Population and Community Need Data

Please utilize the resources below to help describe community need for Adolescent Family Life Program (AFLP) services and identify potential AFLP program service areas. Information on AFLP county eligibility is provided on page 1 and in Table 1. Information to support development of program reach is provided throughout the document. Methods to calculate estimates are provided in Technical Notes on pages 20 – 23.

- **CDPH 2000-2016 California Adolescent Births Slides** include statewide and county data about births to females ages 15 – 19.

- **CDPH 2016 Adolescent Birth Rate (ABR) Press Release Frequently Asked Questions** provides answers to commonly asked questions about adolescent birth data and sexual health programming in California.

- **CDPH 2016 Adolescent Sexual Health County Profiles** provide population, youth behavioral and adolescent birth data at the county level.

Eligibility

To be eligible for this Request for Application (RFA), counties must have a minimum countywide 2016 California Adolescent Sexual Health Needs Index (CASHNI) score of 400 and have a county minimum of 200 projected expectant and parenting females (EPF) under age 22 in 2020.

The combined eligibility requirements (CASHNI >= 400 and EPF >=200) captures 93.1 percent of 2017 CA statewide births to adolescent females aged 15 – 19 and 92.9 percent of 2017 CA statewide births to adolescent females aged 15 – 21. See Table 1 for a list of eligible counties.

CASHNI scores are based on a formula that includes each county's annual number of live births to females under age 19 and additional community characteristics (e.g., percentage of youth living in concentrated areas of poverty, rural community status). For more information about the CASHNI, see the CA Adolescent Sexual Health Needs Index. Methods for projecting EPF under 22 in 2020 are provided in Technical Notes on pages 20 – 23.

Program Reach

Each applicant must identify a program service area and develop a reasonable and well-justified expected program reach in response to this RFA. California Department of Public Health (CDPH) Maternal Child and Adolescent Health (MCAH) has provided the required Program Reach Worksheet, the data in Tables 1 - 3, and the information outlined below to assist with this task.

Estimated Number of Eligible Female Youth. Table 1 and Table 3 provide projected estimates of the number of expectant and parenting female youth under age 22 in calendar year 2020, by county and Medical Service Study Area (MSSA), respectively. In using these numbers, keep in mind the following:

1. Estimates reflect the number of expectant and parenting female youth across the entire calendar year. At any given point in time, the number of eligible youth will be less.
2. These estimates do not account for migration in and out of California, its counties or sub-county geographies. This may result in higher or lower estimates depending on local migration patterns.
3. These estimates do not address whether the young parent retained custody of the child or if the child was placed elsewhere (e.g., foster care, adoption, non-mandated kin care). This will result in higher estimates than if these individuals were able to be identified and removed from the eligible population.

Average Decline in Estimated Population of Adolescent Mothers. Table 2 provides the average decline in the estimated population of parenting females under age 22 by county. In estimating their annual reach over the three-year period, agencies need to consider the probable decline in the eligible population over time. For example, if the projected population in the proposed service area was 500 in 2020 and there was an annual decline of around 15%, it is reasonable to estimate that there will be a total population of about 425 in 2021 (500*0.85) and about 361(425*.85) in 2022.

Scope of Cal-Learn Program. Table 2 provides data on the number of adolescent parents served by the Cal-Learn Program in July 2019 by county for counties eligible for this RFA. In using these numbers, keep in mind the following:

- This data reflects a single month's caseloads. Each month, some portion of the youth will exit, some portion will enter and some portion will continue. From available data (representing approximately 60.0 percent of the statewide Cal-Learn caseload), CDPH/MCAH estimated that, on average across FY 15-16, monthly Cal-Learn totals represented approximately 48.4 percent of the annual Cal-Learn reach.
- Although youth cannot be enrolled concurrently in AFLP and Cal-Learn, youth who become ineligible for Cal-Learn may be eligible for AFLP. From available MIS data, CDPH/MCAH estimated that 6.6 percent of youth enrolled in Cal-Learn during FY 15-16 were also enrolled in AFLP during the same time period.
- Expectant and parenting male youth can enroll in Cal-Learn. From available MIS data, CDPH/MCAH estimated that 8.4 percent of the annual FY 15-16 Cal-Learn case load was male.

Table 1: County AFLP RFA Eligibility Status

County	2016 CASHNI Score	Projected EPF, 2020	AFLP RFA Eligibility Status
Alameda	1230	1,398	Eligible
Alpine	0	1	Ineligible
Amador	48	39	Ineligible
Butte	598	399	Eligible
Calaveras	24	38	Ineligible
Colusa	113	54	Ineligible
Contra Costa	982	1,168	Eligible
Del Norte	252	73	Ineligible
El Dorado	93	147	Ineligible
Fresno	6767	2,775	Eligible
Glenn	166	63	Ineligible
Humboldt	245	187	Ineligible
Imperial	2503	655	Eligible
Inyo	34	27	Ineligible
Kern	6303	2,911	Eligible
Kings	996	487	Eligible
Lake	412	161	Ineligible
Lassen	76	59	Ineligible
Los Angeles	18605	14,599	Eligible
Madera	2312	483	Eligible
Marin	78	133	Ineligible
Mariposa	32	20	Ineligible
Mendocino	373	175	Ineligible
Merced	2531	849	Eligible
Modoc	14	14	Ineligible
Mono	15	21	Ineligible
Monterey	2627	1,069	Eligible
Napa	113	169	Ineligible
Nevada	69	71	Ineligible
Orange	2929	3,518	Eligible
Placer	87	281	Ineligible
Plumas	22	33	Ineligible
Riverside	4445	4,887	Eligible
Sacramento	2253	2,327	Eligible

County	2016 CASHNI Score	Projected EPF, 2020	AFLP RFA Eligibility Status
San Benito	191	99	Ineligible
San Bernardino	7374	5,302	Eligible
San Diego	3429	5,185	Eligible
San Francisco	226	412	Ineligible
San Joaquin	1641	1,628	Eligible
San Luis Obispo	311	338	Ineligible
San Mateo	387	542	Ineligible
Santa Barbara	1322	993	Eligible
Santa Clara	1081	1,571	Eligible
Santa Cruz	405	362	Eligible
Shasta	437	343	Eligible
Sierra	11	15	Ineligible
Siskiyou	123	84	Ineligible
Solano	467	655	Eligible
Sonoma	164	473	Ineligible
Stanislaus	1827	1,324	Eligible
Sutter	314	218	Ineligible
Tehama	429	162	Ineligible
Trinity	42	12	Ineligible
Tulare	4345	1,677	Eligible
Tuolumne	57	55	Ineligible
Ventura	1633	1,144	Eligible
Yolo	157	327	Ineligible
Yuba	477	193	Ineligible

Note: AFLP RFA eligibility status is based on the 2016 (CASHNI) and the projected number of Expectant and Parenting Females (EPF) under age 22 in 2020. AFLP eligibility requires a minimum county 2016 CASHNI of 400 and a minimum county EPF of 200.

Table 2: Average Annual Percentage Decline in Number of First-time Mothers Under Age 22, 2014 – 2017 and Total Youth with Cal-Learn Status during month of July 2019, in AFLP RFA Eligible California Counties

County	Average Annual Percentage Decline in Number of First-time Mothers Under Age 22, 2014 – 2017	Total Youth with Cal-Learn Status during month of July 2019
Alameda	-10.5%	42
Butte	-8.3%	18
Contra Costa	-8.2%	31
Fresno	-9.6%	219
Imperial	-6.7%	30
Kern	-7.3%	177
Kings	-1.8%	15
Los Angeles	-9.8%	723
Madera	-8.0%	19
Merced	-7.2%	51
Monterey	-5.1%	25
Orange	-9.7%	71
Riverside	-7.0%	126
Sacramento	-9.1%	164
San Bernardino	-8.2%	281
San Diego	-11.4%	95
San Joaquin	-6.5%	71
Santa Barbara	-3.7%	16
Santa Clara	-13.7%	29
Santa Cruz	-12.0%	13
Shasta	-2.7%	13
Solano	-9.6%	16
Stanislaus	-8.2%	69
Tulare	-6.3%	105
Ventura	-10.5%	27
Statewide*	-8.9%	2567

Note: *Statewide totals include data from 33 California counties not eligible for the 2020 AFLP RFA. Data calculated by CDPH/MCAH/EAPD, August 7, 2019. See Technical Notes on pages 20 – 23 for more information. Cal-Learn data provided by California Department of Social Services, September 24, 2019. For more information see: https://www.cdss.ca.gov/inforesources/Research-and-Data/CalWORKs-Data-Tables/STAT45

Table 3: Projected Number of Expectant and Parenting Females (EPF) Under Age 22 in 2020 by Medical Service Study Area (MSSA)

County	MSSA ID	Projected EPF, 2020
Alameda	1.1	34
Alameda	1.2	15
Alameda	2a	36
Alameda	2b	13
Alameda	2c	104
Alameda	2d	373
Alameda	2e	36
Alameda	2f	53
Alameda	2g	100
Alameda	2h	221
Alameda	2i	36
Alameda	2j	63
Alameda	2k	25
Alameda	2l	41
Alameda	2m	54
Alameda	2n	195
Alpine	3	1
Amador	4	30
Amador	5	4
Amador	6	5
Butte	7.1	119
Butte	7.2	5
Butte	7.3	1
Butte	7.4	4
Butte	8	69
Butte	9	32
Butte	10	160
Butte	11	9
Calaveras	12	38
Colusa	15	20
Colusa	16.1	22
Colusa	16.2	5
Colusa	16.3	7
Contra Costa	17	67
Contra Costa	18a	68
Contra Costa	18b	108
Contra Costa	18c	70

County	MSSA ID	Projected EPF, 2020
Contra Costa	18d	287
Contra Costa	18e	182
Contra Costa	18f	286
Contra Costa	18g	64
Contra Costa	18h	15
Contra Costa	18i	5
Contra Costa	18j	16
Del Norte	19	73
El Dorado	22	7
El Dorado	23.1	28
El Dorado	23.2	23
El Dorado	23.3	47
El Dorado	24	43
Fresno	25	107
Fresno	26	23
Fresno	27	51
Fresno	28	19
Fresno	29	108
Fresno	30	324
Fresno	31	165
Fresno	32	206
Fresno	35a	115
Fresno	35b	223
Fresno	35c	384
Fresno	35d	462
Fresno	35e	383
Fresno	35f	204
Glenn	36.1	29
Glenn	36.2	9
Glenn	37	25
Humboldt	38	3
Humboldt	39	95
Humboldt	40	32
Humboldt	42	48
Humboldt	44	8
Imperial	46	0
Imperial	47	37
Imperial	48	285
Imperial	49	205
Imperial	50	127

County	MSSA ID	Projected EPF, 2020
Inyo	53	21
Inyo	54	2
Inyo	55	3
Kern	57.1	10
Kern	57.2	90
Kern	58.1	85
Kern	58.2	124
Kern	59	12
Kern	60	270
Kern	61	208
Kern	62	53
Kern	63	24
Kern	64	83
Kern	65	125
Kern	66a	417
Kern	66b	800
Kern	66c	449
Kern	66d	162
Kings	67	51
Kings	68	88
Kings	69	348
Lake	70.1	40
Lake	70.2	20
Lake	71.1	77
Lake	71.2	12
Lake	71.3	13
Lassen	72	47
Lassen	73	1
Lassen	74	4
Lassen	75	6
Los Angeles	76.2	14
Los Angeles	77.2	66
Los Angeles	77.3	41
Los Angeles	77.4	4
Los Angeles	77.5	29
Los Angeles	78.1	4
Los Angeles	76.1a	42
Los Angeles	76.1b	133
Los Angeles	77.1a	307
Los Angeles	77.1b	183

County	MSSA ID	Projected EPF, 2020
Los Angeles	77.1c	440
Los Angeles	78.2a	30
Los Angeles	78.2aa	3
Los Angeles	78.2aaaa	109
Los Angeles	78.2b	319
Los Angeles	78.2bb	148
Los Angeles	78.2bbb	359
Los Angeles	78.2bbbb	128
Los Angeles	78.2c	283
Los Angeles	78.2cc	174
Los Angeles	78.2ccc	285
Los Angeles	78.2cccc	62
Los Angeles	78.2d	250
Los Angeles	78.2dd	45
Los Angeles	78.2ddd	233
Los Angeles	78.2dddd	51
Los Angeles	78.2e	178
Los Angeles	78.2ee	27
Los Angeles	78.2eee	100
Los Angeles	78.2eeee	69
Los Angeles	78.2f	10
Los Angeles	78.2ff	83
Los Angeles	78.2fff	575
Los Angeles	78.2ffff	155
Los Angeles	78.2g	127
Los Angeles	78.2gg	183
Los Angeles	78.2ggg	474
Los Angeles	78.2gggg	41
Los Angeles	78.2h	311
Los Angeles	78.2hh	32
Los Angeles	78.2hhh	124
Los Angeles	78.2hhhh	189
Los Angeles	78.2i	209
Los Angeles	78.2ii	53
Los Angeles	78.2iii	246
Los Angeles	78.2iiii	93
Los Angeles	78.2j	26
Los Angeles	78.2jj	20
Los Angeles	78.2jjj	330
Los Angeles	78.2jjjj	182

County	MSSA ID	Projected EPF, 2020
Los Angeles	78.2k	158
Los Angeles	78.2kk	157
Los Angeles	78.2kkk	54
Los Angeles	78.2kkkk	8
Los Angeles	78.2l	258
Los Angeles	78.2ll	305
Los Angeles	78.2lll	110
Los Angeles	78.2m	215
Los Angeles	78.2mm	23
Los Angeles	78.2mmm	353
Los Angeles	78.2n	110
Los Angeles	78.2nn	45
Los Angeles	78.2nnn	226
Los Angeles	78.2o	34
Los Angeles	78.2oo	236
Los Angeles	78.2ooo	482
Los Angeles	78.2p	273
Los Angeles	78.2pp	77
Los Angeles	78.2ppp	236
Los Angeles	78.2q	110
Los Angeles	78.2qq	175
Los Angeles	78.2qqq	118
Los Angeles	78.2r	170
Los Angeles	78.2rr	39
Los Angeles	78.2rrr	56
Los Angeles	78.2s	347
Los Angeles	78.2ss	381
Los Angeles	78.2sss	202
Los Angeles	78.2t	29
Los Angeles	78.2tt	73
Los Angeles	78.2ttt	36
Los Angeles	78.2u	10
Los Angeles	78.2uu	116
Los Angeles	78.2uuu	258
Los Angeles	78.2v	139
Los Angeles	78.2vv	153
Los Angeles	78.2vvv	37
Los Angeles	78.2w	6
Los Angeles	78.2ww	165
Los Angeles	78.2www	191

County	MSSA ID	Projected EPF, 2020
Los Angeles	78.2x	60
Los Angeles	78.2xx	17
Los Angeles	78.2xxx	55
Los Angeles	78.2y	23
Los Angeles	78.2yy	12
Los Angeles	78.2yyy	246
Los Angeles	78.2z	44
Los Angeles	78.2zz	174
Los Angeles	78.2zzz	219
Madera	79.1	36
Madera	79.2	51
Madera	80	397
Marin	81	2
Marin	82	8
Marin	83a	17
Marin	83b	106
Mariposa	85	20
Mariposa	86	0
Mendocino	87.1	3
Mendocino	87.2	3
Mendocino	88	5
Mendocino	89	23
Mendocino	90	4
Mendocino	91	34
Mendocino	92	8
Mendocino	93.1	74
Mendocino	93.2	9
Mendocino	93.3	2
Mendocino	93.4	5
Mendocino	93.5	4
Merced	94	193
Merced	95	103
Merced	96	178
Merced	97.1	225
Merced	97.2	132
Merced	97.3	19
Modoc	98	7
Modoc	99	2
Modoc	100	4
Mono	102	6

County	MSSA ID	Projected EPF, 2020
Mono	103	15
Monterey	105	63
Monterey	106	4
Monterey	107	210
Monterey	108	85
Monterey	109.1	102
Monterey	109.2	539
Monterey	110	64
Napa	111.1	5
Napa	111.2	10
Napa	111.3	1
Napa	112.1	94
Napa	112.2	34
Napa	112.3	25
Nevada	113	55
Nevada	114	16
Orange	115.1	103
Orange	115.2a	69
Orange	115.2b	35
Orange	115.2c	46
Orange	115.2d	38
Orange	116a	134
Orange	116b	447
Orange	116c	267
Orange	116d	16
Orange	116e	61
Orange	116f	150
Orange	116g	341
Orange	116h	152
Orange	116i	210
Orange	116j	40
Orange	116k	115
Orange	116l	295
Orange	116m	65
Orange	116n	90
Orange	116o	40
Orange	116p	136
Orange	116q	221
Orange	116r	229
Orange	116s	143

County	MSSA ID	Projected EPF, 2020
Orange	116t	21
Orange	116u	26
Orange	116v	28
Placer	117	15
Placer	118	28
Placer	119	86
Placer	120	6
Placer	121.1	97
Placer	121.2	48
Plumas	122	6
Plumas	123.1	10
Plumas	123.2	1
Plumas	124	12
Plumas	125	3
Riverside	126	53
Riverside	127	5
Riverside	128	405
Riverside	129.1	103
Riverside	129.2	152
Riverside	129.3	27
Riverside	129.4	314
Riverside	130	13
Riverside	132	455
Riverside	133.1	485
Riverside	133.2	75
Riverside	133.3	94
Riverside	134	330
Riverside	131a	266
Riverside	131b	159
Riverside	131c	68
Riverside	135a	344
Riverside	135b	352
Riverside	135c	229
Riverside	135d	328
Riverside	135e	270
Riverside	135f	122
Riverside	135g	239
Sacramento	136	48
Sacramento	137	7
Sacramento	138	6

County	MSSA ID	Projected EPF, 2020
Sacramento	139a	293
Sacramento	139b	90
Sacramento	139c	227
Sacramento	139d	121
Sacramento	139e	45
Sacramento	139f	332
Sacramento	139g	186
Sacramento	139h	121
Sacramento	139i	55
Sacramento	139j	398
Sacramento	139k	253
Sacramento	139l	78
Sacramento	139m	66
San Benito	140	99
San Bernardino	142	5
San Bernardino	143	0
San Bernardino	144.1	48
San Bernardino	144.2	98
San Bernardino	144.3	125
San Bernardino	145.2	238
San Bernardino	145.3	10
San Bernardino	146	33
San Bernardino	147	25
San Bernardino	148	6
San Bernardino	149	200
San Bernardino	150	58
San Bernardino	145.1a	598
San Bernardino	145.1b	301
San Bernardino	151a	133
San Bernardino	151b	183
San Bernardino	151c	348
San Bernardino	151d	56
San Bernardino	151e	218
San Bernardino	151f	498
San Bernardino	151g	630
San Bernardino	151h	472
San Bernardino	151i	184
San Bernardino	151j	114
San Bernardino	151k	493
San Bernardino	151l	229

County	MSSA ID	Projected EPF, 2020
San Diego	152	12
San Diego	153.1	15
San Diego	153.2	27
San Diego	154	3
San Diego	155	39
San Diego	157	15
San Diego	158.1	48
San Diego	158.2	6
San Diego	159	31
San Diego	160	223
San Diego	156a	217
San Diego	156b	109
San Diego	156c	56
San Diego	156d	329
San Diego	156e	387
San Diego	156f	95
San Diego	161a	98
San Diego	161b	95
San Diego	161c	260
San Diego	161d	317
San Diego	161e	88
San Diego	161f	166
San Diego	161g	321
San Diego	161h	229
San Diego	161i	154
San Diego	161j	499
San Diego	161k	282
San Diego	161l	188
San Diego	161m	72
San Diego	161n	36
San Diego	161o	72
San Diego	161p	41
San Diego	161q	42
San Diego	161r	12
San Diego	161s	263
San Diego	161t	126
San Diego	161u	128
San Diego	161v	83
San Francisco	162a	64
San Francisco	162b	7

County	MSSA ID	Projected EPF, 2020
San Francisco	162c	76
San Francisco	162d	72
San Francisco	162e	3
San Francisco	162f	160
San Francisco	162g	17
San Francisco	162h	12
San Joaquin	163	144
San Joaquin	164.1	144
San Joaquin	164.2	67
San Joaquin	165	3
San Joaquin	166	166
San Joaquin	167	63
San Joaquin	168	28
San Joaquin	169a	280
San Joaquin	169b	561
San Joaquin	169c	172
San Luis Obispo	170	58
San Luis Obispo	171	108
San Luis Obispo	172	31
San Luis Obispo	173	108
San Luis Obispo	174	33
San Mateo	175.1	22
San Mateo	175.2	3
San Mateo	175.3	16
San Mateo	176a	80
San Mateo	176b	209
San Mateo	176c	27
San Mateo	176d	73
San Mateo	176e	13
San Mateo	176f	89
San Mateo	176g	10
Santa Barbara	177	19
Santa Barbara	178.1	9
Santa Barbara	178.2	7
Santa Barbara	179	159
Santa Barbara	180.1	620
Santa Barbara	180.2	27
Santa Barbara	181a	102
Santa Barbara	181b	50
Santa Clara	182	152

County	MSSA ID	Projected EPF, 2020
Santa Clara	183a	13
Santa Clara	183b	116
Santa Clara	183c	41
Santa Clara	183d	133
Santa Clara	183e	310
Santa Clara	183f	10
Santa Clara	183g	67
Santa Clara	183h	225
Santa Clara	183i	58
Santa Clara	183j	121
Santa Clara	183k	63
Santa Clara	183l	90
Santa Clara	183m	31
Santa Clara	183n	73
Santa Clara	183o	70
Santa Cruz	184	225
Santa Cruz	185.1	67
Santa Cruz	185.3	18
Santa Cruz	185.4	2
Santa Cruz	185.5	51
Shasta	186	68
Shasta	187	2
Shasta	188.1	6
Shasta	188.2	5
Shasta	189.1	3
Shasta	189.2	198
Shasta	189.3	45
Shasta	190	17
Sierra	191	15
Siskiyou	193	4
Siskiyou	194	9
Siskiyou	195	40
Siskiyou	197	25
Siskiyou	198	5
Siskiyou	199	1
Siskiyou	200	1
Solano	201	29
Solano	203.1	24
Solano	203.2	6
Solano	204	240

County	MSSA ID	Projected EPF, 2020
Solano	202a	127
Solano	202b	229
Sonoma	205.1	13
Sonoma	205.2	30
Sonoma	206	16
Sonoma	207	8
Sonoma	208	36
Sonoma	209.1	124
Sonoma	209.2	5
Sonoma	210.1	235
Sonoma	210.2	6
Stanislaus	211	103
Stanislaus	212.1	159
Stanislaus	212.2	50
Stanislaus	212.3	60
Stanislaus	213	103
Stanislaus	214	117
Stanislaus	215a	174
Stanislaus	215b	170
Stanislaus	215c	388
Sutter	216	193
Sutter	217	2
Sutter	218	23
Tehama	219	10
Tehama	220	8
Tehama	221	90
Tehama	222	53
Trinity	223	1
Trinity	224	7
Trinity	225	3
Trinity	226	0
Tulare	227.1	117
Tulare	227.2	81
Tulare	228.1	70
Tulare	228.2	153
Tulare	229	7
Tulare	230	306
Tulare	231	463
Tulare	232	9
Tulare	233	473

County	MSSA ID	Projected EPF, 2020
Tuolumne	234.1	2
Tuolumne	234.2	28
Tuolumne	235	2
Tuolumne	236	22
Ventura	237	138
Ventura	238	26
Ventura	239	79
Ventura	240a	45
Ventura	240b	51
Ventura	240c	51
Ventura	241a	221
Ventura	241b	442
Ventura	241c	91
Yolo	242	15
Yolo	243	12
Yolo	244	23
Yolo	245	119
Yolo	246.1	144
Yolo	246.2	13
Yuba	247	5
Yuba	248	8
Yuba	249	179

Projections calculated by CDPH/MCAH/EAPD, March 2019. See Technical Notes for more information.

Technical Notes

Average Decline in Estimated Population of Adolescent Mothers

The estimated number of adolescent mothers (females under age 22 who have at least 1 live birth) in California at any given time is the cumulative sum of all females who have given birth for the first time over the previous 11 years, who at the time of the estimate are under age 22. For example, to estimate the number of parenting youth in California in 2020, add all first time mothers who gave birth under age 12 in 2010, those who gave birth under age 13 in 2011, under age 14 in 2012, etc., through those who gave birth under age 22 in 2020. To determine the average decline in this population, CDPH/MCAH calculated the estimated number of adolescent mothers under age 22 in 2014, 2015, 2016, 2017 using the Birth Statistical Master Files from 2004 – 2017, and calculated the decline per year from 2014 to 2015, 2015 to 2016 and 2016 to 2017, by county of residence. The average percentage decline from these four years is presented in Table 2.

Projected Number of Expectant and Parenting Female Youth under age 22 in 2020

CDPH/MCAH extended the method to calculate the estimated number of adolescent mothers (see paragraph above) to develop the projected number of eligible parenting and pregnant females under age 22 for calendar year 2020.

A. Projecting the Number of Adolescent Mothers

Projecting numbers of adolescent mothers started with calculating the adolescent birth rates (ABR) from 2010 to 2017.[1] This is conducted by single year of age starting with aged 12 to aged 21 by race and Hispanic ethnicity. Due to the small number of births occurring to adolescents under age 15, those births to aged 12 to aged 14 were added to the calculation of ABR for aged 15. Calculations were made for four race/ethnicity groups: Black, Hispanic, White, and Other (included Asian, Pacific Islander, Native American). To increase data stability of by county projections, three years of data were aggregated. Moving averages to "smooth" the data were applied where time periods are not combined mutually exclusive but rather in overlapping sequences: Years 2010-2012, Years 2011-2013, etc.

1. ABR is calculated as follows for each single year age and race/ethnic group:

$$\text{ABR} = \frac{\text{Number of births (specific group)}}{\text{Female population (specific group)}} \times 1{,}000$$

[1] Data sources used: Births: 2010-2017, Birth Statistical Master File, California Department of Public Health, Center for Health Statistics and Informatics. Population: 2010-2020, State of California, Department of Finance, Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060, Sacramento, California, January 2016.

2. Examination of the historical ABR data showed a declining trend from 2010 to 2017. Upon determination that there is a linear relationship between time (year, x) and ABR (y), a linear regression was assessed to be appropriate in making the future projections. Linear regression is a statistical approach that approximates the best straight line to quantify the relationship between the two variables, time represented in year (x) and the calculated historical ABR (y). This method develops a line equation y = a + b(x) that best fits a set of historical data points (x, y). Once the regression line is developed, x values are plugged in to predict ABR (y) up to year 2020.

   Modeling the historical rate:

   ABR_i = Intercept + (Slope x $Year_i$)
   where i=1 to the number of years being analyzed

For county level predictions, a Poisson distribution was applied after assessing it to be the best fit for the data.

3. To estimate the number of births to females in a given year at a given age, the projected ABR for that year along with the female population from the Department of Finance population projections for the same year and age were utilized. The equation is:

   Projected number of births, by age and year =

$$\frac{\text{Projected ABR (age, year) x Female population (age, year)}}{1{,}000}$$

4. To obtain the projected number of first time adolescent mothers at a given age in a given year, two adjustment factors were applied to the projected number of births.

   a. The factor to adjust for repeat births (births to mothers with one or more previous live births) was calculated by county, race and age using aggregate birth data from 2016 – 2017.

   b. The factor to adjust for multiple births (single birth events producing two or more live births) was calculated by county and age using aggregate birth data from 2015 – 2017.

This process was repeated for each age, race and year combination needed to estimate adolescent mothers under age 22 in 2020 by county (i.e., those aged 12 – 19 in 2018, 12-20 in 2019 and 12-21 in 2020). Specifically, CDPH/MCAH calculated (Projected adolescent birth rate by age, race and year*Number females by age, race and year) * (1 – Percent repeat births, by age and race, average 2015 - 2017)* (1 – Percent of multiple births, by age, average 2015 - 2017).

To this sum of these estimates, CDPH/MCAH added the actual number of first-time births to females aged 12 in 2011, aged 12 and 13 in 2012, aged 12, 13, and 14 in 2013, aged 12 through 15 in 2014, aged 12 through 16 in 2015, aged 12 through 17 in 2016, and aged 12 through 18 in 2017.

B. Estimating the Number of Pregnant Adolescents

To estimate the number of expectant adolescents who would be eligible for AFLP in 2020, CDPH/MCAH extended the methodology outlined above. Specifically, the number of new adolescent mothers under age 22 in 2021 was estimated and a time factor of .769 was applied to account for the time a woman would need to be pregnant in 2020 to give birth in 2021 (40 of 52 weeks). This method assumes the following:

- The number of first time mothers under age 22 in 2021 will substantially reflect the number of first time pregnant women under age 22 in 2020.
- Although some additional number of new mothers under age 22 may be pregnant in 2017 and not give birth in 2021 (due to voluntary or involuntary pregnancy loss), the likelihood of these mothers enrolling in AFLP is low (an estimated 1.4% of expectant youth who enrolled during FY 15-16 exited because of pregnancy loss; AFLP MIS data). To the extent this occurs, this number underestimates the eligible population.
- To the extent an expectant youth might age out of eligibility before discovering a pregnancy, this number overestimates the eligible population.

C. Calculating MSSA-Level Estimates

To obtain projections at the MSSA level, CDPH/MCAH calculated the percentage of total adolescent births within a given county by MSSA, aggregated over all adolescent births 2015 – 2017. This percentage was then multiplied by the total projected number of adolescent expectant and parenting mothers in each county to obtain the projected number of births by MSSA in 2020.

Recruitment Adjustment (see *Program Reach Worksheet*)

The recruitment adjustment for the RFA reflects the average monthly estimated percent of adolescent mothers in California from January 2009 through July 2013 that are not enrolled in either Cal-Learn or AFLP. Methods to calculate the estimates of adolescent mothers followed the methods outlined in the section, Average Decline in Estimated Population of Adolescent Mothers. Reach numbers for Cal-Learn and AFLP were obtained from the Department of Social Services, and the AFLP Management Information System (MIS) LodeStar application software, respectively. Over these five years, the percent of youth not reached was relatively stable and the average percent across the period (56.5%) closely reflected the percent not reached in July 2013 (56.7%). In using this number CDPH/MCAH makes the following assumptions:

- Although the program reach worksheet removes the Cal-Learn population from the eligible population in a separate step, it is likely that some percent of the youth who were not reached by either program may be eligible for Cal-Learn, and thus not AFLP. To the extent that Cal-Learn accurately captures every eligible youth from the total shared eligible population, the percent of the total AFLP eligible population not reached by AFLP will be underestimated.