structured the auction to ensure aggressive and active competition by reserve-eligible bidders: the staff proposes to shrink the reserve in each PEA where reserve-eligible demand does not match the prospective supply of reserve blocks, and in parallel to shrink the reserve if reserve-demand in any PEA comes from only a single bidder at the time the Final Stage Rule is met. Perhaps most importantly, in the event that bidding closes without meeting the necessary revenue goals, the failure to satisfy a given clearing target will fall on *all* bidders, both those who are reserve eligible and those who are not. Indeed, because reserve-eligible bidders need low-band spectrum more than other providers, reserve-eligible bidders have powerful incentives to ensure forward auction revenue does not fail to satisfy the Final Stage Rule.

Consistent with section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter is being filed in the above-referenced docket. Please direct any questions regarding this filing to me.

Respectfully submitted,

/s/ Trey Hanbury

Trey Hanbury
Counsel to T-Mobile USA, Inc.

Enclosures

cc: Jim Schlichting
Gary Epstein
Evan Kwerel
Chris Helzer
John Leibovitz
Howard Symons
Martha Stancill
Mary Margaret Jackson
Madelaine Maior
Joel Taubenblatt

Paul Milgrom
Ilya Segal
David Salant
Margaret Wiener

[redacted]

[redacted]

[redacted]

Supply Total: [redacted] - Exposure $

PEA Number	PEA Name	Population
1	New York, NY	25,237,061
2	Los Angeles, CA	19,410,169
3	Chicago, IL	9,366,713
4	San Francisco, CA	9,027,937
5	Baltimore, MD-Washington, DC	7,842,134
6	Philadelphia, PA	7,587,252
7	Boston, MA	6,776,035
8	Dallas, TX	6,452,472
9	Miami, FL	6,291,880
10	Houston, TX	5,891,999
11	Atlanta, GA	5,435,312
12	Detroit, MI	5,137,479
13	Orlando, FL	4,562,642
14	Cleveland, OH	4,096,678
15	Phoenix, AZ	3,817,117
16	Seattle, WA	3,792,218
17	Minneapolis-St. Paul, MN	3,390,091
18	San Diego, CA	3,095,313
19	Portland, OR	3,022,643
20	Denver, CO	2,789,669
21	Tampa, FL	2,783,243
22	Sacramento, CA	2,722,415
23	Pittsburgh, PA	2,399,667
24	Saint Louis, MO	2,396,938
25	Cincinnati, OH	2,196,428
26	Las Vegas, NV	2,151,455
27	Salt Lake City, UT	2,142,152
28	San Antonio, TX	1,999,689
29	Jacksonville, FL	1,918,264
30	Kansas City, MO	1,810,075
31	Indianapolis, IN	1,769,011
32	Nashville, TN	1,748,445
33	Virginia Beach, VA	1,698,835
34	Fresno, CA	1,676,476
35	Austin, TX	1,628,809
36	New Orleans, LA	1,622,143
37	Columbus, OH	1,582,917
38	Milwaukee, WI	1,555,908
39	Oklahoma City, OK	1,446,527
40	Birmingham, AL	1,399,686
41	Syracuse, NY	1,371,959
42	Honolulu, HI	1,360,301
43	Charlotte, NC	1,327,006
44	Rochester, NY	1,316,146
45	Raleigh, NC	1,302,381
46	Little Rock, AR	1,275,690
47	Brownsville, TX	1,264,091
48	Harrisburg, PA	1,244,058
49	Albany, NY	1,222,542
50	Greenville, SC	1,220,968
51	Louisville, KY	1,194,260
52	Charleston, WV	1,191,822
53	Tucson, AZ	1,159,029
54	Buffalo, NY	1,135,509
55	Huntsville, AL	1,105,409
56	Kalamazoo, MI	1,095,827
57	Richmond, VA	1,080,661
58	Bloomington, IN	1,069,729
59	Memphis, TN	1,039,627

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

PEA Number	PEA Name	Population
60	Manchester, NH	1,025,620
61	Toledo, OH	1,023,081
62	Dayton, OH	1,019,932
63	Tulsa, OK	969,078
64	South Bend, IN	954,029
65	Cape Coral, FL	940,274
66	Lansing, MI	922,885
67	Sarasota, FL	897,121
68	Grand Rapids, MI	866,423
69	Springfield, MA	861,286
70	Eugene, OR	859,318
71	Knoxville, TN	837,142
72	Tallahassee, FL	801,642
73	El Paso, TX	800,647
74	Chattanooga, TN	797,154
75	Albuquerque, NM	794,125
76	Reno, NV	786,501
77	Portland, ME	784,594
78	Greensboro, NC	781,289
79	Hattiesburg, MS	780,833
80	Omaha, NE	769,108
81	Saginaw, MI	767,362
82	Baton Rouge, LA	756,008
83	Fort Wayne, IN	748,680
84	Mobile, AL	724,956
85	Charleston, SC	703,499
86	Frankfort, KY	685,317
87	Pensacola, FL	684,856
88	Frederick, MD	678,674
89	Columbia, SC	646,895
90	Jackson, MS	646,279
91	Colorado Springs, CO	645,613
92	Decatur, IL	644,865
93	Lafayette, LA	638,768
94	Waco, TX	638,395
95	Bluefield, WV	631,120
96	Richmond, KY	620,049
97	Mankato, MN	617,663
98	Johnson City, TN	609,299
99	Tupelo, MS	599,462
100	Greenville, NC	571,905
101	Wichita, KS	564,245
102	Grand Junction, CO	562,340
103	Winchester, VA	556,408
104	Fort Collins, CO	552,455
105	Augusta, GA	552,150
106	Zanesville, OH	548,017
107	Bangor, ME	543,767
108	Des Moines, IA	543,000
109	Rocky Mount, NC	536,809
110	Jackson, TN	533,539
111	Fayetteville, AR	527,374
112	Bowling Green, KY	526,621
113	Erie, PA	513,834
114	Morgantown, WV	512,830
115	Asheville, NC	512,200
116	Rockford, IL	509,762
117	La Grange, GA	501,771
118	Richmond, IN	496,850
119	Yakima, WA	496,571

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

PEA Number	PEA Name	Population
120	Shreveport, LA	492,213
121	Altoona, PA	490,867
122	Madison, WI	488,073
123	Mansfield, OH	486,730
124	Olympia, WA	482,135
125	Alton, IL	476,174
126	Casa Grande, AZ	475,024
127	Evansville, IN	474,251
128	Macon, GA	472,241
129	Springfield, IL	471,823
130	Spokane, WA	471,221
131	Sanford, NC	468,358
132	Corpus Christi, TX	467,429
133	Nacogdoches, TX	464,704
134	Newark, OH	463,800
135	Beaumont, TX	460,666
136	Williamsport, PA	454,792
137	Eau Claire, WI	452,434
138	Burlington, VT	452,191
139	Hot Springs, AR	443,880
140	Fredericksburg, VA	438,705
141	Brainerd, MN	435,203
142	Merced, CA	430,256
143	Keene, NH	427,275
144	Paris, TX	423,195
145	Columbia, TN	422,947
146	Wilmington, NC	420,413
147	Salisbury, MD	419,355
148	Bellingham, WA	412,316
149	Biloxi, MS	411,066
150	Rolla, MO	405,037
151	Winston-Salem, NC	398,071
152	Tyler, TX	397,075
153	Fond du Lac, WI	395,357
154	Myrtle Beach, SC	394,573
155	Appleton, WI	392,660
156	Boise City, ID	392,365
157	Yuma, AZ	390,768
158	Helena, MT	378,009
159	Valdosta, GA	373,343
160	Victoria, TX	371,551
161	Carbondale, IL	368,043
162	Elizabethtown, KY	364,517
163	Davenport, IA	363,256
164	Montgomery, AL	363,237
165	Rome, GA	362,053
166	Redding, CA	361,652
167	Harrisonburg, VA	360,886
168	Peoria, IL	360,552
169	Goldsboro, NC	358,900
170	Dothan, AL	358,396
171	Fort Smith, AR	356,101
172	Duluth, MN	354,182
173	Blacksburg, VA	352,838
174	Springfield, MO	352,596
175	Southaven, MS	349,748
176	Ames, IA	348,248
177	Savannah, GA	347,611
178	Sedalia, MO	346,580
179	Burlington, IA	346,354

Demand Price (MHz-POP)														
	AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other
[redacted]														

[redacted]

PEA Number	PEA Name	Population
180	Flagstaff, AZ	345,454
181	Texarkana, TX	343,206
182	Cedar Rapids, IA	342,108
183	Columbia, MO	340,194
184	Ruston, LA	338,416
185	Marquette, MI	335,871
186	Rock Hill, SC	335,865
187	Pocatello, ID	328,567
188	Jamestown, NY	325,075
189	Alexandria, LA	324,637
190	Bozeman, MT	324,077
191	Petersburg, VA	321,175
192	Fayetteville, NC	319,431
193	Saint Joseph, MO	318,414
194	State College, PA	317,863
195	Lewiston, ID	317,751
196	Cape Girardeau, MO	315,713
197	Wheeling, WV	312,837
198	Jonesboro, AR	311,312
199	Dalton, GA	310,645
200	Danville, VA	310,385
201	Eagle Pass, TX	304,111
202	Columbus, GA	303,722
203	Traverse City, MI	303,041
204	Owensboro, KY	301,206
205	Douglas City, CA	300,915
206	Wenatchee, WA	300,767
207	Brunswick, GA	298,749
208	Salisbury, NC	297,865
209	Green Bay, WI	296,366
210	Binghamton, NY	295,081
211	Ardmore, OK	291,829
212	Anchorage, AK	291,826
213	Bend, OR	289,034
214	Lincoln, NE	285,407
215	Hickory, NC	282,468
216	Joplin, MO	280,505
217	Lubbock, TX	278,831
218	Wausau, WI	278,831
219	Mason City, IA	277,029
220	Odessa, TX	274,002
221	Laredo, TX	269,622
222	Morristown, TN	268,978
223	Dubuque, IA	264,752
224	De Kalb, IL	257,786
225	La Crosse, WI	257,376
226	Lima, OH	256,337
227	Watertown, NY	255,260
228	Roanoke, VA	252,548
229	Saint George, UT	252,481
230	Lumberton, NC	252,467
231	Fremont, NE	249,287
232	Topeka, KS	245,402
233	Shelby, NC	244,153
234	Lexington, NC	242,524
235	Amarillo, TX	241,798
236	Grand Island, NE	240,913
237	Hinesville, GA	240,344
238	Florence, SC	239,989
239	Kannapolis, NC	238,596

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

PEA Number	PEA Name	Population
240	Charlottesville, VA	234,712
241	Dublin, GA	233,302
242	Lake Charles, LA	231,201
243	Paducah, KY	230,924
244	Manhattan, KS	230,920
245	West Plains, MO	229,798
246	Auburn, AL	228,786
247	Nampa, ID	227,487
248	Sumter, SC	223,344
249	Bryan, TX	221,455
250	Las Cruces, NM	221,221
251	Salina, KS	219,945
252	Sioux City, IA	218,063
253	Baraboo, WI	216,417
254	Merrill, WI	216,161
255	Greenville, MS	214,872
256	Lynchburg, VA	213,977
257	Cheyenne, WY	213,445
258	Cullman, AL	210,229
259	Roswell, NM	209,606
260	Alpena, MI	208,861
261	Fargo, ND	208,777
262	Hilton Head Island, SC	208,100
263	Santa Fe, NM	201,081
264	Kodiak, AK	200,813
265	Winona, MN	197,462
266	Lenoir, NC	197,430
267	Sheboygan, WI	196,949
268	Clinton, IA	196,679
269	Racine, WI	195,408
270	Ottawa, IL	193,858
271	Elmira, NY	193,433
272	Brownwood, TX	192,692
273	Bloomington, IL	186,133
274	Twin Falls, ID	185,790
275	Corsicana, TX	184,725
276	Rapid City, SD	183,639
277	Hutchinson, KS	183,101
278	Bartlesville, OK	179,889
279	Logan, UT	179,703
280	Garden City, KS	177,150
281	Muskogee, OK	177,148
282	Galesburg, IL	173,607
283	Plattsburgh, NY	173,097
284	Greenwood, SC	171,848
285	Gallup, NM	170,223
286	Sioux Falls, SD	169,468
287	Kenosha, WI	166,426
288	Abilene, TX	165,252
289	Price, UT	164,900
290	Watertown, SD	163,741
291	Rockingham, NC	162,684
292	Pueblo, CO	159,063
293	Lawrenceburg, TN	158,283
294	Waterloo, IA	155,366
295	Stillwater, OK	152,050
296	Pottsville, PA	148,289
297	Pendleton, OR	146,709
298	Fairbanks, AK	145,928
299	Kirksville, MO	144,847

Demand Price (MHz-POP)	AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other
[redacted]														

[redacted]

PEA Number	PEA Name	Population
300	Selma, AL	144,376
301	Rochester, MN	144,248
302	Enid, OK	143,731
303	Great Falls, MT	143,015
304	Mount Airy, NC	143,013
305	Altus, OK	142,644
306	Wichita Falls, TX	142,252
307	Yankton, SD	141,973
308	Americus, GA	138,886
309	Elizabeth City, NC	137,035
310	Farmington, MO	133,395
311	Trinidad, CO	132,721
312	Farmington, NM	130,044
313	Lockhart, TX	128,849
314	Jacksonville, TX	127,971
315	Sheridan, WY	127,963
316	Rock Springs, WY	125,434
317	Beatrice, NE	124,932
318	Thief River Falls, MN	124,110
319	Albany, GA	122,863
320	San Angelo, TX	119,412
321	Batesville, IN	118,693
322	Minot, ND	116,439
323	Socorro, NM	114,543
324	Honesdale, PA	110,191
325	Bismarck, ND	108,779
326	Fergus Falls, MN	108,648
327	Orangeburg, SC	107,676
328	Winslow, AZ	107,449
329	Kingsville, TX	104,558
330	Olney, IL	102,976
331	Plainview, TX	102,732
332	Bennettsville, SC	102,615
333	Sidney, OH	102,382
334	Pampa, TX	100,685
335	Natchitoches, LA	99,546
336	Grand Forks, ND	98,461
337	Mineral Wells, TX	95,311
338	Durango, CO	91,716
339	Scottsbluff, NE	91,571
340	Clovis, NM	84,529
341	Alamogordo, NM	84,294
342	Mitchell, SD	83,465
343	Pecos, TX	82,332
344	Clanton, AL	82,318
345	Newberry, SC	81,339
346	Franklin, NC	80,814
347	New Roads, LA	79,775
348	Aberdeen, SD	79,541
349	Marion, NC	78,393
350	Forrest City, AR	78,309
351	Dickinson, ND	78,183
352	Gonzales, TX	77,549
353	Watseka, IL	77,440
354	New London, WI	76,906
355	Casper, WY	75,450
356	Colville, WA	74,653
357	Espanola, NM	73,183
358	Marble Falls, TX	72,548
359	Sterling, CO	72,175

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

PEA Number	PEA Name	Population
360	Juneau, AK	71,664
361	Richfield, UT	71,373
362	Payette, ID	70,406
363	Big Spring, TX	70,297
364	Butte, MT	69,762
365	Vernon, TX	69,603
366	Pullman, WA	68,665
367	Moberly, MO	66,156
368	Concordia, KS	65,577
369	Red Oak, IA	65,203
370	Washington, IA	64,135
371	Wytheville, VA	62,965
372	Colby, KS	62,951
373	Walla Walla, WA	62,859
374	North Platte, NE	61,592
375	Deming, NM	59,503
376	Hereford, TX	59,127
377	Demopolis, AL	57,694
378	Waynesboro, GA	57,502
379	Sault Ste. Marie, MI	56,264
380	Escanaba, MI	55,155
381	Del Rio, TX	54,479
382	Riverton, WY	53,468
383	Creston, IA	50,709
384	Manchester, IA	50,223
385	Hannibal, MO	49,159
386	Barnwell, SC	49,027
387	Wahpeton, ND	48,521
388	Atlantic, IA	47,170
389	McCook, NE	47,014
390	Snyder, TX	45,514
391	Ontario, OR	38,735
392	Maryville, MO	37,191
393	Macon, MO	36,158
394	Martin, SD	34,651
395	Jamestown, ND	34,328
396	Winterset, IA	34,315
397	Aliceville, AL	34,310
398	South Sioux City, NE	33,946
399	Lampasas, TX	25,808
400	Muleshoe, TX	25,496
401	Floydada, TX	25,065
402	Brady, TX	23,231
403	Lewistown, MT	21,970
404	Kanab, UT	21,871
405	Jackson, WY	21,294
406	Anamosa, IA	20,638
407	Salmon, ID	15,195
408	Ballinger, TX	14,964
409	Haskell, TX	14,772
410	Valentine, NE	11,796
411	Van Horn, TX	5,874
412	Puerto Rico	3,725,789
413	Guam-Northern Mariana Islands	213,241
414	US Virgin Islands	106,405
415	American Samoa	55,519
416	Gulf of Mexico	-

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted] Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population
1	New York, NY	25,237,061
2	Los Angeles, CA	19,410,169
3	Chicago, IL	9,366,713
4	San Francisco, CA	9,027,937
5	Baltimore, MD-Washington, DC	7,842,134
6	Philadelphia, PA	7,587,252
7	Boston, MA	6,776,035
8	Dallas, TX	6,452,472
9	Miami, FL	6,291,880
10	Houston, TX	5,891,999
11	Atlanta, GA	5,435,312
12	Detroit, MI	5,137,479
13	Orlando, FL	4,562,642
14	Cleveland, OH	4,096,678
15	Phoenix, AZ	3,817,117
16	Seattle, WA	3,792,218
17	Minneapolis-St. Paul, MN	3,390,091
18	San Diego, CA	3,095,313
19	Portland, OR	3,022,643
20	Denver, CO	2,789,669
21	Tampa, FL	2,783,243
22	Sacramento, CA	2,722,415
23	Pittsburgh, PA	2,399,667
24	Saint Louis, MO	2,396,938
25	Cincinnati, OH	2,196,428
26	Las Vegas, NV	2,151,455
27	Salt Lake City, UT	2,142,152
28	San Antonio, TX	1,999,689
29	Jacksonville, FL	1,918,264
30	Kansas City, MO	1,810,075
31	Indianapolis, IN	1,769,011
32	Nashville, TN	1,748,445
33	Virginia Beach, VA	1,698,835
34	Fresno, CA	1,676,476
35	Austin, TX	1,628,809
36	New Orleans, LA	1,622,143
37	Columbus, OH	1,582,917
38	Milwaukee, WI	1,555,908
39	Oklahoma City, OK	1,446,527
40	Birmingham, AL	1,399,686
41	Syracuse, NY	1,371,959
42	Honolulu, HI	1,360,301
43	Charlotte, NC	1,327,006
44	Rochester, NY	1,316,146
45	Raleigh, NC	1,302,381
46	Little Rock, AR	1,275,690
47	Brownsville, TX	1,264,091
48	Harrisburg, PA	1,244,058
49	Albany, NY	1,222,542
50	Greenville, SC	1,220,968
51	Louisville, KY	1,194,260
52	Charleston, WV	1,191,822
53	Tucson, AZ	1,159,029
54	Buffalo, NY	1,135,509
55	Huntsville, AL	1,105,409
56	Kalamazoo, MI	1,095,827
57	Richmond, VA	1,080,661
58	Bloomington, IN	1,069,729
59	Memphis, TN	1,039,627

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted]

Supply Total: [redacted] <- Exposure $

PEA Number	PEA Name	Population
60	Manchester, NH	1,025,620
61	Toledo, OH	1,023,081
62	Dayton, OH	1,019,932
63	Tulsa, OK	969,078
64	South Bend, IN	954,029
65	Cape Coral, FL	940,274
66	Lansing, MI	922,885
67	Sarasota, FL	897,121
68	Grand Rapids, MI	866,423
69	Springfield, MA	861,286
70	Eugene, OR	859,318
71	Knoxville, TN	837,142
72	Tallahassee, FL	801,642
73	El Paso, TX	800,647
74	Chattanooga, TN	797,154
75	Albuquerque, NM	794,125
76	Reno, NV	786,501
77	Portland, ME	784,594
78	Greensboro, NC	781,289
79	Hattiesburg, MS	780,833
80	Omaha, NE	769,108
81	Saginaw, MI	767,362
82	Baton Rouge, LA	756,008
83	Fort Wayne, IN	748,680
84	Mobile, AL	724,956
85	Charleston, SC	703,499
86	Frankfort, KY	685,317
87	Pensacola, FL	684,856
88	Frederick, MD	678,674
89	Columbia, SC	646,895
90	Jackson, MS	646,279
91	Colorado Springs, CO	645,613
92	Decatur, IL	644,865
93	Lafayette, LA	638,768
94	Waco, TX	638,395
95	Bluefield, WV	631,120
96	Richmond, KY	620,049
97	Mankato, MN	617,663
98	Johnson City, TN	609,299
99	Tupelo, MS	599,462
100	Greenville, NC	571,905
101	Wichita, KS	564,245
102	Grand Junction, CO	562,340
103	Winchester, VA	556,408
104	Fort Collins, CO	552,455
105	Augusta, GA	552,150
106	Zanesville, OH	548,017
107	Bangor, ME	543,767
108	Des Moines, IA	543,000
109	Rocky Mount, NC	536,809
110	Jackson, TN	533,539
111	Fayetteville, AR	527,374
112	Bowling Green, KY	526,621
113	Erie, PA	513,834
114	Morgantown, WV	512,830
115	Asheville, NC	512,200
116	Rockford, IL	509,762
117	La Grange, GA	501,771
118	Richmond, IN	496,850

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted]

[redacted] Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population
119	Yakima, WA	496,571
120	Shreveport, LA	492,213
121	Altoona, PA	490,867
122	Madison, WI	488,073
123	Mansfield, OH	486,730
124	Olympia, WA	482,135
125	Alton, IL	476,174
126	Casa Grande, AZ	475,024
127	Evansville, IN	474,251
128	Macon, GA	472,241
129	Springfield, IL	471,823
130	Spokane, WA	471,221
131	Sanford, NC	468,358
132	Corpus Christi, TX	467,429
133	Nacogdoches, TX	464,704
134	Newark, OH	463,800
135	Beaumont, TX	460,666
136	Williamsport, PA	454,792
137	Eau Claire, WI	452,434
138	Burlington, VT	452,191
139	Hot Springs, AR	443,880
140	Fredericksburg, VA	438,705
141	Brainerd, MN	435,203
142	Merced, CA	430,256
143	Keene, NH	427,275
144	Paris, TX	423,195
145	Columbia, TN	422,947
146	Wilmington, NC	420,413
147	Salisbury, MD	419,355
148	Bellingham, WA	412,316
149	Biloxi, MS	411,066
150	Rolla, MO	405,037
151	Winston-Salem, NC	398,071
152	Tyler, TX	397,075
153	Fond du Lac, WI	395,357
154	Myrtle Beach, SC	394,573
155	Appleton, WI	392,660
156	Boise City, ID	392,365
157	Yuma, AZ	390,768
158	Helena, MT	378,009
159	Valdosta, GA	373,343
160	Victoria, TX	371,551
161	Carbondale, IL	368,043
162	Elizabethtown, KY	364,517
163	Davenport, IA	363,256
164	Montgomery, AL	363,237
165	Rome, GA	362,053
166	Redding, CA	361,652
167	Harrisonburg, VA	360,886
168	Peoria, IL	360,552
169	Goldsboro, NC	358,900
170	Dothan, AL	358,396
171	Fort Smith, AR	356,101
172	Duluth, MN	354,182
173	Blacksburg, VA	352,838
174	Springfield, MO	352,596
175	Southaven, MS	349,748
176	Ames, IA	348,248
177	Savannah, GA	347,611

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted]

Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population	Demand Price (MHz-POP)	AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other
178	Sedalia, MO	346,580	[redacted]														
179	Burlington, IA	346,354															
180	Flagstaff, AZ	345,454															
181	Texarkana, TX	343,206															
182	Cedar Rapids, IA	342,108															
183	Columbia, MO	340,194															
184	Ruston, LA	338,416															
185	Marquette, MI	335,871															
186	Rock Hill, SC	335,865															
187	Pocatello, ID	328,567															
188	Jamestown, NY	325,075															
189	Alexandria, LA	324,637															
190	Bozeman, MT	324,077															
191	Petersburg, VA	321,175															
192	Fayetteville, NC	319,431															
193	Saint Joseph, MO	318,414															
194	State College, PA	317,863															
195	Lewiston, ID	317,751															
196	Cape Girardeau, MO	315,713															
197	Wheeling, WV	312,837															
198	Jonesboro, AR	311,312															
199	Dalton, GA	310,645															
200	Danville, VA	310,385															
201	Eagle Pass, TX	304,111															
202	Columbus, GA	303,722															
203	Traverse City, MI	303,041															
204	Owensboro, KY	301,206															
205	Douglas City, CA	300,915															
206	Wenatchee, WA	300,767															
207	Brunswick, GA	298,749															
208	Salisbury, NC	297,865															
209	Green Bay, WI	296,366															
210	Binghamton, NY	295,081															
211	Ardmore, OK	291,829															
212	Anchorage, AK	291,826															
213	Bend, OR	289,034															
214	Lincoln, NE	285,407															
215	Hickory, NC	282,468															
216	Joplin, MO	280,505															
217	Lubbock, TX	278,831															
218	Wausau, WI	278,831															
219	Mason City, IA	277,029															
220	Odessa, TX	274,002															
221	Laredo, TX	269,622															
222	Morristown, TN	268,978															
223	Dubuque, IA	264,752															
224	De Kalb, IL	257,786															
225	La Crosse, WI	257,376															
226	Lima, OH	256,337															
227	Watertown, NY	255,260															
228	Roanoke, VA	252,548															
229	Saint George, UT	252,481															
230	Lumberton, NC	252,467															
231	Fremont, NE	249,287															
232	Topeka, KS	245,402															
233	Shelby, NC	244,153															
234	Lexington, NC	242,524															
235	Amarillo, TX	241,798															
236	Grand Island, NE	240,913															

[redacted]

[redacted]

Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population
237	Hinesville, GA	240,344
238	Florence, SC	239,989
239	Kannapolis, NC	238,596
240	Charlottesville, VA	234,712
241	Dublin, GA	233,302
242	Lake Charles, LA	231,201
243	Paducah, KY	230,924
244	Manhattan, KS	230,920
245	West Plains, MO	229,798
246	Auburn, AL	228,786
247	Nampa, ID	227,487
248	Sumter, SC	223,344
249	Bryan, TX	221,455
250	Las Cruces, NM	221,221
251	Salina, KS	219,945
252	Sioux City, IA	218,063
253	Baraboo, WI	216,417
254	Merrill, WI	216,161
255	Greenville, MS	214,872
256	Lynchburg, VA	213,977
257	Cheyenne, WY	213,445
258	Cullman, AL	210,229
259	Roswell, NM	209,606
260	Alpena, MI	208,861
261	Fargo, ND	208,777
262	Hilton Head Island, SC	208,100
263	Santa Fe, NM	201,081
264	Kodiak, AK	200,813
265	Winona, MN	197,462
266	Lenoir, NC	197,430
267	Sheboygan, WI	196,949
268	Clinton, IA	196,679
269	Racine, WI	195,408
270	Ottawa, IL	193,858
271	Elmira, NY	193,433
272	Brownwood, TX	192,692
273	Bloomington, IL	186,133
274	Twin Falls, ID	185,790
275	Corsicana, TX	184,725
276	Rapid City, SD	183,639
277	Hutchinson, KS	183,101
278	Bartlesville, OK	179,889
279	Logan, UT	179,703
280	Garden City, KS	177,150
281	Muskogee, OK	177,148
282	Galesburg, IL	173,607
283	Plattsburgh, NY	173,097
284	Greenwood, SC	171,848
285	Gallup, NM	170,223
286	Sioux Falls, SD	169,468
287	Kenosha, WI	166,426
288	Abilene, TX	165,252
289	Price, UT	164,900
290	Watertown, SD	163,741
291	Rockingham, NC	162,684
292	Pueblo, CO	159,063
293	Lawrenceburg, TN	158,283
294	Waterloo, IA	155,366
295	Stillwater, OK	152,050

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted] $ [redacted]

PEA Number	PEA Name	Population
296	Pottsville, PA	148,289
297	Pendleton, OR	146,709
298	Fairbanks, AK	145,928
299	Kirksville, MO	144,847
300	Selma, AL	144,376
301	Rochester, MN	144,248
302	Enid, OK	143,731
303	Great Falls, MT	143,015
304	Mount Airy, NC	143,013
305	Altus, OK	142,644
306	Wichita Falls, TX	142,252
307	Yankton, SD	141,973
308	Americus, GA	138,886
309	Elizabeth City, NC	137,035
310	Farmington, MO	133,395
311	Trinidad, CO	132,721
312	Farmington, NM	130,044
313	Lockhart, TX	128,849
314	Jacksonville, TX	127,971
315	Sheridan, WY	127,963
316	Rock Springs, WY	125,434
317	Beatrice, NE	124,932
318	Thief River Falls, MN	124,110
319	Albany, GA	122,863
320	San Angelo, TX	119,412
321	Batesville, IN	118,693
322	Minot, ND	116,439
323	Socorro, NM	114,543
324	Honesdale, PA	110,191
325	Bismarck, ND	108,779
326	Fergus Falls, MN	108,648
327	Orangeburg, SC	107,676
328	Winslow, AZ	107,449
329	Kingsville, TX	104,558
330	Olney, IL	102,976
331	Plainview, TX	102,732
332	Bennettsville, SC	102,615
333	Sidney, OH	102,382
334	Pampa, TX	100,685
335	Natchitoches, LA	99,546
336	Grand Forks, ND	98,461
337	Mineral Wells, TX	95,311
338	Durango, CO	91,716
339	Scottsbluff, NE	91,571
340	Clovis, NM	84,529
341	Alamogordo, NM	84,294
342	Mitchell, SD	83,465
343	Pecos, TX	82,332
344	Clanton, AL	82,318
345	Newberry, SC	81,339
346	Franklin, NC	80,814
347	New Roads, LA	79,775
348	Aberdeen, SD	79,541
349	Marion, NC	78,393
350	Forrest City, AR	78,309
351	Dickinson, ND	78,183
352	Gonzales, TX	77,549
353	Watseka, IL	77,440
354	New London, WI	76,906

Demand Price (MHz-POP) [redacted] [redacted]

Supply Total: $ [redacted] <- Exposure $

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted]

Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population
355	Casper, WY	75,450
356	Colville, WA	74,653
357	Espanola, NM	73,183
358	Marble Falls, TX	72,548
359	Sterling, CO	72,175
360	Juneau, AK	71,664
361	Richfield, UT	71,373
362	Payette, ID	70,406
363	Big Spring, TX	70,297
364	Butte, MT	69,762
365	Vernon, TX	69,603
366	Pullman, WA	68,665
367	Moberly, MO	66,156
368	Concordia, KS	65,577
369	Red Oak, IA	65,203
370	Washington, IA	64,135
371	Wytheville, VA	62,965
372	Colby, KS	62,951
373	Walla Walla, WA	62,859
374	North Platte, NE	61,592
375	Deming, NM	59,503
376	Hereford, TX	59,127
377	Demopolis, AL	57,694
378	Waynesboro, GA	57,502
379	Sault Ste. Marie, MI	56,264
380	Escanaba, MI	55,155
381	Del Rio, TX	54,479
382	Riverton, WY	53,468
383	Creston, IA	50,709
384	Manchester, IA	50,223
385	Hannibal, MO	49,159
386	Barnwell, SC	49,027
387	Wahpeton, ND	48,521
388	Atlantic, IA	47,170
389	McCook, NE	47,014
390	Snyder, TX	45,514
391	Ontario, OR	38,735
392	Maryville, MO	37,191
393	Macon, MO	36,158
394	Martin, SD	34,651
395	Jamestown, ND	34,328
396	Winterset, IA	34,315
397	Aliceville, AL	34,310
398	South Sioux City, NE	33,946
399	Lampasas, TX	25,808
400	Muleshoe, TX	25,496
401	Floydada, TX	25,065
402	Brady, TX	23,231
403	Lewistown, MT	21,970
404	Kanab, UT	21,871
405	Jackson, WY	21,294
406	Anamosa, IA	20,638
407	Salmon, ID	15,195
408	Ballinger, TX	14,964
409	Haskell, TX	14,772
410	Valentine, NE	11,796
411	Van Horn, TX	5,874
412	Puerto Rico	3,725,789
413	Guam-Northern Mariana Islands	213,241

Demand Price (MHz-POP)

	AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]

[redacted]

[redacted]

Supply Total: $ [redacted] <- Exposure $

PEA Number	PEA Name	Population
414	US Virgin Islands	106,405
415	American Samoa	55,519
416	Gulf of Mexico	-

Demand Price (MHz-POP)

AT&T	VZ	Sprint	TMUS	Other	Total Demand	Block Supply	Demand Price	Supply Price	AT&T	VZ	Sprint	TMUS	Other

[redacted]