



U.S. 3G Mobile Wireless Broadband Competition Report

A report of ZIP codes and population by number of 3G mobile wireless
broadband service providers

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3G Competition Report

This report summarizes the national deployment of Third Generation (3G) mobile wireless broadband services.

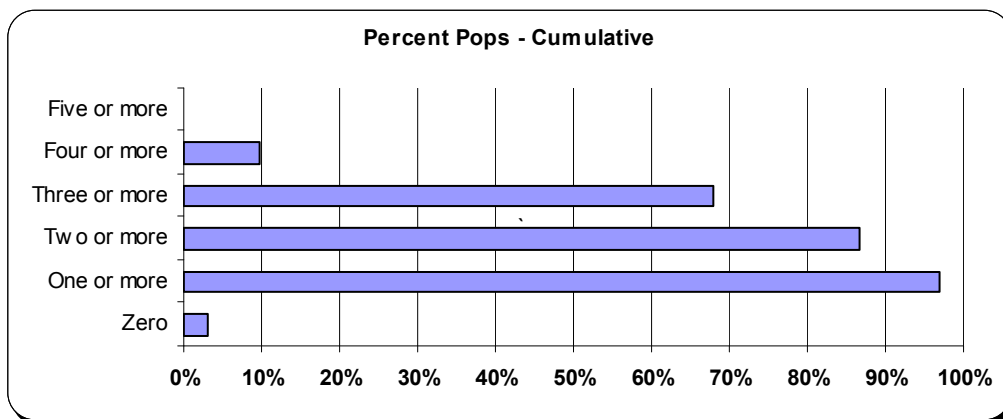
Information on marketplace participants and coverage was derived from publicly available sources and the analysis reflects ZIP-code deployment comparable to FCC Form 477 reports.

The analysis is presented on two levels. First, the report segments U.S. population and the number of carriers providing 3G mobile wireless broadband services by ZIP code. ZIP code areas are described in terms of the number of carriers who can provide 3G services and the population within. As stated, this analysis is comparable to the FCC Form 477 methods. As such, if a ZIP-code has any 3G mobile wireless broadband coverage (partial or full), it is counted as covered in this analysis¹. The population by number of carriers is shown in Figure 1.

Second, the report segments state population (non-cumulative) in terms of the number of carriers available to provide 3G mobile wireless broadband services, as shown in Figure 2, below.

Figure 1 – Population by Number of Carriers – Cumulative

Total U.S. Population - Cumulative		
Number of 3G Carriers	Population	Percent Pops
Zero	9,424,307	3.19%
One or more	286,046,618	96.81%
Two or more	255,756,484	86.56%
Three or more	201,072,143	68.05%
Four or more	28,982,087	9.81%
Five or more	46,931	0.02%
Total	295,470,925	100.00%



¹ It is important to note that the 3G population coverage reported in this report will be different as compared to our prior "U.S. Ubiquitous Mobility Study"(released April 17, 2008). This study used zip codes as the basic unit of coverage geography as compared to the 8.48 sq mi. grids used in the prior study.

Figure 2 – State Population by Number of Carriers – Non-Cumulative

STATE	Number of 3G Carriers	Total Pops	Percent Pops
AK	0	157,183	24.04%
	1	496,683	75.96%
AK Total		653,866	
AL	0	102,452	2.28%
	1	1,226,269	27.24%
	2	1,420,137	31.54%
	3	1,480,747	32.89%
	4	272,649	6.06%
AL Total		4,502,254	
AR	0	54,270	1.95%
	1	683,309	24.57%
	2	603,443	21.70%
	3	498,908	17.94%
	4	940,589	33.83%
AR Total		2,780,519	
AZ	0	26,498	0.46%
	1	346,077	6.04%
	2	618,860	10.80%
	3	173,059	3.02%
	4	4,563,067	79.67%
AZ Total		5,727,561	
CA	0	240,014	0.67%
	1	558,567	1.56%
	2	3,819,256	10.65%
	3	30,130,516	83.99%
	4	1,125,288	3.14%
CA Total		35,873,641	
CO	0	13,839	0.29%
	1	164,162	3.45%
	2	727,171	15.28%
	3	3,839,117	80.68%
	4	14,415	0.30%
CO Total		4,758,704	
CT	1	5,324	0.15%
	2	730,121	21.01%
	3	2,484,762	71.50%
	4	254,775	7.33%
CT Total		3,474,982	
DC	3	566,957	100.00%
DC Total		566,957	
DE	1	70,057	8.43%
	2	208,977	25.14%
	3	552,174	66.43%
DE Total		831,208	
FL	0	0	0.00%
	1	125,920	0.72%
	2	1,294,167	7.42%
	3	12,334,361	70.67%
	4	3,698,375	21.19%
FL Total		17,452,823	

STATE	Number of 3G Carriers	Total Pops	Percent Pops
GA	0	46,625	0.52%
	1	1,372,377	15.16%
	2	2,513,455	27.77%
	3	4,926,171	54.42%
	4	193,490	2.14%
GA Total		9,052,118	
HI	0	142	0.01%
	1	13,059	1.05%
	2	421,292	33.72%
	3	814,753	65.22%
HI Total		1,249,246	
IA	0	718,955	24.09%
	1	823,802	27.60%
	2	1,350,135	45.23%
	3	92,059	3.08%
IA Total		2,984,951	
ID	0	28,381	2.04%
	1	516,821	37.06%
	2	298,527	21.41%
	3	436,232	31.28%
	4	114,562	8.22%
ID Total		1,394,523	
IL	0	350,063	2.73%
	1	1,498,708	11.71%
	2	1,891,624	14.78%
	3	9,061,774	70.78%
IL Total		12,802,169	
IN	0	67,672	1.08%
	1	1,757,846	27.96%
	2	2,256,278	35.89%
	3	2,204,667	35.07%
IN Total		6,286,463	
KS	0	35,031	1.26%
	1	374,752	13.51%
	2	710,962	25.64%
	3	1,333,413	48.08%
	4	319,068	11.51%
KS Total		2,773,226	
KY	0	589,349	14.22%
	1	1,321,578	31.88%
	2	590,849	14.25%
	3	1,643,938	39.65%
KY Total		4,145,714	
LA	0	369,236	8.04%
	1	1,570,126	34.18%
	2	614,461	13.38%
	3	829,159	18.05%
	4	1,195,434	26.02%
	5	15,487	0.34%
LA Total		4,593,903	

STATE	Number of 3G Carriers	Total Pops	Percent Pops
MA	0	2,391	0.04%
	1	12,761	0.20%
	2	855,000	13.26%
	3	5,578,347	86.51%
MA Total		6,448,499	
MD	0	112,022	2.02%
	1	64,736	1.17%
	2	1,110,350	20.04%
	3	4,254,229	76.77%
MD Total		5,541,337	
ME	0	261,019	19.75%
	1	259,329	19.62%
	2	801,299	60.63%
ME Total		1,321,647	
MI	0	94,608	0.93%
	1	481,406	4.72%
	2	1,630,184	15.98%
	3	7,084,738	69.43%
	4	881,395	8.64%
	5	31,444	0.31%
MI Total		10,203,775	
MN	0	380,663	7.30%
	1	572,907	10.99%
	2	1,017,484	19.51%
	3	3,120,114	59.83%
	4	124,141	2.38%
MN Total		5,215,309	
MO	0	397,913	6.89%
	1	1,353,039	23.41%
	2	768,918	13.31%
	3	3,186,492	55.14%
	4	72,435	1.25%
MO Total		5,778,797	
MS	0	520,390	17.83%
	1	1,183,358	40.55%
	2	209,837	7.19%
	3	949,187	32.53%
	4	55,365	1.90%
MS Total		2,918,137	
MT	0	91,689	9.99%
	1	63,523	6.92%
	2	762,524	83.09%
MT Total		917,736	
NC	0	127,168	1.46%
	1	1,131,803	13.01%
	2	1,674,973	19.25%
	3	2,753,514	31.64%
	4	3,013,971	34.64%
NC Total		8,701,429	

STATE	Number of 3G Carriers	Total Pops	Percent Pops
ND	0	32,422	5.04%
	1	96,322	14.96%
	2	334,708	51.98%
	3	180,428	28.02%
ND Total		643,880	
NE	0	40,162	2.27%
	1	733,815	41.53%
	2	325,013	18.40%
	3	667,831	37.80%
NE Total		1,766,821	
NH	0	33,322	2.53%
	1	427,968	32.52%
	2	807,578	61.36%
	3	47,290	3.59%
NH Total		1,316,158	
NJ	1	18,735	0.22%
	2	811,824	9.33%
	3	7,875,110	90.46%
NJ Total		8,705,669	
NM	0	261,793	13.67%
	1	515,139	26.90%
	2	475,972	24.85%
	3	3,653	0.19%
	4	658,759	34.39%
NM Total		1,915,316	
NV	0	1,013	0.04%
	1	39,000	1.65%
	2	124,138	5.24%
	3	2,202,757	93.06%
NV Total		2,366,908	
NY	0	310,830	1.61%
	1	538,567	2.79%
	2	3,966,084	20.58%
	3	14,457,477	75.01%
NY Total		19,272,958	
OH	0	164,791	1.44%
	1	668,312	5.83%
	2	1,699,197	14.83%
	3	5,686,152	49.62%
	4	3,241,917	28.29%
OH Total		11,460,369	
OK	0	362,390	10.15%
	1	787,971	22.07%
	2	396,779	11.11%
	3	1,620,212	45.38%
	4	403,125	11.29%
OK Total		3,570,477	
OR	0	89,261	2.49%
	1	217,963	6.09%
	2	514,435	14.37%
	3	563,470	15.73%
	4	2,196,036	61.32%
OR Total		3,581,165	

STATE	Number of 3G Carriers	Total Pops	Percent Pops
PA	0	904,004	7.27%
	1	1,736,455	13.96%
	2	2,392,526	19.23%
	3	7,202,301	57.90%
	4	204,293	1.64%
PA Total		12,439,579	
RI	2	10,152	0.95%
	3	1,038,560	96.99%
	4	22,108	2.06%
RI Total		1,070,820	
SC	1	45,831	1.09%
	2	2,459,291	58.52%
	3	1,515,829	36.07%
	4	181,541	4.32%
SC Total		4,202,492	
SD	0	40,139	5.12%
	1	742,880	94.68%
	2	1,610	0.21%
SD Total		784,629	
TN	0	218,259	3.67%
	1	493,717	8.31%
	2	1,878,845	31.61%
	3	2,153,794	36.23%
	4	1,200,011	20.19%
TN Total		5,944,626	
TX	0	726,879	3.18%
	1	2,133,818	9.33%
	2	3,461,876	15.14%
	3	15,999,983	69.99%
	4	536,782	2.35%
TX Total		22,859,338	
UT	0	2,479	0.10%
	1	125,608	5.21%
	2	339,780	14.08%
	3	1,942,886	80.52%
	4	2,296	0.10%
UT Total		2,413,049	
VA	0	27,496	0.37%
	1	597,868	7.96%
	2	1,873,588	24.94%
	3	2,432,507	32.39%
	4	2,579,531	34.34%
VA Total		7,510,990	

STATE	Number of 3G Carriers	Total Pops	Percent Pops
VT	0	14,293	2.27%
	1	155,284	24.65%
	2	460,459	73.08%
VT Total		630,036	
WA	0	30,656	0.50%
	1	274,158	4.43%
	2	1,105,186	17.87%
	3	3,972,616	64.23%
	4	802,565	12.98%
WA Total		6,185,181	
WI	0	458,533	8.26%
	1	1,182,894	21.30%
	2	1,802,593	32.46%
	3	2,042,253	36.77%
	4	67,173	1.21%
WI Total		5,553,446	
WV	0	917,732	50.33%
	1	600,570	32.94%
	2	260,906	14.31%
	3	44,094	2.42%
WV Total		1,823,302	
WY	0	280	0.06%
	1	108,960	21.70%
	2	281,517	56.05%
	3	111,465	22.19%
WY Total		502,222	

Study Parameters

Analysis Methods

To mimic the FCC Form 477 report methodologies, the basic geographic unit of analysis was ZIP code area. ZIP code areas and contained population were derived using ESRI/TeleAtlas (2006)².

The count of providers within each ZIP code area providing 3G mobile wireless broadband service was provided by American Roamer based upon Coverage Right (6/2008). This coverage represents 15 terrestrial mobile wireless carriers that have deployed 3G mobile wireless broadband coverage as of June, 2008.³ The count of providers does not include any fixed wireless, facilities- based ISPs.

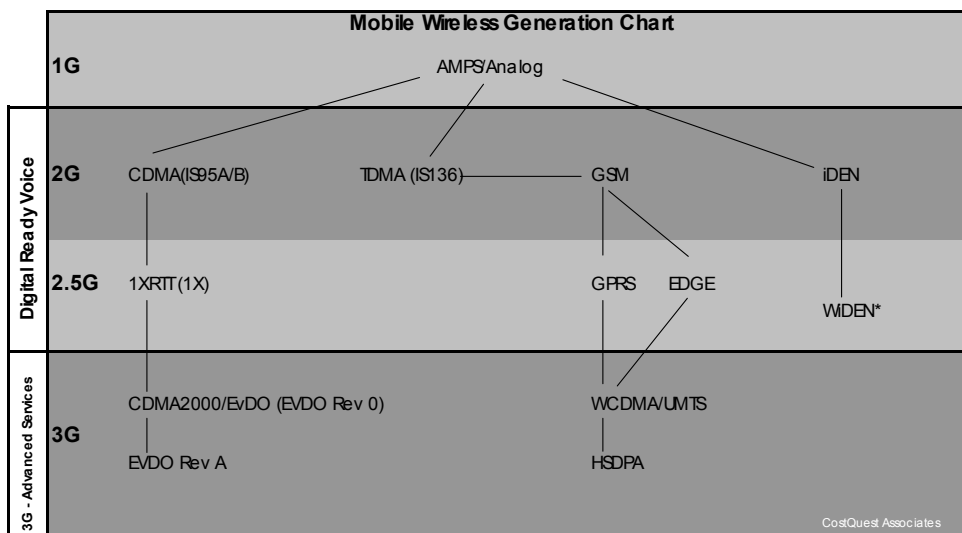
A mobile wireless carrier was counted as serving a ZIP code area and the population contained within if that carrier’s coverage touched any portion of the ZIP code area.⁴

3G Definition

Coverage Protocol and Generation Scenarios

For this report, 3G is defined as the latest deployed technology for both GSM and CDMA standards. EVDO (rev. 0 and rev. A) and HSPA (HSDPA) are considered 3G for this report.

The figure below shows the generational technology protocols and research standards used for the two technologies.



Mobile Wireless Technology Generation

² Population – ESRI/TeleAtlas supplies 2006 ZIPS with 2004 Population estimates

³ Using American Roamer Coverage Right (June 2008). The 3G mobile wireless broadband coverage includes 3G mobile wireless broadband deployed service that has been made public and is available for roaming contracts with other carriers.

⁴ This method is analogous to FCC Form 477 reporting, see FAQ number 46, at http://www.fcc.gov/broadband/broadband_data_faq.html#overview but it represents a different population assignment and apportionment methodology than that used in the Ubiquitous Mobility Study.

About CostQuest

CostQuest Associates develops solutions related to costs, pricing, business management, and regulatory analysis. CostQuest's recent projects include Broadband Network Modeling, Forward Looking Cost Models, Profitability Analysis, Regulatory Compliance Consultation and Regulatory Advocacy Support.

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