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July 9, 2007

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VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

**RE: In the Matter of
Public Safety Network in the 700 MHz Broadband
PS Docket No. 06-229 / RM-11348
WT Docket Nos. 06-150, 06-169 and 96-86
Ex Parte Presentation**

Dear Ms. Dortch:

On behalf of Cyren Call Communications Corporation ("Cyren Call"), and in accordance with Section 1.1206(b) of the Commission's Rules, 47 C.F.R. § 1.1206(b), undersigned counsel hereby submits the instant notice of an *ex parte* presentation.

On July 6, 2007, Bruce Cox, Vice President – Government Affairs, Cyren Call, together with Robert Burkhardt, Executive Director – Technology, Cyren Call, met with John Branscome Division Chief and the following staff members of the Spectrum & Competition Policy Division of the Wireless Telecommunications Bureau: Paul D'Ari, Rachel Kazan, Ben Freeman & Wayne Leighton and with Paul Murray of the Office of the Wireless Telecommunications Bureau Chief to discuss the items in the enclosed PowerPoint deck.

Kindly refer any questions or correspondence regarding this matter to the undersigned.

Very truly yours,

/s/

Elizabeth R. Sachs

cc: John Branscome
Paul D'Ari
Rachel Kazan
Ben Freeman
Wayne Leighton
Paul Murray



Cyren Call Communications

Population vs Geographic Coverage
for a
National 700 MHz Mobile Broadband Network

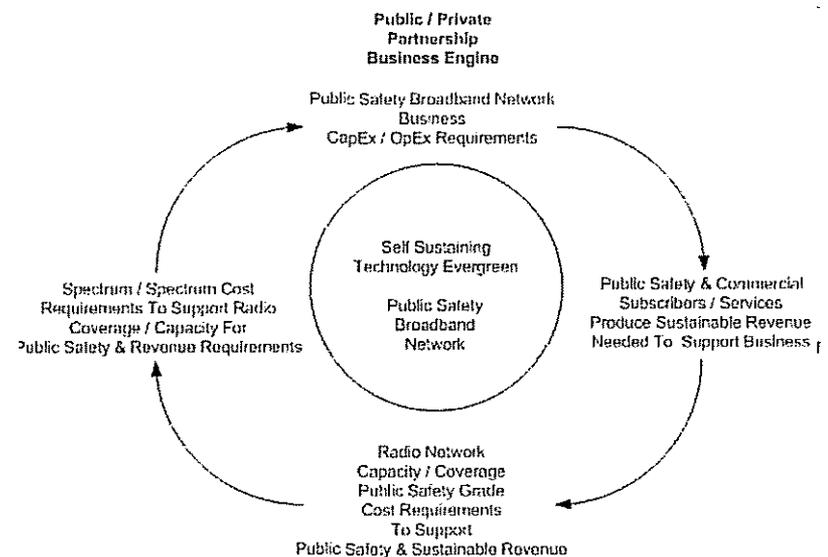


Agenda -

- **Network Coverage Analysis Method**
- **Public Safety Broadband Network Cell Coverage Assumptions**
- **Illustrative Example of Population vs Geographic Coverage**
- **Effects of Spectrum Position on Coverage**
- **CMA Coverage Requirements**

Network Coverage Development

- Business plan calculations set CapEx ceiling for quantity of cell sites
- RF Design and performance assumptions developed through normalization of 3GPP / 3GPP2 / WiMax vendor design criteria
- Cyren Call experience with the design, build, and on-going evolution of network coverage was used to modify base coverage calculations to reflect and mirror real world implementations
- The final assumed network data filed in Cyren Call's petition was the result of an iterative process that balanced the business and network requirements of:
 - *Public Safety*
 - *Public / Private partnership*
 - *Viable mobile operator business criteria*



Coverage Criteria & Assumptions Evolution Example

Morphology and Cell Site Assumptions				Initial Coverage Mix	
Morphology Types	Pop Density (pops per sq mi)	Cell Site		Morphology	Qty Sites
		Radius (Miles)	Area (Hexagon - Sq Mi)		
Urban	> 2,500	0.95	2.34	Urban	5,438
Suburban	200 - 2,499	2.5	16.24	Suburban	15,909
Rural	5 - 199	6.5	109.77	Rural	18,007
Satellite	< 5	n/a	n/a	Satellite	n/a
					39,354
				Post Iterative Process Coverage Mix	
					Qty Sites
				Urban	4,216
				Suburban	14,550
				Rural	18,234
				Satellite	n/a
					37,000

Geographic vs Population Mobile Radio Network Coverage

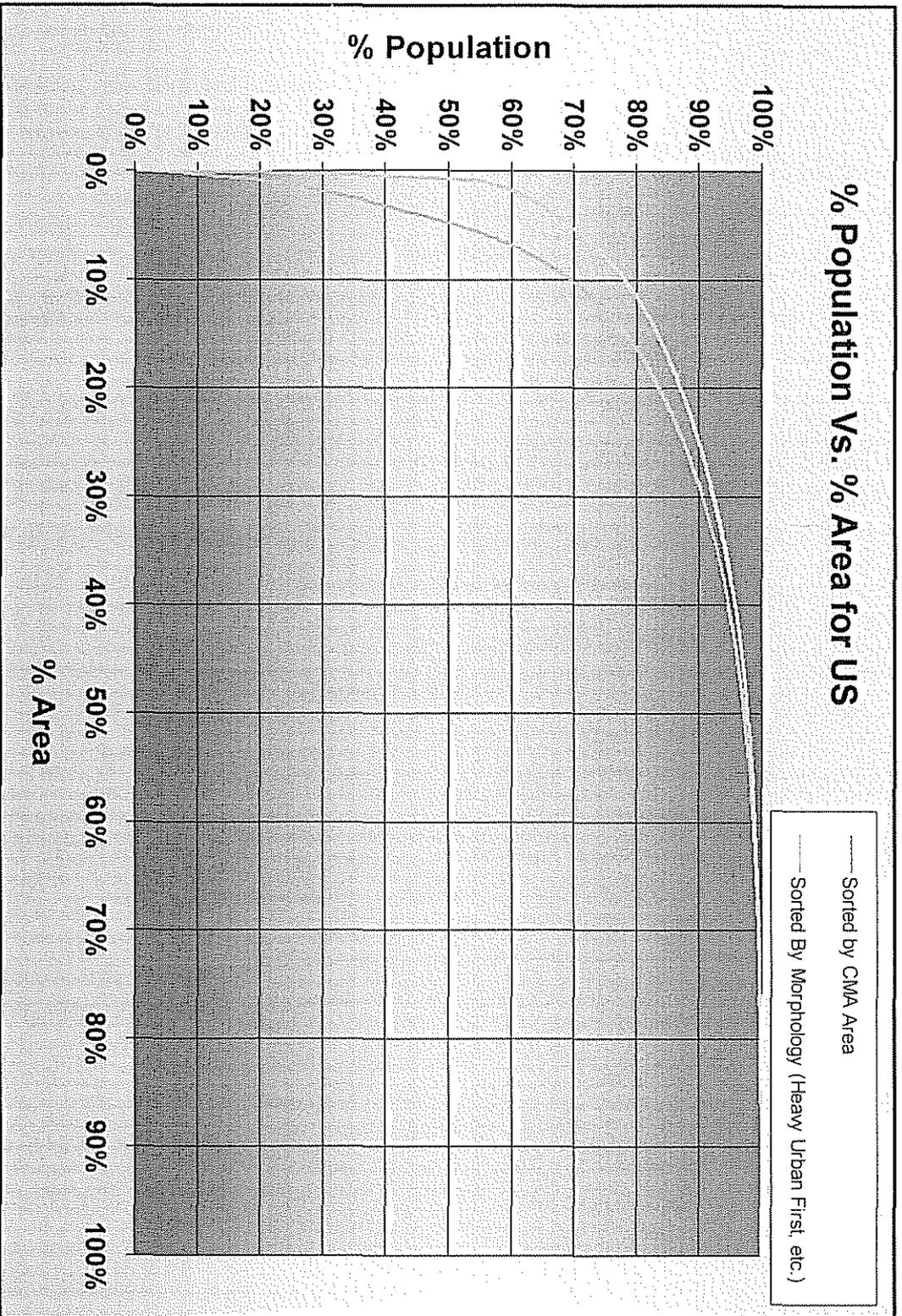
A large percentage of the U.S. population lives within a small percentage of the U.S. land mass

- **Geographic versus population coverage examples:**
 - *50% of the U.S. Population lives within 2.8% of U.S. land mass*
 - *75% of the U.S. Population lives within 10.9% of the U.S. land mass*
 - *99% of the U.S. Population lives within 59% of the U.S. land mass*
- **To go from 99% to 99.9% population coverage requires adding coverage to 21.1% of the U.S. land mass**
- **The following examples start at the highest population density areas and move to the lowest density areas to show effects of population vs geographic coverage**

CONUS vs Total U.S. Land Mass Coverage

CONUS				Total U.S. Land Mass			
Cumulative	Percent Covered	Geography	Pop's Covered	Cumulative	Percent Covered	Geography	Pop's Covered
Sq. Ml. Covered				Sq. Ml. Covered			
3461	0.12%	29,724,235	10.02%	3,627	0.10%	30,749,417	10.15%
97,803	3.30%	149,528,122	50.06%	97,815	2.76%	151,638,629	50.08%
170,095	5.75%	178,102,169	60.03%	169,535	4.79%	181,757,571	60.02%
222,982	7.53%	192,906,319	65.02%	222,433	6.28%	196,892,286	65.02%
292,262	9.85%	207,758,775	70.02%	291,609	8.24%	212,006,639	70.01%
391,122	13.22%	223,229,689	75.24%	385,825	10.90%	227,195,504	75.01%
514,165	17.57%	287,865,721	80.00%	514,803	14.54%	242,256,151	80.00%
958,320	31.61%	267,042,316	90.00%	942,824	26.64%	272,613,341	90.03%
997,674	33.71%	270,007,523	91.00%	1,003,178	28.40%	275,850,548	91.01%
1,066,237	36.03%	272,957,649	92.01%	1,074,310	30.35%	278,584,228	92.00%
1,141,137	38.56%	275,956,452	93.00%	1,132,410	32.56%	281,649,739	93.01%
1,225,435	41.41%	278,911,996	94.00%	1,239,039	35.01%	284,699,334	94.02%
1,320,580	44.62%	281,886,471	95.01%	1,334,484	37.70%	287,672,790	95.00%
1,431,965	48.59%	284,841,032	96.00%	1,449,233	40.93%	290,703,115	96.00%
1,567,484	52.97%	287,803,161	97.00%	1,590,045	44.92%	293,735,638	97.00%
1,752,181	59.21%	290,532,901	98.02%	1,779,900	50.29%	296,768,649	98.01%
2,041,503	68.99%	293,743,921	99.00%	2,088,486	59.00%	299,780,730	99.00%
2,082,457	70.37%	294,036,861	99.10%	2,133,497	60.28%	300,082,202	99.10%
2,129,670	71.93%	294,333,418	99.20%	2,182,213	61.65%	300,386,441	99.20%
2,176,130	73.34%	294,626,250	99.30%	2,234,408	63.13%	300,687,053	99.30%
2,231,317	75.40%	294,926,700	99.40%	2,293,223	64.93%	300,993,332	99.40%
2,295,294	77.56%	295,221,978	99.50%	2,369,700	66.92%	301,296,607	99.50%
2,366,463	79.97%	295,517,824	99.60%	2,450,603	69.24%	301,600,233	99.60%
2,449,533	82.75%	295,812,602	99.70%	2,547,503	71.97%	301,900,041	99.70%
2,554,444	86.30%	296,108,991	99.80%	2,673,353	75.53%	302,203,908	99.80%
2,696,434	91.19%	296,409,584	99.90%	2,836,224	80.14%	302,506,934	99.90%
2,718,512	91.70%	296,437,307	99.91%	2,861,365	80.84%	302,541,267	99.91%
2,728,793	92.11%	296,457,706	99.92%	2,880,754	81.39%	302,563,873	99.92%
2,754,773	93.09%	296,504,931	99.93%	2,913,854	82.32%	302,603,482	99.93%
2,758,763	93.22%	296,511,139	99.94%	2,933,385	82.88%	302,627,188	99.94%
2,783,739	94.07%	296,544,590	99.95%	2,961,330	83.67%	302,656,431	99.95%
2,802,746	94.71%	296,568,714	99.96%	2,999,901	84.73%	302,689,709	99.96%
2,830,266	95.64%	296,601,230	99.97%	3,059,348	86.43%	302,718,199	99.97%
2,854,636	96.46%	296,628,060	99.98%	3,133,101	87.52%	302,748,942	99.98%
2,889,693	97.65%	296,661,631	99.99%	3,234,363	91.38%	302,781,372	99.99%
2,939,292	100.00%	296,701,739	100.00%	3,359,313	100.00%	302,808,209	100.00%

Population vs Geography Graph



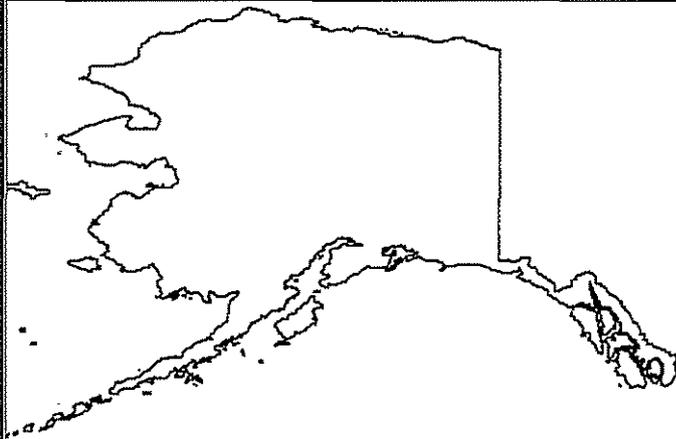
■ = % of U.S. Population Coverage

Coverage For	U.S.	CONUS
Population =	25%	25%
Geography =	.61%	.72%



10
11
12

■ = % of U.S. Population Coverage



Coverage For	U.S.	CONUS
Population =	45%	45%
Geography =	2.1%	2.5%

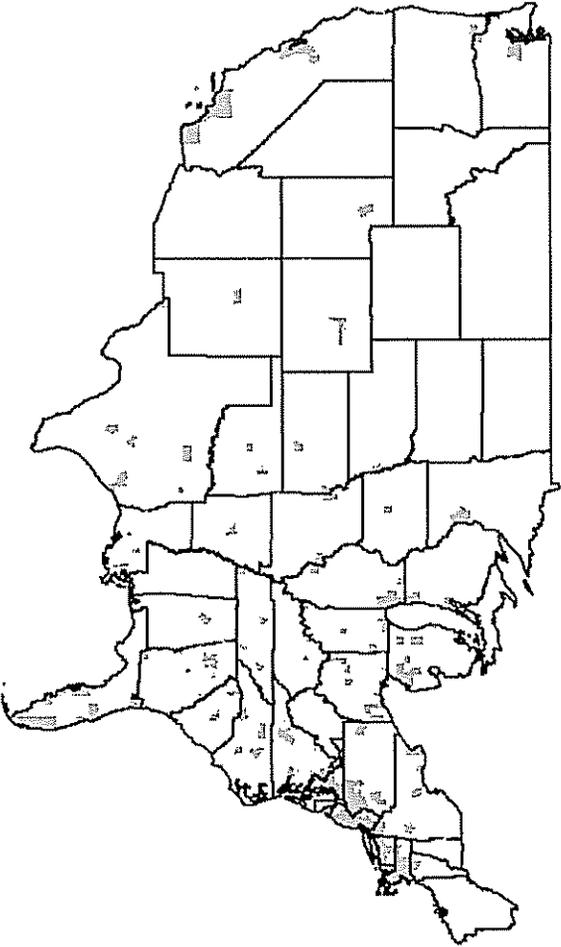
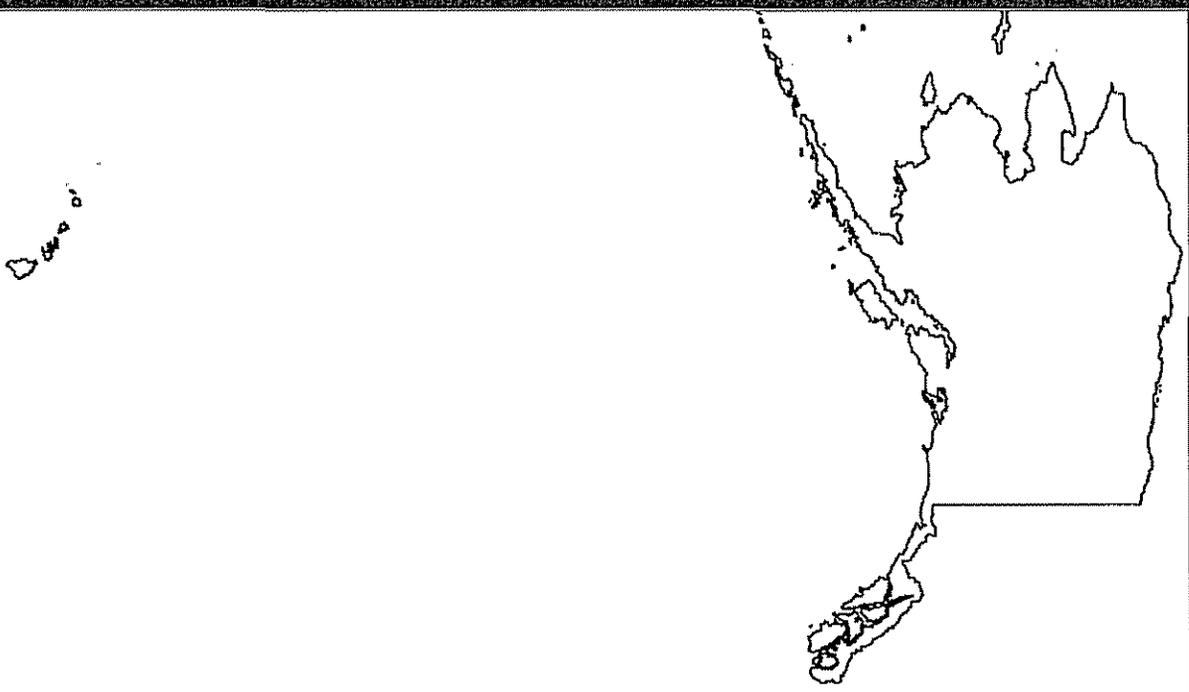


Alaska
Hawaii

8

■ = % of U.S. Population Coverage

Coverage For	U.S.	CONUS
Population =	55%	55%
Geography =	3.7%	4.4%

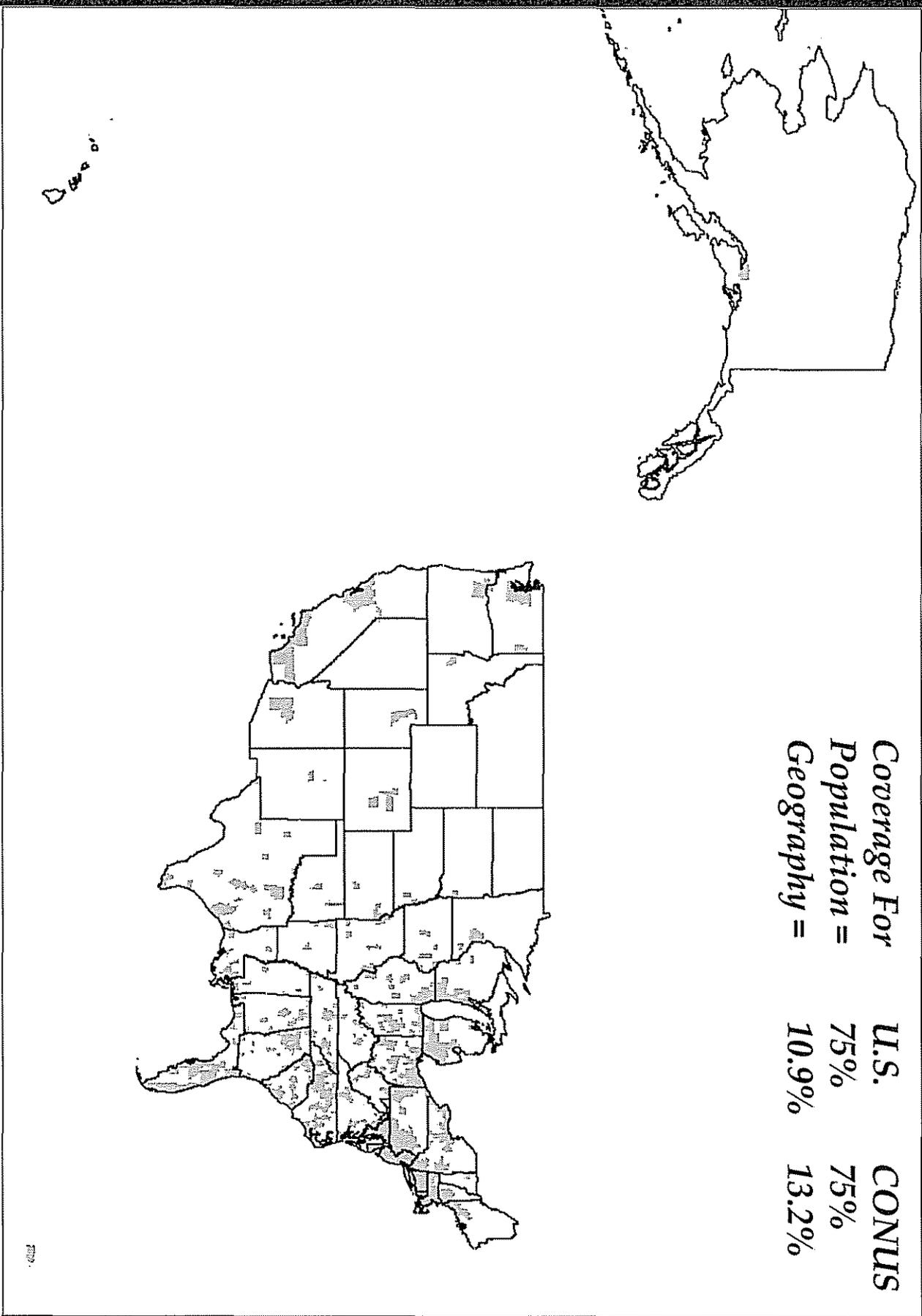


AK
HI

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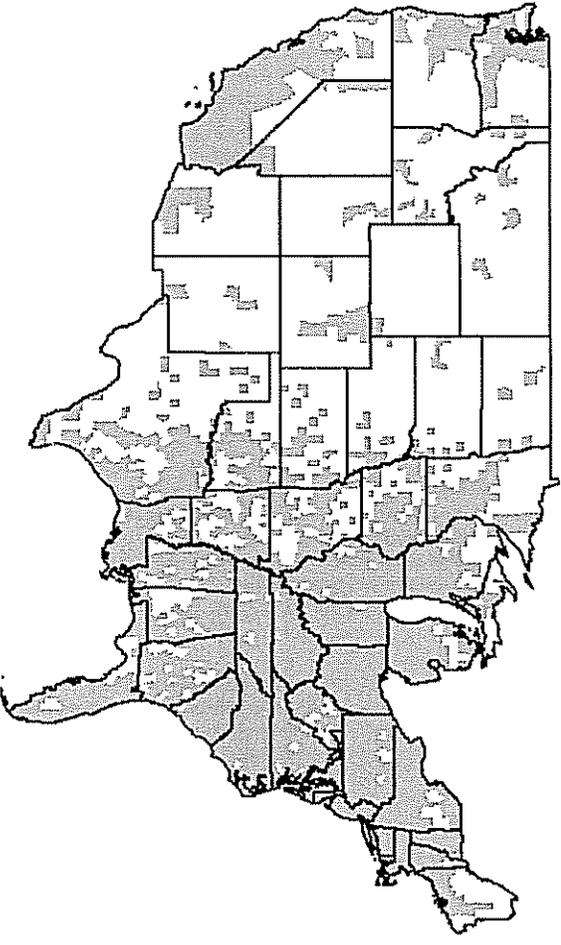
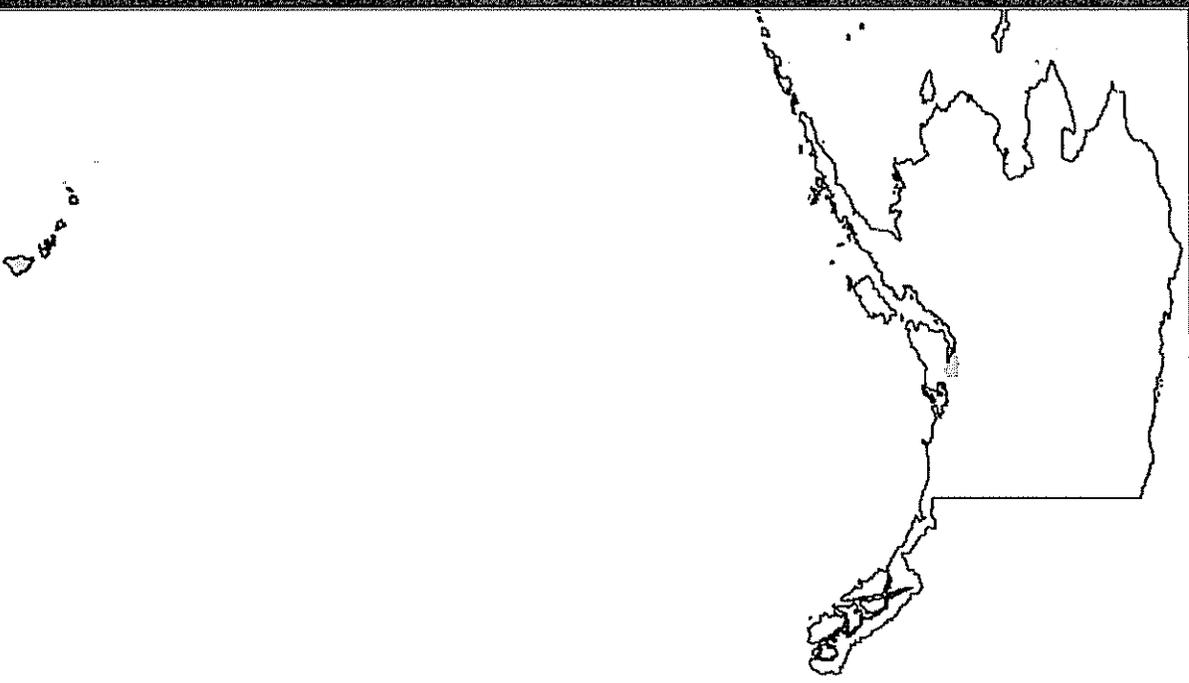
■ = % of U.S. Population Coverage

Coverage For	U.S.	CONUS
Population =	75%	75%
Geography =	10.9%	13.2%



■ = % of U.S. Population Coverage

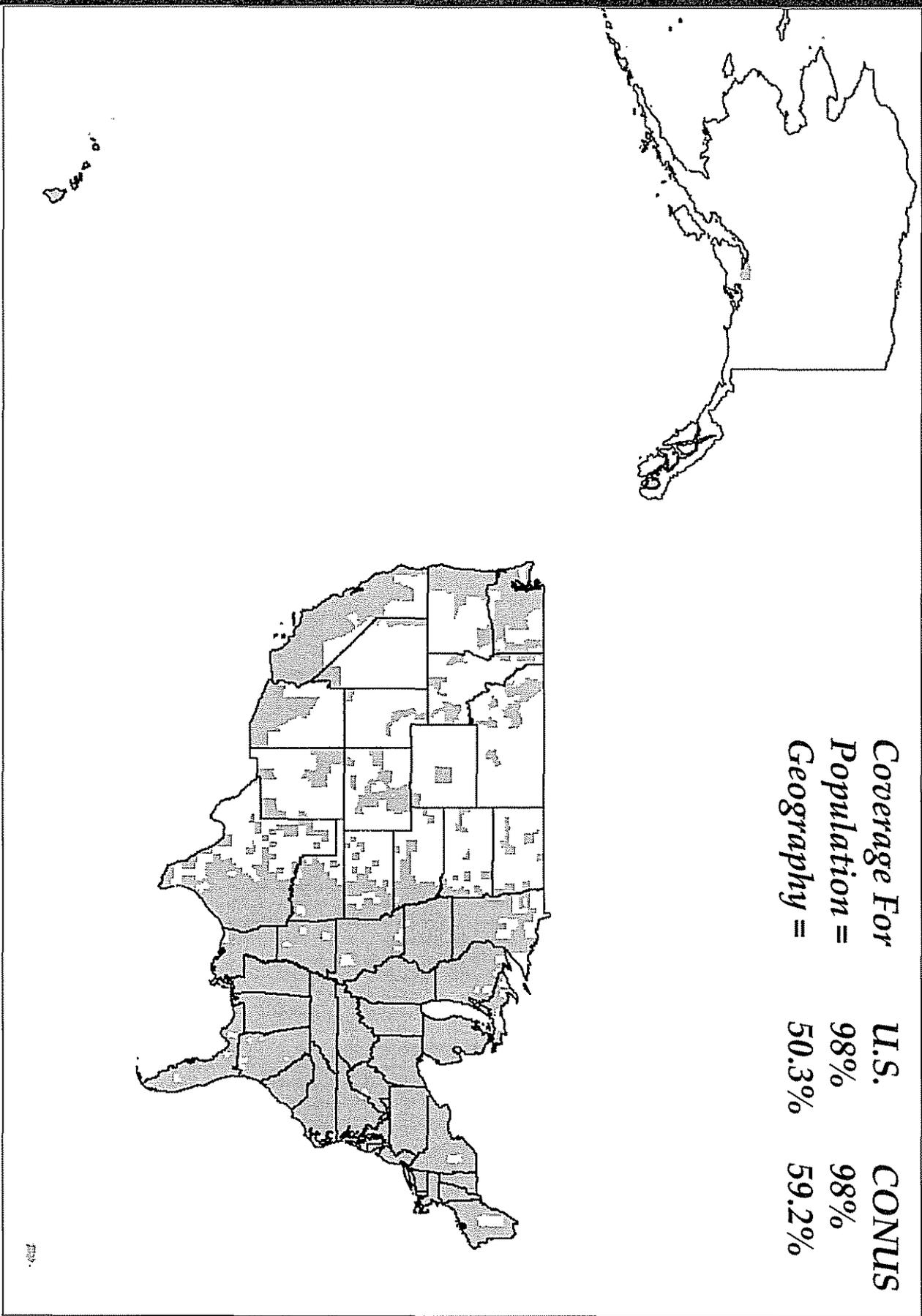
Coverage For	U.S.	CONUS
Population =	95%	95%
Geography =	37.7%	44.6%



Map of

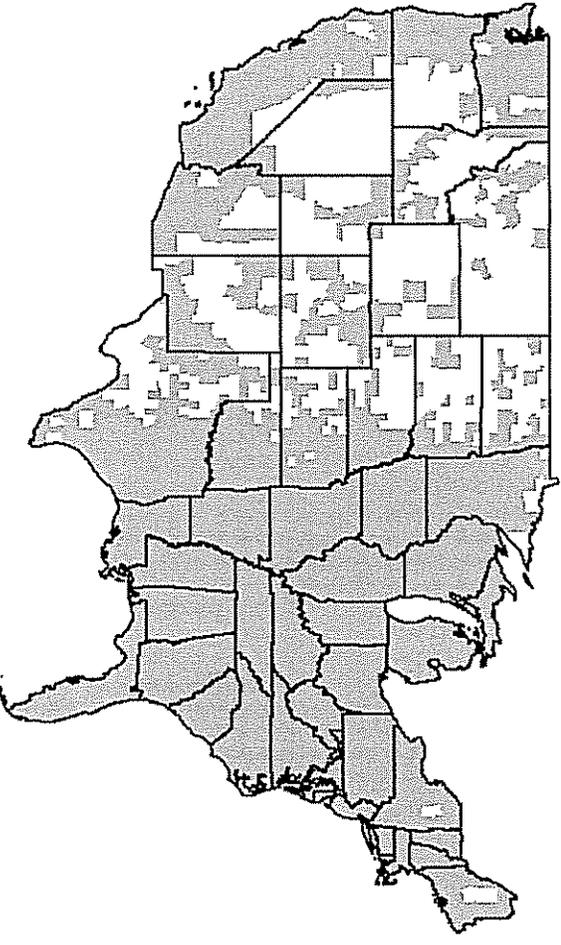
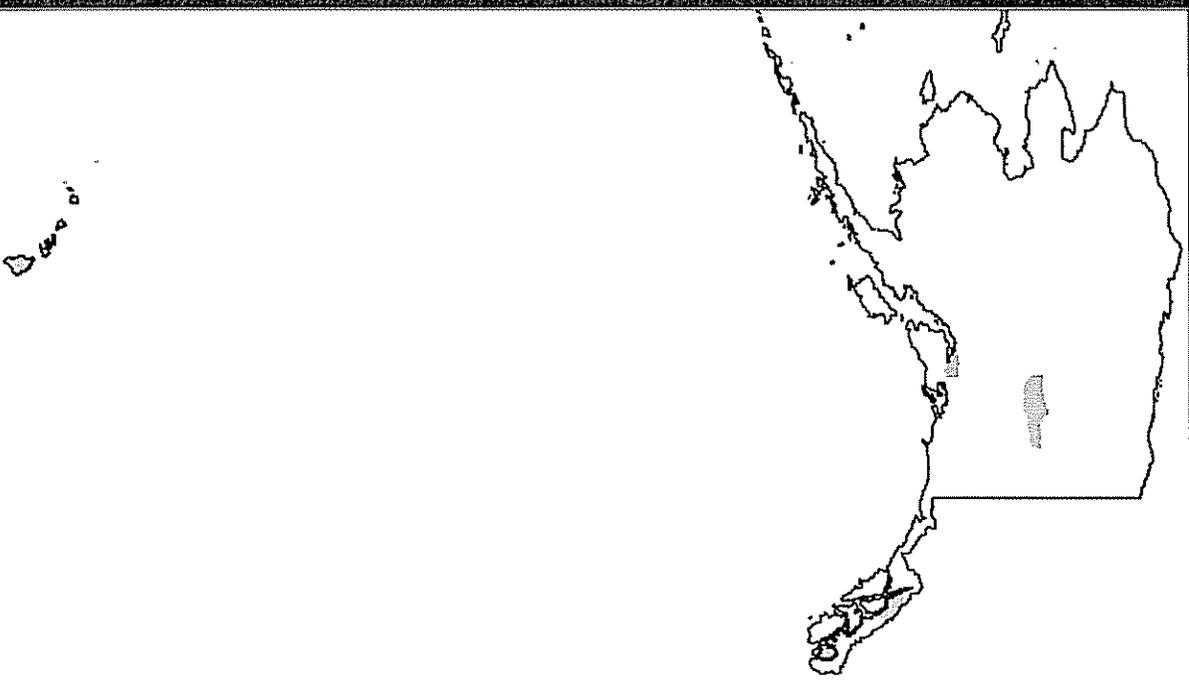
■ = % of U.S. Population Coverage

Coverage For	U.S.	CONUS
Population =	98%	98%
Geography =	50.3%	59.2%

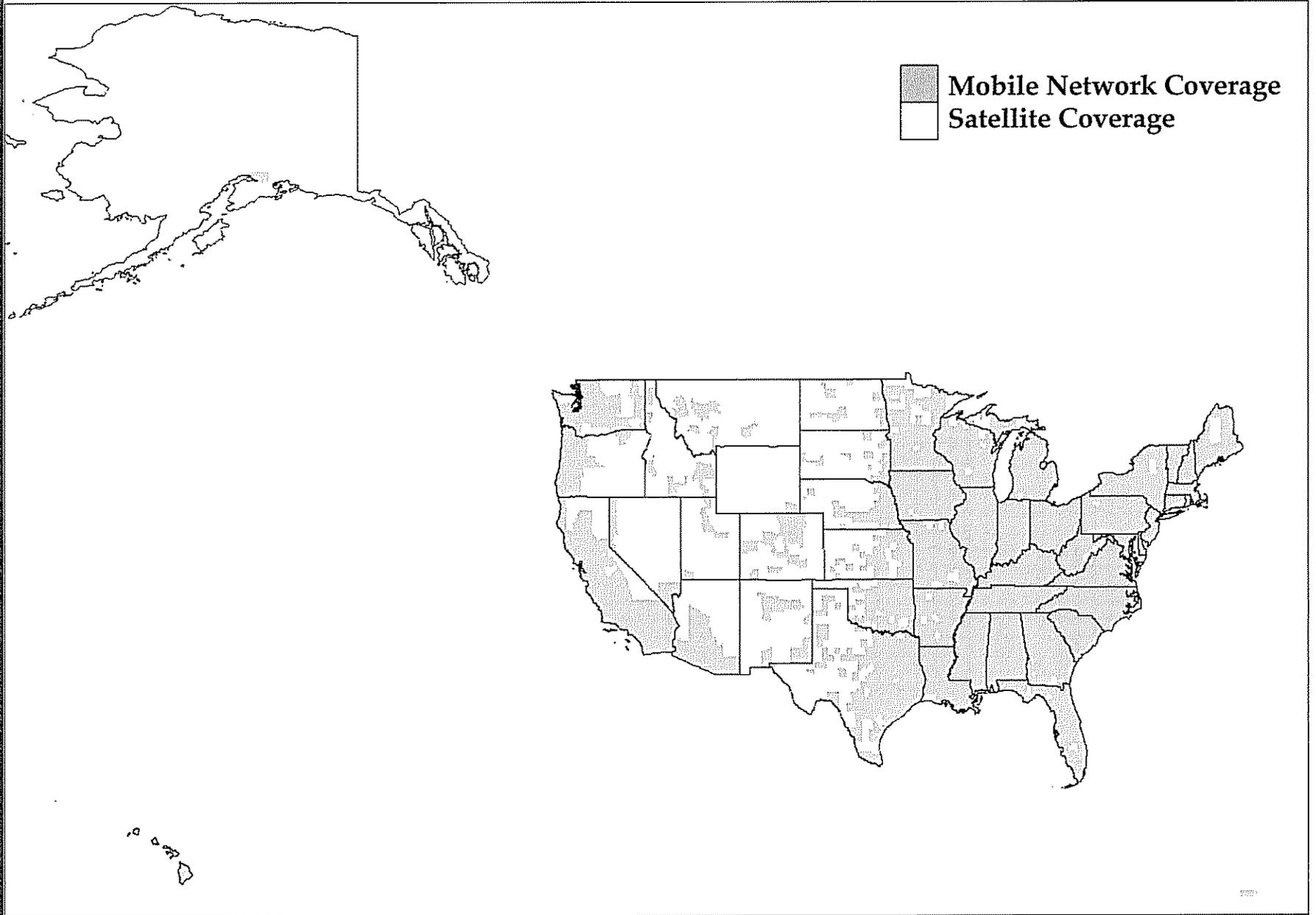


■ = % of U.S. Population Coverage

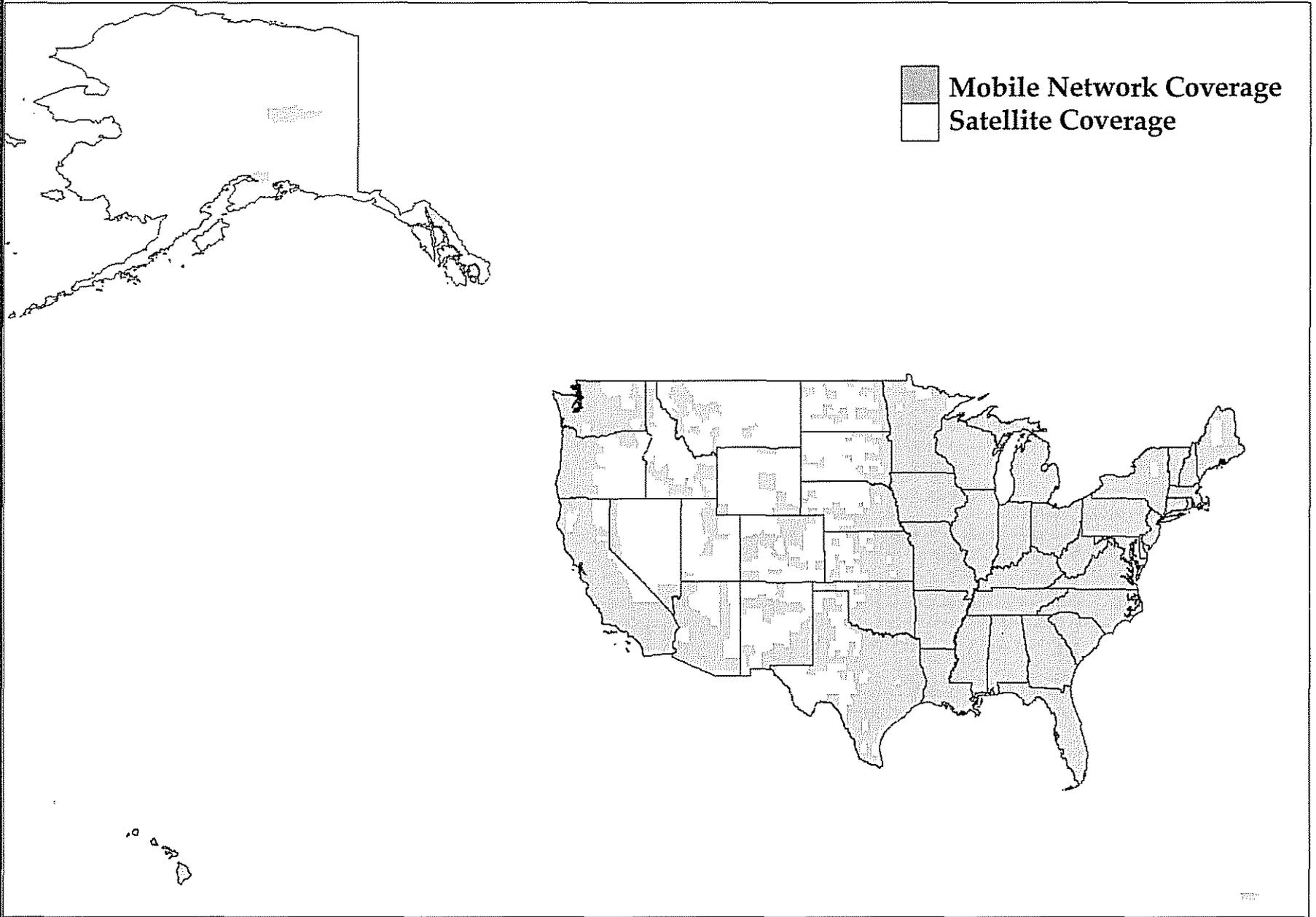
Coverage For	U.S.	CONUS
Population =	99.3%	99.3%
Geography =	63.0%	73.5%



20 MHz Coverage



24 MHz Coverage

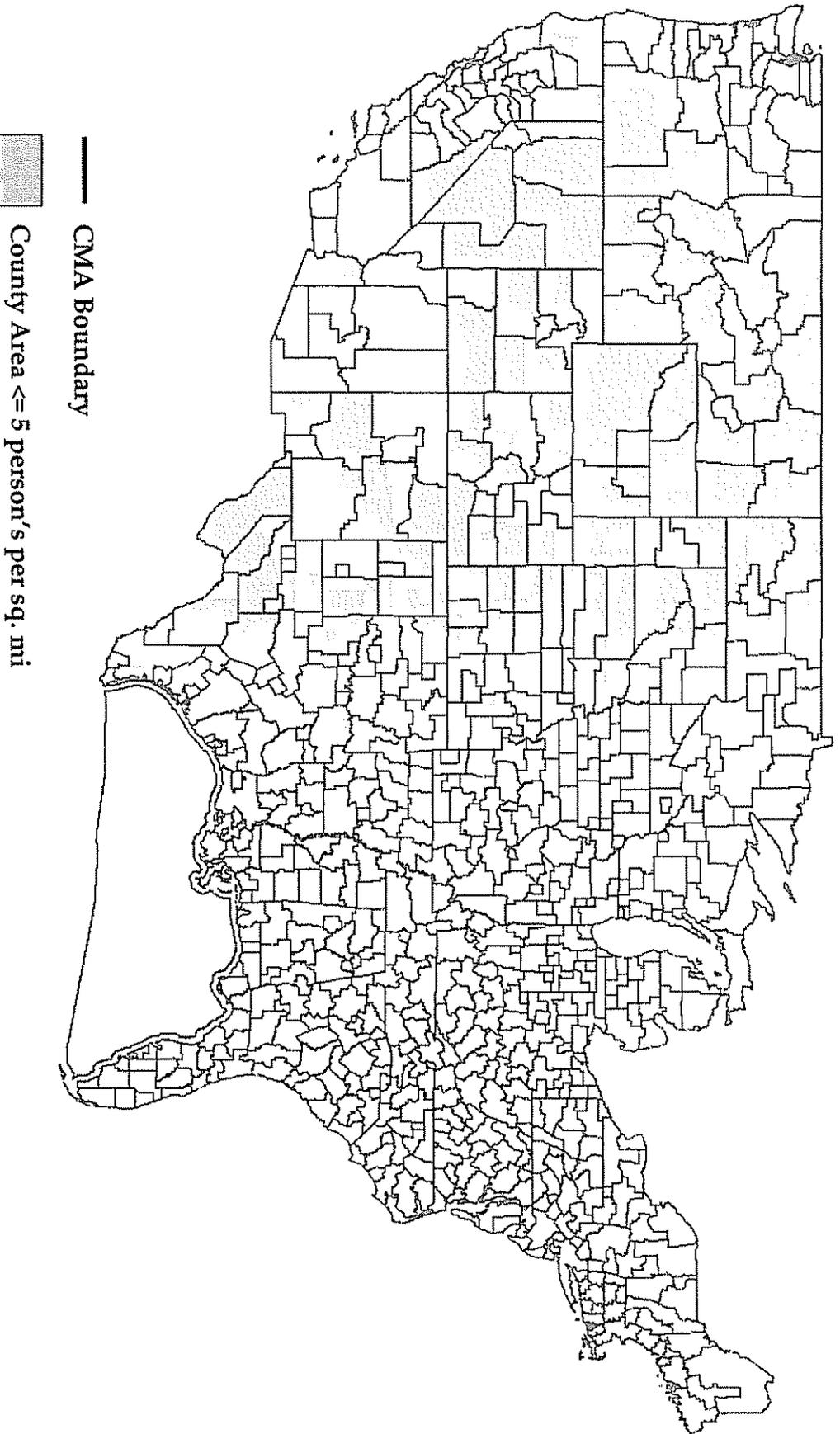


CMA Composition – No. of Counties in a given CMA

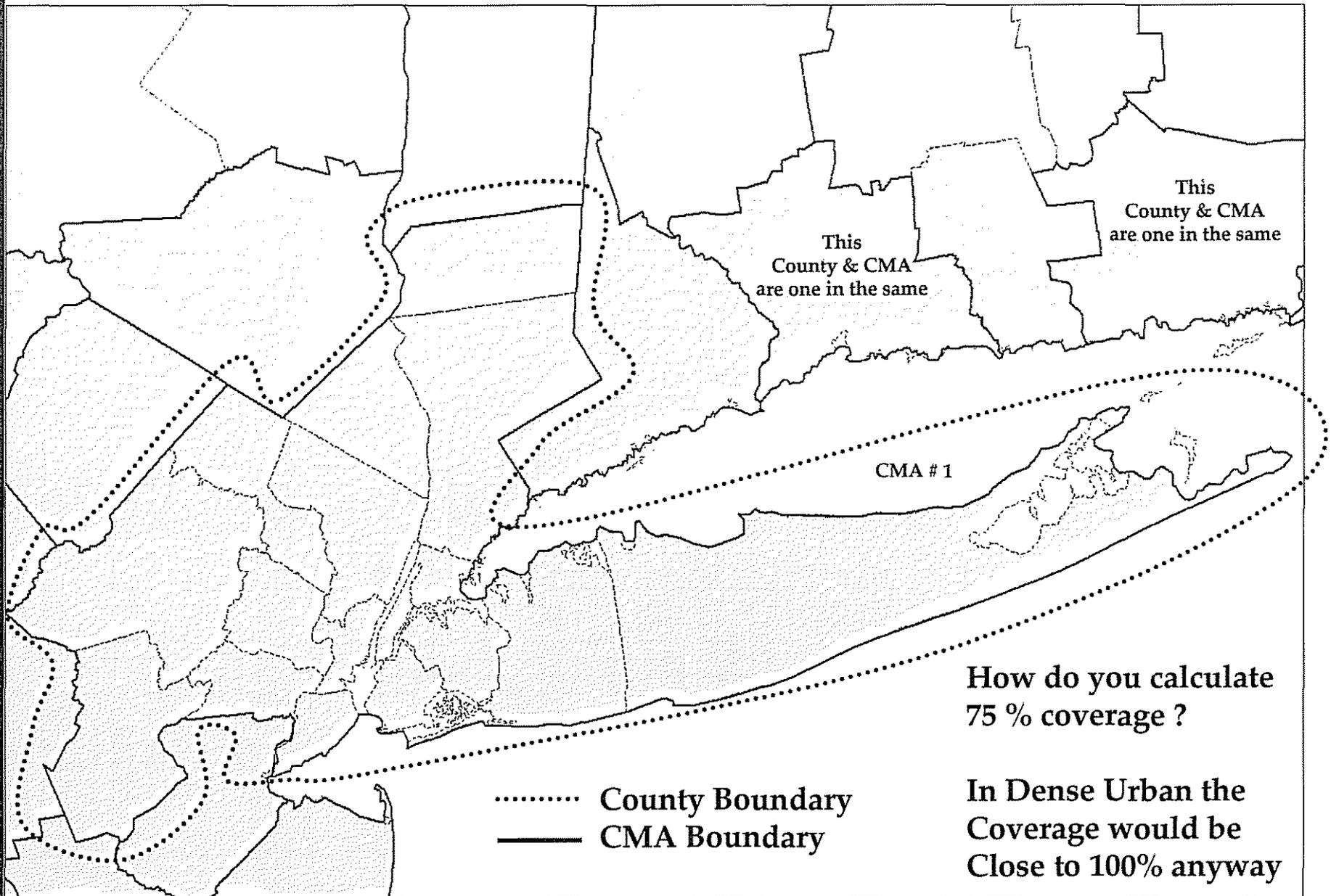
No. of Counties in CMA	No. of CMA's w/ this No. of Counties	Percent of Total CMA's
1	163	22.4%
2	90	12.3%
3	79	10.8%
4	78	10.7%
5	89	12.2%
6	71	9.7%
7	48	6.6%
8	37	5.1%
9	15	2.1%
10	21	2.9%
11	10	1.4%
12	11	1.5%
13	9	1.2%
14	2	0.3%
15	3	0.4%
16	71	9.7%
17	1	0.1%

68.4%

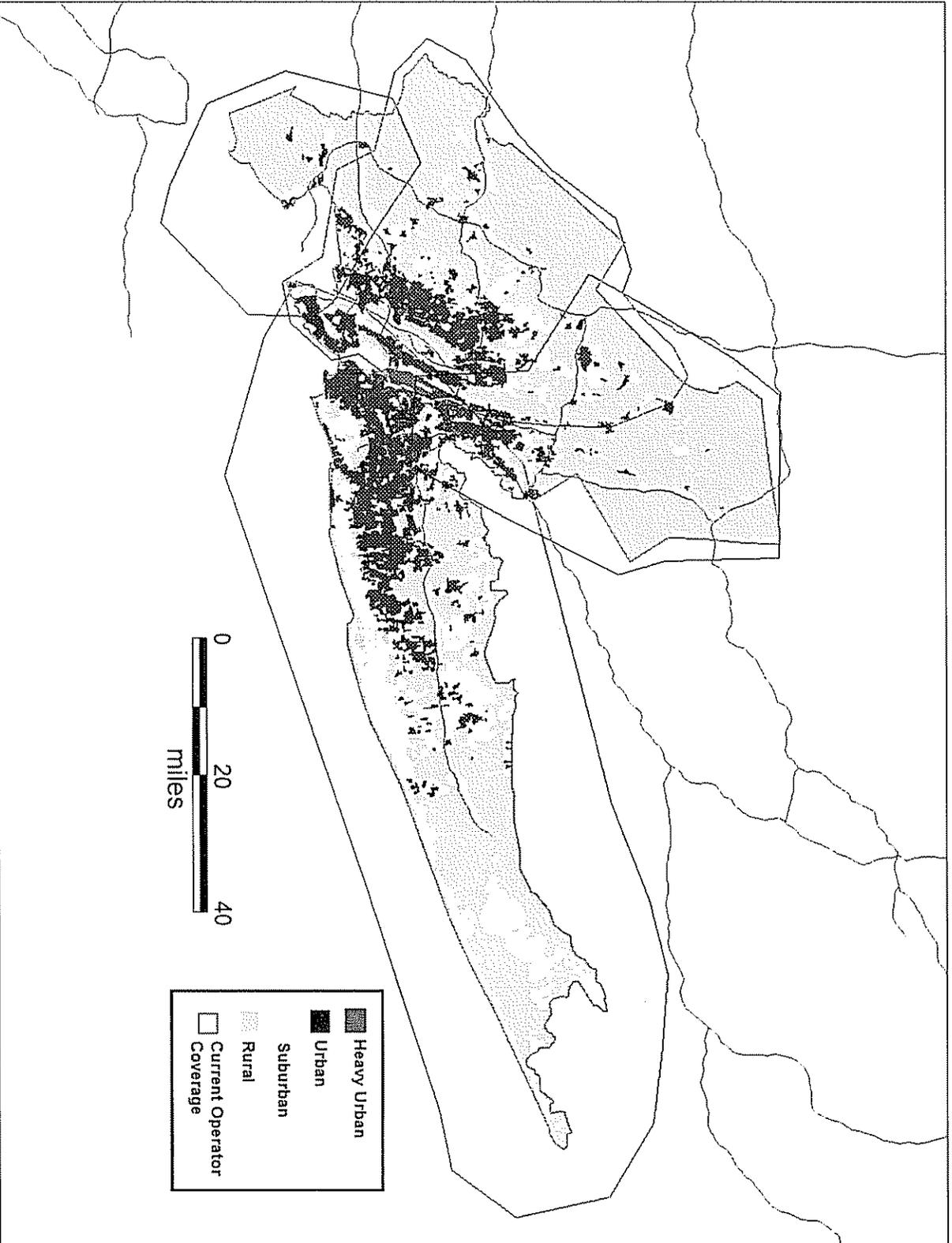
CMA's with Counties \leq 5 persons per sq. mi.



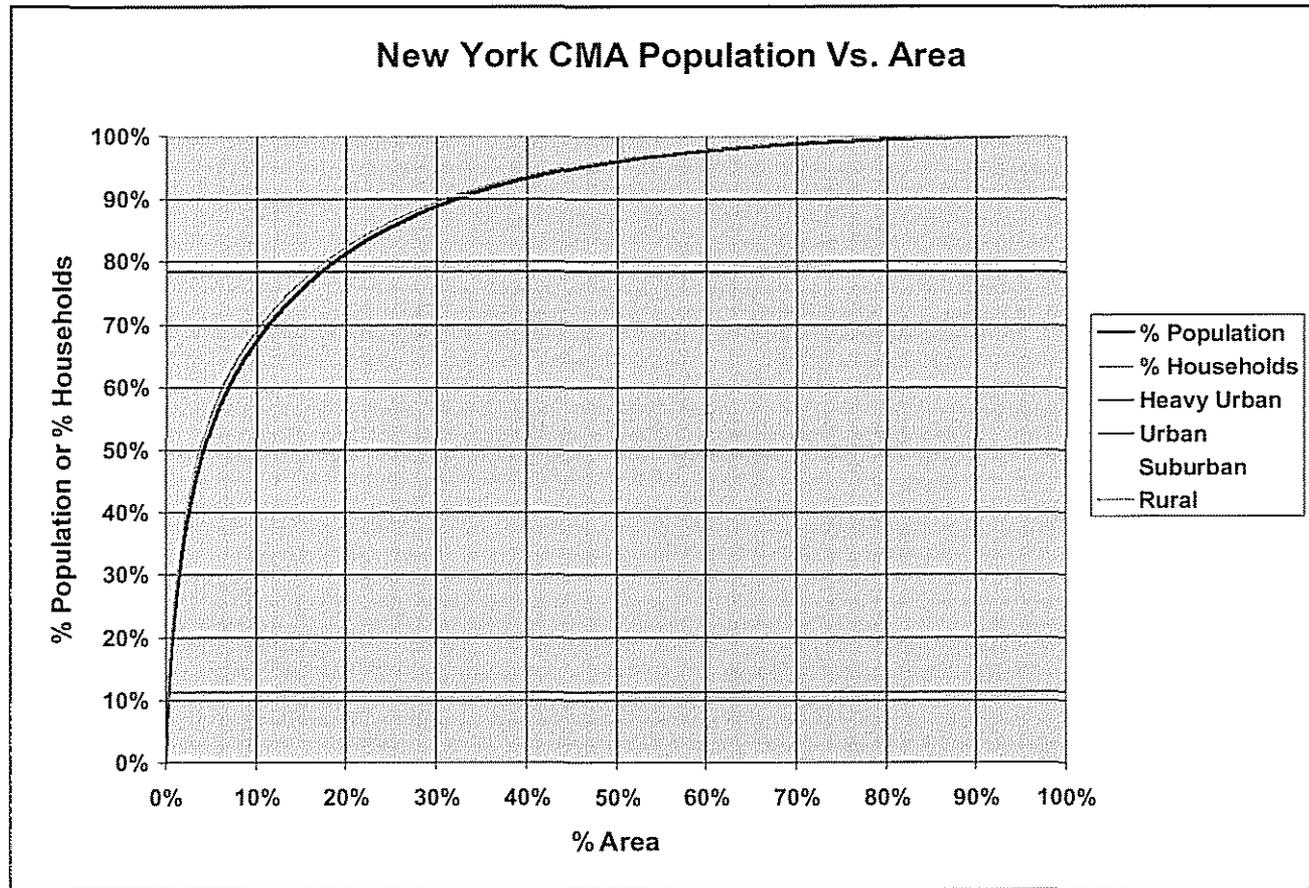
Greater New York City Area – CMA # 1 = 17 Counties



CMA # 1 Morphology Analysis Example



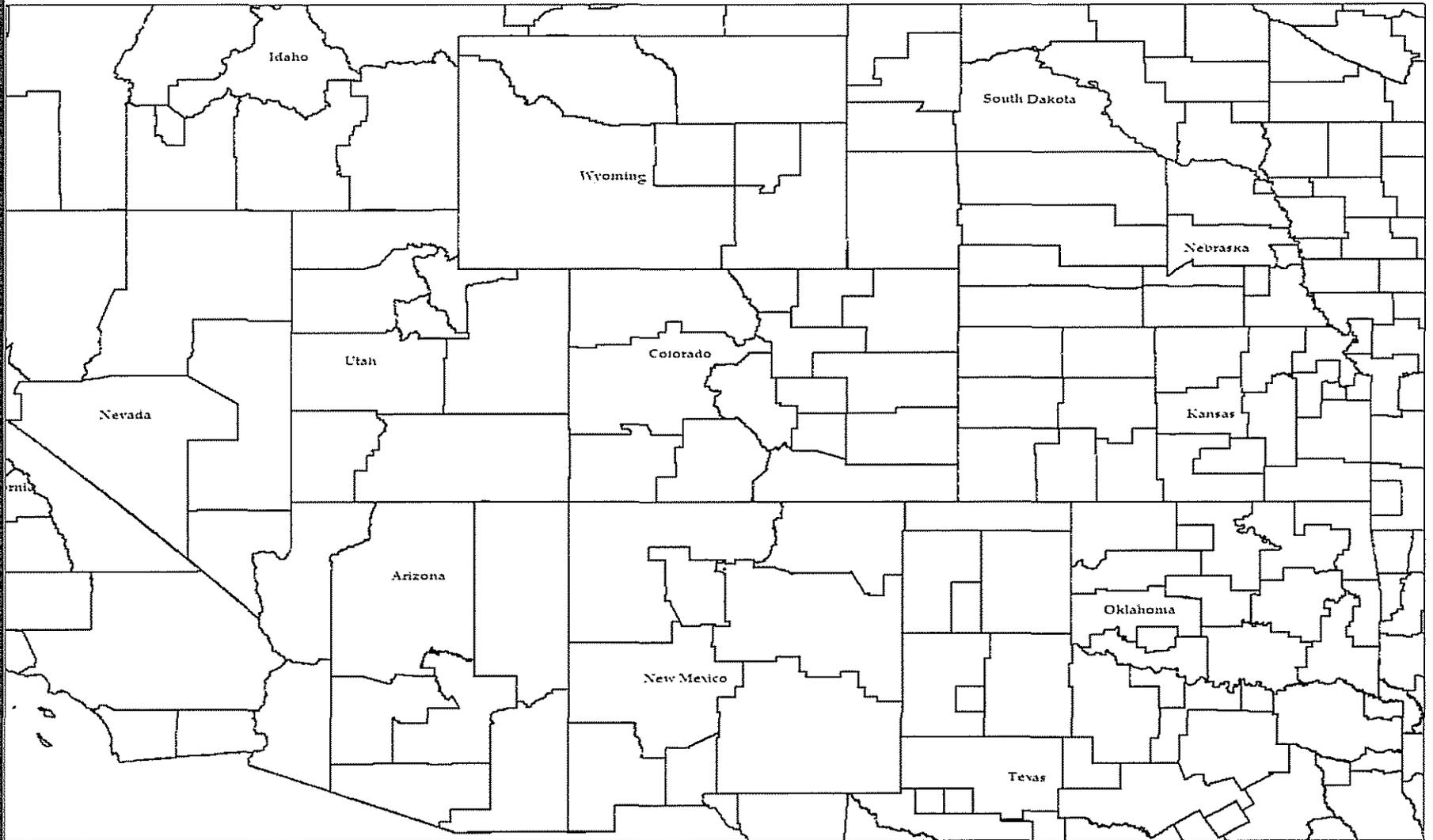
CMA # 1 Morphology Breakdown Example



Morphology	Area (sq. mi.)	Cumulative % Area	Cumulative Households	Cumulative % Households	Household Density (per sq. mi.)	Population	Cumulative % Population	Population Density (per sq. mi.)
Heavy Urban	41.7	1.1%	818,602	13.7%	19,635	1,839,788	11.2%	44,129
Urban	633.1	17.3%	3,905,782	79.3%	6,170	11,022,855	78.4%	17,412
Suburban	625.0	33.4%	700,469	91.1%	1,121	2,002,465	90.6%	3,204
Rural	2,595.1	100.0%	531,885	100.0%	205	1,537,518	100.0%	592
Total	3,894.8		5,956,738		1,529	16,402,626		4,211

From a 2004 database

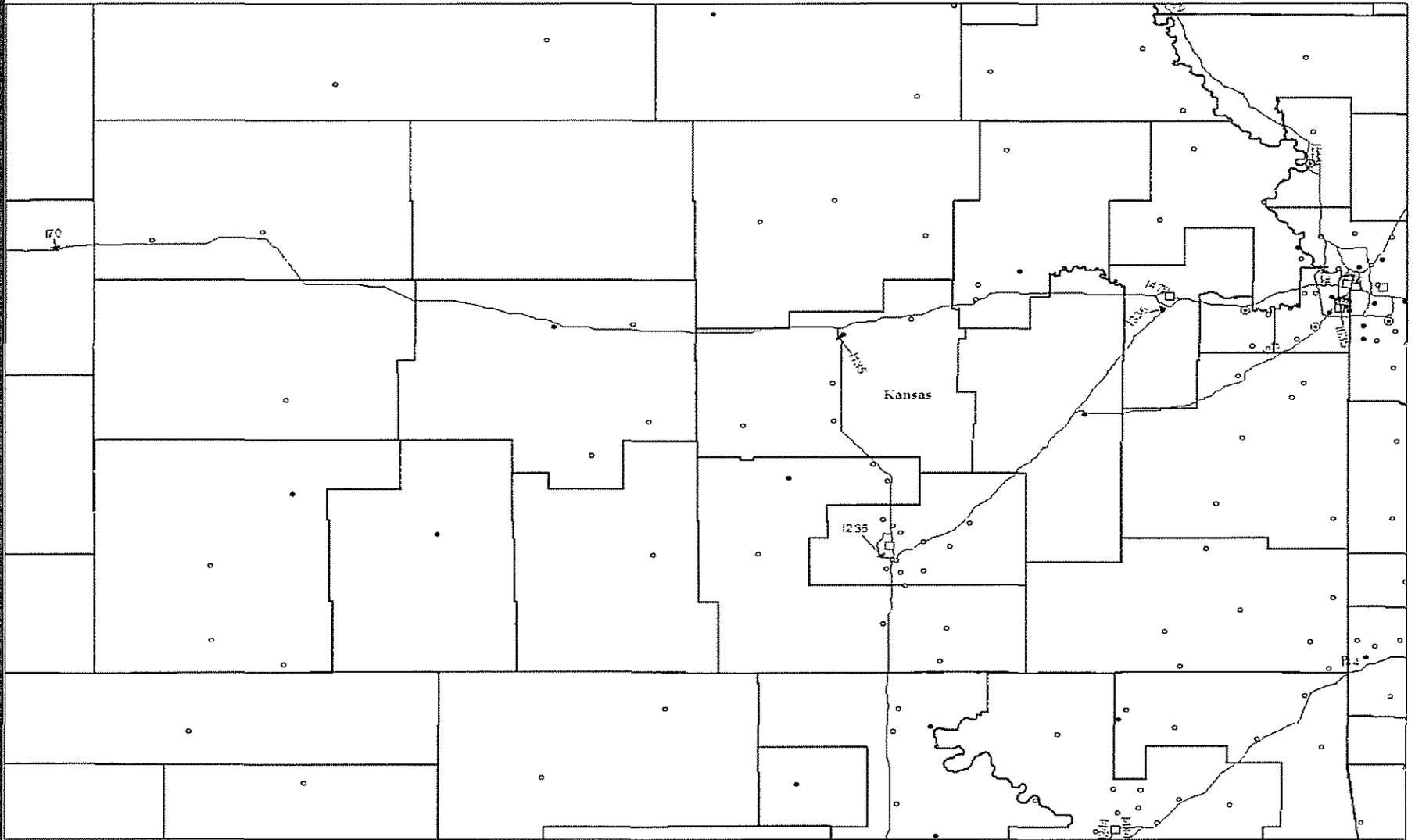
What is used to determine most effective 75% coverage



- County w/ > 10 persons per sq. mi
- County w/ 6-10 persons per sq. mi
- County w/ 0-5 persons per sq. mi

- State Boundary
- CMA Boundary

What is most effective 75% coverage for Kansas ?



- County w/ > 10 persons per sq. mi
- County w/ 6-9 persons per sq. mi
- County w/ 0-5 persons per sq. mi

- State Boundary
- CMA Boundary
- Highway

● Significant Cities