

APPENDIX II
COMPETITIVE DYNAMICS WITHIN THE INDUSTRY

Connections, Net Adds and Churn

Table II.B.i
Estimated Total Mobile Wireless Connections

Year	NRUF			CTIA
	Connected Devices (millions)	Increase from previous year (millions)	Connections Per 100 People	Estimated Connections (millions)
2001	128.5	N/A	45	128.4
2002	141.8	13.3	49	140.8
2003	160.6	18.8	54	158.7
2004	184.7	24.1	62	182.1
2005	213.0	28.3	71	207.9
2006	241.8	28.8	80	233.0
2007	263.0	21.2	86	255.4
2008	279.6	16.6	91	270.3
2009	290.7	11.1	94	285.6
2010	301.8	11.1	97	296.3
2011	317.3	15.5	102	316.0
2012	329.2	11.9	106	326.5
2013	339.2	10.0	109.9	335.7

Note: Based on CTIA Year-End 2013 Wireless Indices Report, table 6. NRUF 2001 – 2013. 2010 Census data (Nationwide Population = 308,745,538)

Table II.B.ii
Quarterly Total Mobile Wireless Connections by Service Segment
2011 – 2nd Quarter 2014

Quarter Year	Postpaid	Prepaid	Wholesale	Connected Devices	Total Connections
1Q11	213,375	62,412	9,017	21,035	305,838
2Q11	213,967	63,506	10,034	22,487	309,995
3Q11	214,412	65,238	11,153	23,933	314,736
4Q11	215,827	67,236	12,659	24,009	319,731
1Q12	215,466	69,133	13,955	24,502	323,056
2Q12	215,633	70,649	13,423	24,982	324,687
3Q12	216,129	71,112	13,567	25,836	326,644
4Q12	218,246	71,728	13,416	26,889	330,279
1Q13	217,887	73,007	16,847	28,233	335,974
2Q13	218,473	71,687	17,445	29,551	337,156
3Q13	221,142	71,906	17,881	30,932	341,862
4Q13	223,759	72,978	18,683	31,958	347,378
1Q14	225,580	74,827	17,738	33,661	351,807
2Q14	228,348	73,875	18,713	35,234	356,170

Source: UBS Investment Research. USB Wireless 411 Version 51, Figure 17: UBS 411 Version 54.

Table II.B.iii
Quarterly Net Adds in Mobile Wireless Connections by Service Segment (In thousands)
2009 – 1st Half 2014

Quarter Year	Postpaid	Prepaid	Wholesale	Connected Devices	Total Net Adds
1Q09	684	2,675	308	244	3,911
2Q09	689	1,530	(50)	758	2,927
3Q09	1,173	1,018	132	184	2,507
4Q09	1,175	2,792	306	1,345	5,618
1Q10	(6)	2,464	671	1,237	4,366
2Q10	813	749	483	1,421	3,466
3Q10	823	1,565	607	1,634	4,629
4Q10	895	2,633	39	1,831	5,398
1Q11	196	2,661	1,210	1,725	5,791
2Q11	787	1,093	1,017	1,452	4,349
3Q11	583	1,730	1,119	1,446	4,878
4Q11	1,304	1,998	1,506	76	4,884
1Q12	(147)	1,891	1,296	493	3,533
2Q12	784	414	568	480	2,246
3Q12	(405)	462	1,244	854	2,156
4Q12	2,177	603	(151)	1,053	3,682
1Q13	(3,872)	1,278	3,431	1,344	2,181
2Q13	263	(1,391)	598	1,318	788
3Q13	1,132	280	436	1,381	3,229
4Q13	2,492	1,069	802	1,026	5,389
1Q14	3,147	472	-945	1,703	4,378
2Q14	2,899	(1,029)	975	1,574	4,418

Source: 1Q09 - 4Q10 data from *Sixteenth Competition Report* 28 FCC Rcd at 3836, *UBS Wireless 411 4Q11 at 10*. 1Q12 - 2Q14 data from *UBS Wireless 411: Version 54*. UBS categorizes Tracfone customers as prepaid, not wholesale.

Market Share and Concentration

**Table II.C.i
Market Concentration by EA, 2011 – 2013**

2013 Rank	EA	Market Name	HHI		
			2011	2012	2013
1	142	Scottsbluff, NE-WY	6618	6606	6689
2	144	Billings, MT-WY	6305	6417	6557
3	145	Great Falls, MT	6315	6571	6414
4	116	Sioux Falls, SD-IA-MN-NE	6028	6150	6297
5	111	Minot, ND	5542	5933	6033
6	110	Grand Forks, ND-MN	5549	5672	5948
7	115	Rapid City, SD-MT-ND-NE	5570	5643	5894
8	113	Fargo-Moorhead, ND-MN	5354	5458	5624
9	143	Casper, WY-ID-UT	5745	5708	5611
10	119	Lincoln, NE	5015	5076	5348
11	14	Salisbury, MD-DE-VA	5152	5122	5293
12	117	Sioux City, IA-NE-SD	4532	4589	5051
13	56	Toledo, OH	4847	4770	5005
14	149	Twin Falls, ID	4504	4444	4997
15	85	Lafayette, LA	4512	4795	4915
16	95	Jonesboro, AR-MO	4376	4583	4909
17	36	Dothan, AL-FL-GA	4128	4508	4861
18	45	Johnson City-Kingsport-Bristol, TN-VA	4182	4403	4807
19	148	Idaho Falls, ID-WY	4534	4432	4782
20	42	Asheville, NC	4357	4497	4763
21	4	Burlington, VT-NY	4704	4658	4700
22	38	Macon, GA	4358	4136	4661
23	72	Paducah, KY-IL	5116	4931	4616
24	109	Duluth-Superior, MN-WI	4464	4587	4567
25	37	Albany, GA	3801	3821	4522
26	7	Rochester, NY-PA	4343	4373	4508
27	154	Flagstaff, AZ-UT	4287	4203	4434
28	139	Santa Fe, NM	4544	4520	4409
29	92	Fayetteville-Springdale-Rogers, AR-MO-OK	4428	4306	4407
30	55	Cleveland-Akron, OH-PA	3948	4104	4404
31	54	Erie, PA	4159	4161	4352
32	52	Wheeling, WV-OH	4169	4203	4335
33	105	La Crosse, WI-MN	4031	4131	4310
34	90	Little Rock-North Little Rock, AR	3526	3823	4241
35	69	Evansville-Henderson, IN-KY-IL	4190	4061	4237

36	91	Fort Smith, AR-OK	3628	3842	4201
37	9	State College, PA	4648	4132	4187
38	6	Syracuse, NY-PA	3989	4044	4185
39	120	Grand Island, NE	6397	5707	4176
40	84	Baton Rouge, LA-MS	4114	4232	4166
41	39	Columbus, GA-AL	3553	3643	4145
42	43	Chattanooga, TN-GA	3755	3851	4124
43	75	Tupelo, MS-AL-TN	4375	4346	4097
44	106	Rochester, MN-IA-WI	3770	3882	4085
45	86	Lake Charles, LA	3487	3728	4070
46	35	Tallahassee, FL-GA	3540	3657	4046
47	89	Monroe, LA	3482	3723	3973
48	118	Omaha, NE-IA-MO	3558	3641	3969
49	98	Columbia, MO	3918	3912	3955
50	1	Bangor, ME	3783	3852	3944
51	51	Columbus, OH	3417	3520	3893
52	171	Anchorage, AK	3971	4083	3863
53	97	Springfield, IL-MO	3713	3914	3851
54	147	Spokane, WA-ID	3586	3620	3841
55	68	Champaign-Urbana, IL	3682	3710	3839
56	162	Fresno, CA	2953	2989	3787
57	27	Augusta-Aiken, GA-SC	3426	3410	3762
58	48	Charleston, WV-KY-OH	3618	3626	3749
59	74	Huntsville, AL-TN	3329	3441	3743
60	41	Greenville-Spartanburg-Anderson, SC-NC	3525	3426	3739
61	79	Montgomery, AL	3325	3496	3725
62	101	Peoria-Pekin, IL	3474	3552	3697
63	87	Beaumont-Port Arthur, TX	3383	3469	3692
64	28	Savannah, GA-SC	2766	2925	3671
65	165	Redding, CA-OR	3299	3405	3621
66	5	Albany-Schenectady-Troy, NY	3524	3518	3617
67	88	Shreveport-Bossier City, LA-AR	3263	3456	3612
68	66	Fort Wayne, IN	3551	3471	3601
69	53	Pittsburgh, PA-WV	3256	3310	3587
70	8	Buffalo-Niagara Falls, NY-PA	3255	3303	3586
71	94	Springfield, MO	3641	3600	3565
72	135	Odessa-Midland, TX	3474	3526	3560
73	168	Pendleton, OR-WA	3337	3397	3542
74	150	Boise City, ID-OR	3226	3273	3527
75	128	Abilene, TX	3687	3635	3499
76	151	Reno, NV-CA	3110	3175	3474

77	24	Columbia, SC	3260	3166	3471
78	15	Richmond-Petersburg, VA	3338	3362	3467
79	47	Lexington, KY-TN-VA-WV	3548	3342	3467
80	46	Hickory-Morganton, NC-TN	2973	3001	3447
81	23	Charlotte-Gastonia-Rock Hill, NC-SC	3068	3120	3440
82	140	Pueblo, CO-NM	3418	3317	3436
83	26	Charleston-North Charleston, SC	3076	3152	3430
84	132	Corpus Christi, TX	2306	2411	3412
85	11	Harrisburg-Lebanon-Carlisle, PA	3445	3406	3362
86	125	Oklahoma City, OK	2988	2825	3316
87	25	Wilmington, NC-SC	2940	3044	3296
88	50	Dayton-Springfield, OH	2722	2774	3291
89	65	Elkhart-Goshen, IN-MI	3170	3158	3287
90	134	San Antonio, TX	2403	2444	3276
91	2	Portland, ME	3036	3057	3260
92	100	Des Moines, IA-IL-MO	3046	3081	3252
93	67	Indianapolis, IN-IL	3199	3163	3247
94	22	Fayetteville, NC	2885	2947	3245
95	155	Farmington, NM-CO	3276	3191	3232
96	104	Madison, WI-IA-IL	3276	3281	3224
97	62	Grand Rapids-Muskegon-Holland, MI	3088	3142	3217
98	156	Albuquerque, NM-AZ	3006	3032	3216
99	57	Detroit-Ann Arbor-Flint, MI	2800	2902	3193
100	124	Tulsa, OK-KS	2926	2635	3184
101	19	Raleigh-Durham-Chapel Hill, NC	2854	2949	3174
102	44	Knoxville, TN	2714	2815	3135
103	126	Western Oklahoma, OK	2512	2861	3132
104	78	Birmingham, AL	3035	3042	3129
105	81	Pensacola, FL	2979	3054	3109
106	130	Austin-San Marcos, TX	2723	2754	3100
107	96	St. Louis, MO-IL	2728	2782	3083
108	93	Joplin, MO-KS-OK	3270	3252	3083
109	18	Greensboro-Winston-Salem-High Point, NC-VA	2770	2781	3080
110	158	Phoenix-Mesa, AZ-NM	2778	2813	3080
111	76	Greenville, MS	2958	3150	3075
112	159	Tucson, AZ	2792	2779	3070
113	80	Mobile, AL	3150	3149	3067
114	20	Norfolk-Virginia Beach-Newport News, VA-NC	2823	2882	3063
115	167	Portland-Salem, OR-WA	2711	2771	3036
116	71	Nashville, TN-KY	2584	2645	3016
117	77	Jackson, MS-AL-LA	3031	3079	3016

118	73	Memphis, TN-AR-MS-KY	2507	2585	3010
119	102	Davenport-Moline-Rock Island, IA-IL	2779	2819	3000
120	83	New Orleans, LA-MS	3189	3175	2976
121	3	Boston-Worcester-Lawrence-Lowewell-Brockton, MA-NH	2841	2843	2967
122	123	Topeka, KS	2843	2882	2967
123	136	Hobbs, NM-TX	2966	3207	2957
124	161	San Diego, CA	2581	2637	2913
125	163	San Francisco-Oakland-San Jose, CA	2720	2742	2899
126	133	McAllen-Edinburg-Mission, TX	2823	2533	2899
127	107	Minneapolis-St. Paul, MN-WI-IA	2815	2832	2898
128	13	Washington-Baltimore, DC-MD-VA-WV-PA	2695	2735	2891
129	166	Eugene-Springfield, OR-CA	2651	2704	2886
130	164	Sacramento-Yolo, CA	2727	2741	2882
131	49	Cincinnati-Hamilton, OH-KY-IN	2437	2543	2870
132	141	Denver-Boulder-Greeley, CO-KS-NE	2479	2533	2869
133	122	Wichita, KS-OK	2821	2826	2868
134	70	Louisville, KY-IN	2545	2549	2846
135	31	Miami-Fort Lauderdale, FL	2286	2292	2839
136	21	Greenville, NC	2602	2669	2833
137	12	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	2619	2612	2831
138	127	Dallas-Fort Worth, TX-AR-OK	2617	2681	2829
139	103	Cedar Rapids, IA	2645	2666	2817
140	170	Seattle-Tacoma-Bremerton, WA	2763	2778	2816
141	40	Atlanta, GA-AL-NC	2570	2602	2778
142	33	Sarasota-Bradenton, FL	2640	2639	2771
143	16	Staunton, VA-WV	2740	2726	2755
144	169	Richland-Kennewick-Pasco, WA	2803	2761	2729
145	157	El Paso, TX-NM	2309	2349	2717
146	10	New York-North New Jersey-Long Island, NY-NJ-CT-PA	2582	2591	2702
147	29	Jacksonville, FL-GA	2440	2461	2695
148	131	Houston-Galveston-Brazoria, TX	2318	2357	2687
149	152	Salt Lake City-Ogden, UT-ID	2460	2476	2685
150	138	Amarillo, TX-NM	2857	2774	2685
151	160	Los Angeles-Riverside-Orange County, CA-AZ	2415	2437	2634
152	34	Tampa-St. Petersburg-Clearwater, FL	2247	2262	2632
153	137	Lubbock, TX	2792	2704	2629
154	60	Appleton-Oshkosh-Neenah, WI	2510	2488	2602
155	32	Fort Myers-Cape Coral, FL	2402	2433	2595
156	30	Orlando, FL	2392	2401	2578
157	172	Honolulu, HI	2497	2528	2559
158	153	Las Vegas, NV-AZ-UT	2139	2211	2557

159	99	Kansas City, MO-KS	2357	2388	2553
160	59	Green Bay, WI-MI	2478	2515	2545
161	17	Roanoke, VA-NC-WV	2375	2387	2510
162	108	Wausau, WI	2010	2008	2474
163	82	Biloxi-Gulfport-Pascagoula, MS	2491	2501	2473
164	64	Chicago-Gary-Kenosha, IL-IN-WI	2120	2180	2360
165	129	San Angelo, TX	2056	2078	2317
166	63	Milwaukee-Racine, WI	2119	2143	2237
	112	Bismarck, ND-MT-SD	5809	5963	*
	58	Northern Michigan, MI	*	*	*
	61	Traverse City, MI	*	*	*
	114	Aberdeen, SD	*	*	*
	121	North Platte, NE-CO	*	*	*
	146	Missoula, MT	7178	*	*

Note: Based on NRUF and 2010 census data, EAs defined as in 1995.

Financial Indicators

Table II.D.i
Annualized Average Revenue Per Reported Subscriber Unit (ARPU)
1993 – 2013

Year	Total Annual Service Revenue	Percentage Change	Average Reported Subscribers	Average Monthly Revenue per Active Subscriber Unit
1993	\$10,895,174,566		11,861,362	\$76.55
1994	\$14,229,921,264	30.6%	18,299,487	\$64.80
1995	\$19,081,239,000	34.1%	26,757,320	\$59.43
1996	\$23,634,971,000	23.9%	35,554,818	\$55.40
1997	\$27,485,632,936	16.3%	46,375,849	\$49.39
1998	\$33,133,174,978	20.6%	58,455,471	\$47.23
1999	\$40,018,489,104	20.8%	71,885,076	\$46.39
2000	\$52,466,019,720	31.1%	90,048,320	\$48.55
2001	\$65,316,235,000	24.5%	109,318,848	\$49.79
2002	\$76,508,187,000	17.1%	125,002,023	\$51.00
2003	\$87,624,093,000	14.5%	141,658,059	\$51.55
2004	\$102,121,210,043	16.5%	161,980,026	\$52.54
2005	\$113,538,220,438	11.2%	186,801,940	\$50.65
2006	\$125,456,824,884	10.5%	213,077,033	\$49.07
2007	\$138,869,303,958	10.7%	234,921,960	\$49.26
2008	\$148,084,169,893	6.6%	252,539,475	\$48.87
2009	\$152,551,853,953	3.0%	265,038,212	\$47.97
2010	\$159,929,646,977	4.9%	280,392,201	\$47.53
2011	\$169,767,314,353	6.2%	306,840,648	\$46.11
2012	\$185,013,934,995	9.0%	314,685,754	\$48.99
2013	\$189,192,811,836	2.3%	323,133,932	\$48.79

Note: Based on CTIA Year-End 2013 Wireless Indices Report, Table 27.

Table II.D.ii
Change in CPI, 1997 - 2013

Year	CPI		Wireless Telephone Services CPI		Telephone Services CPI		Land-line Telephone Services CPI	
	Index Value	Annual Change	Index Value	Annual Change	Index Value	Annual Change	Index Value	Annual Change
1997	100		100		100		-	-
1998	101.6		95.1		100.7		-	-
1999	103.8	2.2%	84.9	-10.7%	100.1	-0.6%	-	-
2000	107.3	3.4%	76.0	-10.5%	98.5	-1.6%	-	-
2001	110.3	2.8%	68.1	-10.4%	99.3	0.8%	-	-
2002	112.1	1.6%	67.4	-1.0%	99.7	0.4%	-	-
2003	114.6	2.3%	66.8	-0.9%	98.3	-1.4%	-	-
2004	117.7	2.7%	66.2	-0.9%	95.8	-2.5%	-	-
2005	121.7	3.4%	65.0	-1.8%	94.9	-0.9%	-	-
2006	125.6	3.2%	64.6	-0.6%	95.8	0.9%	-	-
2007	129.2	2.8%	64.4	-0.3%	98.2	2.6%	-	-
2008	134.1	3.8%	64.2	-0.2%	100.5	2.2%	-	-
2009	133.7	-0.4%	64.3	0.0%	102.4	1.9%	-	-
2010	135.9	1.6%	62.4	-2.9%	102.4	0.0%	101.6	-
2011	140.1	3.2%	60.1	-3.6%	101.2	-1.1%	103.3	1.7%
2012	143.0	2.1%	59.4	-1.2%	101.7	.04%	106.1	2.7%
2013	145.2	1.5%	58.2	-1.6%	101.6	0%	109.3	3.0%
1997 to 2013		34.0%		-42.7%		1.2%		7.4%

Note: Data from Bureau of Labor Statistics. All CPI figures were taken from BLS databases found on the BLS Internet site available at <http://www.bls.gov>. Beginning in January 2010, the CPIs for local telephone service and long-distance telephone service were discontinued and replaced by a new CPI for land-line telephone services.