

6 December 2022

Technical Memorandum

To: William McDonnell, Inland Empire Utilities Agency (IEUA)

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Subject: Update Population Evaluation
K/J 2244515*00

1.1 Introduction

This Technical Memorandum (TM) provides documentation for an effort to update and extend the population evaluation completed as part of IEUA's 2020 Urban Water Management Plan (UWMP) and to determine the most appropriate population count, projection, and methodology for IEUA to use for future planning and communication needs.

IEUA's service area includes nine retail member agencies in Western San Bernardino County including:

- City of Chino (Chino)
- City of Chino Hills (Chino Hills)
- Cucamonga Valley Water District (CVWD)
- Fontana Water Company (FWC)
- Monte Vista Water District (MVWD)
- City of Ontario (Ontario)
- City of Upland (Upland)
- San Antonio Water Company (SAWCo)
- West Valley Water District (WVWD)

This TM describes the data, documents, and methodologies used to evaluate service area population estimates for 2023 and population projection through 2045 for the following IEUA Retail Member Agencies: Chino, Chino Hills, CVWD, FWC, MVWD, Ontario, Upland, SAWCo, & WVWD. It should be noted that the majority of WVWD's service area falls outside of the IEUA service area, and the overlapping jurisdictions only receives a limited amount of water under local outages, emergencies, or loss of local supplies.

1.2 Data Sources and Analysis Methods

IEUA is dependent on the quality and accuracy of population data sources as a means of calculating current and projecting future populations. Available population resources include:

Southern California Association of Governments (SCAG) Growth Forecasting, California's Department of Finance (CDOF), U.S. Population and Housing Census, Department of Water Resources (DWR) Population Tool, and individual retail agency population estimates and projections totals, as described in this section.

Southern California Association of Governments (SCAG) Growth Forecasting: SCAG is a Joint Powers Authority and designated Metropolitan Planning Organization covering the Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. As part of the growth forecasting completed every 4 years, SCAG, maintains and refines the population models. The SCAG population data are used in a variety of regional transportation, housing, and environmental planning efforts including Metropolitan Water District's long-range planning. The population data are estimated using Tier 2 Transportation Analysis Zone (TAZ) areas which have boundaries that are comparable to Census Block Groups, and therefore can be analyzed using an area weighted technique to adjust population counts where boundaries do not directly overlap. SCAG data is limited in scope as it is only available for the counties listed above and was provided on request by IEUA. IEUA utilized SCAG population data in the agency's 2020 UWMP as did a majority of IEUA's retail water agencies. An update is anticipated to be available in 2024.

U.S. Population and Housing Census: The U.S. Census Bureau conducts a national Population and Housing Census every 10 years as mandated by the Constitution. The most recent U.S. Census data is from 2020 which was used in IEUA's redistricting efforts as California Water Code requires municipal water districts to adjust division boundaries after each decennial U.S. census. 2020 U.S. Census populations were not available at the time of the development of the 2020 UWMP and were thus, not considered. U.S. Census data is national in scope but lacks projections and has historically been perceived to undercount certain population groups. The recent U.S. Census was subject to similar concerns of undercounting minority and undocumented immigrant populations, though the COVID-19 pandemic could help to explain the undercount. Below is a list of articles that document the causes of US Census population undercount.

- <https://theconversation.com/2020-census-miscounted-americans-4-questions-answered-179612>
- <https://www.nytimes.com/2022/04/21/us/census-data-privacy-concerns.html>
- <https://www.washingtonpost.com/dc-md-va/2022/03/10/2020-census-undercount-report/>
- <https://www.npr.org/2022/03/09/1085039010/2020-census-accuracy-data-quality-results>
- <https://www.brookings.edu/blog/fixgov/2017/08/31/the-2020-census-may-be-wildly-inaccurate-and-it-matters-more-than-you-think/>

California's Department of Finance (CDOF): CDOF offers county level growth rate estimates that can be used with a base population, such as the 2020 Census, to estimate population change over time. In small uniform counties this can be a good way to calculate projected populations, but there are drawbacks to this approach when applied to a large diverse county with a variety of land uses and densities, as seen in San Bernardino County where the IEUA region is situated. A county wide growth rate can introduce errors when applied to a smaller geographic area or where growth within the county is variable. For example, SAWCO reported in their 2020 UWMP a population growth of less than 1% between 2020 and 2045. compared to San Bernardino County's CDOF growth rate of 16%. CDOF's county wide growth rate also includes large areas outside of IEUA's service area.

Department of Water Resources (DWR) Population Tool: DWR developed a population tool that uses an agency service area boundary map, 2000 and 2010 census data, and an agency's number of connections in 2000 and 2010 to calculate the persons per connection for each year. The 2020 population is estimated using the trend line between the 2000 and 2010 persons per connection to linearly interpolate the 2020 persons per connection which is multiplied by the 2020 service connections to estimate the 2020 population. If the growth between 2000 to 2010 is not representative of the growth from 2010-2020 then the resulting 2020 population estimate may be an over or underestimate.

IEUA Member Retail Agency's: As a wholesaler water agency, IEUA can total population data from each of its Retail Member Agencies to calculate a regional population. Each Retail Member Agency may calculate their own individual population estimates as part of local planning efforts including an individual UWMP. While each Retail Member Agency population is tailored for that local agency, there is typically challenges associated in totaling these numbers to reflect the region. Local population data can have different scopes, sources, assumptions, and adjustments resulting in data that are not "like for like" between retail agencies. It is important to note that FWC's and WWWD's service areas are only partially within the IEUA service area, resulting in a larger individual Member Retail Agency population than the population served by IEUA unless adjusted.

1.3 Current Population Projections

1.3.1 IEUA Member Retail Agency Population Projections

The 2020 UWMPs published by each IEUA member retail agency contains Retail Member Agency level population projections. During the preparation of the 2020 UWMP, IEUA prepared SCAG population data which were made available to the Retail Member Agencies to use. Most of the agencies decided to cite SCAG as their source for data informing population growth in their agency's service agency, with some making retail level adjustments to the data provided.

As Table 1 indicates, SCAG growth forecasting data was widely adopted as a trusted source for population projections for the 2020 UWMPs completed by the Retail Member Agencies, as it is customized to the southern California area. When used in combination with local City planning department data and guidance, Retail Member Agencies can tailor the appropriate approach for their agency. Population projections as reported by each Retail Member Agency in their 2020 UWMPs are summarized and combined in Table 1 and shown on Figure 1. It is important to note that the FWC and WWWD retail agency numbers include populations that fall outside of IEUA's service area.

Table 1: Member Agency 2020 UWMP Reported Population Projection

Retail Agency	Data Source	Estimated Population	Projected Population				
		2020	2025	2030	2035	2040	2045
City of Chino	City's Water Master Plan ⁴	80,808	90,187	98,035	105,056	111,067	117,422
City of Chino Hills	SCAG ¹	82,409	88,239	94,068	98,529	102,989	107,450
Cucamonga Valley Water District (CVWD)	SCAG ¹	198,979	207,151	225,483	231,531	236,573	236,573
Fontana Water Company (FWC) ²	SCAG	236,754	246,665	253,789	263,286	272,900	281,020
Monte Vista Water District (MVWD)	SCAG	57,787	59,506	61,276	64,555	65,957	67,388
City of Ontario	City's Water Master Plan ⁴	178,409	232,583	266,339	300,095	362,903	362,903
San Antonio Water Company	DWR ³	3,303	3,303	3,322	3,322	3,322	3,322
City of Upland	SCAG	78,383	81,177	84,071	87,036	89,902	92,862
Total (without WVWD)		916,832	1,008,811	1,086,383	1,153,410	1,245,613	1,268,940
West Valley Water District (WVWD) ²	SCAG	89,101	102,490	110,410	118,943	128,136	138,039
Total (with WVWD)		1,005,933	1,111,301	1,196,793	1,272,353	1,373,749	1,406,979

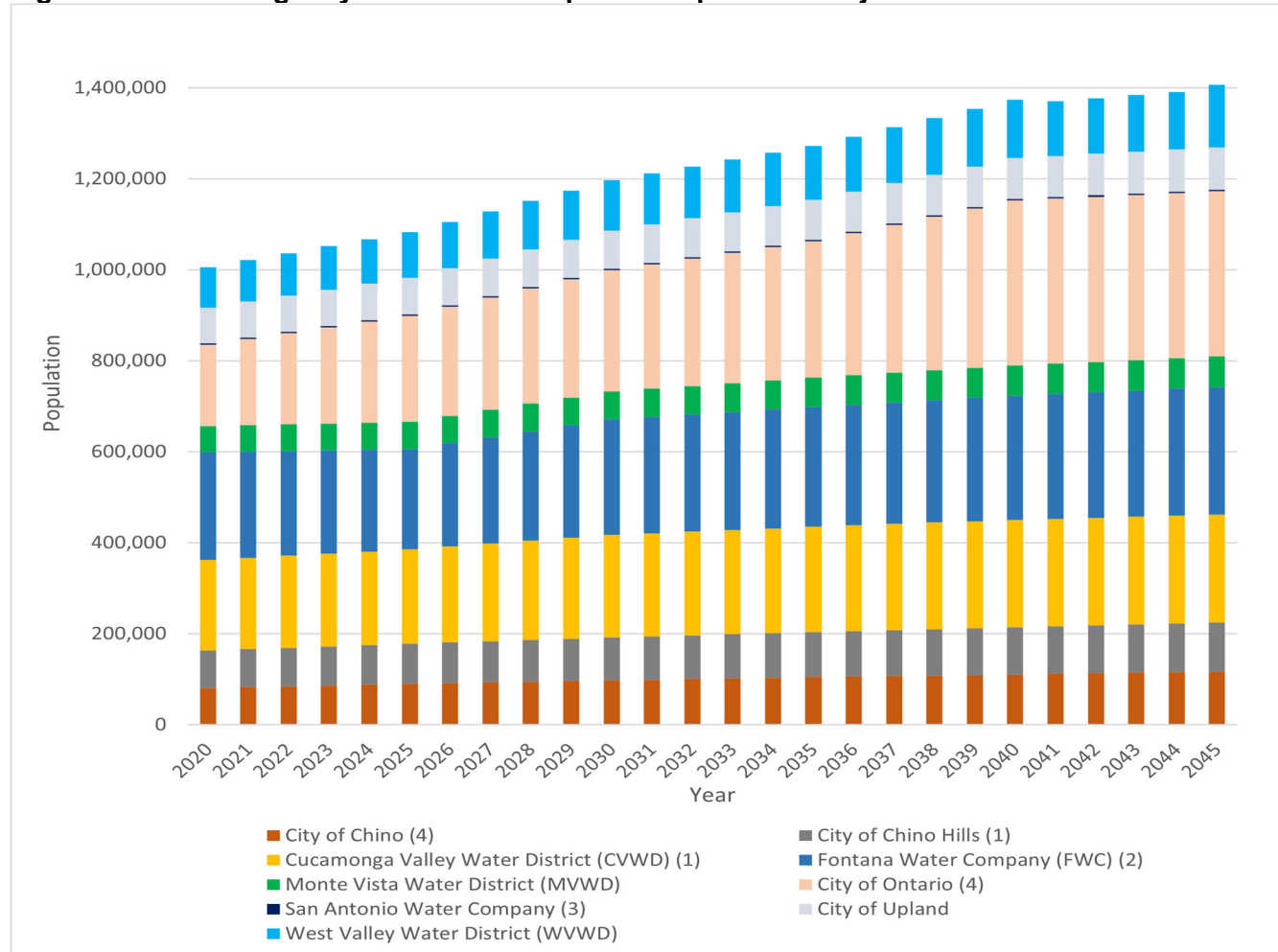
¹ SCAG estimate adjusted by agency

² Includes areas not within IEUA service area

³ DWR provided population tool

⁴ Each city's Water Master Plan used a methodology to combine population data from various sources, see section 1.3.4 for details

Figure 1: Member Agency 2020 UWMP Reported Population Projection



¹ SCAG estimate adjusted by agency

² Includes areas not within IEUA service area

³ DWR Population Tool

⁴ Each city's Water Master Plan used a methodology to combine population data from various sources, see section 1.3.4 for details

1.3.2 IEUA SCAG Wholesale Population Projections

The 2020 UWMP published by IEUA reports wholesale regional population data that is a subset of the individual retail agencies data adjusted to only include areas within IEUA's service area. IEUA service area is covered by a patchwork of retail agencies. As shown on Figure 2, there are some areas that are not served by a retail agency and in some cases, the retail agency boundary spans areas outside the IEUA area. In the IEUA 2020 UWMP, SCAG population projections were used to calculate the population for the entire IEUA service area, including only the portion of retail agencies that fall within IEUA's service area. As part of this TM, IEUA's 2020 SCAG population and future population projections were recalculated to include the portion of WVWD and FWC within IEUA. These population estimates are presented in Table 2 and on Figure 3.

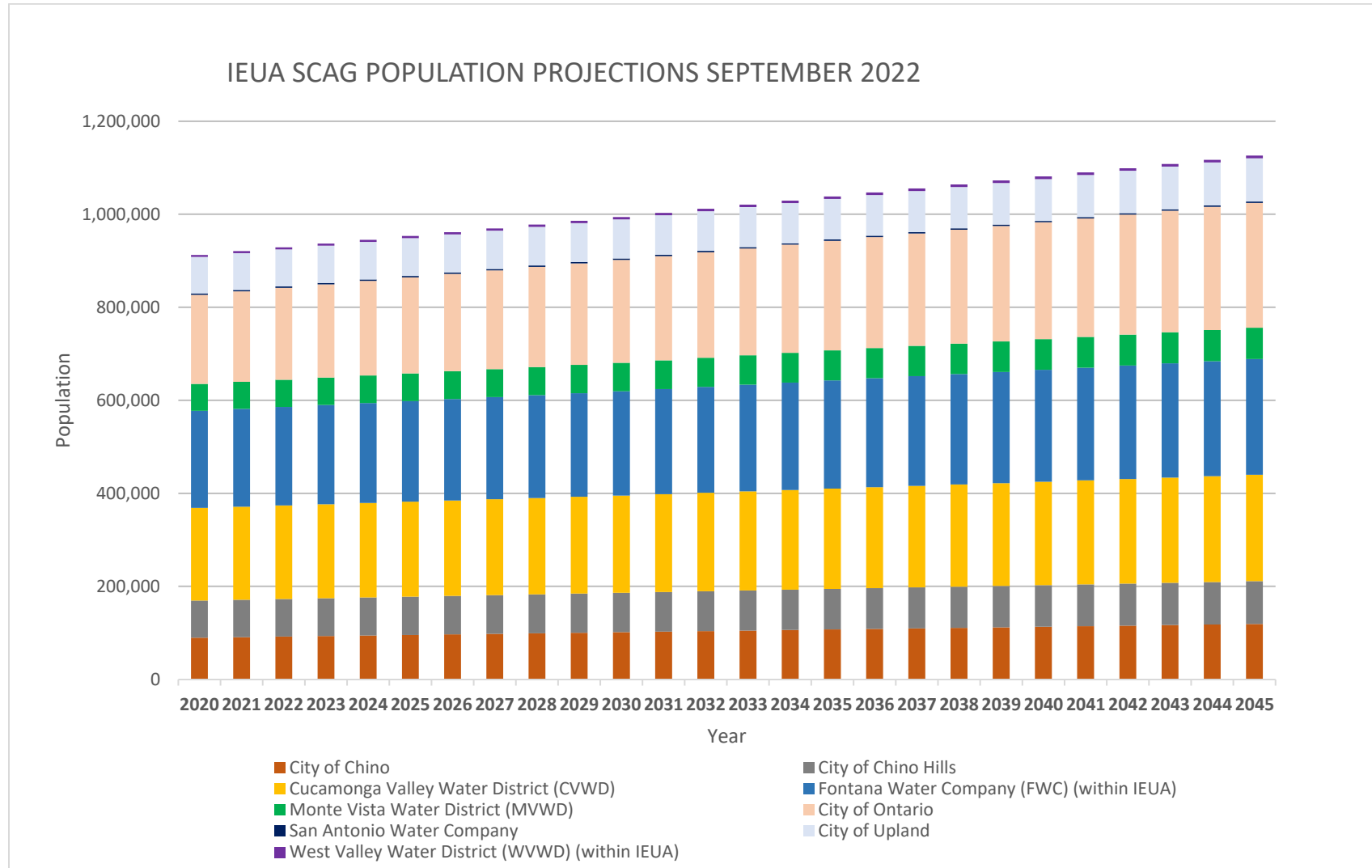
Table 2: IEUA SCAG Population Projections September 2022

Retail Agency	Estimated Population	Projected Population				
	2020 ¹	2025	2030 ¹	2035 ¹	2040 ¹	2045 ¹
City of Chino	89,707	95,621	101,534	107,440	113,208	119,287
City of Chino Hills	79,946	82,330	84,714	87,096	89,447	91,861
Cucamonga Valley Water District (CVWD)	198,979	204,018	209,057	215,695	222,198	228,897
Fontana Water Company (FWC) ²	208,783	216,449	224,115	232,652	240,643	248,635
Monte Vista Water District (MVWD)	57,787	59,506	61,276	64,555	65,957	67,388
City of Ontario	191,563	206,365	221,167	235,313	251,218	268,198
San Antonio Water Company	3,005	3,006	3,006	3,007	3,008	3,008
City of Upland	78,383	81,177	84,071	87,036	89,902	92,862
Total within IEUA Service Area Boundary (without WVWD)	908,153	948,471	988,940	1,032,794	1,075,581	1,120,136
West Valley Water District (WVWD) ²	4,378	4,710	5,042	5,397	5,741	6,086
Total within IEUA Service Area Boundary	912,531	953,181	993,982	1,038,191	1,081,322	1,126,222
Fontana Water Company Total	235,128	243,361	251,595	260,748	269,332	277,916
West Valley Water District Total	89,101	102,490	110,410	118,943	128,136	138,039

¹Years for which SCAG provided a population estimate

²Population analyzed in Revised Area, or area within IEUA Boundary

Figure 3: IEUA SCAG Population Projections September 2022



1.3.3 2020 Census with DOF Growth Rate Population Projections

U.S. Census Data were collected on the block group level and used in conjunction with California Department of Finance's population growth rate for San Bernardino County. Incarcerated populations were included in the analysis. The results of this analysis are presented in Table 3 and when compared to updated SCAG estimates for 2020, as presented in Table 2, are about 5% or almost 47,000 persons lower supporting the theory of Census undercounting. The CDOF annual population percent change for July 1 from 2021 to 2060 is found in Appendix A

Table 3: US Census & Population Projections Interpolated Population Based on CAL DOF % in San Bernardino Co

Retail Agency	Population Projections					
	2020	2025	2030	2035	2040	2045
City of Chino	86,736	90,277	94,039	97,544	100,734	103,695
Chino and Monte Vista Water District	322	335	349	362	374	385
City of Chino Hills	78,411	81,613	85,013	88,181	91,065	93,742
Cucamonga Valley Water District (CVWD)	192,416	200,272	208,616	216,392	223,469	230,038
Fontana Water Company (FWC)*	194,919	202,878	211,330	219,207	226,376	233,030
Monte Vista Water District (MVWD)	54,729	56,964	59,337	61,548	63,561	65,430
City of Ontario	170,814	177,788	185,196	192,098	198,381	204,212
San Antonio Water Company	3,441	3,581	3,731	3,870	3,996	4,114
City of Upland	78,744	81,959	85,374	88,556	91,452	94,140
West Valley Water District*	4,922	5,123	5,336	5,535	5,716	5,884
Total	865,454	900,791	938,320	973,293	1,005,124	1,034,672

* Within IEUA Service Area

Data Source: "CensusBlock2020_NoReallocationOfIncarceratedPersons.shp" provided by IEUA to KJ on August 26th, 2022

1.3.4 Comparison of Population Projections

The population estimates reported by each member agency's 2020 UWMP, presented in Table 1 and Figure 1, differ from the IEUA updated SCAG Population Projections September 2022 presented in Table 2 and on Figure 3. The primary differences are as follows:

1. Fontana Water Company and West Valley Water District both serve areas outside of IEUA's service area, thus the population projections in their individual UWMPs are larger than reported in the IEUA 2020 UWMP.
2. San Antonio Water Company (SAWCo) population was not included in the IEUA 2020 UWMP.
3. City of Ontario, which lies entirely within IEUA's service area, estimated substantially higher population in 2045 than IEUA had estimated. Data prepared in the City's 2020 Water Master Plan Update was cited as the source within its [UWMP](#) on page 60. This methodology combines data from SCAG and municipal land use data to estimate and project future populations.
4. City of Chino's population estimation is slightly less than population in 2045 projections reported in the IEUA 2020 UWMP. Data prepared in the City's 2021 Water Master Plan was cited as the source within its [UWMP](#) on pages 60-61. This methodology linearizes and extrapolates data from the US Census Bureau, CADOF, and SCAG to derive population estimates.

The population projection presented in Appendix A using the 2020 US Census data and California Department of Finance growth rate presented in Table 3 were significantly lower than the other projections, potentially because of concerns regarding the inaccuracies of the 2020 Census discussed in Section 1.2.

1.4 Recommended Future Population Project Approach

The three population projection methods (Retail Agency Projections, IEUA SCAG Wholesale Projections, and 2020 Census and DOF Growth Rate Projections) were compared graphically on Figure 4. Based on the extreme growth projections, local data adjustments, and inconsistent data sources found in the Retail Agency Projections and issues surrounding 2020 Census and the coarseness of county-wide projection data provided by the CA DOF, **it is recommended that SCAG Growth Forecasting data, as used in the IEUA 2020 UWMP, be used by IEUA in decisions related to planning**; use of this projection for other purposes may require additional review. Other projection methods may be more appropriate to meet other requirements. For planning purposes, this approach offers a comparable product to the US Census, with the added benefit of local stakeholder expertise that help to validate the data and ensure that estimates are accurate.

The data presented on Figure 4 are presented in tabular form in Table 4.

Figure 4: Comparison of Population Projection Methods

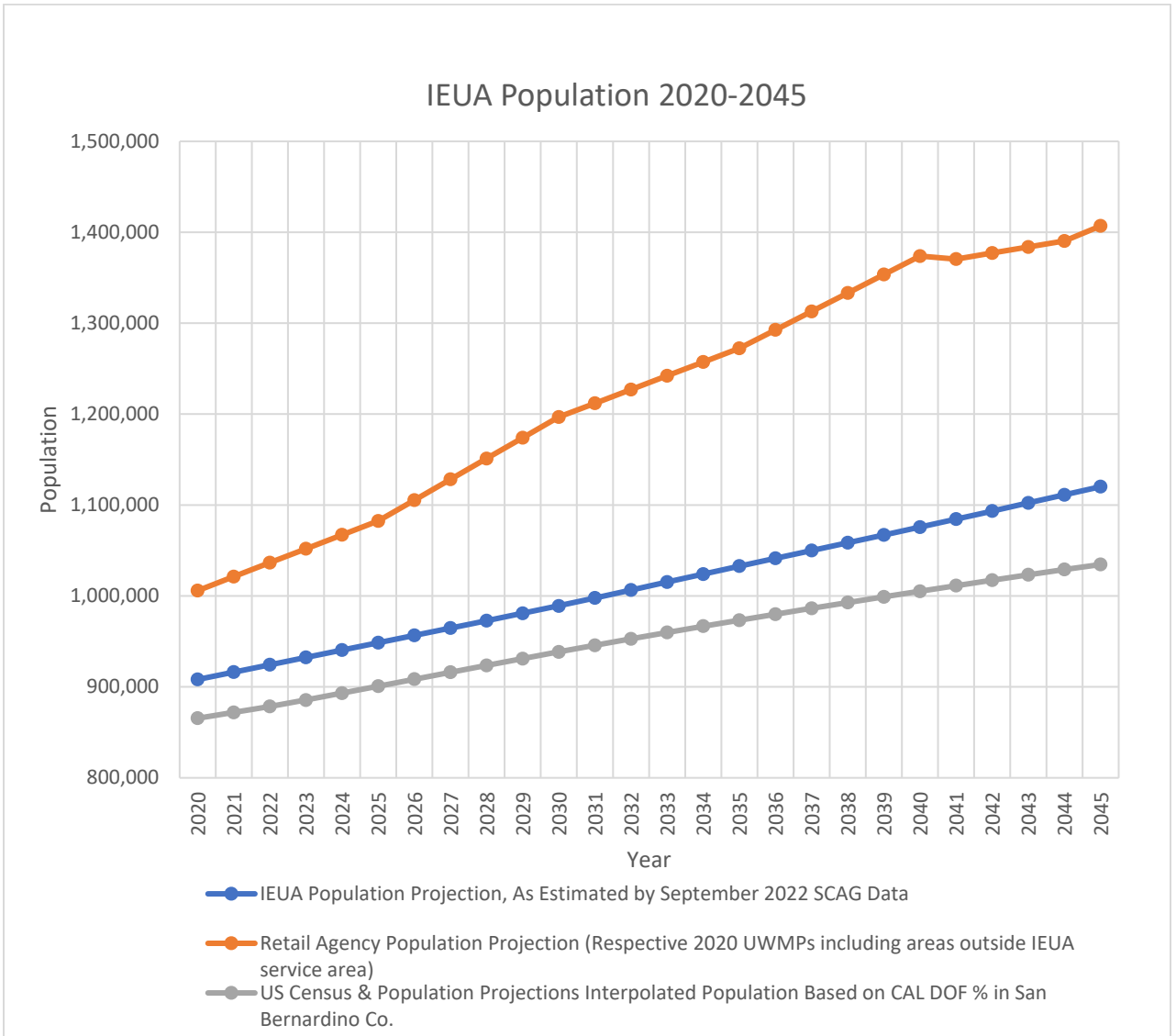


Table 4: Population Projection Methods Summary, 2020-2045

IEUA SCAG Population Projections September 2022																										
Retail Agency	Estimated Population	Projected Population																								
		SCAG YEAR	Interpolated Estimates									SCAG YEAR	Interpolated Estimates					SCAG YEAR	Interpolated Estimates				SCAG YEAR			
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
City of Chino	89,707	90,890	92,072	93,255	94,438	95,621	96,803	97,986	99,169	100,351	101,534	102,715	103,896	105,078	106,259	107,440	108,594	109,747	110,901	112,054	113,208	114,424	115,640	116,855	118,071	119,287
City of Chino Hills	79,946	80,423	80,900	81,376	81,853	82,330	82,807	83,284	83,760	84,237	84,714	85,190	85,667	86,143	86,620	87,096	87,566	88,036	88,507	88,977	89,447	89,930	90,413	90,895	91,378	91,861
Cucamonga Valley Water District (CVWD)	198,979	199,987	200,995	202,002	203,010	204,018	205,026	206,034	207,041	208,049	209,057	210,385	211,712	213,040	214,367	215,695	216,996	218,296	219,597	220,897	222,198	223,538	224,878	226,217	227,557	228,897
Fontana Water Company (FWC) (within IEUA)	208,783	210,317	211,850	213,383	214,916	216,449	217,982	219,515	221,049	222,582	224,115	225,822	227,530	229,237	230,944	232,652	234,250	235,848	237,446	239,045	240,643	242,241	243,840	245,438	247,036	248,635
Monte Vista Water District (MVWD)	57,787	58,131	58,475	58,818	59,162	59,506	59,860	60,214	60,568	60,922	61,276	61,932	62,588	63,243	63,899	64,555	64,835	65,116	65,396	65,677	65,957	66,243	66,529	66,816	67,102	67,388
City of Ontario	191,563	194,523	197,484	200,444	203,405	206,365	209,325	212,286	215,246	218,207	221,167	223,996	226,825	229,655	232,484	235,313	238,494	241,675	244,856	248,037	251,218	254,614	258,010	261,406	264,802	268,198
San Antonio Water Company	3,005	3,005	3,005	3,005	3,005	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,007	3,007	3,007	3,007	3,007	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008
City of Upland	78,383	78,942	79,501	80,059	80,618	81,177	81,756	82,335	82,913	83,492	84,071	84,664	85,257	85,850	86,443	87,036	87,609	88,182	88,756	89,329	89,902	90,494	91,086	91,678	92,270	92,862
Total	908,153	916,217	924,281	932,344	940,408	948,471	956,565	964,659	972,752	980,846	988,940	997,711	1,006,481	1,015,252	1,024,023	1,032,794	1,041,351	1,049,909	1,058,466	1,067,024	1,075,581	1,084,492	1,093,403	1,102,314	1,111,225	1,120,136
West Valley Water District (within IEUA)	4,378	4,445	4,511	4,577	4,644	4,710	4,776	4,843	4,909	4,975	5,042	5,113	5,184	5,255	5,326	5,397	5,466	5,535	5,603	5,672	5,741	5,466	5,535	5,603	5,672	6,086
Grand Total	912,532	920,662	928,792	936,921	945,051	953,181	961,341	969,501	977,661	985,821	993,981	1,002,823	1,011,665	1,020,507	1,029,349	1,038,190	1,046,817	1,055,443	1,064,070	1,072,696	1,081,322	1,089,958	1,098,937	1,107,917	1,116,897	1,126,221
Fontana Water Company (FWC) (Total)	235,128	236,775	238,421	240,068	241,715	243,361	245,008	246,655	248,302	249,948	251,595	253,242	255,256	257,087	258,917	260,748	262,465	264,182	265,898	267,615	269,332	271,049	272,766	274,482	276,199	277,916
Total reported in UWMP Table 1-4 (Plan Omits WVWD)	906,046					945,849					987,401				1,031,771				1,074,773						1,119,568	
Difference	2,107					2,622					1,539				1,023				808						568	
Retail Agency UWMPs																										
Individual Reports	Agency Report	Interpolated Population Served					Agency Report	Interpolated Population Served					Agency Report	Interpolated Population Served					Agency Report	Interpolated Population Served					Agency Report	
Retail Agency	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
City of Chino	80,808	82,684	84,560	86,435	88,311	90,187	91,757	93,326	94,896	96,465	98,035	99,439	100,843	102,248	103,652	105,056	106,258	107,460	108,663	109,865	111,067	112,338	113,609	114,880	116,151	117,422
City of Chino Hills	82,409	83,575	84,741	85,907	87,073	88,239	89,405	90,571	91,736	92,902	94,068	94,960	95,852	96,745	97,637	98,529	99,421	100,313	101,205	102,097	102,989	103,881	104,773	105,666	106,558	107,450
Cucamonga Valley Water District (CVWD)	198,979	200,613	202,248	203,882	205,517	207,151	210,817	214,484	218,150	221,817	225,483	226,693	227,902	229,112	230,321	231,531	232,539	233,548	234,556	235,565	236,573	236,573	236,573	236,573	236,573	236,573
Fontana Water Company (FWC) - Within IEUA	236,754	233,516	230,278	227,041	223,803	220,565	227,210	233,855	240,499	247,144	253,789	255,688	257,588	259,487	261,387	263,286	265,209	267,132	269,054	270,977	272,900	274,524	276,148	277,772	279,396	281,020
Monte Vista Water District (MVWD)	57,787	58,131	58,475	58,818	59,162	59,506	59,860	60,214	60,568	60,922	61,276	61,932	62,588	63,243	63,899	64,555	64,835	65,116	65,396	65,677	65,957	66,243	66,529	66,816	67,102	67,388
City of Ontario	178,409	189,244	200,079	210,913	221,748	232,583	239,334	246,085	252,837	259,588	266,339	273,090	279,841	286,593	293,344	300,095	312,657	325,218	337,780	350,341	362,903	362,903	362,903	362,903	362,903	362,903
San Antonio Water Company	3,303	3,303	3,303	3,303	3,303	3,303	3,307	3,311	3,314	3,318	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322
City of Upland	78,383	78,942	79,501	80,059	80,618	81,177	81,756	82,335	82,913	83,492	84,071	84,664	85,257	85,850	86,443	87,036	87,609	88,182	88,756	89,329	89,902	90,494	91,086	91,678	92,270	92,862
Total w/o WVWD	916,832	930,008	943,184	956,359	969,535	982,711	1,003,445	1,024,180	1,044,914	1,065,649	1,086,383	1,099,788	1,113,194	1,126,599	1,140,005	1,153,410	1,171,851	1,190,291	1,208,732	1,227,172	1,245,613	1,250,278	1,254,944	1,259,609	1,264,275	1,268,940
West Valley Water District	89,101	91,232	93,363	95,494	97,625	99,756	101,886	104,017	106,148	108,279	110,410	112,117	113,823	115,530	117,236	118,943	120,782	122,620	124,459	126,297	128,136	120,214	122,194	124,175	126,155	138,039
Fontana Water Company (FWC) - ALL	236,754	238,736	240,718	242,701	244,683	246,665					253,789					263,286				272,900					281,020	
US Census																										
Retail Agency	Census	Interpolated Population Based on CAL DOF in San Bernardino Co.																								
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Chino	86,736	87,380	88,037	88,739	89,491	90,277	91,044	91,801	92,559	93,303	94,039	94,777	95,489	96,190	96,883	97,544	98,200	98,853	99,491	100,118	100,734	101,351	101,951	102,548	103,131	103,695
Chino and Monte Vista Water District	322	324	327	329	332	335	338	341	344	346	349	352	354	357	360	362	365	367	369	372	374	376	378	381	383	385
Chino Hills	78,411	78,994	79,587	80,221	80,902	81,613	82,306	82,990	83,675	84,348	85,013	85,680	86,324	86,958	87,584	88,181	88,775	89,365	89,942	90,509	91,065	91,623	92,165	92,706	93,233	93,742
Cucamonga Valley Water District	192,416	193,846	195,301	196,859	198,528	200,272	201,973	203,653	205,334	206,984	208,616	210,254	211,834	213,389	214,925	216,392	217,848	219,297	220,712	222,104	223,469	224,839	226,168	227,494	228,788	230,038
Fontana Water Company	194,919	196,367	197,842	199,419	201,110	202,878	204,601	206,302	208,005	209,677	211,330	212,989	214,590	216,165	217,721	219,207	220,682	222,150	223,584	224,993	226,376	227,763	229,110	230,454	231,764	233,030
Monte Vista Water District	54,729	55,136	55,550	55,993	56,467	56,964	57,447	57,925	58,403	58,873	59,337	59,803	60,252	60,694	61,131	61,548	61,963	62,375	62,777	63,173	63,561	63,951	64,329	64,706	65,074	65,430
Ontario	170,814	172,083	173,376	174,758	176,239	177,788	179,298	180,789	182,282	183,747	185,196	186,649	188,052	189,432	190,796	192,098	193,391	194,677	195,934	197,169	198,381	199,597	200,777	201,954	203,103	204,212
San Antonio Water Company	3,441	3,467	3,493	3,520	3,550	3,581	3,612	3,642	3,672	3,702	3,731	3,760	3,788	3,816	3,844											

References

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[Appendix A](#)

CAL DOF Annual Percent population change in San Bernardino Co

Year	% Population Change	Year	% Population Change	Year	% Population Change	Year	% Population Change
2021	0.74%	2031	0.78%	2041	0.61%	2051	0.51%
2022	0.75%	2032	0.75%	2042	0.59%	2052	0.51%
2023	0.79%	2033	0.73%	2043	0.58%	2053	0.49%
2024	0.84%	2034	0.71%	2044	0.57%	2054	0.50%
2025	0.87%	2035	0.68%	2045	0.54%	2055	0.50%
2026	0.84%	2036	0.67%	2046	0.56%	2056	0.49%
2027	0.82%	2037	0.66%	2047	0.54%	2057	0.47%
2028	0.82%	2038	0.64%	2048	0.52%	2058	0.48%
2029	0.80%	2039	0.63%	2049	0.53%	2059	0.51%
2030	0.78%	2040	0.61%	2050	0.52%	2060	0.50%

Date Source: California Department of Finance. Demographic Research Unit. Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.