

Estimated Potential Auction Compensation

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(\$ in millions)

These are estimated high payouts that illustrate the economic potential of the auction. In the actual auction, prices will be bid down in many markets and payouts to many winning bidders will be lower as a result. On a nationwide basis, it is anticipated that forward auction revenues will exceed the winning bid amounts and the other requirements specified by the final stage rule. Those additional revenues will be deposited in the Public Safety Trust Fund to advance the financial goals identified by Congress in the Spectrum Act.

DMA	FCC's Estimated High-End Compensation per Broadcaster						DMA	FCC's Estimated High-End Compensation per Broadcaster					
	Full Power			Class A				Full Power			Class A		
	Maximum	-	Median	Maximum	-	Median		Maximum	-	Median	Maximum	-	Median
1 New York, NY	\$490		\$410	\$360		\$280	31 Kansas City, KS-MO	\$14		\$14	n.a.		n.a.
2 Los Angeles, CA	570		340	370		310	32 Columbus, OH	41		36	20		14
3 Chicago, IL	130		120	120		100	33 Salt Lake City, UT	12		12	11		7
4 Philadelphia, PA	400		230	180		110	34 Milwaukee, WI	68		53	32		30
5 Dallas-Ft. Worth, TX	67		53	58		50	35 Cincinnati, OH	44		42	35		35
6 San Francisco-Oakland-San Jose, CA	140		110	92		70	36 San Antonio, TX	35		29	22		20
7 Boston, MA	140		93	77		77	37 Greenville-Spartanburg, SC-Asheville, NC	57		36	n.a.		n.a.
8 Washington, DC	140		130	98		67	38 West Palm Beach-Ft. Pierce, FL	100		93	47		29
9 Atlanta, GA	91		65	54		51	39 Grand Rapids-Kalamazoo-Battle Creek, MI	70		39	20		14
10 Houston, TX	52		45	38		36	40 Austin, TX	48		36	24		12
11 Detroit, MI	170		110	58		46	41 Oklahoma City, OK	17		13	13		12
12 Phoenix, AZ	36		23	22		10	42 Las Vegas, NV	15		12	13		11
13 Seattle-Tacoma, WA	95		36	n.a.		n.a.	43 Harrisburg-Lancaster-Lebanon-York, PA	180		130	n.a.		n.a.
14 Tampa-St Petersburg-Sarasota, FL	71		60	43		39	44 Birmingham, AL	33		25	20		12
15 Minneapolis - St. Paul, MN	32		20	18		18	45 Norfolk-Portsmouth-Newport News, VA	28		24	16		11
16 Miami - Ft. Lauderdale, FL	80		78	76		70	46 Greensboro-High Point-Winston Salem, NC	60		45	n.a.		n.a.
17 Denver, CO	33		28	22		10	47 Albuquerque-Santa Fe, NM	9		5	6		5
18 Orlando-Daytona Beach-Melbourne, FL	85		68	67		44	48 Jacksonville, FL	27		23	16		15
19 Cleveland-Akron, OH	130		72	26		18	49 Louisville, KY	31		25	18		11
20 Sacramento-Stockton-Modesto, CA	130		94	55		43	50 Memphis, TN	13		11	10		8
21 St. Louis, MO	21		20	13		11	51 New Orleans, LA	18		15	13		11
22 Portland, OR	24		18	15		14	52 Buffalo, NY	73		46	6		4
23 Pittsburgh, PA	46		40	38		21	53 Providence, RI-New Bedford, MA	160		110	56		56
24 Raleigh-Durham, NC	51		47	26		20	54 Wilkes Barre-Scranton, PA	150		140	56		8
25 Charlotte, NC	54		44	25		20	55 Fresno-Visalia, CA	30		26	17		16
26 Indianapolis, IN	42		36	28		21	56 Little Rock-Pine Bluff, AR	16		12	9		7
27 Baltimore, MD	180		160	79		79	57 Richmond-Petersburg, VA	44		39	n.a.		n.a.
28 San Diego, CA	250		200	230		140	58 Albany-Schenectady-Troy, NY	81		37	110		10
29 Nashville, TN	30		20	12		11	59 Mobile, AL-Pensacola, FL	15		12	10		10
30 Hartford-New Haven, CT	280		170	77		63	60 Tulsa, OK	19		14	11		10

Estimated projections by FCC staff of the compensation for relinquishing a license, using auction methodology currently under development as applied to all auction-eligible television stations. Actual compensation may be higher or lower; opening bid prices may be higher in some markets. Markets and stations needed in the Reverse Auction will depend on which stations choose to participate; low VHF stations are least likely to be selected in the auction because of the availability of low VHF channels. Estimates assume the sale of 100 MHz of spectrum in the Forward Auction at an average price of \$1.50 per MHz-pop; the amount of cleared spectrum and the price per pop may vary from these assumptions when the auction is run.

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(\$ in millions)

DMA	FCC's Estimated High-End Compensation per Broadcaster						DMA	FCC's Estimated High-End Compensation per Broadcaster					
	Full Power			Class A				Full Power			Class A		
	Maximum	-	Median	Maximum	-	Median		Maximum	-	Median	Maximum	-	Median
61 Knoxville, TN	\$27		\$19	n.a.		n.a.	95 Charleston, SC	\$14		\$10	\$10		\$7
62 Ft. Myers-Naples, FL	50		35	14		9	96 South Bend-Elkhart, IN	65		56	n.a.		n.a.
63 Lexington, KY	31		20	n.a.		n.a.	97 Tri-Cities, TN-VA	32		21	13		11
64 Dayton, OH	53		48	n.a.		n.a.	98 Burlington, VT-Plattsburgh, NY	58		17	1		1
65 Charleston-Huntington, WV	23		16	n.a.		n.a.	99 Greenville-New Bern-Washington, NC	33		22	n.a.		n.a.
66 Roanoke-Lynchburg, VA	25		22	12		12	100 Davenport, IA-Rock Island-Moline, IL	22		20	n.a.		n.a.
67 Wichita - Hutchinson, KS	8		2	2		2	101 Ft. Smith-Fayetteville-Springdale-Rogers, AR	14		10	8		5
68 Flint-Saginaw-Bay City, MI	100		45	n.a.		n.a.	102 Myrtle Beach-Florence, SC	32		25	21		21
69 Honolulu, HI	10		5	6		6	103 Johnstown-Altoona, PA	38		26	23		12
70 Green Bay-Appleton, WI	13		10	1		1	104 Evansville, IN	16		10	10		6
71 Tucson, AZ	38		20	15		11	105 Lincoln-Hastings-Kearney, NE	14		5	n.a.		n.a.
72 Des Moines-Ames, IA	13		8	4		4	106 Tallahassee, FL-Thomasville, GA	10		9	5		3
73 Spokane, WA	7		3	0		0	107 Reno, NV	48		17	4		4
74 Omaha, NE	9		8	n.a.		n.a.	108 Tyler-Longview, TX	34		24	n.a.		n.a.
75 Springfield, MO	11		8	3		3	109 Ft. Wayne, IN	33		31	5		5
76 Toledo, OH	100		55	38		38	110 Boise, ID	5		4	2		2
77 Columbia, SC	41		17	n.a.		n.a.	111 Sioux Falls-Mitchell, SD	8		2	n.a.		n.a.
78 Rochester, NY	34		30	20		16	112 Augusta, GA	25		17	8		7
79 Huntsville-Decatur-Florence, AL	26		22	18		16	113 Youngstown, OH	95		90	n.a.		n.a.
80 Portland-Auburn, ME	37		22	n.a.		n.a.	114 Springfield-Holyoke, MA	120		120	32		32
81 Paducah-Cape Girardeau-Harrisburg-Mt Vernon	17		9	5		4	115 Lansing, MI	84		62	n.a.		n.a.
82 Shreveport, LA	16		13	4		3	116 Fargo-Valley City, ND	3		1	n.a.		n.a.
83 Madison, WI	40		35	12		12	117 Peoria-Bloomington, IL	30		17	n.a.		n.a.
84 Champaign-Springfield-Decatur, IL	35		19	4		4	118 Macon, GA	40		19	9		9
85 Syracuse, NY	34		24	10		8	119 Traverse City-Cadillac, MI	28		6	n.a.		n.a.
86 Harlingen-Weslaco-Brownsville-McAllen, TX	32		21	28		13	120 Montgomery, AL	18		13	8		5
87 Chattanooga, TN	62		33	21		18	121 Eugene, OR	21		6	6		5
88 Waco-Temple-Bryan, TX	63		47	15		14	122 Lafayette, LA	16		14	7		7
89 Colorado Springs-Pueblo, CO	25		22	5		5	123 Santa Barbara-Santa Maria-San Luis Obispo, CA	120		30	59		4
90 Cedar Rapids-Waterloo-Iowa City-Dubuque, IA	21		13	n.a.		n.a.	124 Yakima-Pasco-Richland-Kennewick, WA	5		3	2		1
91 El Paso, TX	9		7	n.a.		n.a.	125 Monterey-Salinas, CA	79		72	36		31
92 Savannah, GA	11		8	4		3	126 Columbus, GA	38		18	6		6
93 Baton Rouge, LA	24		18	14		7	127 Bakersfield, CA	80		31	28		15
94 Jackson, MS	17		11	n.a.		n.a.	128 La Crosse-Eau Claire, WI	18		13	3		3

Estimated projections by FCC staff of the compensation for relinquishing a license, using auction methodology currently under development as applied to all auction-eligible television stations. Actual compensation may be higher or lower; opening bid prices may be higher in some markets. Markets and stations needed in the Reverse Auction will depend on which stations choose to participate; low VHF stations are least likely to be selected in the auction because of the availability of low VHF channels. Estimates assume the sale of 100 MHz of spectrum in the Forward Auction at an average price of \$1.50 per MHz-pop; the amount of cleared spectrum and the price per pop may vary from these assumptions when the auction is run.

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Estimated Potential Auction Compensation (cont'd)

(\$ in millions)

DMA	FCC's Estimated High-End Compensation per Broadcaster						DMA	FCC's Estimated High-End Compensation per Broadcaster					
	Full Power			Class A				Full Power			Class A		
	Maximum	-	Median	Maximum	-	Median		Maximum	-	Median	Maximum	-	Median
129 Corpus Christi, TX	\$16		\$11	\$4		\$2	163 Gainesville, FL	\$31		\$28	\$28		\$12
130 Amarillo, TX	2		1	0		0	164 Missoula, MT	2		1	1		0
131 Wilmington, NC	18		17	n.a.		n.a.	165 Abilene-Sweetwater, TX	10		5	n.a.		n.a.
132 Chico-Redding, CA	18		16	22		12	166 Yuma, AZ-El Centro, CA	11		8	n.a.		n.a.
133 Columbus-Tupelo-West Point, MS	13		11	4		4	167 Hattiesburg-Laurel, MS	15		13	n.a.		n.a.
134 Topeka, KS	18		8	5		5	168 Billings, MT	1		1	n.a.		n.a.
135 Wausau-Rhineland, WI	15		6	n.a.		n.a.	169 Clarksburg-Weston, WV	31		15	n.a.		n.a.
136 Rockford, IL	55		45	n.a.		n.a.	170 Quincy, IL-Hannibal, MO-Keokuk, IA	8		7	n.a.		n.a.
137 Monroe, LA-El Dorado, AR	11		8	1		1	171 Utica, NY	52		14	6		6
138 Columbia-Jefferson City, MO	9		7	n.a.		n.a.	172 Dothan, AL	12		9	n.a.		n.a.
139 Duluth, MN-Superior, WI	7		3	n.a.		n.a.	173 Rapid City, SD	2		1	n.a.		n.a.
140 Medford-Klamath Falls, OR	5		1	2		1	174 Elmira, NY	8		7	n.a.		n.a.
141 Beaumont-Port Arthur, TX	17		14	n.a.		n.a.	175 Lake Charles, LA	25		15	4		4
142 Salisbury, MD	55		50	n.a.		n.a.	176 Watertown, NY	17		16	5		3
143 Lubbock, TX	3		2	1		1	177 Jackson, TN	13		13	n.a.		n.a.
144 Wichita Falls, TX -Lawton, OK	15		12	1		1	178 Harrisonburg, VA	64		31	17		6
145 Minot-Bismarck-Dickinson, ND	1		0	n.a.		n.a.	179 Alexandria, LA	10		7	n.a.		n.a.
146 Anchorage, AK	2		1	1		1	180 Marquette, MI	4		2	n.a.		n.a.
147 Sioux City, IA	12		5	n.a.		n.a.	181 Jonesboro, AR	12		12	n.a.		n.a.
148 Palm Springs, CA	180		100	170		26	182 Bowling Green, KY	26		11	n.a.		n.a.
149 Erie, PA	41		29	n.a.		n.a.	183 Charlottesville, VA	39		27	22		22
150 Odessa-Midland, TX	3		1	n.a.		n.a.	184 Laredo, TX	9		5	5		5
151 Albany, GA	14		10	n.a.		n.a.	185 Grand Junction-Montrose, CO	2		1	1		1
152 Joplin, MO-Pittsburg, KS	12		9	n.a.		n.a.	186 Meridian, MS	13		10	n.a.		n.a.
153 Rochester, MN-Mason City, IA-Austin, MN	15		9	n.a.		n.a.	187 Lima, OH	36		29	15		15
154 Panama City, FL	15		7	5		4	188 Butte-Bozeman, MT	1		1	0		0
155 Terre Haute, IN	22		17	n.a.		n.a.	189 Lafayette, IN	52		52	n.a.		n.a.
156 Bangor, ME	6		5	n.a.		n.a.	190 Greenwood-Greenville, MS	7		7	n.a.		n.a.
157 Wheeling, WV- Steubenville, OH	59		53	19		10	191 Great Falls, MT	1		0	n.a.		n.a.
158 Bluefield-Beckley-Oak Hill, WV	16		15	n.a.		n.a.	192 Twin Falls, ID	2		1	n.a.		n.a.
159 Binghamton, NY	40		16	5		5	193 Bend, OR	2		1	1		1
160 Biloxi-Gulfport, MS	16		14	n.a.		n.a.	194 Parkersburg, WV	16		16	n.a.		n.a.
161 Sherman, TX - Ada, OK	61		40	n.a.		n.a.	195 Eureka, CA	1		1	n.a.		n.a.
162 Idaho Falls-Pocatello, ID	2		1	0		0	196 Cheyenne, WY-Scottsbluff, NE	35		8	0		0

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(\$ in millions)

DMA	FCC's Estimated High-End Compensation per Broadcaster					
	Full Power			Class A		
	Maximum	-	Median	Maximum	-	Median
197 Casper-Riverton, WY	\$0		\$0	n.a.		n.a.
198 San Angelo, TX	2		1	0		0
199 Mankato, MN	14		14	n.a.		n.a.
200 St. Joseph, MO	15		14	n.a.		n.a.
201 Ottumwa, IA-Kirksville, MO	7		5	n.a.		n.a.
202 Fairbanks, AK	0		0	1		1
203 Victoria, TX	20		19	n.a.		n.a.
204 Zanesville, OH	32		32	n.a.		n.a.
205 Helena, MT	2		1	n.a.		n.a.
206 Presque Isle, ME	1		1	n.a.		n.a.
207 Juneau, AK	0		0	n.a.		n.a.
208 North Platte, NE	2		1	0		0
209 Alpena, MI	8		6	n.a.		n.a.
210 Glendive, MT	0		0	n.a.		n.a.

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DMA	FCC's Estimated High-End Compensation per Broadcaster					
	Full Power			Class A		
	Maximum	-	Median	Maximum	-	Median
Puerto Rico	\$46		\$38	\$34		\$19

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Description of Methodology for Estimating Potential Auction Compensation

The estimated maximum and median high-end compensation in the accompanying charts was developed by the FCC staff using a “top-down” methodology, under which each broadcast station in a market receives a share of expected forward auction revenue proportional to its value in the nationwide repacking process. The estimated compensation therefore reflects the salience of a particular station to the reverse auction with regard to clearing spectrum for mobile broadband use. As noted in the charts, the estimates are for the license relinquishment and channel sharing options; high-end compensation for the other auction options (UHF-to-VHF and high VHF-to-low VHF) may vary.

High-End Auction Revenue Methodology

Forward auction revenue-per-pop was calculated by multiplying an average nationwide \$/MHz-pop forward auction price by an amount of spectrum sold in the Forward Auction, which was then multiplied by the total US population to get an estimate of gross forward auction proceeds. To arrive at the net auction proceeds available to pay broadcasters, this amount was reduced by an estimate of the amount of the costs, other than payments to broadcasters for relinquishing their spectrum usage rights, identified by the Spectrum Act and the Commission’s rules to be paid from auction proceeds.

The estimates presented in the attached spreadsheets assume the following: \$1.50/MHz-pop; a 126 MHz clearing target (with 100 MHz of available spectrum for the forward auction); and auction costs, other than broadcaster payments, of \$7 billion (\$1.75B for the TV Broadcaster Relocation Fund; \$250M for auction costs; and \$5B to cover the costs of FirstNet that are not covered by the H Block and AWS-3 auctions).¹

A station’s impact on repacking is derived from its interference volume and the channel constraints that it generates. An adjusted TV coverage population estimate was developed to approximate each station’s interference volume and thus reflect its repack value. The estimate is a weighted average of a station’s coverage population and the total coverage population of all stations that it directly constrains, i.e., one link in the “daisy chain,” accounting for both adjacent and co-channel constraints. If a station has many constraints and blocks many other stations from being repacked, then it is likely to receive higher compensation to relinquish its spectrum. Stations with lower coverage populations may also be important to the repacking process insofar as their interference footprint prevents larger stations in critical areas from being repacked. Finally, each station’s interference-weighted population was adjusted to reflect the amount of spectrum scarcity in its home band in the market in which it operates. This adjustment captures the added difficulty of clearing where there are not many vacant channels available for repacking, which is not captured by coverage population or blocked channel constraints alone. The value of a station will depend in part on the ratio of stations to available channels.

To determine the rate at which to compensate stations, net forward auction proceeds are divided by the total adjusted coverage population of stations that relinquish spectrum in staff-run Reverse Auction simulations.² The high-end dollar estimate for a station is then the dollar-per-adjusted coverage population multiplied by each station’s individual adjusted coverage population. This approach is applicable to all stations and not just those that relinquish spectrum. Since every station has an adjusted coverage population, a station’s high-end compensation reflects its individual repacking value priced at an average \$/pop derived from the auction simulations. The methodology prices each station as if it were selected to relinquish spectrum.

Estimated High-End Compensation by Market

The accompanying charts show the estimated maximum and median high-end compensation per station for full power and Class A stations in each market, based on the methodology described above. The median is included to help illustrate the distribution of compensation in the market.

(1) The Commission has stated that it is “optimistic that the proceeds from the H Block and AWS-3 auctions will be sufficient to fully fund amounts for FirstNet.” Report and Order at ¶ 345.

(2) Extensive auction simulations have indicated that the total coverage population of spectrum-relinquishing stations is very stable across specifications, and can essentially be treated as a constant.