



A GUIDE TO CREATIVES IN
RURAL CALIFORNIA
Technical Appendix

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Rural Area Defintion Bay Area



Counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

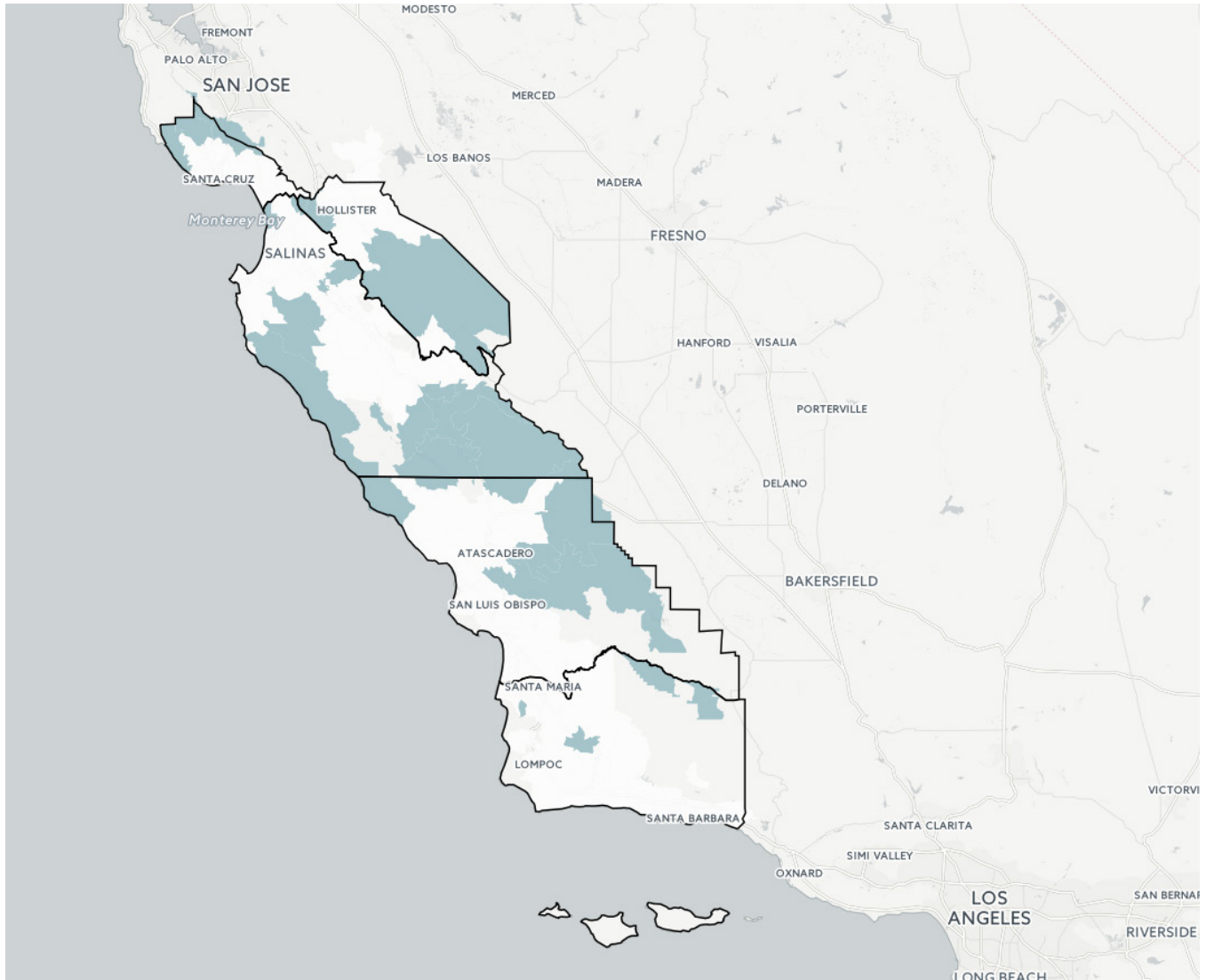
94020	94512	94586	94933	94950	94972	95430	95497
94021	94516	94922	94937	94956	95013	95439	95625
94060	94548	94923	94938	94963	95140	95441	
94074	94567	94924	94940	94970	95412	95450	
94508	94573	94929	94946	94971	95421	95465	

Rural Area Defintion **Central Coast**



Counties: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

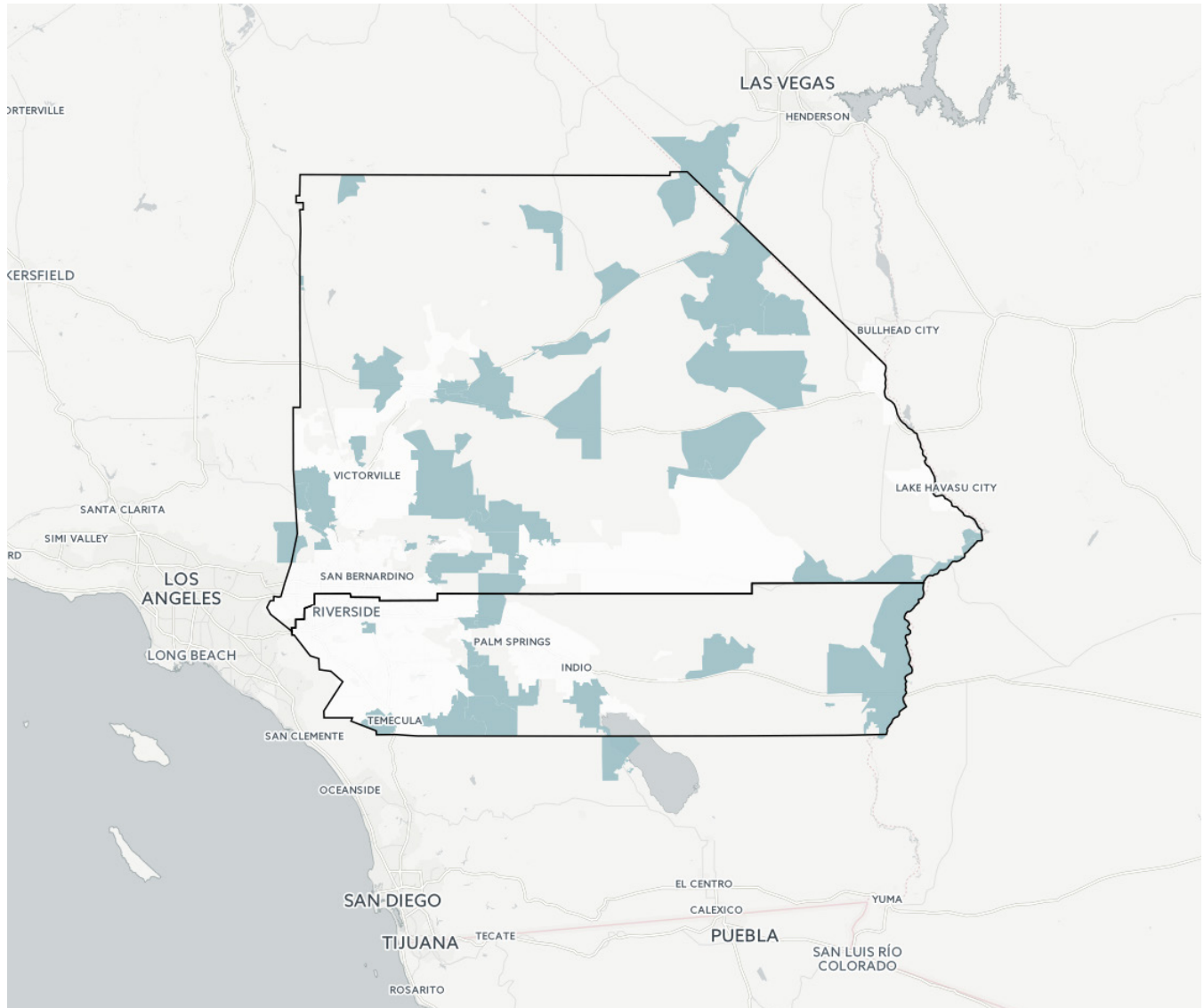
93254	93440	93453	93925	95004	95039
93426	93450	93461	93928	95006	95043
93429	93451	93920	93932	95017	95045
93432	93452	93924	93954	95033	

Rural Area Defintion **Inland Empire**



Counties: Riverside, San Bernardino

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

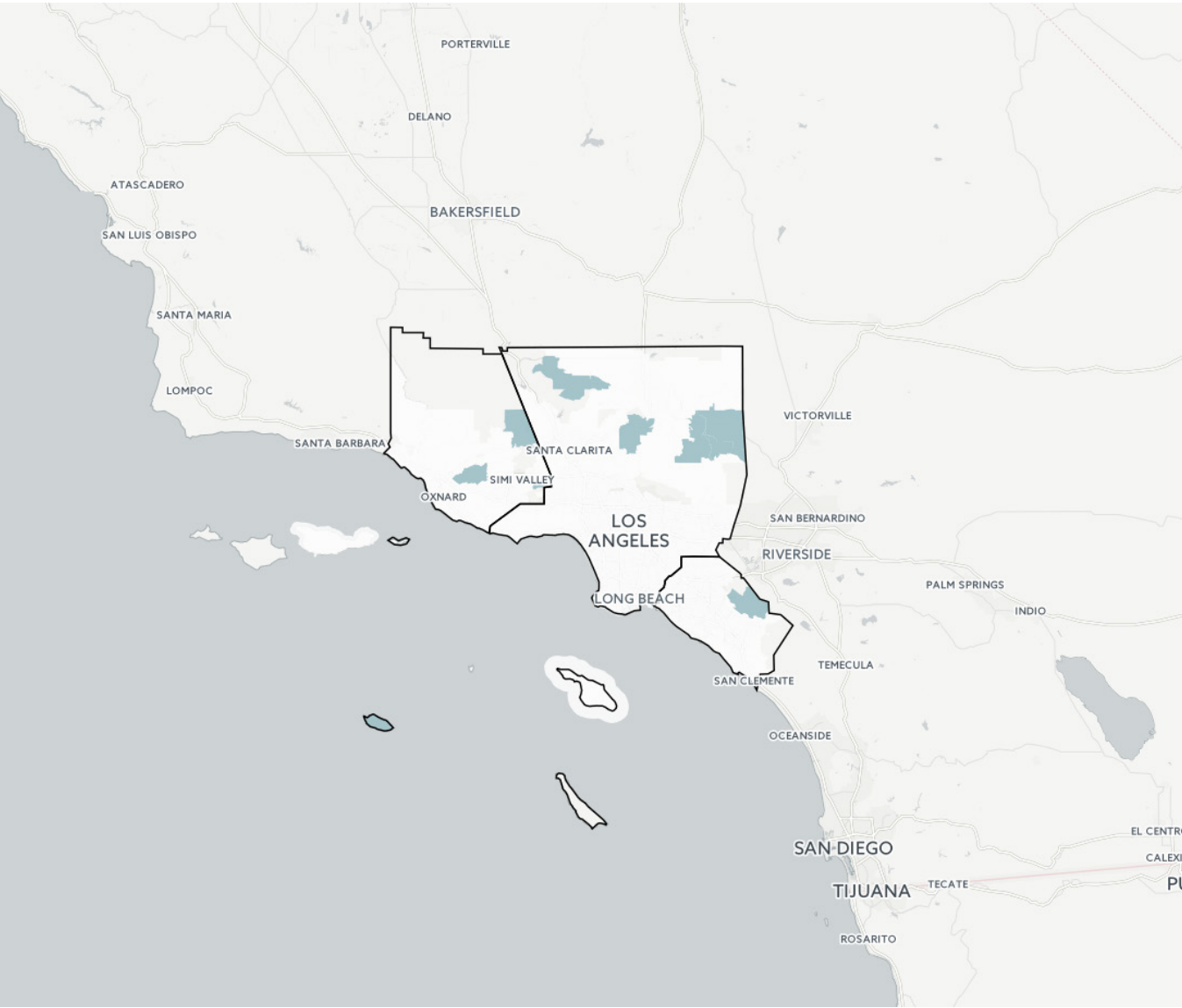
89019	92242	92280	92309	92339	92364	92398	92561
91759	92256	92282	92327	92341	92365	92518	92590
92225	92267	92285	92332	92347	92368	92536	93558
92230	92268	92304	92333	92356	92371	92539	93562
92239	92274	92305	92338	92358	92372	92549	

Rural Area Defintion **Los Angeles**



Counties: Los Angeles, Orange, Ventura

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

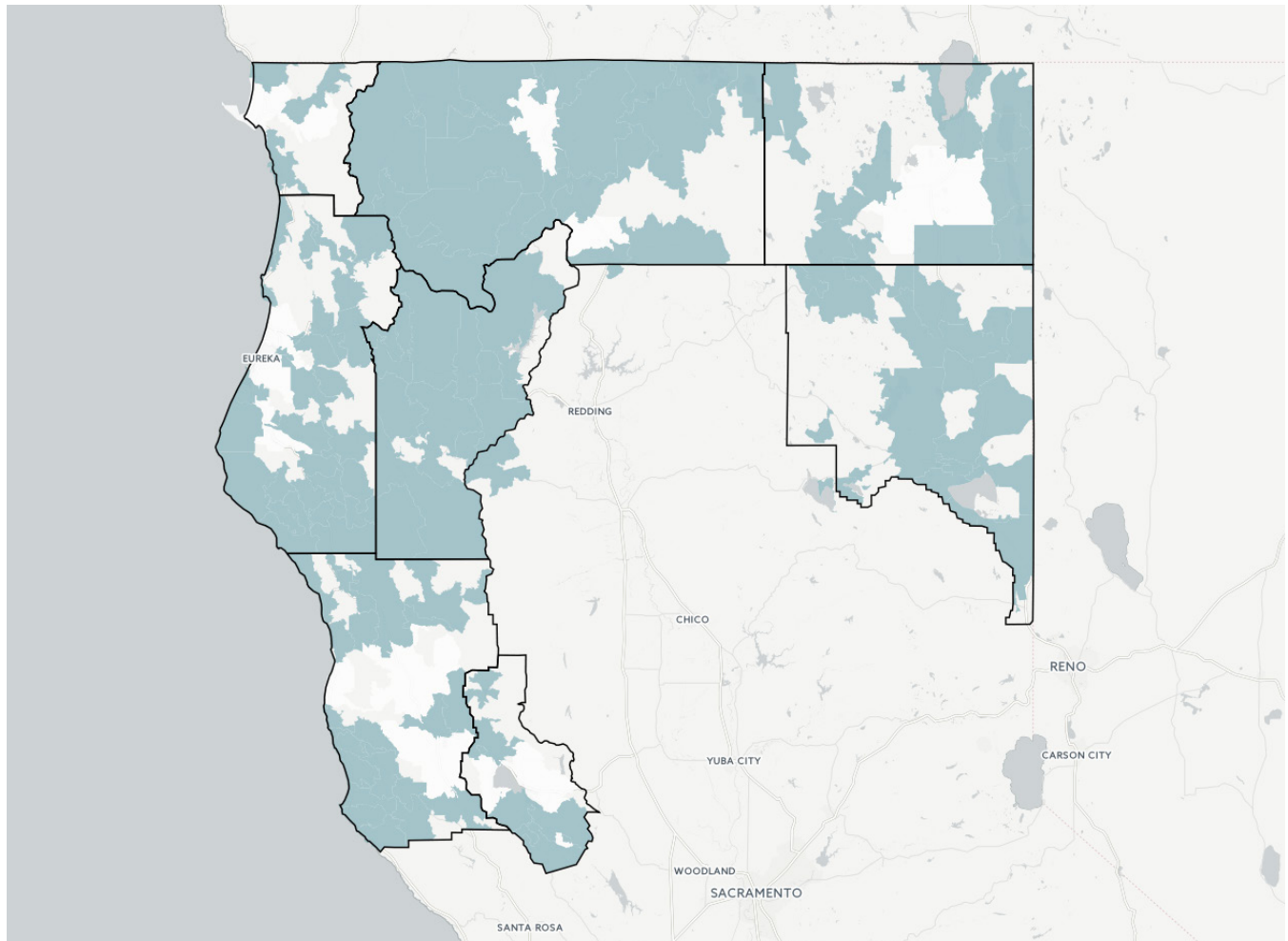
92676	93042	93066	93532	93553
93040	93064	93510	93544	93563

Rural Area Defintion **North Coast**



Counties: Del Norte, Humboldt, Lake, Lassen, Mendocino, Modoc, Siskiyou, Trinity

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

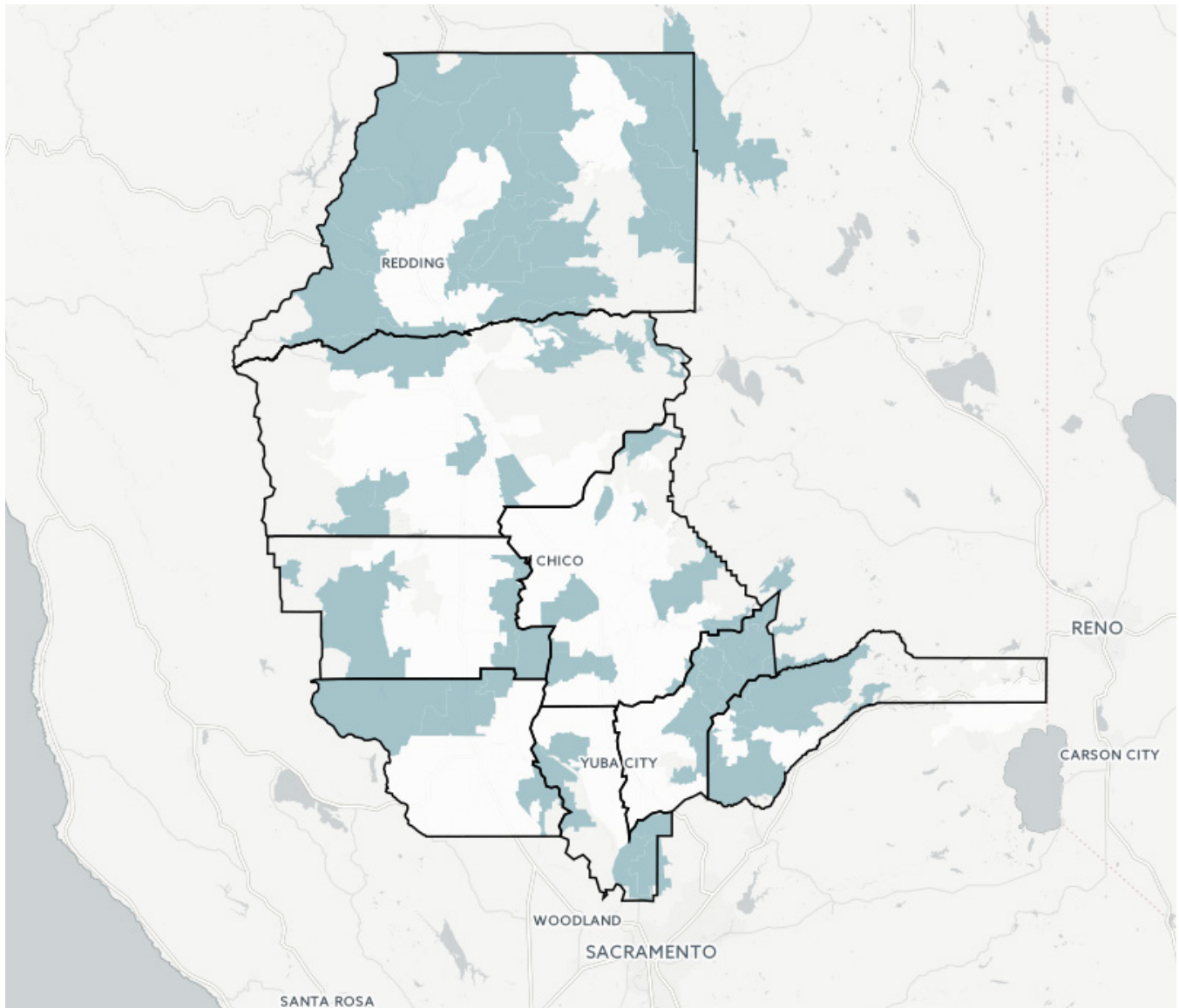
95410	95445	95466	95524	95547	95558	95585	96024	96044	96068	96110	96128
95415	95449	95468	95525	95548	95559	95587	96025	96046	96076	96112	96130
95417	95451	95469	95526	95549	95560	95589	96027	96048	96085	96113	96132
95420	95454	95470	95527	95550	95563	95595	96031	96049	96086	96114	96134
95426	95456	95485	95528	95551	95567	96006	96032	96050	96091	96115	96136
95427	95457	95488	95536	95552	95568	96009	96034	96052	96093	96116	96137
95428	95459	95493	95542	95553	95569	96010	96037	96054	96094	96117	97635
95429	95460	95494	95543	95554	95570	96014	96038	96057	96104	96119	
95432	95461	95511	95545	95555	95571	96015	96039	96058	96108	96121	
95435	95463	95514	95546	95556	95573	96023	96041	96064	96109	96123	

Rural Area Defintion **Northern Central**



Counties: Butte, Colusa, Glenn, Nevada, Shasta, Sutter, Tehama, Yuba

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

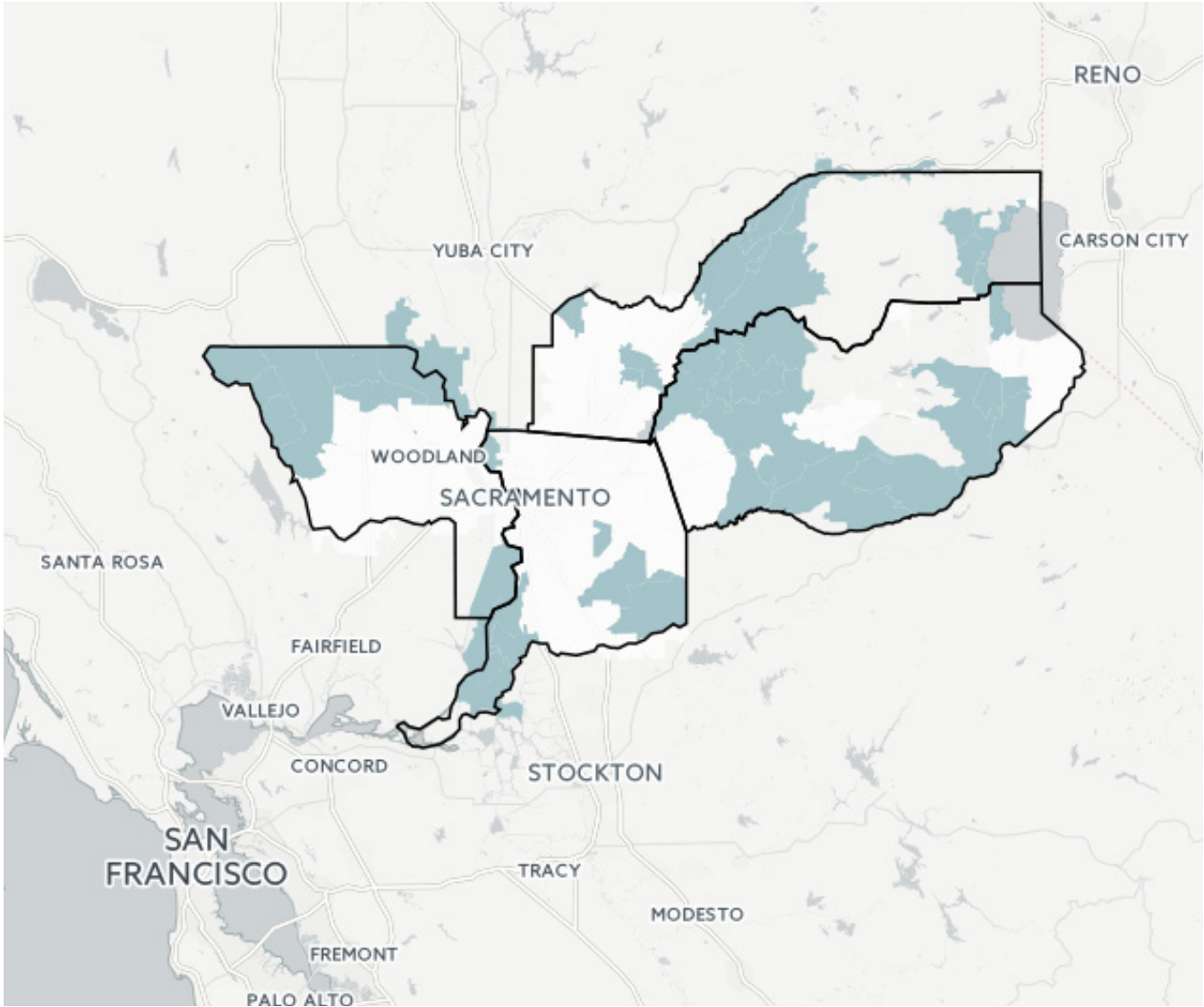
95659	95917	95930	95943	95959	95977	96008	96029	96056	96069	96087
95668	95918	95935	95949	95960	95978	96011	96033	96059	96071	96088
95674	95919	95938	95950	95962	95979	96016	96035	96061	96073	96092
95903	95920	95939	95951	95970	95981	96017	96040	96062	96074	96096
95914	95922	95941	95955	95974	95982	96022	96047	96063	96075	
95916	95925	95942	95957	95975	95986	96028	96051	96065	96084	

Rural Area Defintion **Sacramento**



Counties: El Dorado, Placer, Sacramento, Yolo

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

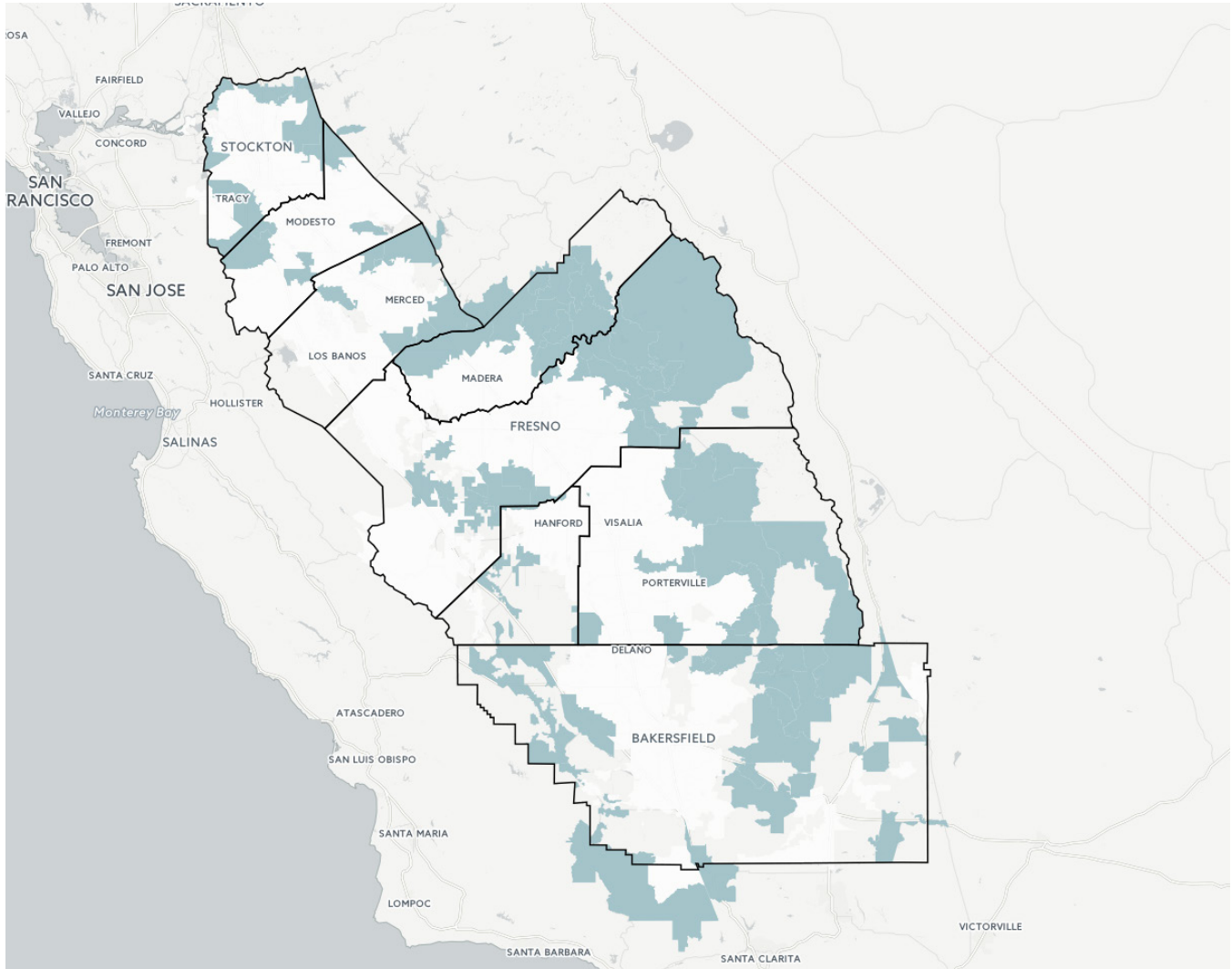
95606	95623	95636	95645	95667	95690	95713	95721	95837	96145
95607	95631	95637	95651	95679	95693	95714	95724	95937	96146
95612	95633	95638	95658	95680	95697	95715	95728	96140	96148
95614	95634	95639	95663	95681	95698	95717	95735	96141	96155
95615	95635	95641	95664	95684	95701	95720	95830	96142	

Rural Area Defintion **San Joaquin**



Counties: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

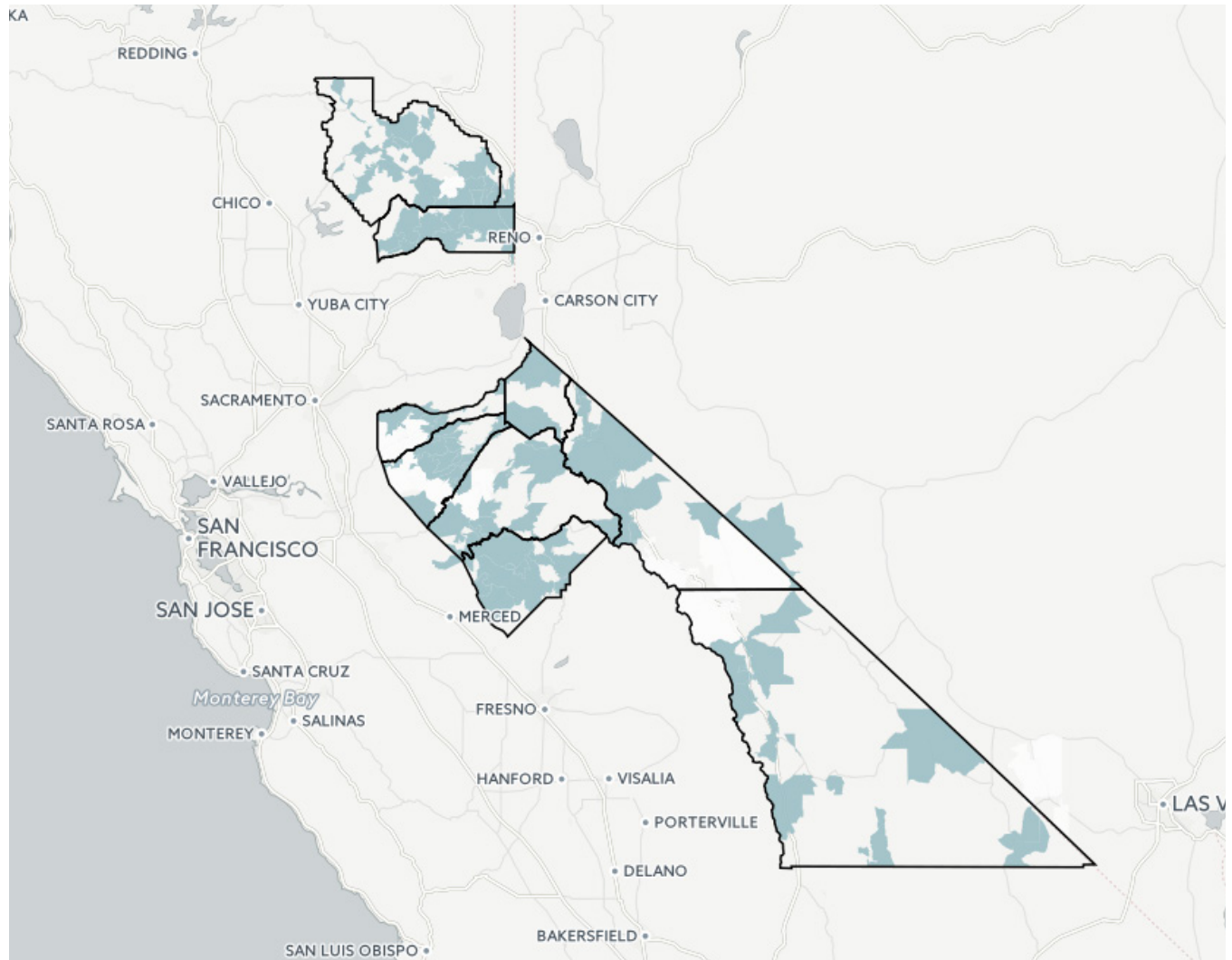
93201	93226	93251	93271	93523	93602	93614	93641	93664	95230	95317
93205	93238	93252	93276	93524	93603	93621	93643	93667	95234	95323
93206	93239	93255	93283	93527	93604	93624	93644	93668	95236	95333
93207	93240	93260	93285	93528	93605	93626	93645	93669	95237	95369
93208	93242	93262	93287	93531	93606	93627	93651	93673	95303	95374
93218	93243	93265	93516	93554	93608	93628	93652	93675	95304	95385
93222	93244	93266	93518	93561	93609	93633	93653	95220	95312	95387
93224	93249	93267	93519	93601	93610	93634	93656	95227	95313	95686

Rural Area Defintion **Sierra**



Counties: Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Plumas, Sierra, Tuolumne

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

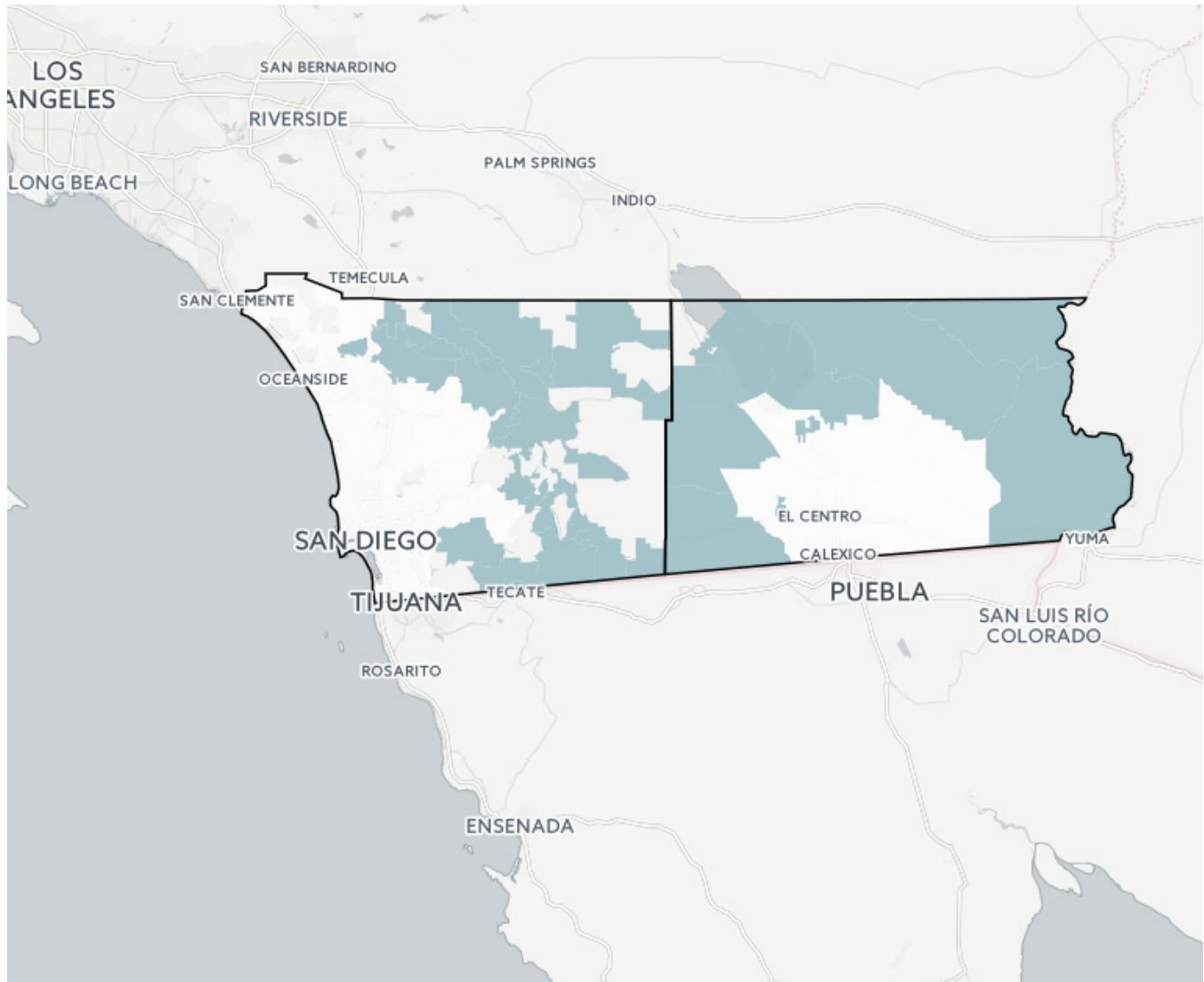
89010	93526	95223	95246	95257	95325	95379	95675	95944	96105	96126
92328	93529	95224	95247	95305	95327	95389	95689	95947	96106	96129
92384	93530	95225	95248	95306	95329	95601	95699	95956	96107	96133
92389	93541	95226	95249	95310	95335	95629	95910	95971	96111	96135
93512	93545	95228	95250	95311	95338	95646	95915	95983	96118	
93513	93549	95232	95251	95314	95345	95665	95923	95984	96120	
93517	93592	95233	95254	95318	95364	95666	95934	96020	96124	
93522	93623	95245	95255	95321	95375	95669	95936	96103	96125	

Rural Area Defintion **South Coast**



Counties: Imperial, San Diego

Rural ZIP Codes in blue



Rural ZIP Codes (ZCTA)

91905	91931	91962	92004	92061	92086	92259	92281
91906	91934	91963	92036	92066	92222	92266	92283
91916	91935	91980	92059	92070	92233	92273	
91917	91948	92003	92060	92082	92257	92275	

Technical Appendix: Appendix B Data Sources and Methodology

Geographic Methodology

The report uses the U.S. Census Bureau definition of urban and rural regions. There are two types of urban areas: Urbanized Areas (UAs) of 50,000 or more people and Urban Clusters (UCs) of at least 2,500 and less than 50,000 people. "Rural" encompasses all populations, housing, and territory not included within an urban area or urban cluster, thus any ZIP Codes with a population of fewer than 2,500. Using the Census Bureau's relationship files all rural ZIP Codes that do not exist in urban areas were identified. In cases where a ZIP Code crosses into an urban area, if 50% or more of the population does not exist within the urban area the ZIP Code was classified as rural. After identifying all of the rural ZIP Codes in California, the regions were aggregated into the regions defined in the *California's Arts and Cultural Ecology* report of 2011.

Arts and Culture Region Adjustment

The report uses ZIP Codes, the smallest geographic region, to calculate the rural regions in California. It is known that ZIP Code regions are not as accurate as county, metropolitan, or state regions. In order to account for any discrepancies between aggregated ZIP Code regions and an arts and culture region, rural and urban ZIP Code regions were proportionally adjusted so that all jobs in the greater region are accounted for.

Region Definition Process

1. Identify rural ZIP Codes using Census 2010 ZIP Code Tabulation Areas (ZCTAs) to Place Relationship File https://www.census.gov/geo/maps-data/data/ua_rel_layout.html
2. Aggregate counties in California arts and culture regions using The James Irvine Foundation definition
3. Identify ZIP Codes in California counties
4. Identify rural ZIP Codes in California regions

Rural ZIP Code Definition

The Census Bureau identifies two types of urban areas: Urbanized Areas (UAs) of 50,000 or more people and Urban Clusters (UCs) of at least 2,500 and fewer than 50,000 people. "Rural" encompasses all population, housing, and territory not included within an urban area or urban cluster. Using the Census Bureau's relationship files we can identify all of the ZIP Codes that do not exist in urban areas. In some cases a ZIP Code may cross into an urban area. In these instances we identify the ZIP Code as rural if 50% or more of the population does not exist within the urban area.

California Arts and Culture Regions

We are using the James Irvine Foundation's definitions for California's arts and culture regions. This definition was used in the 2011, *California's Arts and Cultural Ecology* report from Markusen, Ann and Anne Gadwa.

Rural ZIP Codes (ZCTA) included in Rural Analysis

89010	92309	93251	93558	94074	95246	95429	95554	95669	95942	96035	96108
89019	92327	93252	93561	94508	95247	95430	95555	95674	95943	96037	96109
91759	92328	93254	93562	94512	95248	95432	95556	95675	95944	96038	96110
91905	92332	93255	93563	94516	95249	95435	95558	95679	95947	96039	96111
91906	92333	93260	93592	94548	95250	95439	95559	95680	95949	96040	96112
91916	92338	93262	93601	94567	95251	95441	95560	95681	95950	96041	96113
91917	92339	93265	93602	94573	95254	95445	95563	95684	95951	96044	96114
91931	92341	93266	93603	94586	95255	95449	95567	95686	95955	96046	96115
91934	92347	93267	93604	94922	95257	95450	95568	95689	95956	96047	96116
91935	92356	93271	93605	94923	95303	95451	95569	95690	95957	96048	96117
91948	92358	93276	93606	94924	95304	95454	95570	95693	95959	96049	96118
91962	92364	93283	93608	94929	95305	95456	95571	95697	95960	96050	96119
91963	92365	93285	93609	94933	95306	95457	95573	95698	95962	96051	96120
91980	92368	93287	93610	94937	95310	95459	95585	95699	95970	96052	96121
92003	92371	93426	93614	94938	95311	95460	95587	95701	95971	96054	96123
92004	92372	93429	93621	94940	95312	95461	95589	95713	95974	96056	96124
92036	92384	93432	93623	94946	95313	95463	95595	95714	95975	96057	96125
92059	92389	93440	93624	94950	95314	95465	95601	95715	95977	96058	96126
92060	92398	93450	93626	94956	95317	95466	95606	95717	95978	96059	96128
92061	92518	93451	93627	94963	95318	95468	95607	95720	95979	96061	96129
92066	92536	93452	93628	94970	95321	95469	95612	95721	95981	96062	96130
92070	92539	93453	93633	94971	95323	95470	95614	95724	95982	96063	96132
92082	92549	93461	93634	94972	95325	95485	95615	95728	95983	96064	96133
92086	92561	93510	93641	95004	95327	95488	95623	95735	95984	96065	96134
92222	92590	93512	93643	95006	95329	95493	95625	95830	95986	96068	96135
92225	92676	93513	93644	95013	95333	95494	95629	95837	96006	96069	96136
92230	93040	93516	93645	95017	95335	95497	95631	95903	96008	96071	96137
92233	93042	93517	93651	95033	95338	95511	95633	95910	96009	96073	96140
92239	93064	93518	93652	95039	95345	95514	95634	95914	96010	96074	96141
92242	93066	93519	93653	95043	95364	95524	95635	95915	96011	96075	96142
92256	93201	93522	93656	95045	95369	95525	95636	95916	96014	96076	96145
92257	93205	93523	93664	95140	95374	95526	95637	95917	96015	96084	96146
92259	93206	93524	93667	95220	95375	95527	95638	95918	96016	96085	96148
92266	93207	93526	93668	95223	95379	95528	95639	95919	96017	96086	96155
92267	93208	93527	93669	95224	95385	95536	95641	95920	96020	96087	97635
92268	93218	93528	93673	95225	95387	95542	95645	95922	96022	96088	
92273	93222	93529	93675	95226	95389	95543	95646	95923	96023	96091	
92274	93224	93530	93920	95227	95410	95545	95651	95925	96024	96092	
92275	93226	93531	93924	95228	95412	95546	95658	95930	96025	96093	
92280	93238	93532	93925	95230	95415	95547	95659	95934	96027	96094	
92281	93239	93541	93928	95232	95417	95548	95663	95935	96028	96096	
92282	93240	93544	93932	95233	95420	95549	95664	95936	96029	96103	
92283	93242	93545	93954	95234	95421	95550	95665	95937	96031	96104	
92285	93243	93549	94020	95236	95426	95551	95666	95938	96032	96105	
92304	93244	93553	94021	95237	95427	95552	95667	95939	96033	96106	
92305	93249	93554	94060	95245	95428	95553	95668	95941	96034	96107	

Creative Industry NAICS Codes⁶

There is no absolute agreement on which NAICS Codes represent the creative economy. The 64 creative industries included in this study represent industries that are commonly selected by researchers using data in the Creative Vitality™ Suite tool. The CVSuite tool is designed in a way so as to allow researchers to select the NAICS codes they wish to study and to create customized sets of codes.

The 64 NAICS codes utilized in this report are:

238150 Glass and Glazing Contractors	515112 Radio Stations
323111 Commercial Printing (except Screen and Books)	515120 Television Broadcasting
323113 Commercial Screen Printing	515210 Cable and Other Subscription Programming
323117 Books Printing	519120 Libraries and Archives
323120 Support Activities for Printing	541310 Architectural Services
327110 Pottery, Ceramics, and Plumbing Fixture Manufacturing	541320 Landscape Architectural Services
327212 Other Pressed and Blown Glass and Glassware Manufacturing	541340 Drafting Services
332323 Ornamental and Architectural Metal Work Manufacturing	541410 Interior Design Services
337212 Custom Architectural Woodwork and Millwork Manufacturing	541420 Industrial Design Services
339910 Jewelry and Silverware Manufacturing	541430 Graphic Design Services
339992 Musical Instrument Manufacturing	541490 Other Specialized Design Services
423940 Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	541810 Advertising Agencies
424920 Book, Periodical, and Newspaper Merchant Wholesalers	541850 Outdoor Advertising
443142 Electronics Stores*	541860 Direct Mail Advertising
448310 Jewelry Stores	541890 Other Services Related to Advertising
451130 Sewing, Needlework, and Piece Goods Stores	541921 Photography Studios, Portrait
451140 Musical Instrument and Supplies Stores	541922 Commercial Photography
451211 Book Stores	611610 Fine Arts Schools
453110 Florists	711110 Theater Companies and Dinner Theaters
453920 Art Dealers	711120 Dance Companies
511130 Book Publishers	711130 Musical Groups and Artists
511191 Greeting Card Publishers	711190 Other Performing Arts Companies
511199 All Other Publishers	711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities
512110 Motion Picture and Video Production	711320 Promoters of Performing Arts, Sports, and Similar Events without Facilities
512120 Motion Picture and Video Distribution	711410 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
512131 Motion Picture Theaters (except Drive-Ins)	711510 Independent Artists, Writers, and Performers
512191 Teleproduction and Other Postproduction Services	712110 Museums
512199 Other Motion Picture and Video Industries	712120 Historical Sites
512210 Record Production	812921 Photofinishing Laboratories (except One-Hour)
512220 Integrated Record Production/Distribution	812922 One-Hour Photofinishing
512230 Music Publishers	
512240 Sound Recording Studios	
512290 Other Sound Recording Industries	
515111 Radio Networks	

*Only 29.2% of “electronic stores” industry are attributed as “creative” based on employment ratios published by the United States Bureau of Labor Statistics’ Complete Employment Statistics (CES) program.

Creative Occupation SOC Codes⁷

The SOC code system is a federal system used to classify workers into occupational categories for the purpose of collecting, calculating, and/or disseminating data. All workers are classified into one of 840 detailed occupations according to their occupational definition. The occupations offered in the CVSuite tool were selected for this study based on two criteria: a) The codes represent occupations that are highly correlated with measured skill sets in the areas of: thinking creatively, originality, and fine arts knowledge as measured by the Employment and Training Administration's "O*NET" occupational network database; and b) The SOC codes in this study reflect those that are commonly selected by researchers using data in the Creative Vitality Suite tool.

The 53 SOC codes utilized in this report are:

11-2011 Advertising and Promotions Managers	27-1029 Designers, All Other
11-2031 Public Relations and Fundraising Managers	27-2011 Actors
13-1011 Agents and Business Managers of Artists, Performers, and Athletes	27-2012 Producers and Directors
17-1011 Architects, Except Landscape and Naval	27-2031 Dancers
17-1012 Landscape Architects	27-2032 Choreographers
17-3011 Architectural and Civil Drafters	27-2041 Music Directors and Composers
19-3091 Anthropologists and Archeologists	27-2042 Musicians and Singers
19-3093 Historians	27-3011 Radio and Television Announcers
21-2021 Directors, Religious Activities and Education	27-3041 Editors
25-1099 Postsecondary Teachers	27-3042 Technical Writers
25-4011 Archivists	27-3043 Writers and Authors
25-4012 Curators	27-3099 Media and Communication Workers, All Other
25-4013 Museum Technicians and Conservators	27-4011 Audio and Video Equipment Technicians
25-4021 Librarians	27-4014 Sound Engineering Technicians
25-4031 Library Technicians	27-4021 Photographers
25-9011 Audio-Visual and Multimedia Collections Specialists	27-4031 Camera Operators, Television, Video, and Motion Picture
27-1011 Art Directors	27-4032 Film and Video Editors
27-1012 Craft Artists	27-4099 Media and Communication Equipment Workers, All Other
27-1013 Fine Artists, Including Painters, Sculptors, and Illustrators	39-3031 Ushers, Lobby Attendants, and Ticket Takers
27-1014 Multimedia Artists and Animators	39-3092 Costume Attendants
27-1019 Artists and Related Workers, All Other	39-3099 Entertainment Attendants and Related Workers, All Other
27-1021 Commercial and Industrial Designers	39-5091 Makeup Artists, Theatrical and Performance
27-1022 Fashion Designers	43-4121 Library Assistants, Clerical
27-1023 Floral Designers	49-9063 Musical Instrument Repairers and Tuners
27-1024 Graphic Designers	51-9071 Jewelers and Precious Stone and Metal Workers
27-1025 Interior Designers	
27-1026 Merchandise Displayers and Window Trimmers	
27-1027 Set and Exhibit Designers	

Technical Appendix: Appendix C Regional Rural/ Urban Profiles

Rural/ Urban Area Comparison **California**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
California (by county)	1,007,424	20,496	2.1%	\$59,627	\$60,069,673,710	5.5%
California R	11,835	33	0.3%	\$26,097	\$308,845,314	2.1%
California U	995,590	20,463	2.1%	\$58,170	\$57,913,443,187	5.6%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
California (by county)	1,046,634	20,972	2.0%	9.2%	\$26.33
California R	14,827	186	1.3%	7.8%	\$18.64
California U	1,031,807	20,786	2.1%	9.2%	\$25.84

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	3,757	-80	-2.1%	\$14,164
541430	Graphic Design Services	416	4	1.0%	\$26,140
453920	Art Dealers	402	-5	-1.2%	\$18,782
541320	Landscape Architectural Services	368	28	8.2%	\$37,486
541921	Photography Studios, Portrait	362	-8	-2.2%	\$9,793

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ¹⁴.

Rural/ Urban Area Comparison **Bay Area**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
Bay Area (<i>by county</i>)	203,065	1,425	0.7%	\$52,008	\$10,561,016,378	4.0%
Bay Area R	871	0	0.0%	\$27,895	\$24,296,749	4.1%
Bay Area U	202,194	1,425	0.7%	\$52,132	\$10,540,789,113	4.0%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
Bay Area (<i>by county</i>)	234,021	3,204	1.4%	9.3%	\$26.01
Bay Area R	1,319	39	3.0%	3.6%	\$24.45
Bay Area U	232,702	3,165	1.4%	9.3%	\$25.83

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	511	-9	-1.7%	\$19,695
541320	Landscape Architectural Services	43	3	7.5%	\$41,918
541922	Commercial Photography	40	-5	-11.1%	\$30,135
541490	Other Specialized Design Services	29	2	7.4%	\$36,295
453920	Art Dealers	29	0	0.0%	\$24,708

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **Central Coast**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
<i>Central Coast (by county)</i>	29,832	-372	-1.2%	\$35,495	\$1,058,884,710	0.2%
Central Coast R	705	10	1.4%	\$25,629	\$18,078,189	-1.1%
Central Coast U	29,127	-382	-1.3%	\$35,788	\$1,042,381,322	0.2%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>Central Coast (by county)</i>	37,492	-157	-0.4%	4.6%	\$23.94
Central Coast R	939	22	2.4%	3.4%	\$20.19
Central Coast U	36,553	-179	-0.5%	4.6%	\$22.28

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	225	-13	-5.5%	\$15,082
611610	Fine Arts Schools	104	3	3.0%	\$23,698
541921	Photography Studios, Portrait	44	-4	-8.3%	\$9,408
541340	Drafting Services	40	1	2.6%	\$21,326
541430	Graphic Design Services	32	1	3.2%	\$24,553

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **Inland Empire**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings *	2014 Total Earnings*	2009-2014 % Change
<i>Inland Empire (by county)</i>	44,706	475	1.1%	\$30,815	\$1,377,603,927	-1.4%
Inland Empire R	1,730	27	1.6%	\$33,771	\$52,921,228	10.1%
Inland Empire U	42,975	448	1.1%	\$30,710	\$1,319,777,532	-1.8%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>Inland Empire (by county)</i>	56,337	1,323	2.4%	8.6%	\$21.97
Inland Empire R	2,103	75	3.7%	13.4%	\$20.24
Inland Empire U	54,234	1,248	2.4%	8.4%	\$20.83

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	225	-3	-1.3%	\$14,845
541810	Advertising Agencies	148	13	9.6%	\$51,423
541430	Graphic Design Services	132	0	0.0%	\$30,124
323113	Commercial Screen Printing	127	10	8.5%	\$28,745
323111	Commercial Printing (except Screen and Books)	118	5	4.4%	\$41,241

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **Los Angeles**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings *	2014 Total Earnings*	2009-2014 % Change
<i>Los Angeles (by county)</i>	565,736	18,329	3.3%	\$72,083	\$40,779,923,868	9.1%
Los Angeles R	178	9	5.6%	\$55,869	\$9,927,852	19.5%
Los Angeles U	565,558	18,320	3.3%	\$70,022	\$39,601,499,842	9.1%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>Los Angeles (by county)</i>	512,271	14,979	3.0%	11.6%	\$28.47
Los Angeles R	247	11	4.5%	14.8%	\$24.25
Los Angeles U	512,024	14,968	3.0%	11.6%	\$27.88

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	106	7	7.1%	\$55,662
512110	Motion Picture and Video Production	14	1	7.7%	\$115,174

In Rural Los Angeles Metro the above two industries are the only industries with jobs.

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **North Coast**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
<i>North Coast (by county)</i>	6,663	-140	-2.1%	\$19,232	\$128,137,893	-3.3%
North Coast R	2,214	-48	-2.1%	\$16,385	\$36,273,906	-1.6%
North Coast U	4,449	-92	-2.0%	\$20,998	\$93,417,910	-4.1%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>North Coast (by county)</i>	8,200	59	0.7%	3.0%	\$18.17
North Coast R	2,551	-17	-0.6%	7.4%	\$16.75
North Coast U	5,649	76	1.4%	1.1%	\$18.88

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	950	-43	-4.3%	\$10,510
453920	Art Dealers	117	1	0.9%	\$13,405
541320	Landscape Architectural Services	74	-4	-5.1%	\$32,298
541921	Photography Studios, Portrait	67	-3	-4.3%	\$9,090
451211	Book Stores	64	5	8.5%	\$15,070

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **Northern Central**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
<i>Northern Central (by county)</i>	10,369	23	0.2%	\$24,348	\$252,457,400	1.0%
Northern Central R	1,261	-13	-1.0%	\$22,025	\$27,777,416	7.6%
Northern Central U	9,108	36	0.4%	\$24,581	\$223,872,326	0.1%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>Northern Central (by county)</i>	13,181	249	1.9%	5.3%	\$20.16
Northern Central R	1,798	49	2.8%	13.7%	\$16.67
Northern Central U	11,383	200	1.8%	4.1%	\$19.11

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	342	-3	-0.9%	\$10,309
711130	Musical Groups and Artists	106	0	0.0%	\$20,381
541340	Drafting Services	90	6	7.1%	\$27,825
339910	Jewelry and Silverware Manufacturing	69	-3	-4.2%	\$35,091
541921	Photography Studios, Portrait	66	0	0.0%	\$13,569

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **Sacramento**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings *	2014 Total Earnings*	2009-2014 % Change
<i>Sacramento (by county)</i>	33,386	-172	-0.5%	\$34,337	\$1,146,372,198	-5.2%
Sacramento R	1,363	-26	-1.9%	\$29,747	\$40,547,016	-4.4%
Sacramento U	32,023	-146	-0.5%	\$34,514	\$1,105,236,770	-5.2%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>Sacramento (by county)</i>	44,386	-36	-0.1%	-1.0%	\$22.53
Sacramento R	1,531	-17	-1.1%	3.0%	\$18.49
Sacramento U	42,855	-19	0.0%	-1.2%	\$22.64

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	186	-3	-1.6%	\$12,348
339910	Jewelry and Silverware Manufacturing	144	-7	-4.6%	\$39,751
453920	Art Dealers	78	-5	-6.0%	\$22,343
541922	Commercial Photography	68	-4	-5.6%	\$18,489
448310	Jewelry Stores	60	4	7.1%	\$20,907

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **San Joaquin**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings *	2014 Total Earnings*	2009-2014 % Change
<i>San Joaquin (by county)</i>	31,466	430	1.4%	\$33,989	\$1,069,498,962	-0.7%
San Joaquin R	1,417	75	5.6%	\$33,907	\$48,038,011	0.4%
San Joaquin U	30,049	355	1.2%	\$34,015	\$1,022,126,057	-0.8%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>San Joaquin (by county)</i>	43,796	822	1.9%	6.5%	\$21.70
San Joaquin R	1,717	51	3.1%	11.4%	\$17.98
San Joaquin U	42,079	771	1.9%	6.3%	\$21.18

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	473	21	4.6%	\$11,175
443142	Electronics Stores**	51	0	0.0%	\$41,189
511130	Book Publishers	109	30	38.0%	\$80,721
515210	Cable and Other Subscription Programming	108	12	12.5%	\$122,855
451211	Book Stores	57	1	1.8%	\$33,830

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ. **Only 29.2% of "electronic stores" industry are attributed as "creative" based on employment ratios published by the United States Bureau of Labor Statistics' Complete Employment Statistics (CES) program.

Rural/ Urban Area Comparison **Sierra**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings*	2014 Total Earnings*	2009-2014 % Change
Sierra (by county)	2,855	-21	-0.7%	\$19,111	\$54,564,581	2.0%
Sierra R	1,124	-15	-1.3%	\$17,036	\$19,146,151	2.3%
Sierra U	1,731	-6	-0.3%	\$20,421	\$35,354,383	1.7%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
Sierra (by county)	3,360	61	1.8%	5.5%	\$16.95
Sierra R	1,559	15	1.0%	5.8%	\$16.36
Sierra U	1,801	46	2.6%	5.2%	\$17.48

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	443	-14	-3.1%	\$9,936
541921	Photography Studios, Portrait	87	-3	-3.3%	\$6,580
453920	Art Dealers	63	-2	-3.1%	\$13,644
541410	Interior Design Services	42	1	2.4%	\$24,441
541320	Landscape Architectural Services	38	6	18.8%	\$31,183

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Rural/ Urban Area Comparison **South Coast**

Creative Industry Jobs¹²

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2014 Average Earnings *	2014 Total Earnings*	2009-2014 % Change
<i>South Coast and Border (by county)</i>	66,086	-368	-0.6%	\$39,437	\$2,606,239,261	-0.9%
South Coast R	659	-11	-1.6%	\$25,792	\$17,006,773	4.7%
South Coast U	65,427	-357	-0.5%	\$39,670	\$2,595,479,660	-0.9%

Source: WESTAF and EMSI 2014, version 2016.1

Jobs in Creative Occupations¹³

Region	2014 Jobs	2013-2014 Change Jobs	2013-2014 % Change	2009-2014 % Change	2014 Average Hourly Earnings
<i>South Coast and Border (by county)</i>	84,063	119	0.1%	5.2%	\$24.33
South Coast R	1,018	24	2.4%	1.7%	\$18.06
South Coast U	83,045	95	0.1%	5.3%	\$23.27

Source: WESTAF and EMSI 2014, version 2016.1

Top Rural Creative Industries by Number of Jobs

NAICS Code	Description	2014 Jobs	2013-2014 Change	2013-2014 % Change	2014 Average Earnings
711510	Independent Artists, Writers, and Performers	298	-20	-6.3%	\$16,930
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	72	4	5.9%	\$34,971
541320	Landscape Architectural Services	47	0	0%	\$57,291
453920	Art Dealers	41	2	5.1%	\$22,079
453110	Florists	26	0	0%	\$18,412

Source: WESTAF and EMSI 2014, version 2016.1

*Average Earnings is the total industry earnings for a region divided by number of jobs. Includes wages, salaries, supplements (additional employee benefits), and proprietor income. Difference in total earnings in overall region, compared to rural and urban regions total will differ.

Endnotes

¹United States Census Bureau, "2010 Census Urban and Rural Classification and Urban Area Criteria," September 2016, <https://www.census.gov/geo/reference/ua/urban-rural-2010.html>

²Markusen, Ann and Anne Gadwa. 2011. *California's Arts and Cultural Ecology*. California: The James Irvine Foundation.

³For a list of the 80 sources Economic Modeling Specialist International utilizes visit <http://www.economicmodeling.com/data-sources/>. For additional information regarding EMSI's data visit <http://kb.economicmodeling.com/category/data-questions/>

⁴Data throughout this report are from EMSI's data version 2016.1, data year 2014, including EMSI's four classes of employment: QCEW, Non-QCEW, Self-Employed, and Extended Proprietors.

⁵For more information about O*NET skills visit <https://www.onetonline.org/skills/>. Occupational Information Network (O*NET) is being developed under the sponsorship of the US Department of Labor/Employment and Training Administration (USDOL/ETA).

⁶This report includes data from 64 selected NAICS codes. The census site explains: "The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. NAICS was developed under the auspices of the Office of Management and Budget (OMB), and adopted in 1997 to replace the Standard Industrial Classification (SIC) system." <http://www.census.gov/eos/www/naics/>

⁷This report includes data from 53 selected SOC codes. The Bureau of Labor Statistics site explains: "The 2010 Standard Occupational Classification (SOC) system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of 840 detailed occupations according to their occupational definition. To facilitate classification, detailed occupations are combined to form 461 broad occupations, 97 minor groups, and 23 major groups. Detailed occupations in the SOC with similar job duties, and in some cases skills, education, and/or training, are grouped together." <http://www.bls.gov/soc/>

⁸Bay Area and Los Angeles have a very small percentage of their creative industry jobs in rural areas. The Bay area has 0.43% and Los Angeles has 0.03%. See page 19 of the report for the table: 2014 Rural Creative Industry Jobs.

⁹Markusen, Ann and Anne Gadwa. 2011. *California's Arts and Cultural Ecology*, Technical Appendix. pg9-10. California: The James Irvine Foundation.

Endnotes

¹⁰Explanation of 10 year average for earnings and jobs (pg 19-20). California average percent and rural average percent are the the average percent change for California and Rural California over 10 years. A linear regression model was used to create the average line.

Creative Industry Jobs (pg 19)

California coefficients: $m=0.001568$ $b=-3.147118$

Rural California coefficients: $m=0.0005185$ $b=-1.0432931$

Creative Industry Earnings (pg 20)

California coefficients: $m=0.001298$ $b=-2.589488$

Rural California coefficients: $m=0.00226$ $b=-4.53762$

¹¹Volatility of earnings for the state of California in 2013 can be attributed to several factors. Scrutiny of the data and the fundamental dynamics of competition lead to increased competition within several industries, particularly industries related to entertainment (i.e. 512199, 512240, 512220), were driving down total per worker earnings. Drilling down, this effect was especially pronounced in Los Angeles county, CA. Supplemental research into the current conditions facing these industries paint a picture of an industry group that was, and possibly still is diversifying away from California due to attractive production incentives offered by competing regions. This analysis was provided by EMSI's economist Timothy Aylor.

¹²Creative industry jobs measure all workers in creative industries. Creative industries have creative workers and other types of workers. When measuring the impact of creative industries, we look at all types of employment, including creative workers and other workers.

¹³Creative occupations measure creative workers in all industries.

¹⁴The urban and rural earnings subtotals will not add up to the total earnings number because average earnings per job, which is used to calculate total earnings, differs between the overall region and urban and rural regions. Total earnings is calculated by multiplying average earnings per job by number of jobs.