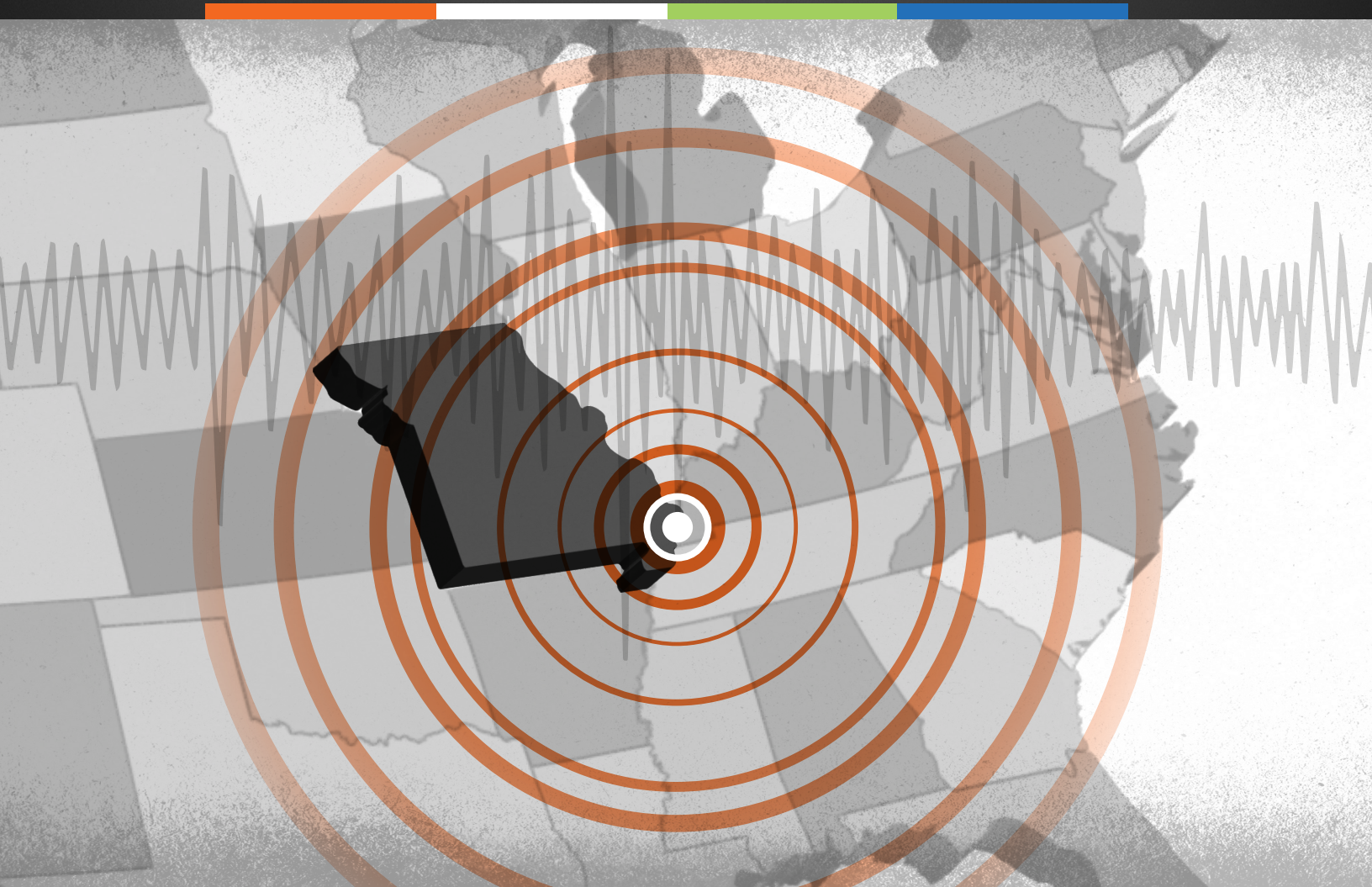


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RESIDENTIAL EARTHQUAKE COVERAGE IN MISSOURI

Missouri Department of Commerce & Insurance
Statistics Section



DCI

Missouri Department of Commerce & Insurance

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1 DISCLAIMER

This report is based upon data provided by insurers to the Missouri Department of Commerce & Insurance (DCI). These data include detailed premium and loss information for homeowners, private passenger auto, earthquake, farmowners, and mobile homes insurance that insurers are required to report under Section 374.405 RSMo. DCI makes every possible effort to ensure these data are accurate and complete. However, the accuracy of the report depends largely on the accuracy of the data filed by insurers.

Questions regarding this report should be addressed to the Business Analytics/Statistics Section of the Missouri Department of Commerce & Insurance, P.O. Box 690, Jefferson City, MO 65102-0690. Emails can be sent to statistics@insurance.mo.gov.

DCI also publishes other reports on the insurance market in Missouri. With this information, DCI aims to facilitate the flow of insurance market information for consumers, insurance companies, and DCI employees.

ALSO AVAILABLE FROM DCI

- Missouri Complaint Report
- Missouri Health Insurance Report
- Missouri Homeowners Insurance Report
- Missouri Legal Malpractice Report
- Missouri Life, Accident, & Health Supplement Report
- Missouri Medical Professional Liability Insurance Report
- Missouri Mortgage Guaranty Report
- Missouri Private Passenger Automobile Report
- Missouri Products Liability Report
- Missouri Property & Casualty Supplement Report

The reports, including this report, are available on the DCI website:
www.insurance.mo.gov/reports/.

DCI also maintains the following databases:

- Missouri ZIP code insurance data for homeowners/dwelling fire, farmowners, mobile homes, earthquake, and private passenger automobiles
- Medigap (Medicare supplement) experience data
- Commercial liability experience data

Additional information on the content of these databases is available on DCI's website:
www.insurance.mo.gov/reports/.

Aggregate data (non-company specific) is available to the public. Some data are available for a fee. Data requests should be directed to the Business Analytics/Statistics section at statistics@insurance.mo.gov.

2 HIGHLIGHTS

Geologists generally concede that the New Madrid Seismic Zone presents a significant hazard to portions of the state. The highest risk area is roughly the state's southeast quadrant, extending from the bootheel up the Mississippi River to the entire St. Louis metropolitan statistics area (MSA). For this report, please note that the definition of the New Madrid region has changed. In previous iterations, the New Madrid region included Dunklin, Mississippi, New Madrid, Pemiscot, Scott and Stoddard counties. This year, the report also includes Butler County, as most carriers responded to the annual survey including Butler County in the New Madrid region.

Historically, this report has presented a few graphics related to one particular range of home insured values (previously \$110K - \$140K) in order to focus on the median home insured value. This year, the range of these graphics was adjusted to reflect the increase in home prices experienced in Missouri over the past few years. You will now see these graphics with the data for the \$140K - \$249K home insured value range.

It should be noted that for the purposes of this report, counties is defined to include the 114 counties in Missouri plus the City of St. Louis.

Unfortunately, residential insurance coverage for earthquakes in Missouri has grown increasingly difficult to obtain because:

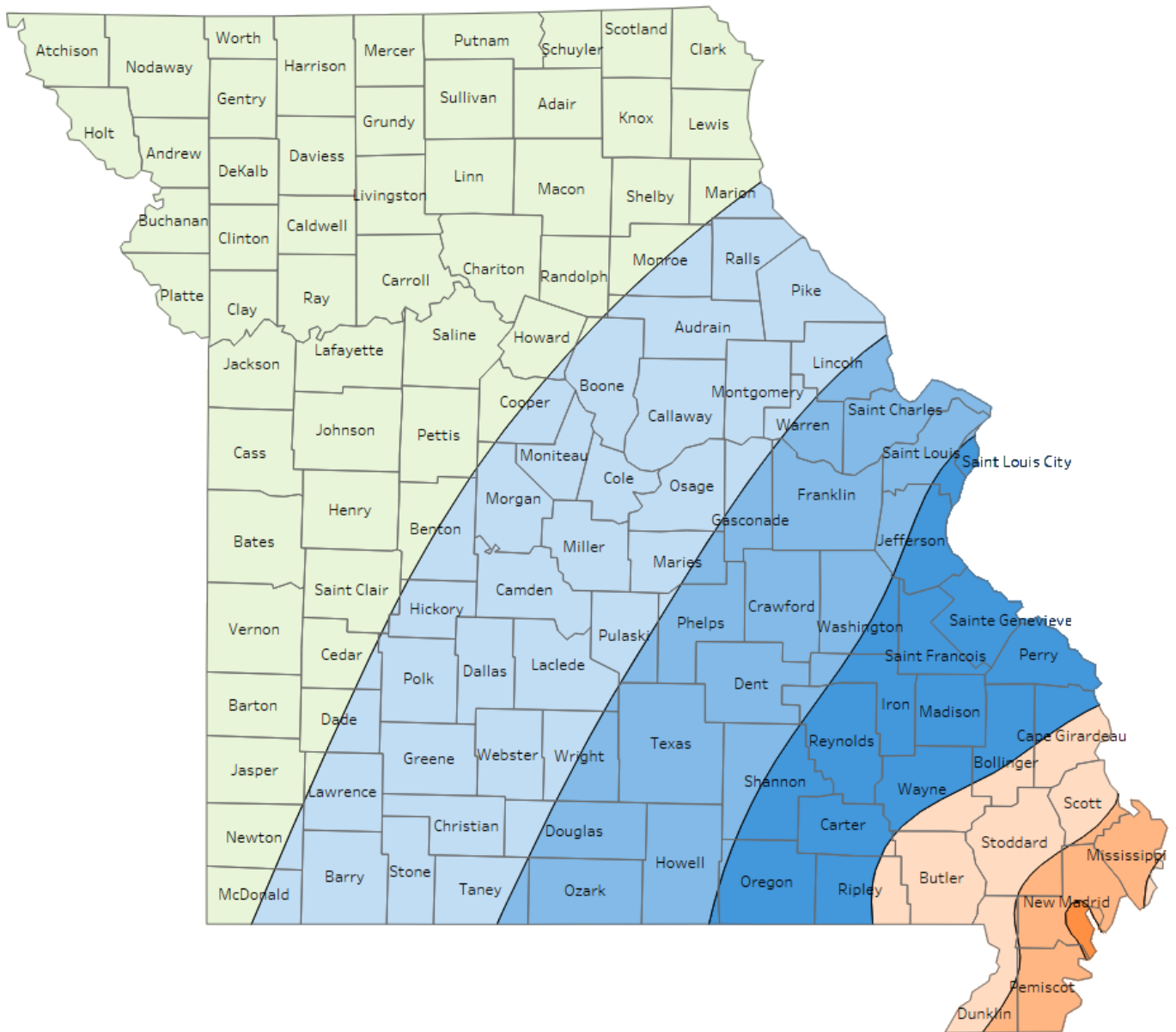
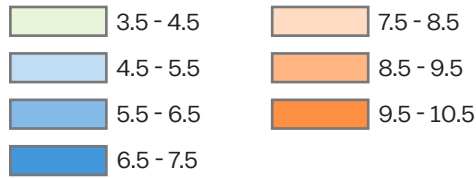
- Insurers have increasingly pulled out of high-risk areas of the state or have subjected such areas to stricter underwriting standards.
- Policyholders are required to self-insure to a significant extent through higher deductibles and the application of separate deductibles to structure and contents. Some insurers will only sell policies with a deductible equal to 20 or 25% of policy limits.
- The cost of coverage has increased dramatically in just the last ten years, particularly in high-risk areas.

This report presents data regarding trends in the earthquake insurance market in Missouri. Among the highlights:

- The market has contracted significantly over the last twenty years. In the seven-county New Madrid region of the state, the percentage of residences with earthquake coverage declined by an astonishing 46 percentage points between 2000 and 2023, from 60.2 to 13.9%.
- From 2022 to 2023 the percent of residences with earthquake coverage actually increased slightly in all regions of the state.
- In 80 of Missouri's 115 counties, fewer than 20% of residences have earthquake coverage. No counties in Missouri had 50% or more of residences covered for earthquakes.
- The cost of earthquake coverage has increased significantly, particularly in the high-risk New Madrid area. Since 2000 and adjusting for inflation, costs have increased nearly 582% in the New Madrid counties.
- Based on a survey of Missouri insurers, nearly 21.3% of the earthquake market in New Madrid does not offer coverage with a deductible of less than 20% of the value of the insured property. Only 4.5% of the market offer policies with deductibles as low as five percent, compared to 40% of the earthquake market in the remainder of the state.

MERCALLI SCALE (PROJECTED EARTHQUAKE INTENSITY)

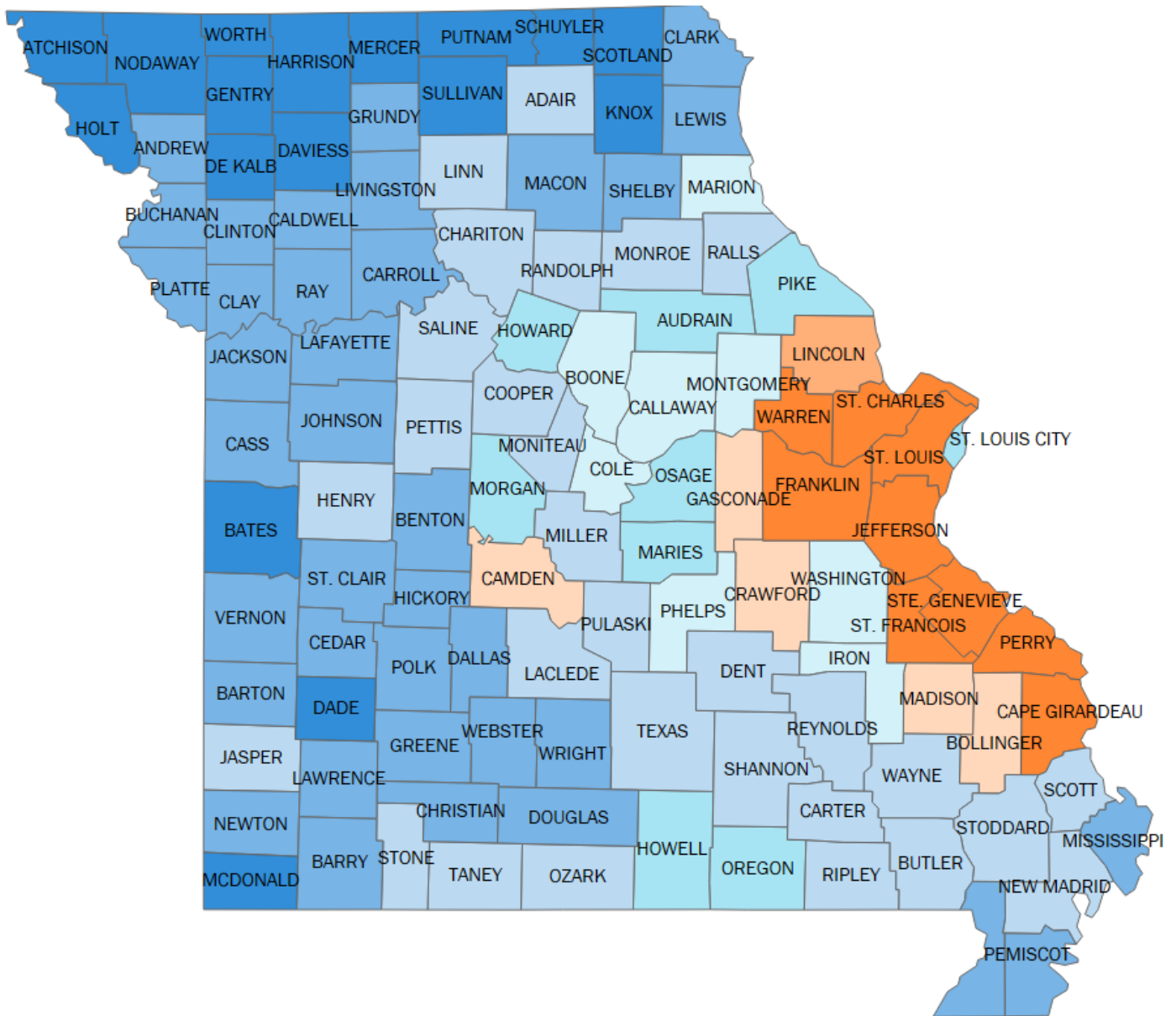
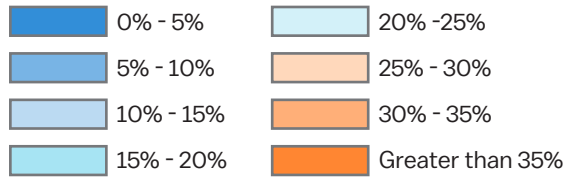
HIGHER VALUES INDICATE GREATER EARTHQUAKE RISK



Source: USGS National Seismic Hazard Map

EARTHQUAKE COVERAGE IN 2023

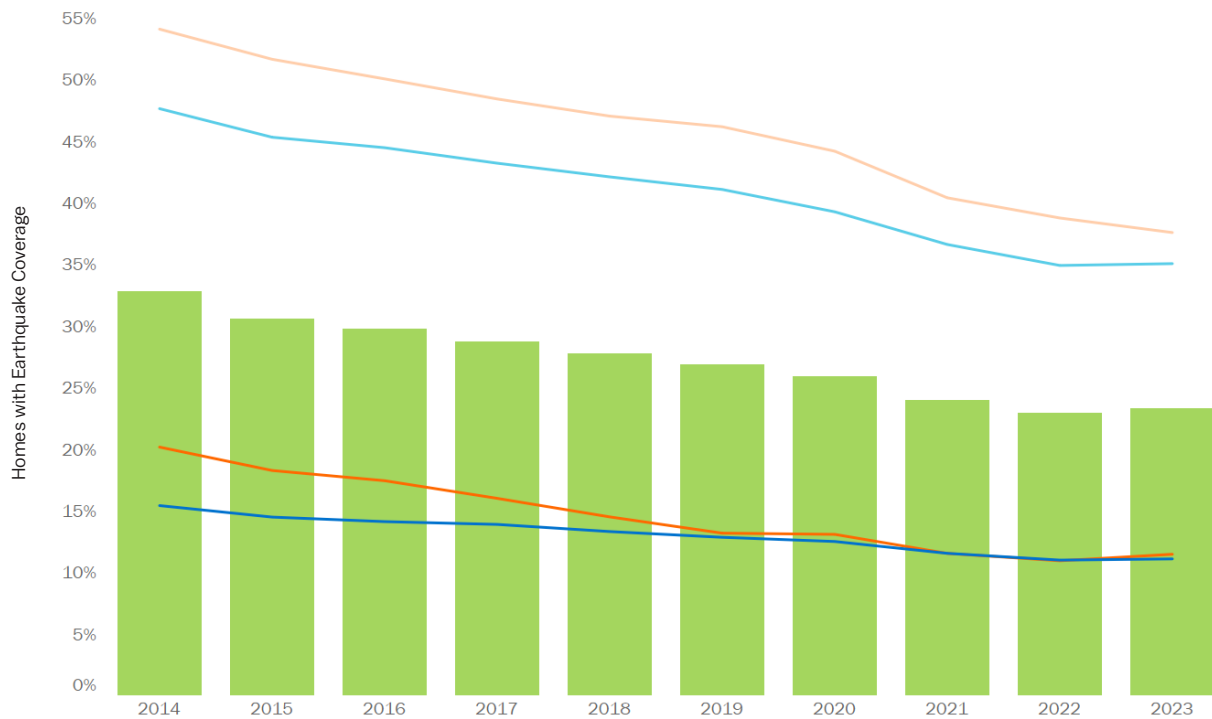
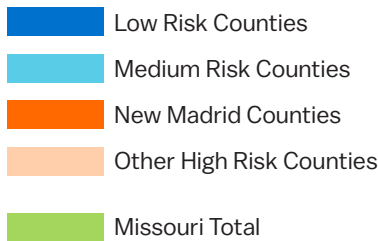
PERCENT OF RESIDENCES WITH EARTHQUAKE COVERAGE



3 REGIONAL TRENDS

REGIONAL TRENDS PERCENT OF RESIDENCES WITH EARTHQUAKE COVERAGE

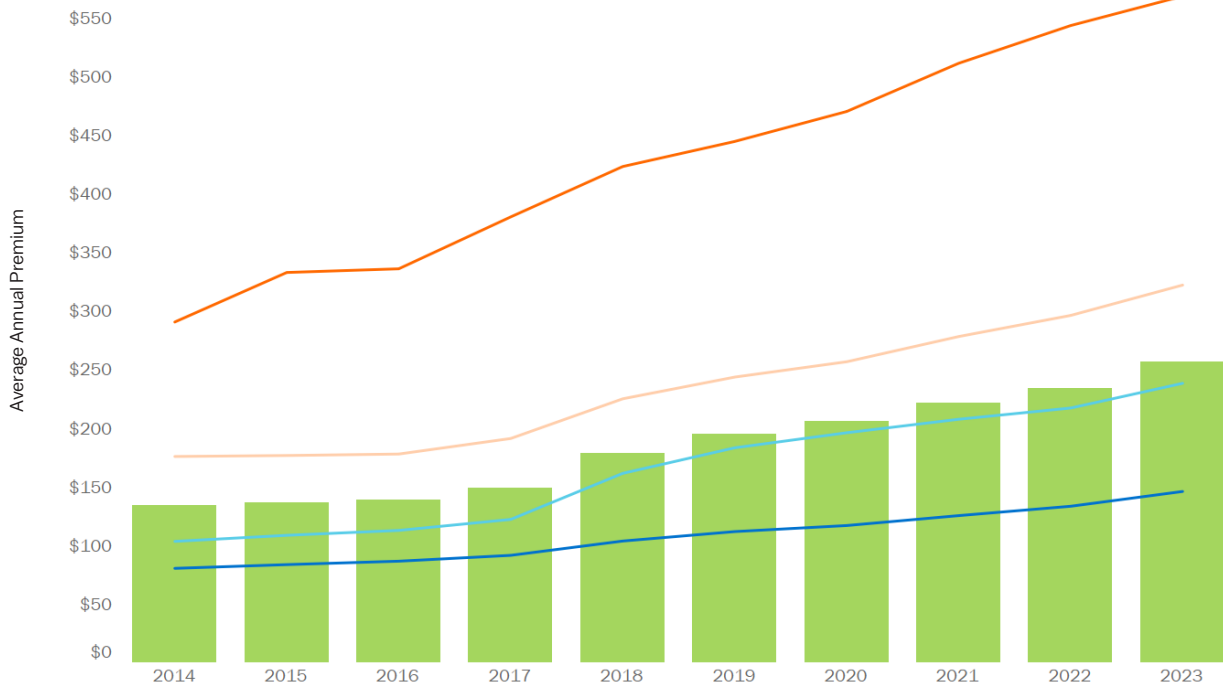
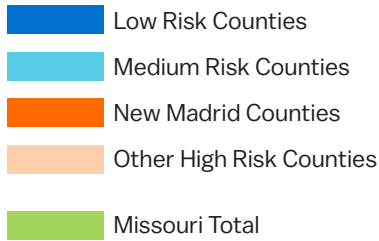
Region	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
New Madrid Counties	20.2%	18.3%	17.5%	16.0%	14.5%	13.2%	13.1%	11.6%	11.0%	11.5%	(8.7%)
Other High Risk Counties	54.1%	51.7%	50.1%	48.4%	47.1%	46.2%	44.2%	40.4%	38.8%	37.6%	(16.5%)
Medium Risk Counties	47.7%	45.3%	44.5%	43.2%	42.1%	41.1%	39.3%	36.6%	34.9%	35.1%	(12.6%)
Low Risk Counties	15.4%	14.5%	14.1%	13.9%	13.3%	12.9%	12.5%	11.6%	11.0%	11.1%	(4.3%)
Missouri Total	32.8%	30.6%	29.7%	28.7%	27.8%	26.8%	25.9%	24.0%	22.9%	23.3%	(9.6%)



REGIONAL TRENDS

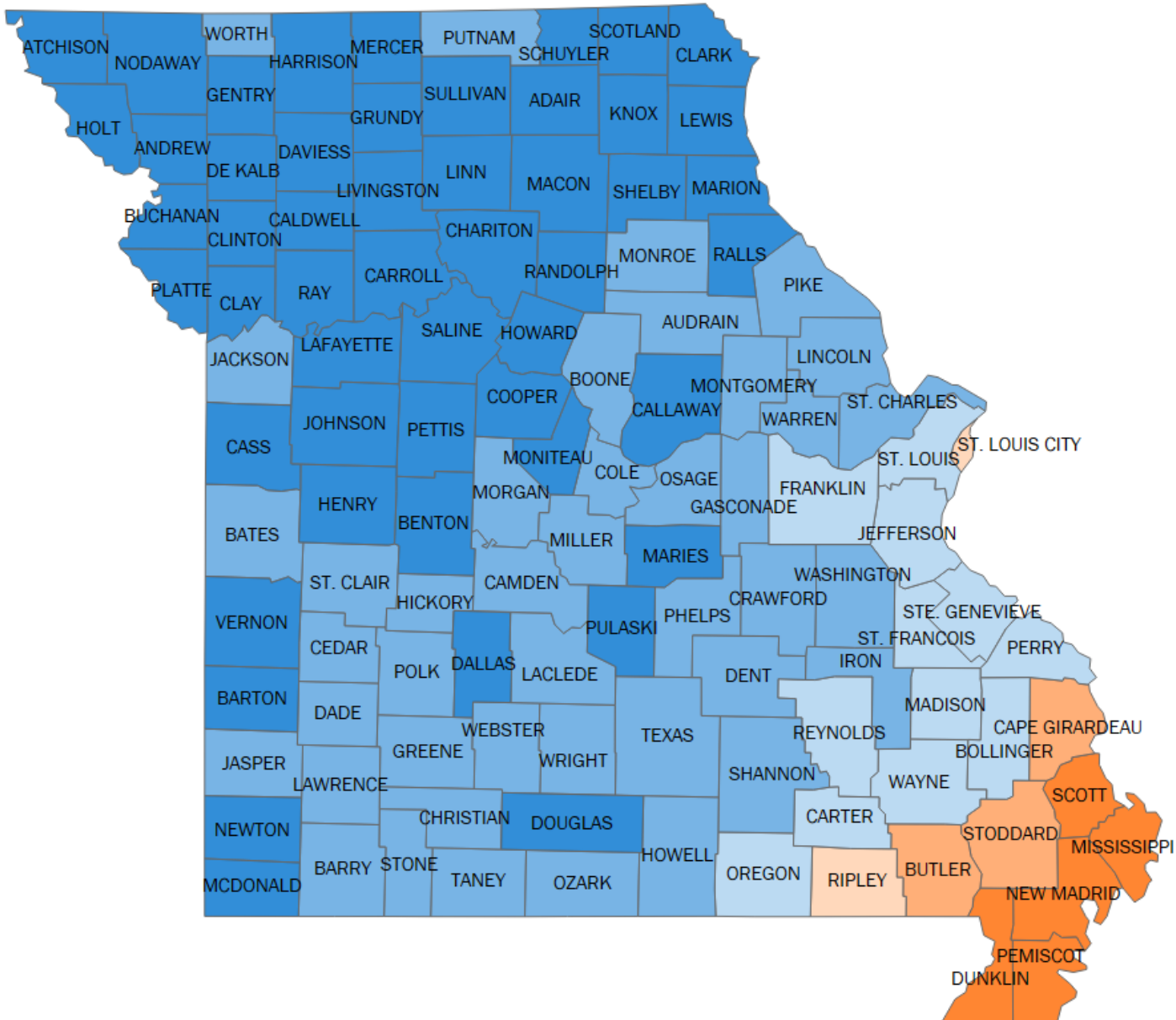
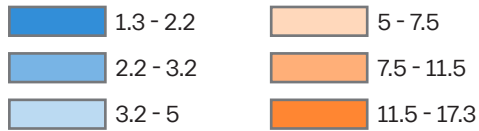
AVERAGE ANNUAL COST OF EARTHQUAKE COVERAGE

Region	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Madrid Counties	\$291	\$333	\$336	\$380	\$423	\$445	\$470	\$511	\$543	\$569
Other High Risk Counties	\$176	\$177	\$178	\$191	\$225	\$244	\$257	\$278	\$296	\$322
Medium Risk Counties	\$104	\$109	\$113	\$122	\$162	\$183	\$196	\$208	\$217	\$238
Low Risk Counties	\$81	\$84	\$87	\$92	\$104	\$112	\$117	\$125	\$133	\$146
Missouri Total	\$134	\$137	\$139	\$149	\$179	\$195	\$206	\$221	\$234	\$257



EARTHQUAKE COST TO MEDIAN INCOME

AVERAGE ANNUAL PREMIUM DIVIDED BY MEDIAN INCOME BY COUNTY, 2023

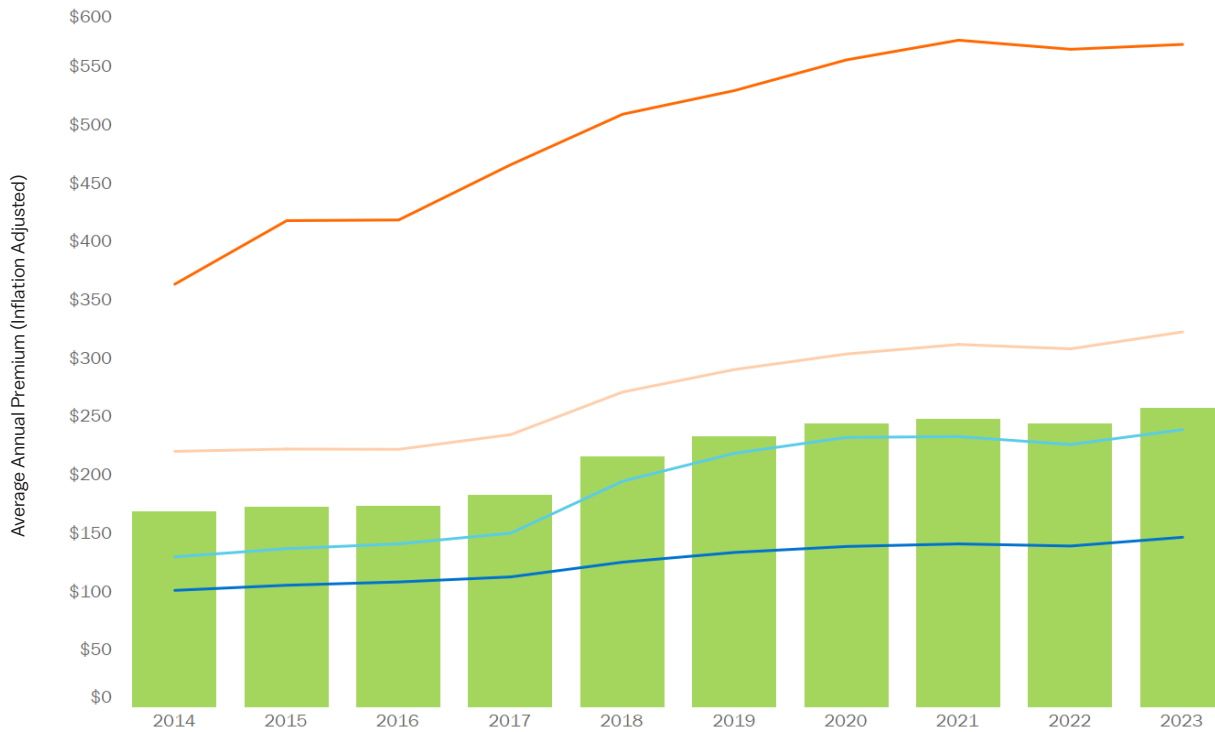
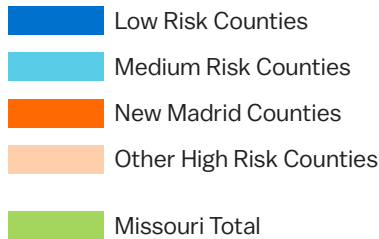


Source: Median household income derived from An Ecosystem of Minority Health and Health Disparities Resources by the National Institute on Minority Health and Health Disparities.

REGIONAL TRENDS

AVERAGE ANNUAL COST OF EARTHQUAKE COVERAGE, INFLATION ADJUSTED, 2023 DOLLARS

Region	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Madrid Counties	\$363	\$418	\$418	\$465	\$509	\$529	\$555	\$572	\$564	\$569
Other High Risk Counties	\$220	\$222	\$221	\$234	\$271	\$290	\$303	\$311	\$308	\$322
Medium Risk Counties	\$129	\$136	\$140	\$150	\$194	\$218	\$232	\$232	\$226	\$238
Low Risk Counties	\$101	\$105	\$108	\$112	\$125	\$133	\$138	\$140	\$139	\$146
Missouri Total	\$168	\$172	\$173	\$182	\$215	\$232	\$243	\$248	\$243	\$257



MARKET PENETRATION AND COST OF COVERAGE, 2023

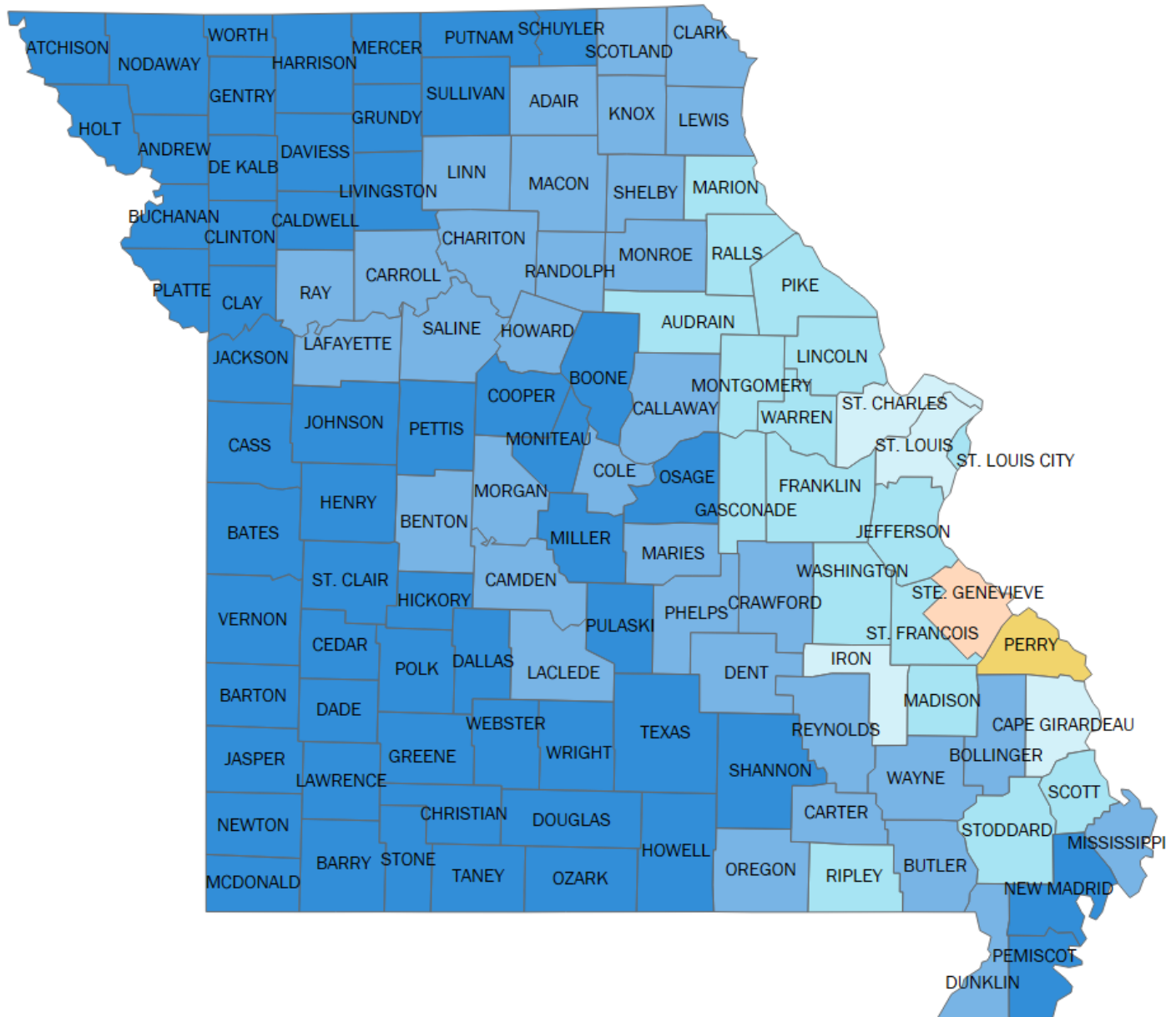
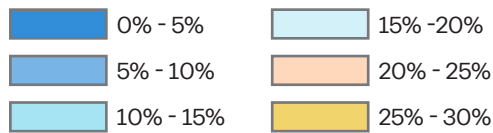
County	Earthquake Exposures	Homeowners, Farm, & Mobile Home Exposures	Percent with Earthquake Endorsements	Average Premium, All Earthquake	Average Premium, \$140K - \$249K Coverage
Adair	622	6,012	10.3%	\$97	\$61
Andrew	1,087	12,601	8.6%	\$112	\$62
Atchison	66	1,641	4.0%	\$103	\$62
Audrain	871	4,762	18.3%	\$113	\$68
Barry	846	10,962	7.7%	\$132	\$67
Barton	131	2,249	5.8%	\$90	\$70
Bates	173	3,822	4.5%	\$135	\$67
Benton	686	6,980	9.8%	\$94	\$61
Bollinger	764	2,807	27.2%	\$211	\$158
Boone	9,409	43,426	21.7%	\$145	\$69
Buchanan	799	13,486	5.9%	\$94	\$62
Butler	1,186	9,265	12.8%	\$497	\$330
Caldwell	109	2,045	5.3%	\$98	\$67
Callaway	1,806	8,889	20.3%	\$122	\$71
Camden	5,638	21,116	26.7%	\$163	\$63
Cape Girardeau	8,665	19,459	44.5%	\$480	\$280
Carroll	122	1,511	8.1%	\$93	\$62
Carter	207	2,056	10.1%	\$192	\$134
Cass	2,713	31,027	8.7%	\$139	\$67
Cedar	219	3,762	5.8%	\$98	\$71
Chariton	155	1,412	11.0%	\$95	\$65
Christian	2,293	26,158	8.8%	\$161	\$66
Clark	138	2,554	5.4%	\$78	\$61
Clay	7,254	80,139	9.1%	\$125	\$68
Clinton	432	6,984	6.2%	\$113	\$62
Cole	4,477	20,232	22.1%	\$159	\$81
Cooper	457	3,704	12.3%	\$118	\$70
Crawford	1,332	4,949	26.9%	\$128	\$71
Dade	98	1,982	4.9%	\$127	\$65
Dallas	158	3,099	5.1%	\$93	\$60
Daviess	104	2,159	4.8%	\$103	\$64
DeKalb	72	2,504	2.9%	\$109	\$65
Dent	490	3,826	12.8%	\$99	\$69
Douglas	243	2,577	9.4%	\$94	\$62
Dunklin	640	6,875	9.3%	\$680	\$645
Franklin	13,365	35,371	37.8%	\$232	\$102
Gasconade	1,113	4,071	27.3%	\$137	\$76

County	Earthquake Exposures	Homeowners, Farm, & Mobile Home Exposures	Percent with Earthquake Endorsements	Average Premium, All Earthquake	Average Premium, \$140K - \$249K Coverage
Gentry	66	1,919	3.4%	\$97	\$71
Greene	7,472	80,909	9.2%	\$164	\$66
Grundy	103	1,853	5.6%	\$93	\$72
Harrison	42	1,770	2.4%	\$86	\$61
Henry	650	5,303	12.3%	\$105	\$58
Hickory	180	2,405	7.5%	\$99	\$54
Holt	38	1,771	2.1%	\$79	\$69
Howard	445	2,298	19.4%	\$106	\$66
Howell	1,990	10,135	19.6%	\$116	\$75
Iron	889	4,102	21.7%	\$139	\$114
Jackson	15,474	197,151	7.8%	\$138	\$71
Jasper	4,666	36,739	12.7%	\$131	\$63
Jefferson	30,469	68,472	44.5%	\$248	\$123
Johnson	1,070	11,955	9.0%	\$107	\$62
Knox	59	1,345	4.4%	\$88	\$55
Laclede	1,184	8,861	13.4%	\$113	\$62
Lafayette	855	9,411	9.1%	\$102	\$64
Lawrence	447	8,059	5.5%	\$116	\$61
Lewis	244	3,090	7.9%	\$89	\$64
Lincoln	6,007	19,102	31.4%	\$191	\$73
Linn	389	2,722	14.3%	\$77	\$60
Livingston	263	3,394	7.7%	\$94	\$58
McDonald	229	4,608	5.0%	\$91	\$59
Macon	378	3,889	9.7%	\$88	\$58
Madison	1,053	3,620	29.1%	\$172	\$134
Maries	266	1,607	16.6%	\$90	\$67
Marion	1,579	7,884	20.0%	\$114	\$64
Mercer	34	967	3.5%	\$86	\$68
Miller	638	4,825	13.2%	\$113	\$63
Mississippi	239	3,090	7.7%	\$573	\$538
Moniteau	369	2,792	13.2%	\$107	\$64
Monroe	378	2,850	13.3%	\$108	\$61
Montgomery	780	3,606	21.6%	\$145	\$68
Morgan	1,857	9,373	19.8%	\$112	\$62
New Madrid	359	2,981	12.0%	\$581	\$574
Newton	869	10,495	8.3%	\$115	\$60
Nodaway	131	4,064	3.2%	\$99	\$65
Oregon	433	2,821	15.3%	\$124	\$108
Osage	445	2,366	18.8%	\$152	\$75
Ozark	362	2,718	13.3%	\$90	\$61
Pemiscot	293	3,707	7.9%	\$616	\$702

County	Earthquake Exposures	Homeowners, Farm, & Mobile Home Exposures	Percent with Earthquake Endorsements	Average Premium, All Earthquake	Average Premium, \$140K - \$249K Coverage
Perry	1,730	4,256	40.6%	\$248	\$148
Pettis	1,034	7,895	13.1%	\$106	\$60
Phelps	2,170	10,843	20.0%	\$117	\$71
Pike	894	4,842	18.5%	\$129	\$65
Platte	3,045	31,314	9.7%	\$146	\$74
Polk	628	7,771	8.1%	\$120	\$63
Pulaski	826	7,692	10.7%	\$119	\$77
Putnam	63	1,355	4.6%	\$143	\$60
Ralls	450	3,355	13.4%	\$103	\$66
Randolph	642	6,011	10.7%	\$93	\$64
Ray	395	6,556	6.0%	\$102	\$65
Reynolds	323	2,421	13.3%	\$140	\$120
Ripley	403	3,766	10.7%	\$200	\$164
St. Charles	55,545	113,834	48.8%	\$286	\$121
St. Clair	126	2,358	5.3%	\$105	\$69
Ste. Genevieve	2,431	5,698	42.7%	\$224	\$143
St. Francois	6,777	17,874	37.9%	\$179	\$117
St. Louis	136,568	317,017	43.1%	\$325	\$132
Saline	682	4,937	13.8%	\$98	\$63
Schuyler	25	846	3.0%	\$87	\$65
Scotland	62	2,206	2.8%	\$97	\$60
Scott	1,576	12,593	12.5%	\$637	\$577
Shannon	226	1,565	14.4%	\$123	\$97
Shelby	173	1,965	8.8%	\$84	\$64
Stoddard	1,250	9,735	12.8%	\$478	\$364
Stone	1,448	11,541	12.5%	\$143	\$60
Sullivan	67	2,179	3.1%	\$76	\$61
Taney	2,230	15,814	14.1%	\$121	\$65
Texas	477	4,668	10.2%	\$119	\$64
Vernon	340	4,977	6.8%	\$88	\$59
Warren	4,616	12,472	37.0%	\$201	\$78
Washington	1,569	6,708	23.4%	\$117	\$81
Wayne	601	4,664	12.9%	\$199	\$159
Webster	1,035	11,348	9.1%	\$143	\$65
Worth	10	455	2.2%	\$95	\$66
Wright	383	4,368	8.8%	\$110	\$68
St. Louis City	12,882	68,763	18.7%	\$315	\$151
Missouri Total	403,113	1,730,975	23.3%	\$257	\$122

PERCENT OF INSURED DWELLINGS WITH EARTHQUAKE ENDORSEMENTS

PERCENTAGE POINT DECREASE, PRIOR TEN YEARS



PERCENT OF INSURED DWELLINGS WITH EARTHQUAKE ENDORSEMENTS

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Adair	19.9%	17.0%	17.0%	15.7%	14.7%	13.5%	12.5%	11.7%	11.2%	10.3%	(9.6%)
Andrew	13.2%	11.9%	11.8%	11.7%	11.0%	10.8%	10.4%	9.5%	8.8%	8.6%	(4.6%)
Atchison	7.4%	6.9%	6.9%	6.9%	6.7%	6.2%	5.0%	4.9%	4.3%	4.0%	(3.3%)
Audrain	32.1%	26.6%	26.6%	24.8%	24.2%	23.3%	19.9%	18.1%	16.7%	18.3%	(13.8%)
Barry	9.0%	8.6%	8.6%	9.1%	8.8%	8.3%	8.2%	7.7%	7.5%	7.7%	(1.3%)
Barton	6.7%	7.2%	7.3%	6.6%	5.8%	5.6%	5.4%	5.8%	5.2%	5.9%	(0.8%)
Bates	6.1%	5.4%	5.1%	5.2%	4.6%	4.7%	4.2%	4.0%	3.5%	4.5%	(1.5%)
Benton	15.1%	13.1%	12.9%	12.5%	11.9%	11.7%	11.0%	10.5%	9.8%	9.8%	(5.3%)
Bollinger	35.2%	33.1%	32.1%	32.4%	30.9%	29.6%	26.4%	26.2%	27.8%	27.2%	(8.0%)
Boone	26.5%	25.4%	25.0%	24.7%	24.3%	23.8%	23.5%	21.8%	21.1%	21.7%	(4.9%)
Buchanan	9.1%	7.8%	7.6%	7.5%	7.1%	7.0%	6.7%	6.4%	6.2%	5.9%	(3.2%)
Butler	22.7%	20.4%	19.7%	18.6%	17.0%	15.4%	15.1%	12.5%	11.8%	12.8%	(9.9%)
Caldwell	7.2%	6.5%	6.9%	6.8%	5.6%	5.3%	4.4%	4.4%	4.4%	5.4%	(1.9%)
Callaway	25.8%	25.5%	24.8%	24.9%	24.0%	24.1%	22.5%	20.4%	19.7%	20.3%	(5.5%)
Camden	36.4%	35.8%	34.3%	33.8%	32.8%	31.9%	31.2%	29.3%	27.9%	26.7%	(9.7%)
Cape Girardeau	62.4%	60.2%	60.2%	57.9%	56.0%	54.0%	52.6%	47.7%	44.1%	44.5%	(17.9%)
Carroll	13.4%	11.8%	11.6%	11.5%	10.0%	9.2%	8.0%	7.1%	6.6%	8.1%	(5.4%)
Carter	16.5%	16.2%	14.8%	14.5%	13.6%	12.6%	10.8%	10.8%	10.4%	10.0%	(6.5%)
Cass	11.6%	11.1%	11.0%	11.1%	10.7%	10.5%	10.1%	9.5%	8.9%	8.7%	(2.8%)
Cedar	8.9%	8.1%	7.3%	7.1%	6.5%	6.5%	5.5%	5.3%	5.2%	5.8%	(3.1%)
Chariton	17.5%	16.0%	16.2%	14.7%	12.2%	11.9%	9.5%	9.0%	8.4%	10.9%	(6.5%)
Christian	11.5%	10.7%	10.3%	9.8%	9.6%	9.2%	9.8%	9.0%	8.6%	8.8%	(2.7%)
Clark	12.2%	9.6%	9.4%	9.0%	7.5%	7.2%	6.0%	5.6%	5.2%	5.4%	(6.8%)
Clay	12.9%	12.3%	12.1%	12.2%	11.9%	11.6%	11.3%	10.3%	9.7%	9.1%	(3.8%)
Clinton	9.1%	7.8%	8.0%	8.1%	8.0%	7.6%	6.8%	6.3%	6.3%	6.2%	(2.9%)
Cole	29.6%	29.5%	28.7%	28.0%	26.5%	26.2%	24.8%	22.9%	21.7%	22.1%	(7.5%)

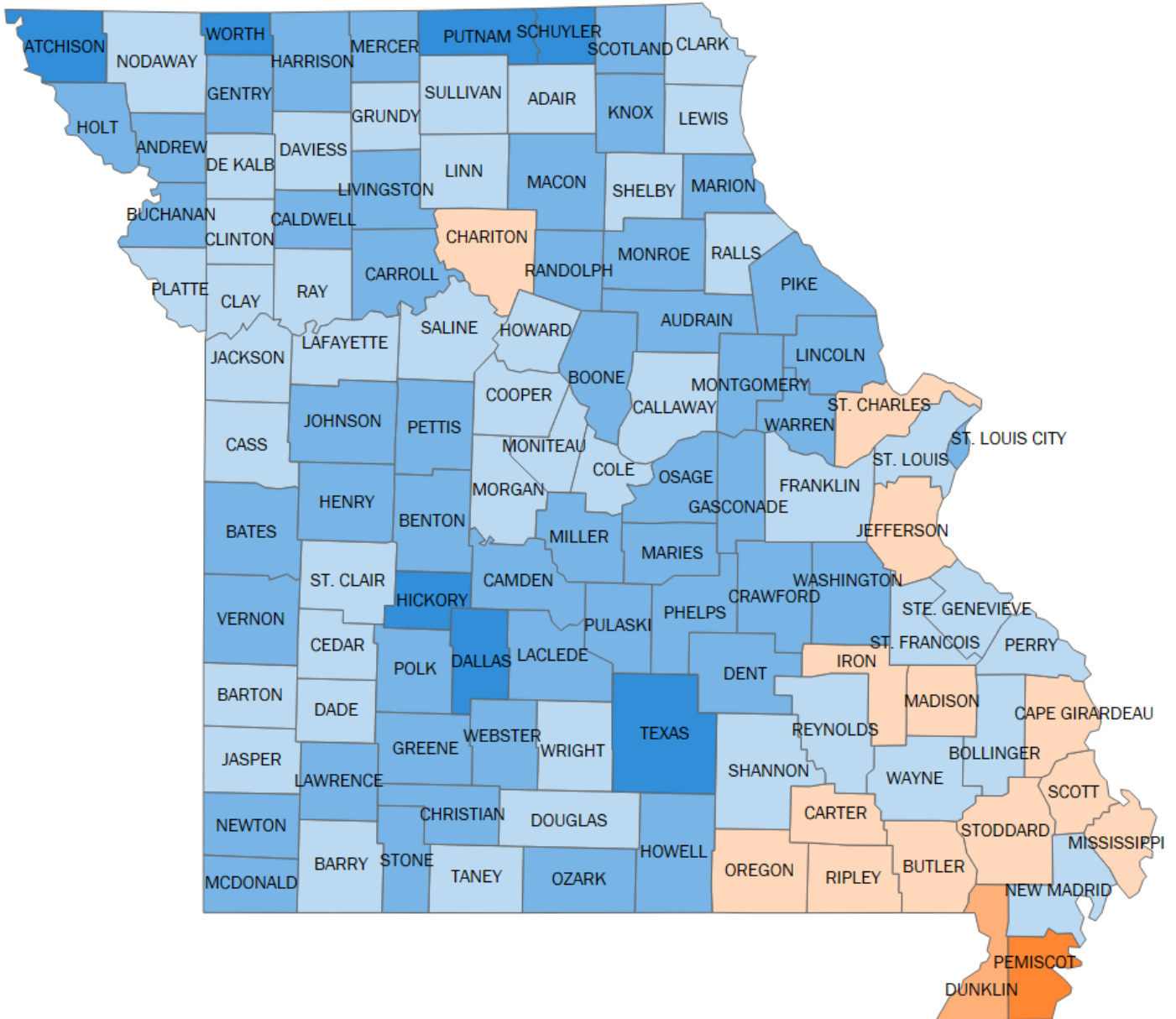
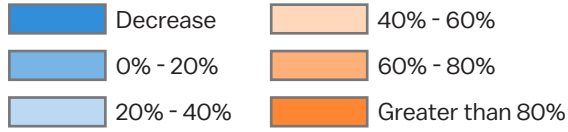
County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Cooper	14.7%	16.1%	16.0%	15.5%	15.0%	14.4%	13.1%	12.1%	11.8%	12.3%	(2.3%)
Crawford	34.0%	32.1%	31.2%	30.2%	28.2%	28.1%	25.3%	23.5%	22.5%	26.9%	(7.1%)
Dade	7.3%	6.7%	6.6%	6.2%	5.8%	5.6%	5.3%	4.8%	4.4%	4.9%	(2.4%)
Dallas	6.4%	6.0%	5.6%	6.0%	5.1%	5.2%	4.8%	4.5%	4.4%	5.1%	(1.3%)
Davess	6.5%	5.4%	5.6%	5.6%	5.0%	4.8%	4.6%	4.0%	3.7%	4.8%	(1.7%)
DeKalb	5.5%	4.3%	4.4%	4.4%	4.1%	3.7%	3.4%	3.3%	3.1%	2.9%	(2.7%)
Dent	18.2%	18.0%	17.4%	16.1%	14.5%	14.1%	13.2%	12.0%	11.6%	12.8%	(5.4%)
Douglas	8.8%	8.8%	8.6%	7.7%	7.7%	8.6%	7.6%	6.9%	6.7%	9.4%	0.6%
Dunklin	14.3%	14.0%	13.0%	12.5%	11.2%	10.5%	10.6%	8.8%	8.2%	9.3%	(5.0%)
Franklin	50.1%	49.5%	48.0%	47.2%	45.6%	44.3%	42.7%	40.4%	39.5%	37.8%	(12.3%)
Gasconade	39.4%	38.0%	36.1%	34.8%	29.8%	27.2%	25.4%	23.9%	21.5%	27.3%	(12.1%)
Gentry	7.5%	6.7%	6.4%	6.2%	5.2%	4.7%	3.8%	3.6%	3.2%	3.4%	(4.1%)
Greene	12.9%	11.9%	11.4%	11.1%	11.0%	10.5%	10.9%	9.9%	9.3%	9.2%	(3.7%)
Grundy	7.7%	6.9%	6.8%	6.4%	5.7%	4.6%	4.2%	3.8%	3.6%	5.5%	(2.1%)
Harrison	4.2%	4.5%	4.5%	4.5%	4.4%	4.0%	2.7%	2.6%	2.5%	2.4%	(1.8%)
Henry	14.9%	13.7%	13.3%	13.2%	11.9%	11.5%	10.8%	9.5%	9.0%	12.2%	(2.7%)
Hickory	11.2%	9.7%	9.0%	8.6%	8.1%	8.2%	8.5%	7.5%	7.0%	7.5%	(3.7%)
Holt	4.2%	4.4%	4.0%	4.0%	3.7%	3.8%	2.6%	2.2%	2.2%	2.2%	(2.0%)
Howard	24.6%	22.9%	22.2%	21.9%	20.1%	19.6%	17.0%	14.9%	15.4%	19.4%	(5.2%)
Howell	23.1%	23.3%	21.3%	20.5%	19.5%	18.9%	18.4%	17.6%	17.7%	19.6%	(3.4%)
Iron	36.9%	35.8%	33.5%	31.5%	30.3%	29.0%	27.0%	24.5%	23.5%	21.7%	(15.3%)
Jackson	11.9%	11.1%	10.8%	10.9%	10.5%	10.3%	10.0%	9.0%	8.4%	7.8%	(4.0%)
Jasper	15.6%	14.1%	13.7%	13.4%	12.6%	12.0%	12.5%	11.7%	11.4%	12.7%	(2.9%)
Jefferson	57.8%	56.6%	55.6%	54.1%	53.2%	51.8%	50.5%	47.5%	45.8%	44.5%	(13.3%)
Johnson	13.1%	12.3%	12.0%	12.1%	11.7%	11.1%	10.5%	9.7%	9.2%	8.9%	(4.2%)
Knox	11.8%	10.2%	9.7%	10.3%	8.3%	8.4%	6.6%	5.2%	4.8%	4.4%	(7.4%)
Laclede	19.1%	17.4%	16.8%	15.6%	15.2%	14.5%	14.0%	12.8%	12.9%	13.4%	(5.8%)
Lafayette	15.1%	13.2%	13.1%	12.9%	11.8%	11.3%	10.5%	10.0%	9.4%	9.1%	(6.1%)
Lawrence	9.1%	8.1%	8.0%	7.6%	6.8%	6.3%	6.0%	5.3%	5.0%	5.5%	(3.6%)

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Lewis	16.1%	13.6%	13.1%	12.6%	10.7%	9.7%	9.4%	8.8%	8.5%	7.9%	(8.3%)
Lincoln	44.0%	42.0%	40.9%	38.6%	38.0%	36.5%	35.2%	34.0%	32.8%	31.4%	(12.6%)
Linn	21.1%	19.2%	18.1%	16.7%	15.4%	14.4%	13.8%	11.0%	9.5%	14.3%	(6.8%)
Livingston	10.9%	9.8%	9.6%	9.1%	8.6%	8.0%	7.1%	6.6%	6.5%	7.7%	(3.1%)
McDonald	5.7%	5.7%	5.7%	5.9%	5.2%	5.1%	5.2%	4.9%	4.7%	5.0%	(0.8%)
Macon	17.0%	14.6%	13.8%	13.1%	12.0%	11.6%	10.9%	9.6%	9.3%	9.7%	(7.3%)
Madison	40.6%	37.9%	38.7%	38.8%	36.9%	35.0%	34.4%	30.7%	30.5%	29.1%	(11.6%)
Maries	23.0%	24.1%	24.1%	22.7%	21.5%	19.3%	18.1%	16.6%	15.6%	16.5%	(6.5%)
Marion	33.1%	28.8%	28.4%	28.0%	26.3%	25.1%	23.7%	22.0%	21.5%	20.0%	(13.1%)
Mercer	6.1%	5.2%	4.7%	5.0%	4.1%	4.0%	2.9%	2.4%	2.2%	3.4%	(2.7%)
Miller	18.1%	16.7%	16.5%	15.6%	14.5%	13.6%	13.4%	12.5%	12.3%	13.2%	(4.9%)
Mississippi	13.7%	13.3%	12.5%	11.0%	8.7%	9.0%	9.1%	8.7%	8.0%	7.7%	(6.0%)
Moniteau	18.0%	16.4%	15.8%	16.1%	15.0%	14.5%	13.3%	12.6%	11.3%	13.2%	(4.8%)
Monroe	19.5%	18.1%	17.1%	16.9%	13.4%	14.3%	13.2%	11.2%	10.5%	13.3%	(6.2%)
Montgomery	35.1%	31.7%	31.2%	31.1%	29.6%	28.9%	25.5%	24.9%	23.4%	21.7%	(13.4%)
Morgan	27.6%	26.8%	26.5%	24.9%	24.0%	22.8%	21.7%	20.3%	19.3%	19.8%	(7.8%)
New Madrid	15.7%	14.9%	14.3%	13.2%	12.3%	11.4%	12.0%	10.9%	10.6%	12.0%	(3.6%)
Newton	9.5%	9.0%	9.0%	8.9%	8.2%	8.0%	7.7%	7.4%	7.0%	8.3%	(1.3%)
Nodaway	5.4%	4.4%	4.5%	4.6%	4.0%	4.1%	4.0%	4.1%	3.6%	3.2%	(2.1%)
Oregon	24.2%	23.5%	21.4%	19.9%	18.4%	17.1%	16.1%	14.9%	15.3%	15.3%	(8.9%)
Osage	23.4%	20.6%	20.4%	20.1%	18.3%	17.9%	16.8%	15.5%	15.2%	18.8%	(4.6%)
Ozark	13.7%	12.9%	12.0%	12.3%	12.4%	11.2%	10.5%	9.9%	10.0%	13.3%	(0.4%)
Pemiscot	10.4%	12.3%	12.3%	11.5%	11.0%	10.7%	9.8%	8.5%	8.8%	7.9%	(2.5%)
Perry	69.0%	66.8%	66.4%	64.7%	58.5%	54.2%	48.6%	46.9%	45.9%	40.6%	(28.4%)
Pettis	17.8%	16.1%	15.8%	16.0%	15.6%	14.9%	14.5%	13.8%	13.0%	13.1%	(4.7%)
Phelps	27.2%	24.4%	23.9%	23.5%	22.2%	21.2%	20.7%	19.7%	19.1%	20.0%	(7.2%)
Pike	31.5%	25.4%	24.9%	23.5%	22.0%	20.8%	19.5%	18.4%	18.6%	18.4%	(13.1%)
Platte	12.4%	12.1%	12.2%	12.3%	12.3%	12.2%	11.8%	10.8%	10.1%	9.7%	(2.7%)
Polk	10.4%	10.0%	9.6%	8.7%	8.3%	8.2%	8.1%	7.5%	7.1%	8.1%	(2.3%)

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Pulaski	12.8%	13.9%	13.7%	13.4%	12.7%	12.2%	11.6%	10.6%	10.5%	10.7%	(2.0%)
Putnam	7.6%	7.3%	7.1%	6.6%	6.4%	6.4%	5.9%	5.4%	5.0%	4.6%	(3.0%)
Ralls	28.3%	24.5%	23.7%	24.4%	20.6%	20.3%	16.9%	15.6%	14.5%	13.4%	(14.9%)
Randolph	19.7%	17.0%	16.3%	15.5%	13.9%	13.1%	12.4%	10.4%	10.0%	10.7%	(9.1%)
Ray	11.1%	10.3%	10.0%	9.5%	8.7%	8.2%	7.4%	6.7%	6.2%	6.0%	(5.1%)
Reynolds	22.4%	18.7%	19.1%	18.5%	17.6%	17.0%	16.3%	15.5%	15.1%	13.3%	(9.1%)
Ripley	20.7%	18.0%	17.2%	16.9%	16.0%	15.1%	14.2%	13.3%	12.3%	10.7%	(10.0%)
St. Charles	64.1%	63.6%	62.0%	60.6%	60.1%	58.7%	56.4%	52.5%	49.5%	48.8%	(15.3%)
St. Clair	5.7%	5.9%	5.6%	5.6%	5.4%	5.3%	5.0%	5.0%	4.9%	5.3%	(0.4%)
Ste. Genevieve	66.1%	64.0%	61.8%	59.2%	54.0%	53.2%	48.6%	45.9%	44.3%	42.7%	(23.4%)
St. Francois	52.7%	50.7%	49.3%	48.0%	45.2%	44.7%	43.3%	40.1%	38.3%	37.9%	(14.7%)
St. Louis	59.7%	57.8%	56.0%	54.4%	53.1%	52.4%	50.3%	46.1%	44.3%	43.1%	(16.6%)
Saline	22.2%	18.3%	18.5%	17.3%	15.8%	14.6%	13.8%	12.4%	12.1%	13.8%	(8.4%)
Schuyler	6.0%	6.4%	6.4%	6.0%	5.2%	4.5%	3.7%	3.3%	2.8%	3.0%	(3.0%)
Scotland	10.4%	9.4%	9.3%	7.9%	5.8%	6.0%	4.6%	4.0%	3.3%	2.8%	(7.6%)
Scott	25.4%	22.7%	21.8%	19.5%	18.0%	15.4%	15.4%	13.4%	12.4%	12.5%	(12.8%)
Shannon	16.4%	17.0%	16.7%	15.7%	14.7%	13.8%	13.4%	12.9%	13.0%	14.4%	(1.9%)
Shelby	15.1%	14.3%	14.0%	13.6%	10.5%	11.1%	9.6%	9.1%	9.2%	8.8%	(6.3%)
Stoddard	24.0%	20.7%	19.2%	17.2%	15.3%	13.6%	13.4%	12.6%	12.2%	12.8%	(11.1%)
Stone	16.4%	14.8%	14.6%	14.8%	14.5%	13.8%	13.7%	12.9%	12.2%	12.5%	(3.9%)
Sullivan	5.6%	5.7%	5.5%	5.2%	4.7%	4.4%	3.7%	3.3%	3.5%	3.1%	(2.6%)
Taney	18.7%	16.8%	16.5%	16.6%	16.2%	15.4%	15.1%	13.7%	12.9%	14.1%	(4.6%)
Texas	12.6%	11.8%	11.9%	11.7%	10.9%	10.3%	9.6%	8.9%	9.0%	10.2%	(2.4%)
Vernon	9.4%	8.6%	9.5%	9.0%	8.6%	8.0%	6.9%	6.6%	6.0%	6.8%	(2.6%)
Warren	51.2%	49.0%	47.9%	45.9%	45.1%	44.1%	41.6%	40.0%	38.6%	37.0%	(14.2%)
Washington	36.5%	36.1%	35.3%	34.6%	30.9%	29.8%	27.7%	26.4%	24.6%	23.4%	(13.2%)
Wayne	20.8%	18.8%	18.3%	17.7%	16.8%	16.0%	15.3%	14.5%	13.7%	12.9%	(8.0%)
Webster	10.5%	10.8%	10.2%	10.1%	9.4%	9.0%	8.8%	8.2%	7.9%	9.1%	(1.4%)
Worth	5.7%	4.4%	4.1%	6.0%	4.8%	3.7%	3.0%	3.1%	2.4%	2.2%	(3.5%)

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Wright	12.6%	11.8%	10.6%	10.5%	9.1%	8.9%	7.4%	6.6%	6.1%	8.7%	(3.8%)
St. Louis City	33.2%	30.5%	29.0%	27.5%	26.1%	25.8%	24.3%	21.2%	20.2%	18.7%	(14.4%)
Missouri Totals	32.8%	30.6%	29.7%	28.7%	27.8%	26.8%	25.9%	24.0%	22.9%	23.3%	(9.6%)

COST OF EARTHQUAKE COVERAGE, \$140-\$249K COVERAGE LIMITS PERCENTAGE POINT CHANGE, PRIOR TEN YEARS



AVERAGE ANNUAL COST OF EARTHQUAKE COVERAGE, \$140-\$249K COVERAGE LIMITS

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Adair	\$50	\$54	\$55	\$57	\$58	\$59	\$58	\$60	\$61	\$61	22.0%
Andrew	\$53	\$56	\$57	\$60	\$64	\$63	\$64	\$66	\$66	\$62	17.0%
Atchison	\$70	\$64	\$65	\$68	\$69	\$74	\$68	\$65	\$65	\$63	-10.0%
Audrain	\$60	\$63	\$65	\$64	\$68	\$68	\$68	\$68	\$68	\$69	15.0%
Barry	\$53	\$58	\$62	\$63	\$64	\$64	\$65	\$66	\$66	\$67	26.4%
Barton	\$52	\$60	\$64	\$62	\$66	\$67	\$64	\$66	\$66	\$70	34.6%
Bates	\$61	\$61	\$65	\$68	\$69	\$70	\$72	\$70	\$62	\$67	9.8%
Benton	\$53	\$55	\$56	\$58	\$63	\$63	\$61	\$61	\$62	\$61	15.1%
Bollinger	\$122	\$137	\$140	\$149	\$154	\$159	\$154	\$158	\$160	\$158	29.5%
Boone	\$59	\$62	\$63	\$64	\$66	\$67	\$68	\$70	\$70	\$69	16.9%
Buchanan	\$53	\$55	\$58	\$59	\$63	\$63	\$63	\$65	\$64	\$62	17.0%
Butler	\$217	\$214	\$217	\$240	\$260	\$275	\$298	\$308	\$312	\$330	52.1%
Caldwell	\$59	\$59	\$58	\$61	\$63	\$62	\$64	\$60	\$66	\$67	13.6%
Callaway	\$59	\$63	\$64	\$66	\$70	\$70	\$69	\$70	\$70	\$71	20.3%
Camden	\$52	\$55	\$57	\$59	\$61	\$62	\$61	\$63	\$61	\$63	21.2%
Cape Girardeau	\$193	\$200	\$201	\$222	\$237	\$245	\$256	\$262	\$272	\$279	44.6%
Carroll	\$52	\$58	\$56	\$58	\$61	\$59	\$60	\$60	\$61	\$62	19.2%
Carter	\$95	\$101	\$107	\$111	\$125	\$123	\$130	\$127	\$134	\$137	44.2%
Cass	\$54	\$57	\$60	\$60	\$64	\$65	\$68	\$68	\$68	\$67	24.1%
Cedar	\$59	\$70	\$68	\$65	\$67	\$61	\$58	\$63	\$65	\$71	20.3%
Chariton	\$45	\$52	\$55	\$58	\$65	\$65	\$69	\$63	\$65	\$66	46.7%
Christian	\$56	\$58	\$60	\$60	\$62	\$62	\$64	\$65	\$62	\$66	17.9%
Clark	\$49	\$50	\$50	\$53	\$55	\$55	\$56	\$57	\$60	\$61	24.5%
Clay	\$51	\$53	\$56	\$58	\$61	\$63	\$64	\$66	\$66	\$69	35.3%
Clinton	\$49	\$53	\$55	\$57	\$60	\$61	\$61	\$66	\$61	\$62	26.5%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Cole	\$64	\$69	\$70	\$73	\$76	\$77	\$79	\$80	\$82	\$81	26.6%
Cooper	\$54	\$62	\$62	\$64	\$67	\$65	\$65	\$70	\$72	\$70	29.6%
Crawford	\$60	\$63	\$64	\$65	\$69	\$70	\$70	\$71	\$71	\$71	18.3%
Dade	\$53	\$56	\$58	\$62	\$63	\$68	\$68	\$66	\$66	\$66	24.5%
Dallas	\$62	\$67	\$61	\$61	\$65	\$62	\$58	\$60	\$60	\$60	-3.2%
Daviss	\$52	\$54	\$56	\$63	\$65	\$60	\$63	\$60	\$62	\$63	21.2%
DeKalb	\$51	\$57	\$61	\$64	\$67	\$65	\$70	\$71	\$69	\$65	27.5%
Dent	\$59	\$62	\$64	\$66	\$72	\$70	\$71	\$70	\$69	\$69	16.9%
Douglas	\$49	\$52	\$52	\$55	\$56	\$59	\$60	\$60	\$60	\$61	24.5%
Dunklin	\$402	\$507	\$506	\$538	\$568	\$574	\$602	\$614	\$655	\$646	60.7%
Franklin	\$75	\$76	\$79	\$83	\$91	\$93	\$97	\$101	\$101	\$102	36.0%
Gasconade	\$63	\$66	\$68	\$74	\$76	\$78	\$78	\$75	\$72	\$76	20.6%
Gentry	\$61	\$62	\$69	\$72	\$71	\$68	\$67	\$67	\$70	\$71	16.4%
Greene	\$56	\$59	\$61	\$63	\$63	\$64	\$65	\$65	\$65	\$66	17.9%
Grundy	\$53	\$57	\$57	\$58	\$65	\$59	\$65	\$62	\$65	\$73	37.7%
Harrison	\$58	\$58	\$66	\$64	\$57	\$56	\$60	\$64	\$66	\$61	5.2%
Henry	\$54	\$57	\$57	\$60	\$62	\$61	\$61	\$61	\$62	\$58	7.4%
Hickory	\$55	\$58	\$54	\$55	\$59	\$59	\$54	\$58	\$58	\$54	-1.8%
Holt	\$66	\$71	\$68	\$75	\$77	\$80	\$81	\$73	\$78	\$66	0.0%
Howard	\$52	\$57	\$59	\$62	\$63	\$63	\$62	\$62	\$66	\$66	26.9%
Howell	\$64	\$68	\$69	\$69	\$73	\$72	\$73	\$75	\$75	\$75	17.2%
Iron	\$80	\$88	\$89	\$94	\$103	\$106	\$107	\$109	\$112	\$114	42.5%
Jackson	\$54	\$56	\$58	\$60	\$63	\$65	\$66	\$68	\$69	\$71	31.5%
Jasper	\$52	\$55	\$57	\$58	\$60	\$61	\$62	\$62	\$63	\$63	21.2%
Jefferson	\$84	\$89	\$91	\$97	\$106	\$108	\$115	\$120	\$121	\$123	46.4%
Johnson	\$57	\$57	\$58	\$61	\$64	\$65	\$63	\$65	\$65	\$62	8.8%
Knox	\$57	\$59	\$58	\$59	\$59	\$61	\$60	\$60	\$65	\$57	0.0%
Laclede	\$55	\$58	\$60	\$60	\$63	\$62	\$63	\$63	\$63	\$61	10.9%
Lafayette	\$53	\$55	\$57	\$60	\$62	\$62	\$61	\$64	\$64	\$64	20.8%

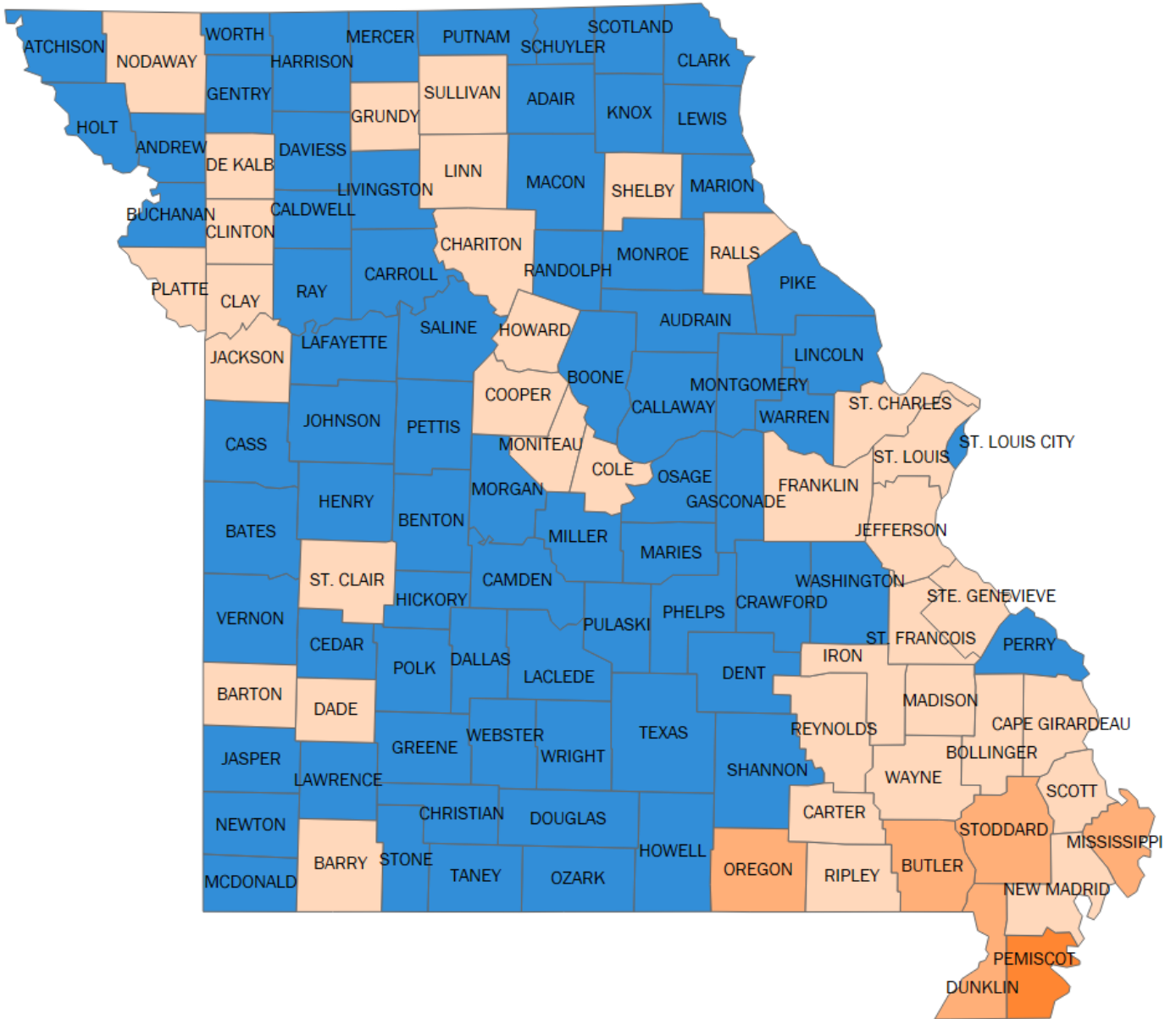
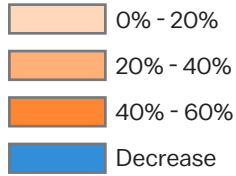
County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Lawrence	\$59	\$64	\$64	\$68	\$66	\$64	\$64	\$64	\$61	\$61	3.4%
Lewis	\$54	\$58	\$64	\$72	\$57	\$66	\$61	\$62	\$60	\$65	20.4%
Lincoln	\$61	\$62	\$64	\$67	\$71	\$72	\$72	\$75	\$75	\$73	19.7%
Linn	\$47	\$49	\$48	\$50	\$53	\$55	\$56	\$56	\$60	\$60	27.7%
Livingston	\$50	\$49	\$52	\$54	\$57	\$57	\$58	\$62	\$60	\$58	16.0%
McDonald	\$53	\$61	\$62	\$63	\$62	\$64	\$64	\$63	\$62	\$59	11.3%
Macon	\$50	\$54	\$56	\$57	\$60	\$59	\$68	\$59	\$59	\$58	16.0%
Madison	\$90	\$116	\$113	\$118	\$129	\$132	\$132	\$133	\$136	\$134	48.9%
Maries	\$59	\$63	\$66	\$68	\$71	\$68	\$69	\$64	\$66	\$67	13.6%
Marion	\$55	\$56	\$59	\$62	\$65	\$65	\$65	\$66	\$65	\$64	16.4%
Mercer	\$62	\$54	\$69	\$69	\$68	\$48	\$61	\$69	\$69	\$69	11.3%
Miller	\$54	\$58	\$60	\$61	\$61	\$59	\$59	\$61	\$59	\$62	14.8%
Mississippi	\$342	\$407	\$375	\$385	\$454	\$476	\$510	\$524	\$541	\$544	59.1%
Moniteau	\$50	\$58	\$60	\$64	\$65	\$65	\$66	\$65	\$64	\$63	26.0%
Monroe	\$53	\$59	\$59	\$64	\$64	\$64	\$66	\$65	\$66	\$61	15.1%
Montgomery	\$59	\$64	\$64	\$68	\$72	\$73	\$72	\$73	\$70	\$68	15.3%
Morgan	\$51	\$56	\$57	\$59	\$61	\$61	\$61	\$61	\$62	\$62	21.6%
New Madrid	\$429	\$482	\$476	\$516	\$580	\$572	\$595	\$624	\$593	\$575	34.0%
Newton	\$53	\$58	\$62	\$60	\$62	\$63	\$64	\$64	\$62	\$60	13.2%
Nodaway	\$51	\$57	\$60	\$57	\$63	\$65	\$65	\$68	\$60	\$65	27.5%
Oregon	\$70	\$102	\$92	\$103	\$104	\$105	\$105	\$104	\$107	\$108	54.3%
Osage	\$63	\$74	\$74	\$81	\$81	\$82	\$79	\$86	\$82	\$75	19.0%
Ozark	\$56	\$54	\$58	\$58	\$65	\$65	\$61	\$63	\$65	\$61	8.9%
Pemiscot	\$366	\$514	\$464	\$557	\$594	\$635	\$642	\$682	\$673	\$700	91.3%
Perry	\$119	\$127	\$127	\$133	\$142	\$144	\$147	\$146	\$151	\$148	24.4%
Pettis	\$53	\$56	\$55	\$56	\$57	\$58	\$58	\$60	\$60	\$60	13.2%
Phelps	\$61	\$68	\$64	\$68	\$72	\$73	\$71	\$74	\$73	\$71	16.4%
Pike	\$63	\$62	\$62	\$63	\$66	\$65	\$66	\$68	\$67	\$65	3.2%
Platte	\$56	\$59	\$61	\$63	\$65	\$67	\$68	\$71	\$71	\$74	32.1%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Polk	\$55	\$61	\$61	\$61	\$63	\$63	\$65	\$65	\$66	\$63	14.5%
Pulaski	\$74	\$71	\$69	\$72	\$73	\$76	\$75	\$72	\$72	\$77	4.1%
Putnam	\$62	\$69	\$70	\$76	\$81	\$84	\$75	\$80	\$65	\$60	-3.2%
Ralls	\$53	\$53	\$54	\$60	\$63	\$65	\$66	\$65	\$67	\$66	24.5%
Randolph	\$53	\$57	\$59	\$60	\$63	\$64	\$65	\$65	\$66	\$64	20.8%
Ray	\$53	\$56	\$57	\$64	\$65	\$67	\$66	\$67	\$64	\$65	22.6%
Reynolds	\$87	\$95	\$94	\$95	\$109	\$113	\$114	\$119	\$120	\$120	37.9%
Ripley	\$112	\$132	\$129	\$134	\$140	\$144	\$145	\$159	\$165	\$164	46.4%
St. Charles	\$84	\$86	\$89	\$96	\$107	\$110	\$115	\$119	\$120	\$121	44.0%
St. Clair	\$55	\$63	\$66	\$64	\$67	\$67	\$66	\$67	\$69	\$70	27.3%
Ste. Genevieve	\$107	\$124	\$124	\$128	\$138	\$138	\$138	\$144	\$149	\$143	33.6%
St. Francois	\$86	\$91	\$93	\$99	\$106	\$109	\$113	\$115	\$115	\$117	36.0%
St. Louis	\$102	\$103	\$105	\$111	\$122	\$123	\$128	\$132	\$133	\$132	29.4%
Saline	\$51	\$54	\$55	\$57	\$59	\$59	\$60	\$62	\$63	\$63	23.5%
Schuyler	\$69	\$82	\$90	\$70	\$70	\$67	\$63	\$64	\$71	\$61	-11.6%
Scotland	\$55	\$53	\$55	\$54	\$58	\$57	\$60	\$58	\$55	\$62	12.7%
Scott	\$387	\$418	\$419	\$477	\$508	\$541	\$545	\$553	\$584	\$579	49.6%
Shannon	\$78	\$101	\$98	\$100	\$103	\$101	\$101	\$100	\$103	\$97	24.4%
Shelby	\$52	\$56	\$58	\$57	\$62	\$61	\$58	\$64	\$68	\$65	25.0%
Stoddard	\$234	\$286	\$280	\$311	\$335	\$344	\$344	\$361	\$354	\$364	55.6%
Stone	\$54	\$56	\$57	\$60	\$64	\$63	\$62	\$63	\$62	\$60	11.1%
Sullivan	\$47	\$55	\$51	\$54	\$55	\$57	\$59	\$57	\$58	\$60	27.7%
Taney	\$53	\$55	\$56	\$58	\$60	\$61	\$62	\$62	\$64	\$65	22.6%
Texas	\$65	\$67	\$70	\$72	\$73	\$74	\$69	\$68	\$63	\$64	-1.5%
Vernon	\$55	\$57	\$64	\$58	\$64	\$60	\$59	\$58	\$59	\$60	9.1%
Warren	\$66	\$67	\$69	\$72	\$76	\$77	\$78	\$79	\$81	\$78	18.2%
Washington	\$72	\$74	\$76	\$80	\$85	\$83	\$82	\$83	\$83	\$81	12.5%
Wayne	\$119	\$138	\$132	\$139	\$148	\$149	\$153	\$157	\$159	\$159	33.6%
Webster	\$56	\$61	\$63	\$64	\$65	\$66	\$69	\$65	\$63	\$65	16.1%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Worth	\$68	\$63	\$53	\$56	\$62	\$64	\$62	\$53	\$56	\$61	-10.3%
Wright	\$55	\$62	\$64	\$68	\$69	\$69	\$69	\$69	\$67	\$68	23.6%
St. Louis City	\$134	\$129	\$130	\$136	\$143	\$144	\$146	\$150	\$151	\$151	12.7%
Missouri Total	\$91	\$93	\$95	\$101	\$108	\$110	\$114	\$117	\$119	\$122	34.1%

COST OF EARTHQUAKE COVERAGE, \$140-\$249K COVERAGE LIMITS

PERCENTAGE POINT CHANGE, PRIOR TEN YEARS, ADJUSTED FOR INFLATION



AVERAGE ANNUAL COST OF EARTHQUAKE COVERAGE, \$140-\$249K COVERAGE LIMITS ADJUSTED FOR INFLATION

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Adair	\$63	\$68	\$69	\$70	\$70	\$70	\$69	\$67	\$63	\$61	-3.2%
Andrew	\$66	\$71	\$71	\$73	\$77	\$75	\$76	\$74	\$68	\$62	-6.2%
Atchison	\$88	\$80	\$80	\$83	\$83	\$88	\$81	\$73	\$67	\$63	-27.8%
Audrain	\$75	\$78	\$81	\$78	\$81	\$81	\$81	\$76	\$70	\$69	-8.3%
Barry	\$67	\$73	\$77	\$77	\$77	\$76	\$77	\$74	\$69	\$67	0.2%
Barton	\$65	\$75	\$79	\$76	\$79	\$80	\$76	\$74	\$68	\$70	7.5%
Bates	\$77	\$76	\$81	\$84	\$83	\$84	\$85	\$78	\$65	\$67	-12.4%
Benton	\$66	\$69	\$70	\$70	\$76	\$75	\$72	\$68	\$64	\$61	-8.0%
Bollinger	\$152	\$172	\$174	\$182	\$186	\$189	\$182	\$177	\$166	\$158	3.9%
Boone	\$74	\$78	\$79	\$79	\$79	\$80	\$80	\$78	\$72	\$69	-5.9%
Buchanan	\$66	\$70	\$72	\$72	\$75	\$75	\$74	\$72	\$66	\$62	-5.8%
Butler	\$271	\$268	\$270	\$294	\$312	\$327	\$353	\$345	\$324	\$330	21.6%
Caldwell	\$73	\$74	\$73	\$74	\$75	\$74	\$75	\$67	\$69	\$67	-8.8%
Callaway	\$73	\$79	\$80	\$81	\$84	\$83	\$81	\$78	\$73	\$71	-3.4%
Camden	\$66	\$69	\$71	\$72	\$74	\$73	\$72	\$70	\$64	\$63	-4.6%
Cape Girardeau	\$241	\$250	\$250	\$271	\$285	\$291	\$302	\$293	\$283	\$279	16.1%
Carroll	\$65	\$72	\$70	\$71	\$73	\$71	\$71	\$68	\$64	\$62	-5.1%
Carter	\$119	\$127	\$133	\$136	\$151	\$146	\$154	\$142	\$140	\$137	15.6%
Cass	\$68	\$71	\$74	\$73	\$77	\$77	\$80	\$76	\$71	\$67	-1.0%
Cedar	\$73	\$87	\$85	\$80	\$80	\$72	\$69	\$70	\$67	\$71	-3.5%
Chariton	\$56	\$65	\$68	\$71	\$78	\$77	\$82	\$70	\$67	\$66	17.2%
Christian	\$70	\$73	\$74	\$73	\$75	\$74	\$76	\$73	\$65	\$66	-6.8%
Clark	\$62	\$63	\$62	\$65	\$66	\$65	\$66	\$64	\$62	\$61	-0.4%
Clay	\$64	\$67	\$69	\$71	\$74	\$75	\$75	\$74	\$69	\$69	8.0%
Clinton	\$61	\$67	\$69	\$70	\$73	\$72	\$72	\$74	\$63	\$62	1.7%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Cole	\$80	\$86	\$88	\$90	\$92	\$92	\$93	\$90	\$85	\$81	0.9%
Cooper	\$67	\$78	\$77	\$78	\$81	\$78	\$77	\$78	\$74	\$70	3.9%
Crawford	\$75	\$79	\$79	\$80	\$83	\$84	\$83	\$79	\$74	\$71	-5.6%
Dade	\$66	\$70	\$73	\$76	\$76	\$81	\$80	\$74	\$68	\$66	0.4%
Dallas	\$77	\$84	\$76	\$75	\$78	\$74	\$69	\$67	\$62	\$60	-22.9%
Davess	\$64	\$68	\$69	\$77	\$79	\$71	\$75	\$67	\$65	\$63	-2.6%
DeKalb	\$64	\$72	\$75	\$79	\$81	\$77	\$83	\$79	\$72	\$65	1.5%
Dent	\$74	\$78	\$79	\$81	\$86	\$84	\$83	\$78	\$71	\$69	-6.3%
Douglas	\$62	\$66	\$64	\$67	\$68	\$70	\$71	\$67	\$63	\$61	-0.5%
Dunklin	\$502	\$636	\$630	\$659	\$682	\$682	\$711	\$687	\$680	\$646	28.8%
Franklin	\$94	\$96	\$98	\$102	\$109	\$111	\$114	\$113	\$105	\$102	9.0%
Gasconade	\$79	\$83	\$85	\$90	\$91	\$93	\$92	\$84	\$75	\$76	-4.8%
Gentry	\$76	\$78	\$86	\$88	\$86	\$81	\$79	\$75	\$73	\$71	-6.9%
Greene	\$70	\$75	\$76	\$77	\$75	\$76	\$76	\$73	\$67	\$66	-6.2%
Grundy	\$66	\$72	\$71	\$71	\$78	\$71	\$77	\$70	\$68	\$73	10.6%
Harrison	\$73	\$73	\$82	\$79	\$69	\$66	\$71	\$72	\$69	\$61	-15.9%
Henry	\$67	\$71	\$71	\$73	\$74	\$72	\$72	\$68	\$65	\$58	-13.4%
Hickory	\$68	\$73	\$68	\$67	\$71	\$70	\$64	\$65	\$60	\$54	-20.1%
Holt	\$82	\$89	\$85	\$92	\$92	\$95	\$96	\$82	\$81	\$66	-19.3%
Howard	\$65	\$72	\$73	\$76	\$76	\$75	\$74	\$70	\$68	\$66	0.8%
Howell	\$80	\$85	\$85	\$84	\$87	\$85	\$87	\$84	\$78	\$75	-7.1%
Iron	\$100	\$111	\$110	\$115	\$123	\$126	\$127	\$122	\$117	\$114	14.6%
Jackson	\$67	\$70	\$72	\$74	\$76	\$78	\$78	\$76	\$72	\$71	4.9%
Jasper	\$65	\$69	\$71	\$71	\$72	\$73	\$73	\$70	\$65	\$63	-3.9%
Jefferson	\$105	\$111	\$113	\$119	\$128	\$129	\$136	\$134	\$126	\$123	17.1%
Johnson	\$71	\$72	\$72	\$75	\$77	\$77	\$74	\$73	\$67	\$62	-12.7%
Knox	\$72	\$74	\$73	\$73	\$70	\$73	\$71	\$67	\$68	\$57	-19.8%
Laclede	\$69	\$72	\$74	\$73	\$75	\$74	\$74	\$70	\$65	\$61	-10.3%
Lafayette	\$66	\$69	\$71	\$73	\$75	\$74	\$72	\$72	\$66	\$64	-2.7%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Lawrence	\$74	\$80	\$79	\$83	\$79	\$76	\$75	\$71	\$63	\$61	-17.2%
Lewis	\$67	\$73	\$80	\$88	\$69	\$78	\$72	\$70	\$63	\$65	-3.0%
Lincoln	\$77	\$78	\$79	\$82	\$85	\$86	\$85	\$84	\$77	\$73	-5.2%
Linn	\$59	\$61	\$60	\$61	\$64	\$65	\$66	\$63	\$62	\$60	1.9%
Livingston	\$62	\$61	\$65	\$66	\$69	\$68	\$68	\$70	\$62	\$58	-7.3%
McDonald	\$67	\$76	\$77	\$77	\$74	\$76	\$76	\$71	\$64	\$59	-11.7%
Macon	\$63	\$67	\$69	\$70	\$72	\$70	\$81	\$66	\$61	\$58	-7.2%
Madison	\$112	\$146	\$141	\$145	\$155	\$157	\$156	\$149	\$141	\$134	19.5%
Maries	\$73	\$78	\$82	\$84	\$86	\$81	\$81	\$72	\$68	\$67	-8.0%
Marion	\$69	\$71	\$73	\$76	\$78	\$77	\$77	\$74	\$68	\$64	-6.4%
Mercer	\$78	\$68	\$86	\$85	\$81	\$57	\$73	\$78	\$72	\$69	-11.0%
Miller	\$68	\$73	\$74	\$75	\$74	\$70	\$69	\$68	\$62	\$62	-8.2%
Mississippi	\$427	\$510	\$467	\$472	\$545	\$566	\$602	\$586	\$561	\$544	27.5%
Moniteau	\$62	\$73	\$75	\$78	\$78	\$77	\$78	\$73	\$66	\$63	2.4%
Monroe	\$66	\$74	\$73	\$78	\$76	\$77	\$78	\$73	\$69	\$61	-8.2%
Montgomery	\$74	\$80	\$79	\$84	\$87	\$87	\$86	\$82	\$73	\$68	-8.7%
Morgan	\$64	\$70	\$71	\$72	\$74	\$73	\$72	\$69	\$65	\$62	-1.9%
New Madrid	\$536	\$604	\$593	\$631	\$698	\$680	\$703	\$698	\$615	\$575	7.3%
Newton	\$66	\$73	\$77	\$74	\$74	\$75	\$75	\$71	\$64	\$60	-8.4%
Nodaway	\$64	\$72	\$74	\$70	\$76	\$78	\$77	\$77	\$62	\$65	1.2%
Oregon	\$87	\$128	\$114	\$126	\$125	\$125	\$124	\$116	\$111	\$108	23.4%
Osage	\$78	\$93	\$92	\$100	\$98	\$97	\$93	\$96	\$85	\$75	-4.6%
Ozark	\$70	\$68	\$72	\$72	\$78	\$77	\$72	\$70	\$67	\$61	-12.8%
Pemiscot	\$458	\$645	\$577	\$682	\$715	\$755	\$759	\$763	\$699	\$700	53.0%
Perry	\$149	\$159	\$158	\$163	\$170	\$171	\$174	\$164	\$156	\$148	-0.4%
Pettis	\$66	\$70	\$68	\$68	\$68	\$70	\$69	\$67	\$63	\$60	-8.2%
Phelps	\$77	\$85	\$80	\$83	\$87	\$86	\$84	\$83	\$76	\$71	-7.2%
Pike	\$79	\$77	\$77	\$77	\$79	\$78	\$78	\$76	\$69	\$65	-18.0%
Platte	\$70	\$75	\$76	\$77	\$78	\$79	\$81	\$79	\$74	\$74	5.8%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Polk	\$68	\$77	\$76	\$74	\$76	\$75	\$77	\$73	\$68	\$63	-7.7%
Pulaski	\$93	\$89	\$85	\$89	\$87	\$90	\$89	\$81	\$75	\$77	-16.6%
Putnam	\$78	\$87	\$87	\$93	\$98	\$100	\$89	\$90	\$67	\$60	-22.5%
Ralls	\$66	\$66	\$67	\$73	\$76	\$77	\$78	\$73	\$69	\$66	1.2%
Randolph	\$67	\$72	\$73	\$74	\$76	\$77	\$77	\$73	\$68	\$64	-4.0%
Ray	\$66	\$70	\$71	\$78	\$78	\$80	\$78	\$75	\$67	\$65	-1.7%
Reynolds	\$109	\$120	\$117	\$117	\$131	\$134	\$134	\$133	\$124	\$120	10.1%
Ripley	\$140	\$165	\$160	\$163	\$168	\$171	\$171	\$178	\$171	\$164	17.1%
St. Charles	\$104	\$108	\$111	\$117	\$129	\$131	\$136	\$133	\$125	\$121	15.6%
St. Clair	\$69	\$79	\$82	\$78	\$80	\$80	\$78	\$75	\$72	\$70	1.9%
Ste. Genevieve	\$134	\$155	\$155	\$157	\$166	\$164	\$163	\$161	\$154	\$143	7.1%
St. Francois	\$108	\$114	\$116	\$122	\$128	\$129	\$133	\$129	\$120	\$117	8.0%
St. Louis	\$127	\$129	\$131	\$136	\$146	\$147	\$151	\$148	\$139	\$132	3.9%
Saline	\$63	\$67	\$68	\$70	\$71	\$70	\$71	\$69	\$66	\$63	-0.3%
Schuyler	\$87	\$103	\$112	\$86	\$84	\$79	\$75	\$72	\$74	\$61	-29.3%
Scotland	\$69	\$67	\$68	\$66	\$70	\$68	\$70	\$65	\$57	\$62	-9.9%
Scott	\$483	\$525	\$521	\$584	\$610	\$644	\$644	\$619	\$606	\$579	19.7%
Shannon	\$98	\$126	\$122	\$123	\$123	\$121	\$119	\$112	\$107	\$97	-0.5%
Shelby	\$65	\$70	\$72	\$70	\$74	\$73	\$69	\$71	\$71	\$65	0.5%
Stoddard	\$292	\$358	\$348	\$380	\$402	\$409	\$407	\$404	\$368	\$364	24.8%
Stone	\$68	\$70	\$71	\$73	\$77	\$75	\$74	\$70	\$64	\$60	-11.3%
Sullivan	\$59	\$69	\$63	\$66	\$66	\$68	\$70	\$64	\$60	\$60	1.6%
Taney	\$66	\$69	\$70	\$71	\$72	\$72	\$73	\$69	\$66	\$65	-1.0%
Texas	\$81	\$84	\$87	\$88	\$88	\$88	\$81	\$77	\$66	\$64	-21.1%
Vernon	\$69	\$71	\$79	\$71	\$77	\$72	\$70	\$65	\$61	\$60	-13.0%
Warren	\$82	\$84	\$86	\$88	\$91	\$91	\$92	\$89	\$84	\$78	-5.4%
Washington	\$90	\$93	\$94	\$98	\$102	\$99	\$97	\$93	\$86	\$81	-9.5%
Wayne	\$149	\$173	\$164	\$170	\$177	\$177	\$180	\$176	\$165	\$159	6.8%
Webster	\$70	\$77	\$78	\$79	\$78	\$79	\$82	\$73	\$66	\$65	-6.4%

County	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Difference
Worth	\$86	\$79	\$66	\$68	\$75	\$77	\$73	\$59	\$58	\$61	-28.8%
Wright	\$69	\$77	\$80	\$83	\$84	\$82	\$81	\$77	\$70	\$68	-0.6%
St. Louis City	\$167	\$162	\$162	\$167	\$172	\$172	\$172	\$168	\$157	\$151	-9.9%
Missouri Total	\$113	\$117	\$118	\$123	\$130	\$131	\$134	\$131	\$124	\$122	7.7%

4 AFFORDABILITY OF COVERAGE IN MISSOURI

In general, it is expected that premiums relate to the risk of the exposure. The following charts and maps explore the earthquake risk associated with covering homes in Missouri. The first chart looks at the average written premium adjusted for inflation and number of exposures over the last ten years for the New Madrid region. From this chart, it is important to note the significant decrease in exposure months. In contrast, total written premiums have remained steady for the past several years.

The map following the first chart shows the average premium per exposure for all counties in the State of Missouri. The average written premium per exposure gives an approximation of how expensive covering an exposure (house-month) is in the county. The seven counties in the New Madrid region, as well as the counties in the St. Louis region, show higher average premiums per exposure. The higher risk of insuring houses in this region may contribute to the higher premium per exposure.

To get a better sense of the relative cost of coverage in the riskier parts of the state, we pulled the median home values.¹ Considering that our zip code level data only collects data for homes which have earthquake coverage, market value data provides an even better picture of the housing market. This data was combined with written premium from the zip code data to produce the scatter plot below. This chart shows patterns which indicate where in the state lower valued homes pay higher premiums. Typically, one would expect the higher the median house value, the higher the premiums paid for that county. However, the scatter plot shows several counties which do not follow the expected pattern. In fact, five clusters were identified in the scatter plot using a clustering algorithm:

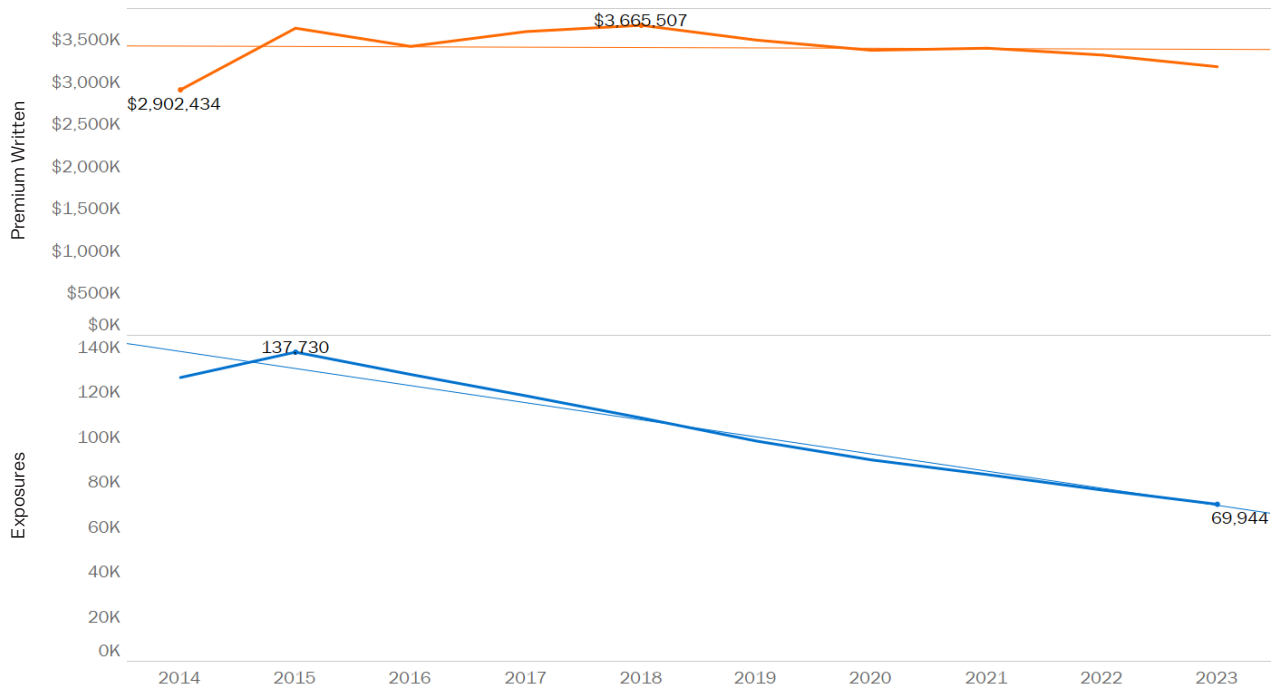
1. The light blue cluster indicates those counties which pay lower premiums for their lower than average home values.
2. The teal cluster (above the light blue) indicates those counties which pay higher premiums for their higher than average home values.
3. The dark blue cluster indicates those counties which pay the highest premiums in the state for about the same home values as those counties in the teal cluster.
4. The orange cluster indicates those counties which pay high premiums for their low home values.
5. The green cluster indicates those counties which pay relatively higher premiums than the teal and light blue clusters for their home values which fall between the dark blue and orange clusters.

We should note that the light blue and teal clusters fit the expectation that the higher the home value, the higher the premium charged. However, the dark blue, orange, and green clusters do not follow this pattern indicating that other factors, such as the risk of earthquake damage, play into the price which these counties are charged.

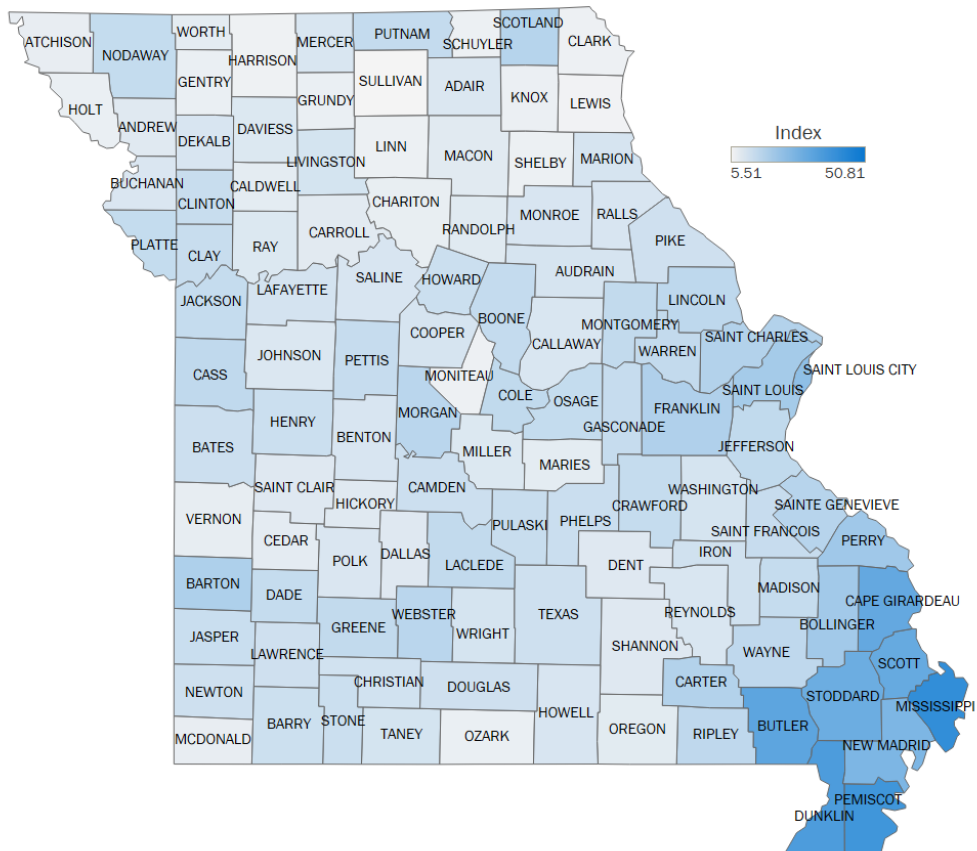
The final map shows the data presented in the scatter plot mapped by county. It is easy to see that the counties most at risk of earthquake damage are paying the highest premiums.

¹Median home values were pulled from the National Association of Realtors website.

WRITTEN PREMIUM AND EXPOSURES



AVERAGE WRITTEN PREMIUM PER EXPOSURE, 2023



MEDIAN MARKET VALUE VS. WRITTEN PREMIUM

BY MARKET VALUE OF HOUSE, 2023

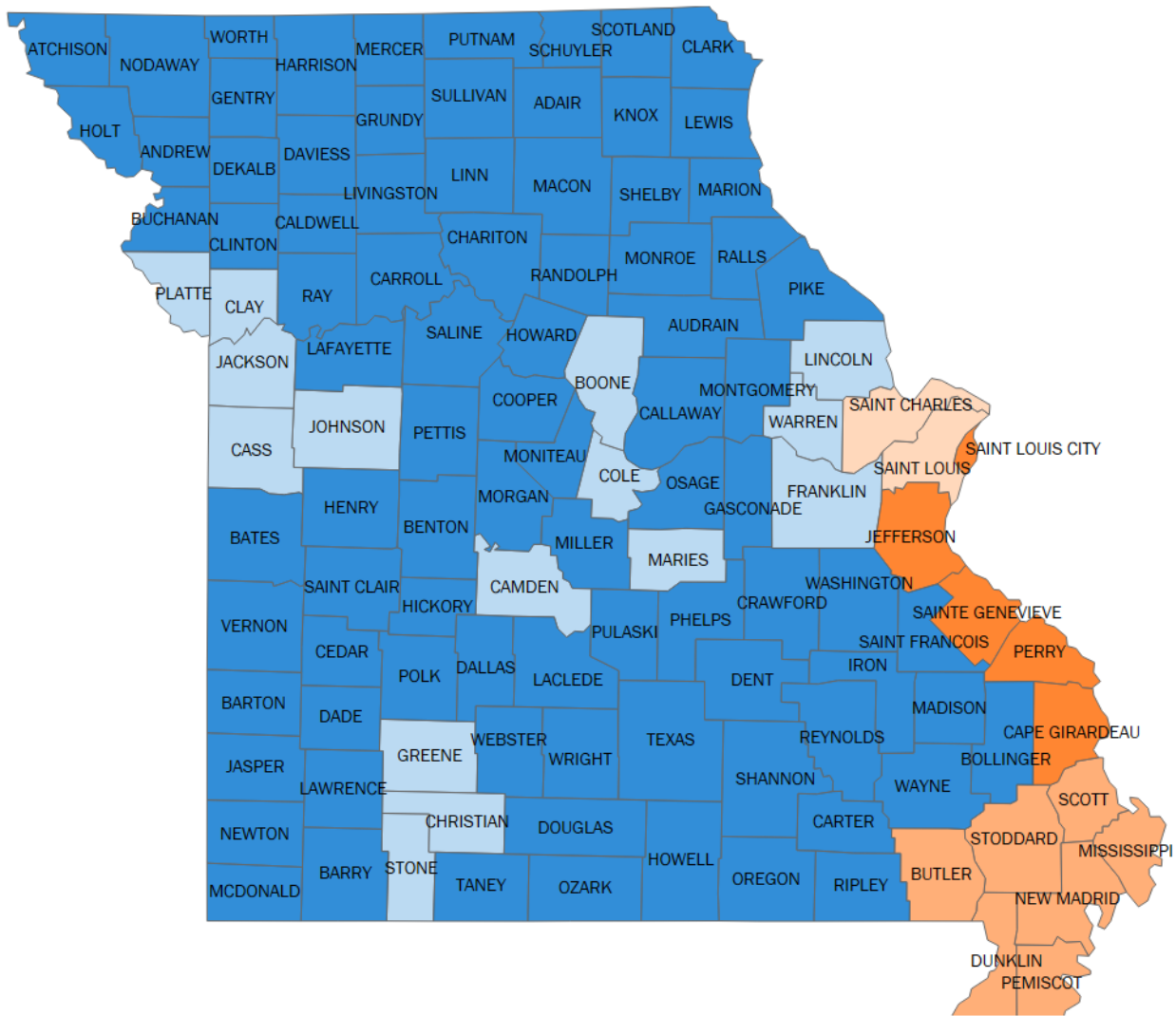
- High Median Home Price, High Premium
- High Median Home Price, Low Premium
- Medium Median Home Price, High Premium
- Low Median Home Price, High Premium
- Low Median Home Price, Low Premium



WRITTEN PREMIUM AND EXPOSURES

BY MARKET VALUE OF HOUSE, 2023

- High Median Home Price, High Premium
- High Median Home Price, Low Premium
- Medium Median Home Price, High Premium
- Low Median Home Price, High Premium
- Low Median Home Price, Low Premium



Source: Median home values were provided by the National Association of Realtors website.

5 DATA FROM DCI ANNUAL INSURER SURVEY

5.1 UNDERWRITING

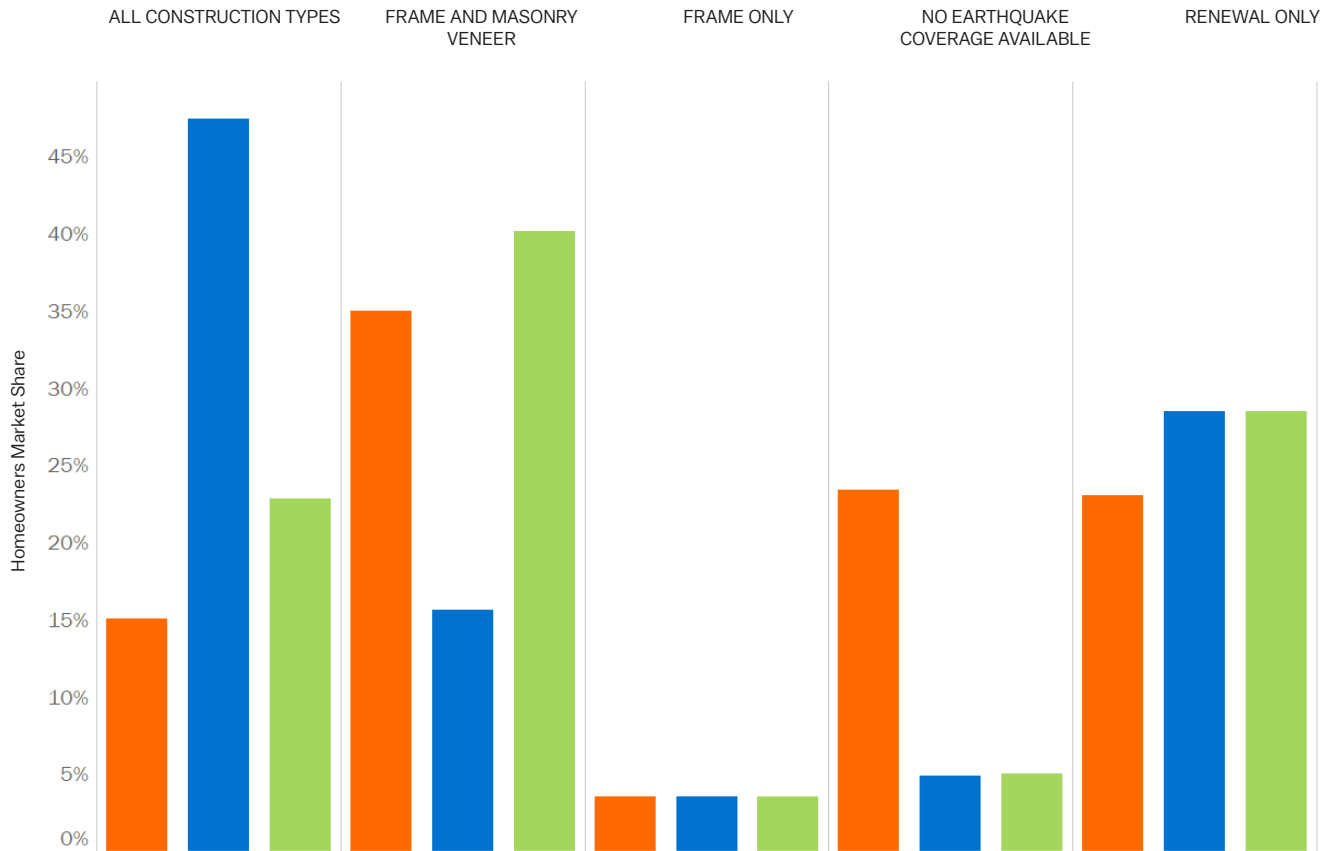
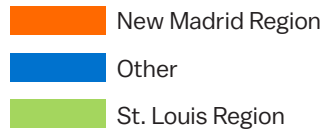
Insurers often make decisions about who they are willing to insure for earthquakes based on the construction type of a home. DCI surveyed homeowners insurers regarding their underwriting practices across five areas of the state. The tables below report the homeowners market share of insurers responses for each category or construction type.

For example, insurers comprising 13.9% of the homeowners market do not make any earthquake coverage available in the New Madrid area, and only 15.1% issue such coverage to all construction types (frame, masonry veneer, and solid masonry). Other characteristics of homes commonly used in underwriting include the location of the home (on a hill side, for example), and the number of stories a home has.

COVERAGE BY DWELLING TYPE AS A PERCENTAGE OF HOMEOWNERS MARKET, 2023

Dwelling Type	New Madrid Region	St. Louis Region	Remainder of Missouri
NO EARTHQUAKE COVERAGE AVAILABLE	23.37%	5.01%	4.89%
RENEWAL ONLY	23.07%	28.52%	28.52%
FRAME ONLY	3.52%	3.52%	3.52%
FRAME AND MASONRY VENEER	34.98%	40.12%	15.62%
ALL CONSTRUCTION TYPES	15.07%	22.84%	47.46%

AVAILABILITY OF EARTHQUAKE COVERAGE



5.2 DEDUCTIBLES

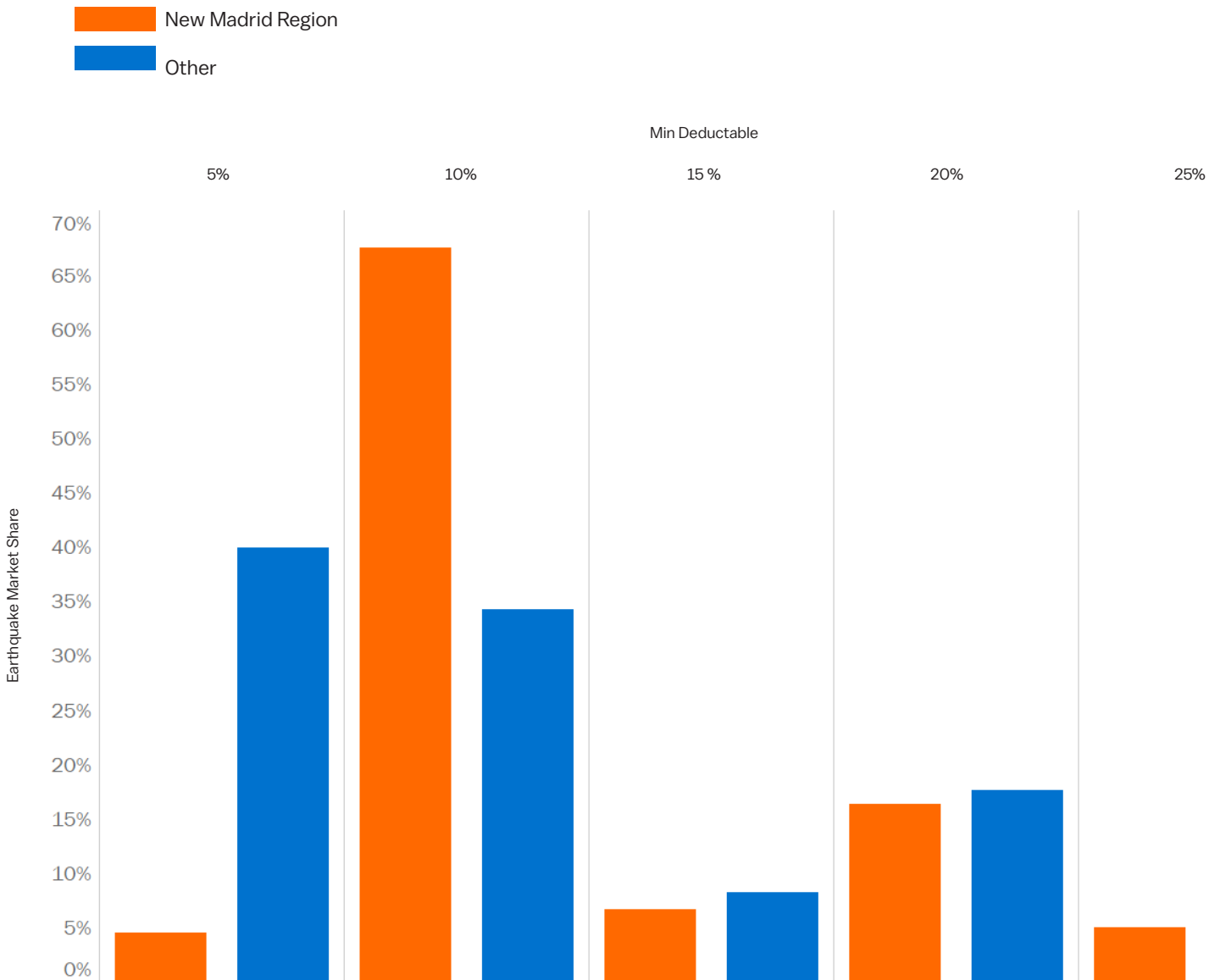
All insurers require insureds to retain a deductible, or the amount of property damage the insured must pay before insurance coverage is available. Most commonly, earthquake policies specify a deductible as a percentage of the value of the insured property. For example, if an insured purchases a policy on a \$200,000 home with a 10% deductible, the insurance policy would not cover the first \$20,000 of damage to the insured property.

The table below specifies the minimum available deductible in the New Madrid region compared to the remainder of the state. The values in the cell are the market share of the earthquake market of insurers offering each minimum deductible level. For example, insurers with 21.3% of the earthquake market in the New Madrid region require a deductible 20% or higher, with the highest of 25%. Only 4.5% of the market in the region offer policies with a deductible as low as 5%.

AVAILABILITY OF EARTHQUAKE COVERAGE AS A PERCENTAGE OF EARTHQUAKE MARKET BY MINIMUM AVAILABLE DEDUCTIBLE, 2023

Min. Available Deductible	New Madrid Region	Elsewhere in MO
5%	4.5%	40.0%
10%	67.6%	34.2%
15%	6.6%	8.2%
20%	16.3%	17.6%
25%	5.0%	0.0%

AVAILABILITY OF EARTHQUAKE COVERAGE AS A PERCENTAGE OF EARTHQUAKE MARKET BY MINIMUM AVAILABLE DEDUCTIBLE, 2023



Only 70% of the earthquake market in Missouri responded to our survey. Market shares were normalized to this percentage so that totals summed to 100%.

UPDATED: 09/24



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Missouri Department of Commerce & Insurance

