



**103 Auction Winners:** Winning bidders, the number of markets won, their cost, and population by block and total

Auction 103 Winners								
	Total				MN Blocks			
	Markets	Cost (\$MM)	Pops (MM)	Unit	Markets	Cost (\$MM)	Pops (MM)	Unit
Verizon	411	3,417.13	3,438.4	0.99	411	3,417.13	3,438.4	0.99
AT&T	411	2,379.10	2,457.2	0.97	411	2,379.10	2,457.2	0.97
T-Mobile	399	931.61	1,455.5	0.64	276	905.24	1,004.1	0.90
Columbia Capital	22	306.71	261.5	1.17	22	306.71	261.5	1.17
DISH	416	202.53	1,937.9	0.10	4	2.28	32.4	0.07
US Cellular	70	146.34	94.2	1.55	70	146.34	94.2	1.55
Sprint	38	113.95	736.5	0.15	-	-	-	-
Monarch Wireless	46	39.28	124.7	0.32	46	39.28	124.7	0.32
Windstream	8	13.75	13.1	1.05	8	13.75	13.1	1.05
NKCN	17	6.72	31.2	0.22	15	5.69	18.1	0.32
East Kentucky Network	2	2.38	6.3	0.38	2	2.38	6.3	0.38
Joseph Sofio	23	2.08	37.6	0.06	17	1.87	30.7	0.06

**103 Market Pricing:** By PEA, the population and price of each market by block

PEA	Name	Population	MN Block Price	P Block Price	Wtd Avg Price	MN Unit (c)	P Unit (c)	Wtd Avg Unit (c)
PEA001	New York, NY	25,237,061	37,541,000	4,608,000	27,854,824	1.49	0.18	1.10
PEA002	Los Angeles, CA	19,410,169	29,468,000	3,288,000	21,768,000	1.52	0.17	1.12
PEA003	Chicago, IL	9,366,713	13,966,000	2,072,000	10,467,765	1.49	0.22	1.12
PEA004	San Francisco, CA	9,027,937	10,558,000	1,292,000	7,832,706	1.17	0.14	0.87
PEA005	Baltimore-DC	7,842,134	10,498,000	1,285,000	7,788,294	1.34	0.16	0.99
PEA006	Philadelphia, PA	7,587,252	8,390,000	1,027,000	6,224,412	1.11	0.14	0.82
PEA007	Boston, MA	6,776,035	11,244,000	940,000	8,213,412	1.66	0.14	1.21
PEA008	Dallas, TX	6,452,472	11,048,000	923,000	8,070,059	1.71	0.14	1.25
PEA009	Miami, FL	6,291,880	8,080,000	900,000	5,968,235	1.28	0.14	0.95
PEA010	Houston, TX	5,891,999	7,715,000	1,038,000	5,751,176	1.31	0.18	0.98
PEA011	Atlanta, GA	5,435,312	5,115,000	625,000	3,794,412	0.94	0.11	0.70
PEA012	Detroit, MI	5,137,479	4,713,000	575,000	3,495,941	0.92	0.11	0.68
PEA013	Orlando, FL	4,562,642	4,789,000	584,000	3,552,235	1.05	0.13	0.78
PEA014	Cleveland, OH	4,096,678	3,768,000	418,000	2,782,706	0.92	0.10	0.68
PEA015	Phoenix, AZ	3,817,117	9,718,750	637,000	7,047,647	2.55	0.17	1.85

**103 Buyer Summary:** Eight market size groups, the number of licenses won, their cost, and population by block and total for each buyer as well as the entire auction

<b>T-Mobile</b>									
<b>Auction 103 Purchased Licenses Profile</b>									
PEA Population	Total			MN Blocks					cc
	# Li-censes	Cost (\$MM)	Wtg Avg Unit (c)	# Li-censes	Cost (\$MM)	Wtg Avg Unit (c)	Min Unit Cost (c)	Max Unit Cost (c)	
Over 10MM	8	268.7	1.504	8	268.7	1.504	1.490	1.523	
5MM-10MM	36	334.4	1.307	36	334.4	1.307	0.921	1.719	
1MM-5MM	235	239.5	0.575	182	232.7	0.685	0.001	5.692	
750K-1MM	125	25.5	0.244	51	22.4	0.527	0.005	1.811	
500K-750K	209	18.5	0.149	77	14.8	0.325	0.007	2.243	1
250K-500K	647	26.4	0.112	236	19.3	0.226	0.002	4.241	4
100K-250K	665	13.5	0.118	276	9.8	0.210	0.004	1.552	3
Under 100K	<u>459</u>	<u>5.2</u>	<u>0.193</u>	<u>163</u>	<u>3.1</u>	<u>0.316</u>	<u>-</u>	<u>4.298</u>	2

**Block Assignments:** By PEA, a matrix of the winner of each block

PEA	Name	Group	1	2	3	4	5	6	7
PEA001	New York, NY	M	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Veri
		N	Verizon	T-Mobile	T-Mobile	T-Mobile	T-Mobile	Columbia Cap	AT&
		P	Sprint	Sprint	Sprint	Sprint	Sprint	DISH	DISH
PEA002	Los Angeles, CA	M	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Veri
		N	Verizon	Columbia Cap	T-Mobile	T-Mobile	T-Mobile	T-Mobile	AT&
		P	Sprint	Sprint	Sprint	Sprint	Sprint	DISH	DISH
PEA003	Chicago, IL	M	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Veri
		N	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&
		P	Sprint	Sprint	Sprint	Sprint	Sprint	DISH	DISH
PEA004	San Francisco, CA	M	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Veri
		N	Columbia Cap	Columbia Cap	T-Mobile	T-Mobile	T-Mobile	T-Mobile	AT&
		P	Sprint	Sprint	Sprint	Sprint	Sprint	DISH	DISH
PEA005	Baltimore-DC	M	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Veri
		N	Columbia Cap	Columbia Cap	AT&T	AT&T	AT&T	AT&T	AT&
		P	Sprint	Sprint	Sprint	Sprint	Sprint	DISH	DISH

**Winners by PEA:** By PEA, the spectrum depth won by each successful bidder

	AT&T		DISH			Sprint		T-Mobile			Verizon	
	Total	MN	Total	MN	P	Total	P	Total	MN	P	Total	MN
PEA001	800	800	500	-	500	500	500	400	400	-	1,100	1,100
PEA002	800	800	500	-	500	500	500	400	400	-	1,100	1,100
PEA003	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA004	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA005	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA006	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA007	800	800	500	-	500	500	500	300	300	-	1,100	1,100
PEA008	800	800	500	-	500	500	500	300	300	-	1,100	1,100
PEA009	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA010	800	800	500	-	500	500	500	400	400	-	1,000	1,000
PEA011	800	800	600	-	600	400	400	400	400	-	1,200	1,200
PEA012	800	800	700	-	700	300	300	200	200	-	1,000	1,000
PEA013	800	800	600	-	600	400	400	400	400	-	1,200	1,200
PEA014	800	800	600	-	600	300	300	-	-	-	1,600	1,600
PEA015	600	600	600	-	600	400	400	200	200	-	1,600	1,600
PEA016	800	800	600	-	600	400	400	200	200	-	1,000	1,000

**Winners by County:** Each county, the spectrum depth won by each successful bidder

PEA	FIPS	ATT	ATT_MN	DISH	DISH_MN	DISH_P	SPRINT	SPRINT_P	TMOBIL
PEA164	1001	800	800	600	0	600	0	0	400
PEA084	1003	800	800	600	0	600	0	0	600
PEA170	1005	800	800	600	0	600	0	0	1000
PEA344	1007	800	800	600	0	600	0	0	1000
PEA258	1009	800	800	600	0	600	0	0	1000
PEA300	1011	800	800	600	0	600	0	0	400
PEA300	1013	800	800	600	0	600	0	0	400
PEA040	1015	800	800	800	0	800	0	0	800
PEA165	1017	800	800	600	0	600	0	0	1000
PEA165	1019	800	800	600	0	600	0	0	1000
PEA344	1021	800	800	600	0	600	0	0	1000
PEA377	1023	800	800	600	0	600	0	0	400
PEA084	1025	800	800	600	0	600	0	0	600
PEA246	1027	800	800	600	0	600	0	0	1000
PEA165	1029	800	800	600	0	600	0	0	1000
PEA170	1031	800	800	600	0	600	0	0	1000

**MAPS:** Data in downloadable spreadsheet can also be viewed visually in both png and eps formats, including:

- mmWave: Holdings of all 24 (lower and upper), 28 and 37/39 and 47 GHz licenses.

