Enumeration of Kernel-Based Metropolitan Regions (KBMRs)

Data supplement to Rappaport, Jordan, and McKenzie Humann. 2025. "A Better Delineation of U.S. Metropolitan Areas." Federal Reserve Bank of Kansas City, Research Working Paper no. 25-01, April.

The paper broadly defines metropolitan areas as unions of built-up locations near each other with combined population of at least moderate scale and among which a significant share of residents and workers travel on a day-to-day basis between places of residence, places of employment, and places of consumption. A wide range of parameterizations of our delineation algorithm are arguably consistent with this broad definition.

KBMAs, our baseline parameterization, are likely to be appropriate for most questions and purposes. Their parameterization balances encompassing commuting flows and excluding locations insufficiently nearby or built up. One alternative parameterization, Kernel-Based Metropolitan Regions (KBMRs), more heavily weights encompassing commuting flows and so delineates metropolitan areas that are more expansive. Another alternative parameterization, Kernel-Based Urban Areas (KBUAs), more heavily weights excluding less built-up and less near locations and so delineates metropolitan areas that are more compact.

Additional enumerations, workbooks, and maps are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
1	New York--Newark, NY--NJ--PA	15	19,771,858	8,444,046	12,516	4,807	245	0.028	0.017
2	Los Angeles--Long Beach--Santa Ana, CA	22	16,364,066	6,578,410	19,058	3,365	248	0.011	0.015
3	Chicago, IL--IN--WI--MI	11	9,446,244	4,287,909	10,428	2,134	179	0.022	0.016
4	Baltimore--Washington, MD--DC--VA--PA--	18	8,101,995	3,950,852	14,868	1,796	215	0.024	0.015
5	Boston, MA--NH--RI--CT--ME	15	7,703,932	3,689,727	11,731	1,649	162	0.016	0.015
6	San Jose--San Francisco--Oakland, CA	21	7,227,187	3,510,946	10,019	1,488	187	0.033	0.015
7	Philadelphia, PA--NJ--DE--MD	12	6,405,563	2,797,397	7,399	1,636	129	0.039	0.049
8	Dallas--Fort Worth--Arlington, TX--OK	15	5,656,174	2,622,723	20,496	1,170	196	0.018	0.014
9	Detroit, MI	9	5,563,629	2,476,277	8,393	1,600	143	0.030	0.021
10	Miami, FL	5	5,060,512	2,110,622	6,305	907	76	0.017	0.013
11	Atlanta, GA--AL--NC	11	4,977,252	2,275,237	16,550	845	188	0.021	0.020
12	Houston, TX	9	4,888,453	2,083,863	12,611	928	118	0.020	0.015
13	Springfield--Bridgeport--New Haven, MA--C	11	3,819,476	1,769,860	6,087	894	114	0.047	0.060
14	Seattle, WA	10	3,803,984	1,841,004	12,861	838	146	0.014	0.012
15	Cleveland, OH	9	3,533,977	1,626,045	5,816	1,013	156	0.032	0.025
16	Phoenix--Mesa, AZ	4	3,240,629	1,444,132	14,882	691	126	0.017	0.014
17	Minneapolis--St. Paul, MN--WI	11	3,197,266	1,701,275	10,114	797	141	0.033	0.016
18	St. Louis, MO--IL	6	2,857,904	1,283,176	13,647	587	154	0.021	0.018
19	Pittsburgh, PA--OH--WV	11	2,837,029	1,184,015	8,266	829	155	0.030	0.034
20	San Diego, CA	2	2,813,833	1,275,918	4,200	605	74	0.031	0.034
21	Denver--Aurora, CO	7	2,503,828	1,299,012	7,871	601	124	0.032	0.018
22	Tampa--St. Petersburg, FL	4	2,404,269	1,054,730	2,606	548	53	0.031	0.030
23	Portland, OR--WA	8	2,292,303	1,101,771	9,297	492	142	0.020	0.016
24	Orlando, FL	7	2,171,576	1,007,147	5,727	419	88	0.046	0.030
25	Cincinnati, OH--KY--IN	6	2,113,917	976,392	6,278	511	119	0.042	0.042
26	Kansas City, MO--KS	8	2,042,577	994,678	11,434	559	137	0.032	0.020
27	Charlotte, NC--SC	14	2,004,548	942,320	7,726	394	145	0.042	0.038
28	Sacramento, CA	8	1,991,876	851,966	8,400	437	143	0.046	0.047
29	Indianapolis, IN	9	1,891,449	912,396	6,201	414	136	0.042	0.037
30	Salt Lake City, UT	6	1,841,082	837,640	9,264	396	94	0.016	0.010
31	Columbus, OH	9	1,840,733	911,285	6,914	435	111	0.058	0.036
32	Milwaukee, WI	10	1,829,827	880,559	3,034	488	82	0.049	0.045
33	San Antonio, TX	3	1,723,507	720,760	8,362	343	127	0.025	0.027
34	Virginia Beach, VA--NC	3	1,721,749	759,865	5,239	399	91	0.020	0.031
35	Lancaster--Harrisburg--York, PA	9	1,601,695	754,397	4,983	347	153	0.052	0.068
36	New Orleans, LA--MS	8	1,522,083	608,106	5,443	426	89	0.043	0.039
37	Nashville-Davidson, TN--KY	4	1,503,180	734,346	8,388	307	130	0.048	0.030
38	Greensboro--Winston-Salem, NC--VA	9	1,473,469	664,463	6,064	306	114	0.044	0.047
39	Raleigh--Durham, NC	6	1,463,294	709,426	5,963	258	104	0.060	0.041
40	Las Vegas, NV	3	1,381,996	620,861	7,578	339	113	0.019	0.018
41	Louisville, KY--IN	4	1,355,762	615,444	6,768	313	104	0.034	0.033
42	Austin, TX	6	1,334,280	661,060	7,139	277	108	0.040	0.026
43	Memphis, TN--MS--AR	2	1,312,849	550,083	7,930	312	139	0.045	0.022
44	Grand Rapids, MI	4	1,295,835	616,750	5,592	266	107	0.048	0.035
45	Jacksonville, FL--GA	5	1,244,885	529,483	5,118	223	74	0.027	0.030
46	Buffalo, NY	2	1,242,146	535,973	2,637	319	68	0.027	0.032
47	Oklahoma City, OK	5	1,229,949	528,039	8,902	372	144	0.026	0.020
48	Stockton--Modesto, CA	9	1,179,075	391,985	5,927	255	115	0.062	0.139
49	Greenville--Spartanburg, SC--NC--GA	8	1,172,856	529,793	5,881	251	117	0.033	0.032
50	Rochester, NY	5	1,158,630	543,317	4,158	281	112	0.044	0.030

Enumeration of KBMRs (ranks 1 to 50 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
51	Albany, NY	6	1,140,243	484,596	7,304	301	101	0.031	0.032
52	Richmond, VA	1	1,114,611	506,035	6,073	278	110	0.044	0.036
53	Birmingham, AL	3	1,072,761	434,422	5,750	231	112	0.051	0.049
54	Dayton, OH	3	1,047,914	490,740	2,508	261	73	0.081	0.077
55	Brownsville--McAllen, TX	6	978,369	282,871	4,295	181	129	0.009	0.032
56	Tulsa, OK--KS	5	968,683	407,024	8,187	294	122	0.037	0.026
57	Fresno, CA	5	937,206	336,987	7,503	180	109	0.051	0.048
58	Chattanooga, TN--GA--AL	6	915,990	356,966	6,366	186	105	0.044	0.043
59	Knoxville, TN--KY	5	912,920	355,712	5,621	191	105	0.042	0.039
60	Honolulu, HI	3	876,151	408,740	575	214	40	0.010	0.007
61	Tucson, AZ	2	865,369	369,033	6,536	199	74	0.019	0.026
62	Omaha, NE--IA	2	815,803	411,638	5,799	253	114	0.042	0.028
63	Columbia, SC	2	772,870	327,168	5,272	169	102	0.061	0.054
64	Sarasota--Bradenton, FL	3	772,847	290,238	2,742	173	69	0.039	0.057
65	Albuquerque, NM	3	745,249	328,982	11,395	191	96	0.020	0.027
66	Syracuse, NY	4	744,518	336,445	3,100	211	87	0.062	0.057
67	Allentown--Bethlehem, PA--NJ	2	726,794	295,291	1,348	163	63	0.107	0.176
68	Lexington-Fayette, KY	9	724,466	329,631	5,658	168	106	0.072	0.039
69	El Paso, TX--NM	1	722,919	252,068	4,391	135	97	0.030	0.041
70	Cape Coral, FL	5	718,808	286,244	4,252	172	77	0.031	0.030
71	Baton Rouge, LA	2	712,514	286,626	4,346	146	82	0.055	0.037
72	Little Rock, AR	2	707,006	316,579	6,753	170	110	0.057	0.048
73	Des Moines, IA	5	674,909	354,057	6,966	159	112	0.056	0.031
74	Toledo, OH--MI	2	656,392	301,679	1,513	172	55	0.083	0.087
75	Santa Barbara--Santa Maria, CA	7	646,028	291,690	6,041	130	117	0.050	0.030
76	Youngstown, OH--PA	3	631,767	260,326	1,757	172	56	0.094	0.118
77	Scranton, PA	2	629,261	246,856	2,754	186	70	0.054	0.052
78	South Bend, IN--MI	3	627,971	306,466	2,399	144	68	0.101	0.065
79	Portland, ME	4	615,366	277,037	3,536	150	98	0.056	0.071
80	Charleston--North Charleston, SC	2	601,294	259,031	3,718	127	86	0.027	0.030
81	Bakersfield, CA	8	600,577	206,150	6,568	126	97	0.073	0.057
82	Wichita, KS	3	595,374	279,518	5,851	151	132	0.032	0.019
83	Spokane, WA--ID	3	590,692	249,594	7,583	146	153	0.021	0.025
84	Johnson City--Kingsport, TN--VA	4	582,905	182,497	4,667	131	116	0.032	0.057
85	Jackson, MS	4	581,414	233,385	6,556	134	82	0.062	0.047
86	Huntsville, AL--TN	4	559,614	256,688	3,950	137	87	0.076	0.064
87	Augusta-Richmond County, GA--SC	1	552,009	216,616	4,988	108	100	0.042	0.039
88	Fort Wayne, IN--OH	4	543,939	274,811	2,904	138	65	0.081	0.050
89	Colorado Springs, CO	2	543,848	266,921	3,652	119	93	0.036	0.043
90	Lafayette, LA	6	541,603	180,498	4,619	111	73	0.051	0.060
91	Mobile, AL--MS	2	540,432	213,200	3,635	140	83	0.064	0.066
92	Madison, WI	2	536,166	314,844	3,048	116	86	0.106	0.059
93	Fayetteville, NC	2	511,659	171,806	2,786	84	60	0.072	0.099
94	Corpus Christi, TX	6	498,859	180,994	6,088	103	111	0.027	0.028
95	Reno, NV--CA	4	497,183	224,073	6,395	101	98	0.038	0.040
96	Lakeland, FL	3	491,341	187,675	2,061	111	46	0.091	0.146
97	Boise City, ID--OR	2	489,331	226,308	5,314	83	95	0.021	0.025
98	Rockford, IL--WI	3	488,885	223,948	1,849	122	38	0.088	0.125
99	Kalamazoo--Battle Creek, MI	3	483,308	227,672	2,131	124	106	0.106	0.113
100	Shreveport, LA--TX	2	478,563	179,131	5,736	116	95	0.034	0.038

Enumeration of KBMRs (ranks 51 to 100 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
101	Lansing, MI	2	476,045	236,001	2,011	123	65	0.105	0.107
102	Palm Bay--Melbourne, FL	2	472,702	195,747	991	91	28	0.041	0.072
103	Springfield, MO	1	463,857	181,018	5,724	103	97	0.043	0.045
104	Macon, GA	3	462,525	152,242	4,571	104	91	0.049	0.053
105	Saginaw--Midland, MI	3	459,204	192,138	2,923	119	102	0.100	0.107
106	Visalia, CA	8	456,188	135,707	5,857	93	99	0.078	0.118
107	Asheville, NC	2	437,359	123,727	3,108	95	71	0.033	0.044
108	Port St. Lucie, FL	2	430,840	160,197	1,630	83	30	0.063	0.113
109	Beaumont, TX	3	430,344	151,264	3,758	111	58	0.049	0.043
110	Pensacola, FL--AL	1	422,037	174,695	1,901	79	53	0.070	0.083
111	Cedar Rapids, IA	2	417,578	217,661	5,118	94	89	0.056	0.043
112	Hickory, NC--TN	2	414,464	171,418	2,334	85	70	0.092	0.075
113	Montgomery, AL	2	414,266	157,827	4,835	103	74	0.063	0.045
114	Columbia, MO	4	410,899	165,444	7,159	97	87	0.042	0.036
115	Savannah, GA	2	406,654	135,508	3,214	96	87	0.053	0.049
116	Appleton--Oshkosh, WI	2	406,450	212,731	2,310	94	83	0.108	0.088
117	Peoria, IL	2	403,631	175,884	3,452	106	81	0.060	0.071
118	Springfield, IL	4	401,510	177,571	6,261	113	120	0.071	0.072
119	Gulfport--Biloxi, MS	2	396,754	179,680	2,708	84	76	0.084	0.056
120	Evansville, IN--KY--IL	1	390,894	168,876	3,603	99	92	0.064	0.047
121	Salinas, CA	4	384,434	154,606	3,273	80	77	0.081	0.089
122	Fort Collins, CO	2	379,978	181,760	5,559	84	91	0.061	0.119
123	Fayetteville--Springdale, AR--MO--OK	2	377,356	161,969	3,976	74	85	0.042	0.034
124	Davenport, IA--IL	1	375,123	181,125	2,539	102	66	0.071	0.068
125	Charleston, WV	1	371,072	119,811	3,599	90	75	0.080	0.056
126	Tallahassee, FL--GA	1	357,625	143,394	4,564	74	93	0.036	0.035
127	Roanoke, VA--WV	1	340,338	139,415	2,702	73	59	0.072	0.083
128	Huntington, WV--KY--OH	1	339,351	111,434	2,761	88	76	0.071	0.084
129	Killeen, TX	2	337,861	147,316	3,472	64	93	0.064	0.089
130	Gainesville, FL	1	330,517	119,610	3,374	61	79	0.071	0.081
131	Reading, PA	1	329,981	153,307	725	75	35	0.176	0.176
132	Columbus, GA--AL	1	324,929	122,047	3,217	88	73	0.046	0.078
133	Eugene, OR	1	321,758	150,434	5,069	78	94	0.040	0.037
134	Anchorage, AK	3	316,348	143,193	5,233	67	74	0.020	0.008
135	Lubbock, TX	2	315,201	126,115	7,626	84	115	0.026	0.024
136	Green Bay, WI	1	312,784	160,515	2,583	73	83	0.103	0.096
137	Lincoln, NE	1	307,398	162,594	3,653	75	73	0.063	0.055
138	Erie, PA--NY	1	303,967	134,421	1,237	76	56	0.053	0.042
139	Utica, NY	3	297,940	114,453	3,192	93	68	0.089	0.100
140	Binghamton, NY--PA	1	295,384	118,934	2,280	75	72	0.074	0.073
141	Myrtle Beach, SC--NC	1	294,335	110,344	2,828	63	79	0.074	0.064
142	Fort Smith, AR--OK	1	293,306	100,548	4,536	58	91	0.036	0.037
143	Morgantown--Fairmont, WV--PA	3	284,898	68,404	2,876	80	77	0.064	0.078
144	Hattiesburg, MS	2	276,527	78,598	4,624	53	86	0.091	0.095
145	Norwich--New London, CT--RI	2	276,497	142,383	659	66	39	0.186	0.148
146	Longview, TX	3	275,991	83,105	3,125	57	51	0.090	0.112
147	Midland--Odessa, TX	3	275,987	105,548	7,090	70	90	0.028	0.023
148	Ocala, FL	2	274,095	94,309	1,460	47	48	0.117	0.126
149	Florence, SC	3	269,741	96,034	2,868	64	73	0.106	0.105
150	Wilmington, NC	1	268,466	120,876	2,560	49	71	0.089	0.079

Enumeration of KBMRs (ranks 101 to 150 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
151	Medford, OR--CA	2	261,978	97,261	5,935	54	78	0.013	0.024
152	Amarillo, TX	3	260,051	107,077	8,050	72	108	0.035	0.022
153	Tyler, TX	2	255,980	93,465	2,337	52	42	0.105	0.094
154	Dothan, AL--FL--GA	2	253,563	62,722	3,883	71	89	0.045	0.068
155	Waco, TX	1	251,632	99,462	2,560	65	75	0.068	0.064
156	Lake Charles, LA	2	250,788	89,971	4,368	55	73	0.059	0.070
157	Lafayette, IN	2	246,435	109,760	2,412	65	76	0.085	0.074
158	Elmira, NY--PA	3	246,062	72,219	2,753	63	70	0.088	0.134
159	Monroe, LA	2	244,526	82,686	3,894	67	73	0.063	0.074
160	Burlington, VT--NY	1	242,860	116,994	2,198	56	70	0.068	0.066
161	Fort Walton Beach--Crestview, FL--AL	2	237,652	96,943	2,297	44	63	0.053	0.073
162	Joplin, MO--OK--KS	4	232,914	89,312	3,121	52	86	0.076	0.071
163	Mansfield, OH	5	230,273	99,414	1,386	57	59	0.098	0.135
164	Chico, CA	3	229,624	83,297	2,954	48	79	0.047	0.071
165	Charlottesville, VA	1	228,417	95,001	2,961	46	71	0.099	0.100
166	Salisbury, MD--DE--VA	3	226,318	49,622	1,642	50	60	0.077	0.129
167	Greenville, NC	2	226,317	77,822	2,432	42	76	0.088	0.086
168	Tuscaloosa, AL	1	224,470	78,173	3,876	61	66	0.080	0.074
169	Jackson, TN	1	222,713	94,996	2,949	59	80	0.157	0.114
170	Yakima, WA	3	222,581	86,185	4,296	34	75	0.042	0.039
171	Rocky Mount--Wilson, NC	3	222,427	83,385	1,602	51	46	0.137	0.122
172	Champaign, IL	2	220,534	111,360	1,945	52	43	0.090	0.053
173	Sioux Falls, SD--MN--IA	1	220,369	113,982	4,514	47	84	0.045	0.040
174	Topeka, KS	1	218,484	101,904	3,030	53	55	0.090	0.079
175	Redding, CA	2	218,305	73,963	6,845	43	74	0.038	0.059
176	Duluth, MN--WI	2	217,254	96,958	6,048	71	111	0.068	0.070
177	Parkersburg, WV--OH	1	213,802	63,693	2,889	59	73	0.051	0.082
178	Terre Haute, IN--IL	2	213,148	78,416	2,295	55	48	0.068	0.076
179	College Station--Bryan, TX	1	212,261	81,323	3,379	47	54	0.051	0.060
180	Eau Claire, WI	2	211,040	101,069	3,400	47	77	0.062	0.088
181	Panama City, FL	1	209,465	73,608	2,769	41	55	0.041	0.050
182	Carbondale--Marion, IL	4	209,204	74,120	2,443	57	90	0.077	0.099
183	Houma, LA	2	208,364	74,935	2,543	46	57	0.081	0.105
184	Bloomington, IN	2	206,306	81,804	1,734	48	49	0.075	0.089
185	Alexandria, LA	1	205,156	64,771	3,431	51	67	0.091	0.095
186	Laredo, TX	1	202,594	62,767	3,957	35	33	0.039	0.026
187	Lynchburg, VA	1	200,567	90,375	1,746	48	54	0.119	0.046
188	St. Cloud, MN	1	200,246	106,742	2,278	42	78	0.119	0.113
189	Tupelo, MS--AL	1	197,922	83,495	3,183	38	75	0.150	0.163
190	Kennewick--Richland, WA	1	197,359	84,906	3,578	38	78	0.063	0.037
191	Fargo, ND--MN	1	197,332	102,093	5,170	50	108	0.054	0.037
192	Rochester, MN	1	196,977	94,925	2,930	54	77	0.077	0.071
193	Albany, GA	1	196,670	63,571	3,347	58	81	0.079	0.045
194	Bloomington--Normal, IL	1	194,109	96,694	2,376	53	57	0.127	0.105
195	Waterloo, IA	1	191,815	91,663	2,322	57	66	0.072	0.062
196	Bangor, ME	1	191,541	70,727	3,912	61	88	0.078	0.085
197	Wheeling, WV--OH	1	187,376	64,658	1,709	60	40	0.091	0.126
198	Lima, OH	2	182,317	80,590	1,108	49	42	0.153	0.173
199	La Crosse, WI--MN--IA	1	182,235	79,187	2,554	44	57	0.064	0.083
200	Florence, AL--TN	1	181,736	60,586	2,270	42	51	0.054	0.143

Enumeration of KBMRs (ranks 151 to 200 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
201	Altoona, PA	1	179,768	70,288	1,155	46	31	0.134	0.119
202	Clarksville, TN--KY	1	172,033	74,321	1,152	36	48	0.123	0.164
203	Texarkana, TX--AR	1	171,311	59,204	3,005	37	50	0.050	0.052
204	Blacksburg, VA--WV	2	170,750	65,728	1,527	31	48	0.098	0.096
205	Bowling Green, KY	1	170,617	69,265	2,172	40	56	0.101	0.094
206	Sioux City, IA--NE--SD	1	170,455	80,645	3,100	44	74	0.065	0.032
207	Santa Fe, NM	2	170,366	81,179	4,362	48	58	0.148	0.044
208	Valdosta, GA--FL	1	169,527	50,792	3,392	48	65	0.040	0.047
209	Corvallis--Albany, OR	3	169,421	65,075	2,478	37	78	0.099	0.117
210	Abilene, TX	1	169,245	68,223	4,656	48	57	0.037	0.038
211	Lufkin--Nacogdoches, TX	2	168,430	34,211	3,648	35	72	0.041	0.079
212	Jackson, MI	1	168,163	64,770	853	40	40	0.151	0.261
213	Idaho Falls, ID	2	168,070	58,254	7,713	41	81	0.054	0.061
214	Williamsport, PA	2	167,416	60,621	2,782	39	98	0.085	0.099
215	Sunbury--Shamokin, PA	3	165,759	26,377	982	36	60	0.115	0.279
216	Bellingham, WA	1	165,506	74,930	2,115	26	56	0.044	0.085
217	Hilton Head Island, SC	2	164,927	66,139	1,929	36	53	0.093	0.061
218	Augusta--Waterville, ME	2	164,255	63,141	1,862	42	57	0.133	0.123
219	Johnstown, PA	1	162,809	57,526	782	51	30	0.127	0.158
220	Meridian, MS--AL	1	161,811	39,510	4,647	37	75	0.051	0.112
221	Yuma, AZ--CA	1	161,484	49,698	816	31	51	0.043	0.065
222	Jacksonville, NC	1	161,093	76,631	857	28	38	0.068	0.094
223	Wichita Falls, TX--OK	2	160,535	69,106	3,737	46	78	0.040	0.040
224	State College, PA	2	159,869	72,515	1,513	34	65	0.133	0.074
225	Columbus, IN	3	156,446	62,507	1,603	33	48	0.116	0.114
226	Findlay, OH	3	155,630	71,555	1,528	34	70	0.175	0.203
227	Cookeville, TN	1	153,470	43,406	2,110	35	51	0.079	0.091
228	Beckley, WV	2	151,959	32,881	1,955	34	64	0.075	0.091
229	Traverse City, MI	1	149,659	59,293	2,145	36	87	0.058	0.075
230	Muskogee, OK	2	148,664	36,262	2,529	33	66	0.111	0.200
231	Paducah, KY--IL	1	148,605	54,527	2,193	39	75	0.135	0.106
232	Owensboro, KY	1	145,184	47,028	1,736	40	52	0.070	0.110
233	Pueblo, CO	1	144,209	56,903	3,501	53	75	0.069	0.079
234	Wausau, WI	2	143,285	75,707	2,094	33	56	0.113	0.081
235	Decatur, IL	1	142,885	61,040	1,350	44	34	0.125	0.097
236	Billings, MT	1	142,101	67,576	6,598	34	87	0.033	0.018
237	Anniston, AL	1	140,446	52,743	1,224	33	38	0.128	0.152
238	Harrisonburg, VA--WV	1	139,050	59,929	2,132	33	67	0.107	0.081
239	Prescott, AZ	1	138,602	53,167	4,233	21	95	0.091	0.121
240	El Centro--Calexico, CA	3	136,837	26,540	4,069	27	66	0.042	0.079
241	Pittsfield, MA--VT	2	135,762	65,862	1,078	41	31	0.103	0.071
242	Bend, OR	2	135,576	34,532	5,049	25	80	0.062	0.071
243	Las Cruces, NM	1	133,957	54,616	2,747	24	49	0.109	0.090
244	Sumter, SC	1	132,860	45,427	1,202	30	34	0.089	0.135
245	Benton Harbor--St. Joseph, MI	1	131,869	59,104	534	38	36	0.160	0.164
246	Kokomo, IN	2	131,339	55,282	869	33	36	0.171	0.146
247	Watertown, NY	1	129,305	22,286	1,953	27	65	0.047	0.134
248	Corbin--London, KY	2	129,118	14,751	1,434	28	43	0.084	0.115
249	Dubuque, IA--WI--IL	1	129,093	63,933	1,702	34	60	0.099	0.106
250	Goldsboro, NC	1	128,375	51,202	822	24	30	0.135	0.198

Enumeration of KBMRs (ranks 201 to 250 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
251	Kahului--Kihei, HI	3	128,094	37,725	1,159	28	74	0.008	0.021
252	Sandusky, OH	2	127,600	62,046	672	29	31	0.194	0.151
253	Lawton, OK	1	127,389	54,270	2,523	33	58	0.069	0.045
254	Morristown, TN--KY	1	126,867	46,726	947	28	44	0.202	0.190
255	Eureka, CA	3	126,518	36,189	3,572	27	45	0.011	0.022
256	Auburn, AL	2	125,073	44,481	1,283	30	43	0.158	0.170
257	Victoria, TX	1	123,848	44,883	4,070	32	76	0.089	0.095
258	San Angelo, TX	1	123,840	49,900	6,354	32	76	0.025	0.030
259	Rome, GA--AL	1	123,481	43,038	1,234	28	42	0.154	0.186
260	Ottawa--Streator, IL	3	123,094	48,316	1,441	32	54	0.147	0.179
261	Manhattan, KS	2	122,267	57,984	3,580	28	58	0.061	0.098
262	St. Joseph, MO--KS	1	122,116	47,463	1,909	37	52	0.086	0.114
263	Homosassa Springs, FL	2	121,680	33,150	678	20	31	0.095	0.203
264	Danville, VA--NC	1	119,192	45,569	1,306	30	41	0.137	0.202
265	Missoula, MT	1	118,271	55,859	4,038	26	80	0.045	0.037
266	Rapid City, SD	1	117,228	54,590	4,846	26	88	0.048	0.034
267	Stevens Point--Wisconsin Rapids, WI	2	116,657	56,299	1,466	24	58	0.111	0.122
268	Pine Bluff, AR	1	116,618	36,096	2,189	35	67	0.142	0.126
269	Hot Springs, AR	1	116,507	39,323	2,524	27	58	0.108	0.119
270	Cumberland, MD--WV--PA	2	116,344	35,888	1,251	34	46	0.074	0.120
271	Grand Junction, CO	1	116,255	52,999	3,328	28	51	0.024	0.024
272	Ithaca, NY	1	116,111	60,048	819	28	36	0.181	0.122
273	McComb--Brookhaven, MS	2	115,016	30,735	2,842	22	56	0.101	0.207
274	Sheboygan, WI	1	114,760	60,694	502	24	27	0.131	0.120
275	New Bern--Havelock, NC	2	111,314	19,219	1,341	17	42	0.111	0.188
276	Cape Girardeau, MO--IL	1	110,991	44,487	1,942	28	48	0.090	0.076
277	Bluefield, WV--VA	1	109,200	10,157	1,279	28	53	0.085	0.197
278	Farmington, NM	1	106,629	24,007	4,920	21	89	0.033	0.040
279	Jonesboro, AR	1	106,524	45,548	1,795	20	57	0.130	0.093
280	Mankato, MN	2	106,099	36,926	1,695	28	67	0.095	0.131
281	Staunton--Waynesboro, VA	2	105,625	26,209	1,343	22	63	0.120	0.216
282	Portsmouth, OH--KY	1	104,702	27,422	1,163	26	42	0.107	0.227
283	Gadsden, AL	1	103,549	38,135	636	29	36	0.183	0.184
284	Logan, UT--ID	1	102,701	44,756	1,120	23	16	0.043	0.058
285	Bismarck, ND	1	101,984	50,738	5,058	24	92	0.026	0.018
286	Pottsville, PA	2	101,761	17,206	334	25	22	0.180	0.408
287	Zanesville, OH	1	100,500	40,886	951	23	30	0.180	0.207
288	Pocatello, ID	1	98,753	39,017	3,967	27	57	0.087	0.081
289	Danville, IL--IN	1	97,783	36,743	1,393	29	30	0.096	0.153
290	Martinsville, VA	1	97,303	35,729	930	22	36	0.108	0.169
291	Sebring--Avon Park, FL	1	94,893	17,537	1,346	18	31	0.052	0.146
292	Dixon--Sterling, IL	2	94,690	41,416	1,338	26	45	0.154	0.170
293	Columbus, MS--AL	1	94,576	30,320	2,015	20	42	0.164	0.142
294	Greenwood--Grenada, MS	2	92,802	11,031	2,530	20	49	0.086	0.132
295	Quincy, IL--MO	1	92,490	25,282	2,271	26	59	0.063	0.115
296	Lebanon, NH--VT	1	90,918	17,219	1,413	23	38	0.154	0.199
297	Tullahoma, TN	2	90,678	37,629	1,153	20	38	0.162	0.178
298	St. George, UT	1	90,354	20,750	2,427	18	38	0.037	0.090
299	Wenatchee, WA	1	90,171	24,255	3,856	18	64	0.031	0.051
300	Twin Falls, ID	1	89,937	27,773	2,689	20	56	0.041	0.042

Enumeration of KBMRs (ranks 251 to 300 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
301	Bloomsburg--Berwick, PA	1	89,706	23,414	677	21	34	0.197	0.240
302	Vicksburg, MS--LA	2	89,496	26,371	3,046	24	38	0.149	0.127
303	Grand Forks, ND--MN	1	89,076	43,945	3,766	26	64	0.074	0.077
304	Russellville, AR	1	89,007	27,203	2,154	18	48	0.086	0.138
305	Greenville, MS--AR	2	88,875	15,252	1,086	25	52	0.112	0.072
306	Longview, WA	1	88,716	22,917	1,218	23	66	0.112	0.167
307	Plattsburgh, NY	1	88,425	17,365	1,345	23	35	0.040	0.081
308	Brunswick, GA	1	87,723	13,031	1,195	17	44	0.063	0.106
309	Greenwood, SC	1	87,364	35,369	999	15	40	0.184	0.124
310	Hilo, HI	1	86,549	19,754	1,797	17	57	0.062	0.079
311	Great Falls, MT	1	86,403	38,819	4,969	26	81	0.030	0.021
312	Jamestown, NY	1	85,569	39,402	732	19	44	0.168	0.112
313	Gallup, NM--AZ	1	85,350	7,971	4,069	18	78	0.034	0.137
314	DuBois--Clearfield, PA	2	84,884	14,024	1,407	22	59	0.174	0.273
315	Hopkinsville, KY	1	84,628	27,629	1,594	21	58	0.189	0.266
316	Stillwater, OK	1	83,817	19,202	1,582	19	40	0.103	0.214
317	Fairbanks, AK	1	82,840	40,174	7,366	19	76	0.016	0.007
318	Richmond, IN--OH	1	82,269	37,527	607	20	28	0.156	0.163
319	Wooster, OH	1	81,746	41,641	519	20	24	0.329	0.283
320	Cheyenne, WY	1	81,607	39,067	2,686	18	45	0.051	0.044
321	Easton--Cambridge, MD	2	80,773	21,742	996	22	38	0.153	0.200
322	Barre--Montpelier, VT	1	80,410	35,698	1,197	25	47	0.173	0.160
323	Fond du Lac, WI	1	80,018	40,046	527	16	25	0.221	0.253
324	Roseburg, OR	1	79,375	20,320	2,500	16	64	0.069	0.065
325	Grand Island, NE	1	78,907	37,393	2,473	22	74	0.093	0.077
326	Poplar Bluff, MO	1	78,482	10,465	2,868	20	68	0.057	0.185
327	Charleston--Mattoon, IL	2	77,995	21,236	1,361	19	48	0.135	0.198
328	Salina, KS	1	77,413	37,225	1,918	19	77	0.090	0.045
329	Marion, IN	1	77,289	34,033	490	17	33	0.186	0.185
330	Bozeman, MT	1	76,960	38,556	2,804	15	68	0.050	0.039
331	Talladega--Sylacauga, AL	2	76,214	23,720	1,171	20	23	0.194	0.241
332	Kalispell, MT	1	76,184	21,480	5,161	15	41	0.017	0.038
333	Natchez, MS--LA	1	75,890	16,631	2,621	20	55	0.098	0.151
334	Dyersburg, TN--MO	1	75,710	26,919	1,344	19	44	0.234	0.190
335	Jasper, IN	1	75,142	19,348	1,314	16	52	0.161	0.151
336	Flagstaff, AZ	1	74,838	41,338	4,991	17	69	0.132	0.083
337	Enid, OK	1	74,591	28,615	3,206	17	42	0.040	0.059
338	Hutchinson, KS	1	74,479	31,342	2,296	20	38	0.083	0.128
339	Somerset, KY	1	74,449	11,057	951	14	46	0.104	0.176
340	Manitowoc, WI	1	74,249	34,851	494	17	27	0.105	0.177
341	Albertville, AL	1	74,009	30,198	500	13	23	0.238	0.202
342	Searcy, AR	1	73,092	24,557	1,695	15	60	0.182	0.190
343	Athens, OH	1	73,042	26,864	838	18	27	0.163	0.169
344	Marion, OH	1	72,561	31,305	507	20	22	0.233	0.237
345	Roanoke Rapids, NC--VA	1	72,381	18,328	1,190	14	44	0.167	0.232
346	Burlington, IA--IL	1	72,220	38,265	1,109	20	44	0.261	0.131
347	Casper, WY	1	71,969	33,411	9,535	19	82	0.029	0.030
348	Galesburg, IL	2	71,076	30,485	1,073	20	36	0.123	0.111
349	Minot, ND	1	71,061	32,701	6,238	18	84	0.033	0.031
350	Austin--Albert Lea, MN--IA	2	70,327	20,864	1,234	20	58	0.101	0.148

Enumeration of KBMRs (ranks 301 to 350 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
351	Defiance, OH	1	70,327	28,276	868	16	32	0.361	0.331
352	Sierra Vista, AZ	1	70,187	12,651	1,335	13	32	0.073	0.141
353	Marquette, MI	2	70,118	30,556	2,364	28	84	0.041	0.040
354	Kinston, NC	1	69,679	28,861	631	16	20	0.249	0.195
355	Mountain Home, AR--MO	1	68,669	9,797	2,044	15	50	0.052	0.160
356	Beaver Dam--Waupun, WI	2	68,470	30,308	802	16	39	0.245	0.321
357	Clovis, NM--TX	2	68,323	26,038	4,381	14	41	0.029	0.029
358	Walla Walla, WA--OR	1	68,192	16,658	2,081	14	41	0.042	0.089
359	Mason City, IA	1	67,556	31,243	1,359	17	54	0.106	0.070
360	City of The Dalles, OR--WA	2	67,489	16,635	5,684	17	68	0.022	0.104
361	Olean, NY--PA	1	67,232	16,116	1,097	16	49	0.158	0.238
362	Statesboro, GA	1	67,198	8,304	1,079	15	40	0.131	0.272
363	Cullman, AL	1	66,870	28,254	561	14	29	0.222	0.238
364	Waycross, GA	1	65,811	9,211	1,669	16	29	0.059	0.145
365	North Wilkesboro--Wilkesboro, NC	1	65,632	10,677	757	12	31	0.076	0.282
366	Southern Pines--Pinehurst, NC	1	65,244	10,976	515	11	26	0.205	0.330
367	Ruston, LA	1	65,177	22,740	1,282	17	30	0.163	0.150
368	Meadville, PA	1	64,908	13,626	660	15	54	0.178	0.355
369	Mount Pleasant, MI	1	64,847	32,955	589	13	25	0.254	0.208
370	Tifton, GA	1	64,328	7,933	1,149	16	34	0.117	0.235
371	Klamath Falls, OR--CA	1	64,288	16,945	5,118	21	70	0.014	0.033
372	Helena, MT	1	63,820	31,832	4,397	15	91	0.058	0.031
373	Oxford, MS	1	63,425	11,984	1,237	10	39	0.230	0.222
374	LaGrange, GA--AL	1	63,375	29,895	482	14	32	0.291	0.165
375	Danville, KY	1	63,066	20,120	844	15	28	0.261	0.283
376	Coos Bay, OR	1	62,779	13,836	1,600	12	29	0.025	0.044
377	Alamogordo, NM	1	62,298	11,842	6,626	13	32	0.023	0.188
378	Lewiston, ID--WA	1	62,115	16,963	2,144	19	84	0.052	0.050
379	Rutland, VT	1	62,006	13,809	890	19	30	0.073	0.145
380	Oneonta, NY	1	61,945	11,165	972	17	57	0.191	0.286
381	Roswell, NM	1	61,382	15,074	6,071	13	38	0.031	0.045
382	Warsaw, IN	1	60,836	28,604	448	16	21	0.225	0.256
383	Glasgow, KY	1	60,253	23,204	1,089	17	34	0.151	0.175
384	Greeneville, TN	1	60,089	28,374	572	14	27	0.178	0.128
385	Rolla, MO	1	60,089	11,425	1,309	15	36	0.139	0.161
386	Freeport, IL	1	59,983	25,890	908	16	38	0.144	0.211
387	Starkville, MS	1	59,934	19,082	1,199	12	34	0.142	0.182
388	Palestine, TX	1	59,764	6,965	1,417	11	32	0.092	0.264
389	Brainerd, MN	1	58,458	17,904	1,048	13	51	0.154	0.149
390	Ottumwa, IA	1	58,357	19,414	1,793	18	60	0.111	0.197
391	Bullhead City, AZ--NV	1	58,331	25,567	367	11	8	0.225	0.183
392	Kapaa, HI	2	58,303	13,719	552	10	28	0.008	0.028
393	Sikeston, MO	1	58,035	11,127	1,281	15	46	0.211	0.231
394	Hobbs, NM--TX	1	57,720	11,537	5,454	13	50	0.060	0.084
395	Lake City, FL	1	57,583	5,951	1,367	10	40	0.236	0.328
396	Fremont, OH	1	57,569	25,894	442	14	30	0.252	0.304
397	West Plains, MO--AR	1	57,034	9,985	2,419	13	69	0.080	0.143
398	Point Pleasant--Gallipolis, WV--OH	1	57,026	8,929	901	11	33	0.114	0.318
399	Ukiah, CA	1	56,904	14,733	1,304	12	30	0.080	0.108
400	Hutchinson, MN	1	56,429	24,452	1,313	13	39	0.230	0.316

Enumeration of KBMRs (ranks 351 to 400 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.

Rank	KBMR Title	Cores	Population	Employment	Land Area (sq.mi)	Tracts	Max Dist (mi)	Inflow Rate	Outflow Rate
401	Harrison, AR	1	56,316	9,294	2,272	11	55	0.104	0.198
402	Sedalia, MO	1	56,235	13,150	1,362	16	37	0.112	0.210
403	Thomasville, GA	1	56,168	13,309	756	14	35	0.160	0.135
405	Selma, AL	1	55,606	6,427	1,774	17	45	0.141	0.245
406	Keene, NH	1	55,598	16,691	539	12	22	0.152	0.204
407	El Dorado, AR--LA	1	55,540	12,626	1,844	13	36	0.108	0.086
408	Ardmore, OK	1	55,302	10,605	1,699	15	60	0.110	0.132
409	Ponca City, OK	1	54,942	13,321	1,764	14	45	0.057	0.091
410	Plainview, TX	1	54,892	16,670	2,917	15	77	0.104	0.095
411	Winona, MN--WI	1	54,794	19,182	954	12	25	0.124	0.180
412	Vincennes, IN--IL	1	54,708	13,422	888	15	34	0.090	0.128
413	Port Angeles, WA	1	54,379	14,061	905	17	50	0.033	0.066
414	Fort Dodge, IA	1	54,268	26,358	1,018	17	52	0.213	0.082
415	Cadillac, MI	1	53,713	14,313	1,469	15	52	0.115	0.207
416	Oil City, PA	1	53,678	11,391	473	15	22	0.219	0.206
417	Aberdeen, WA	1	53,580	13,500	1,446	13	43	0.117	0.112
418	Cortland, NY	1	53,509	20,740	716	13	33	0.211	0.303
419	Paragould, AR--MO	1	53,483	18,653	1,265	14	32	0.120	0.165
420	Morgan City, LA	2	53,195	10,701	677	16	29	0.165	0.208
421	Muscatine, IA--IL	1	53,083	22,954	992	13	35	0.200	0.224
422	Kingman, AZ	1	52,958	18,682	7,584	10	52	0.169	0.191
423	Butte-Silver Bow, MT	1	52,952	15,572	2,523	14	76	0.032	0.052
424	Sonora, CA	1	52,699	7,836	1,322	9	34	0.108	0.301
425	Marinette--Menominee, WI--MI	1	52,659	18,031	1,108	15	42	0.084	0.151
426	Centralia, IL	1	52,247	15,725	806	14	30	0.210	0.197
427	Dublin, GA	1	51,868	20,017	998	15	41	0.165	0.081
428	Cambridge, OH	1	51,673	16,644	706	12	20	0.160	0.239
429	Laurinburg, NC--SC	1	51,557	5,158	512	9	24	0.206	0.346
430	Sidney, OH	1	51,487	32,336	430	11	22	0.380	0.212
431	Marshfield, WI	1	51,291	27,647	1,032	12	33	0.224	0.180
432	Kearney, NE	1	50,711	27,856	1,712	13	29	0.114	0.075
433	Dunkirk--Fredonia, NY	1	50,694	20,783	359	13	31	0.223	0.256
434	Brownwood, TX	1	50,383	11,564	3,716	17	60	0.068	0.140
435	Crawfordsville, IN	1	50,013	12,252	927	12	35	0.122	0.317

Enumeration of KBMRs (ranks 401 to 435 of 435): "Max Dist" is the distance between the tract centroids within a KBMR that are farthest from each other. Tables with more detailed variables for KBMRs and analogous tables for KBMAs and KBUAs are available from the paper's webpage.