

# **Adolescence Interrupted:**

## **An Analysis of the Epidemic of Teen Births in San Joaquin Valley Communities**



by  
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# CENTRAL CALIFORNIA CHILDREN'S INSTITUTE

The Central California Children's Institute is dedicated to improving the well-being and quality of life for all children, youth, and their families in the Central California region. The objectives of the Central California Children's Institute are to (a) study health, education, and welfare issues that affect children and youth in the Central California region; (b) provide an informed voice for children and youth in the Central California region; (c) develop policy and programs, and foster communication and collaboration among communities, agencies, and organizations; and (d) enhance the quality and effectiveness of communities, agencies, and organizations that provide services to children, youth, and their families.

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## Executive Summary

Data show that teen birth rates in the San Joaquin Valley have been decreasing over the last decade. Nevertheless, Valley rates exceed those of the state and the nation. In 2002, the Valley teen birth rate was almost 50% higher than that of the U.S. rate and over 50% higher than the rate for California. The direct economic costs of teen births in the Valley are profound and are estimated at \$256,000,000 annually. The social consequences are also far-reaching and have implications for the immediate needs of teens who give birth and for the future needs of their children.

This report examines the social context in which teen births occur in the San Joaquin Valley. Factors such as family structure, community characteristics, culture and language, barriers to health access, and poverty are all related to the epidemic of teen births. A community-level analysis clarifies the relationship of these factors to the rate of births among teenage girls in the Valley. In order to demonstrate the relationship between community characteristics and teen births, this report uses community-level teen birth rates and rankings of birth rates to describe the prevalence of teen births in the San Joaquin Valley. This report also compares Valley communities with the lowest and highest proportions of teen births.

Results indicate that Valley communities with higher percentages of teen births also have higher percentages of residents living in poverty, families headed by a single female, low levels of educational attainment, foreign-born residents, and residents who speak a non-English language at home. The findings indicate that communities need to examine individual and community risk factors associated with unprotected teen sexual activity and pregnancy when devising interventions to reduce the teen birth rate in their communities. The findings also indicate that prevention and education activities need to be culturally and linguistically appropriate, as well as and clinically relevant.

Lowering the persistently high rates of teen births will require many changes at the societal, community, and individual level. This report recommends how to increase community awareness, assess the availability of local resources, and provide young people with knowledge and support for this effort.



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## Introduction

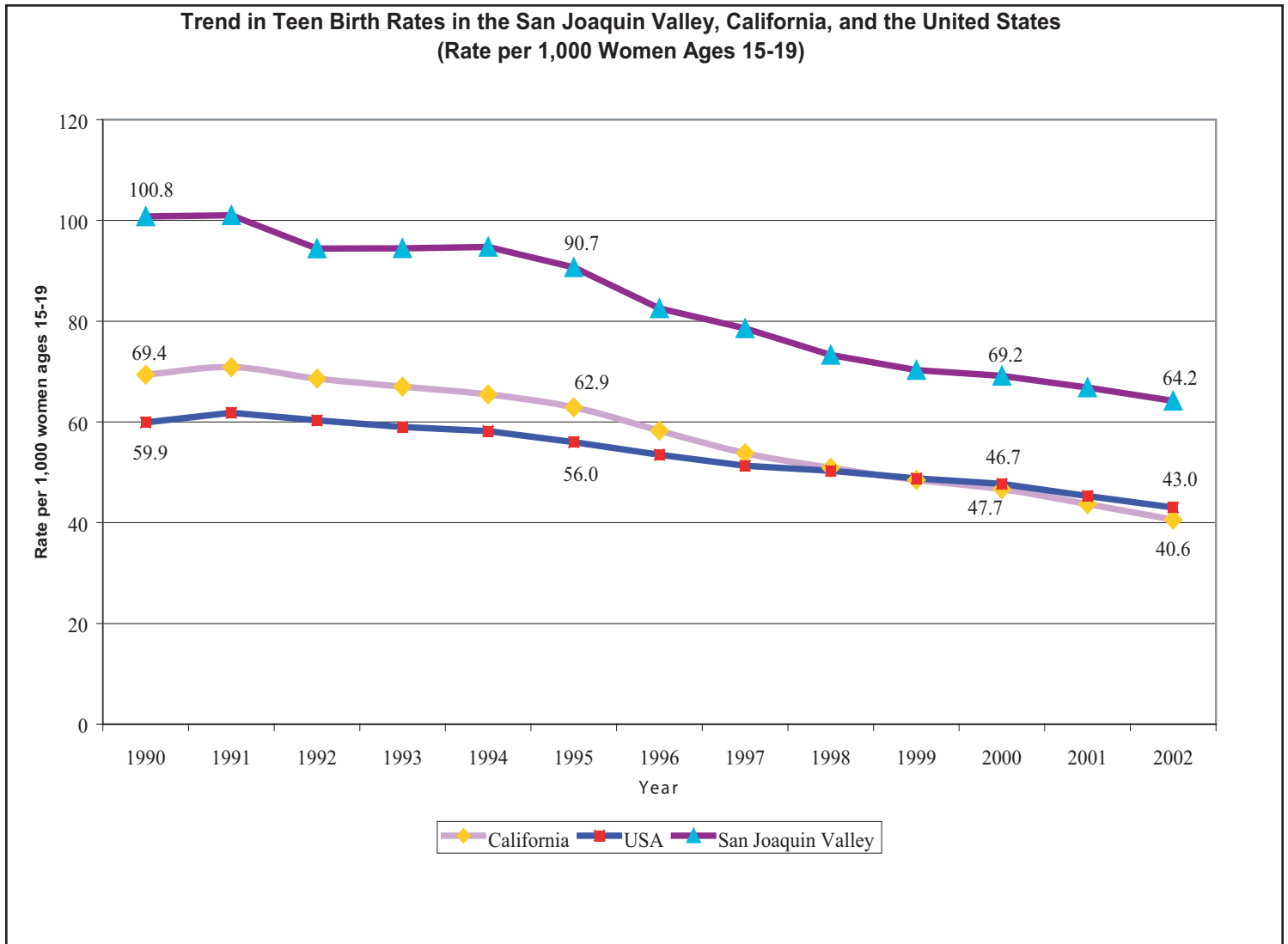
Teen birth rates are at a historic low in the United States. Between 1990 and 2002, the national teen birth rate decreased almost 30% (Martin et al., 2003; see Figure 1). An even steeper decline occurred in California and the San Joaquin Valley (41.5% and 36.3%, respectively; see Figure 1). Despite this decrease, some Valley communities continue to experience higher rates of teen births than do California and the United States as a whole (see Figure 1). For example, in 2002, the U.S. teen birth rate was 43.0 per 1,000 women ages 15 to 19 (Martin et al., 2003). California's rate for the same year was slightly lower at 40.6 per 1,000 women ages 15 to 19 (California Department of Health Services, 2004f). In comparison, the San Joaquin Valley rate was 49% higher than the U.S. rate and 58% higher than the California rate, at 64.2 per 1,000 women ages 15 to 19 (California Department of Health Services, 2004d).

Both a delay in initiation of sexual intercourse and an increase in contraceptive use and efficacy (e.g. decreasing use of withdrawal and increasing use of condoms) are responsible for the declines in pregnancy rates and teen birth rates (Henshaw, 1998; Santelli et al., 2004). Harlap, Kost, and Forrest (1991, as cited in Alan Guttmacher Institute, 1999) noted that a young woman who engages in unprotected sexual intercourse has a 90% chance of becoming pregnant within 1 year. This statistic suggests that unprotected sexual intercourse is the primary factor leading to unplanned pregnancy.

Considering the high teen birth rates in the San Joaquin Valley, one can reasonably conclude that Valley adolescents are engaging in unprotected sexual activity at a higher rate than are adolescents in California or nationwide. The extremely high rates of sexually transmitted infections (STIs) among adolescents in the San Joaquin Valley also support this conclusion. For example, in 2002, the rate of chlamydial infection in the Valley was 28.2 per 1,000 females ages 15-24, compared to 23.0 for the state. Fresno County had the highest rate of chlamydial infections in the state among young women, at 38.5 per 1,000 females ages 15-24. This rate was 67% higher than the state rate of 23.0 (California Department of Health Services, Sexually Transmitted Disease Control Branch, 2004). Therefore, in addition to putting themselves at risk for unplanned pregnancy, Valley adolescents engaging in unprotected sexual activity also put themselves at risk for STIs.



Figure 1



Source: Department of Health Services, Maternal and Child Health Epidemiology Section (2000, 2004); California Department of Health Services, 2003, 2002, and 2001 Vital Statistics Data Tables (2004c, 2004d, 2004e, 2004f); Martin et al., 2003.

In 2002, six of the eight San Joaquin Valley counties were ranked highest for teen birth rates in California. Tulare County had the highest rate in the state at 74.6 per 1,000 young women ages 15-19 (California Department of Health Services, 2004d). Valley teen birth rates are predicted to increase and remain among the highest in the state because of rapidly changing population demographics, such as large Latina teen population and poverty (Constantine & Navarez, 2003). This translates into an urgent need to examine the epidemic of teen births in order to generate knowledge that will support current and future program interventions designed to reduce the rate and the incidence of teen births and STIs.

This report was developed to examine the prevalence of teen births in the San Joaquin Valley and the implications for communities, especially those where teen birth rates are high. The report is organized into four sections. The first section examines the consequences for teen mothers and their children. This is followed by the presentation of specific data for Valley communities. The third section offers discussion and implications of the findings presented in the previous section. The final section includes policy recommendations and specific measures that communities could undertake to reduce teen birth rates and improve their capacity to care for teen mothers and their children. Data supporting these discussions are included in the Appendices of this report.



Although this report focuses on adolescent females, adolescent males are just as important in the prevention of pregnancy and sexually transmitted infections. Among adolescents who are sexually active, the male condom is the most effective method to prevent disease and pregnancy, which reinforces the need to include adolescent males in pregnancy prevention programs. Nevertheless, a specific focus on adolescent males is beyond the scope of this report.

## Background

Teen pregnancy<sup>1</sup> is the observable consequence of engaging in risky sexual behavior, specifically unprotected adolescent sexual activity. Nevertheless, it provides only a glimpse of the range of social and economic factors associated with adolescent sexual activity. Adolescent sexual activity, pregnancy, and births<sup>2</sup> are complex behavioral issues influenced by individual characteristics (i.e., attitudes, beliefs, past experiences, etc.), as well as the characteristics of the social environment in which the teen lives, (i.e., family connections, social connections, etc; Blum & Rinehart, 1998; Kirby, Coyle, & Gould, 2001; Young, Martin, Young, & Ting, 2001). Research has shown that adolescents who are raised in vulnerable situations, such as growing up in an alcoholic or abusive family or in poverty, are at an increased risk for early initiation of sexual activity and for teen pregnancy (Blum, 2001; Kirby et al., 2001).

Recent research evidence has also shown that the prevalence of teen births varies by race or ethnicity (see Berglas et al., 2003). Hispanic adolescents, compared to their White peers, have an earlier initiation of sexual activity (Santelli, Lowry, Brener, & Robin, 2000) and a higher teen birth rate (Department of Health Services, Vital Statistics Query System, 2002; National Campaign to Prevent Teen Pregnancy, 2004). The National Campaign to Prevent Teen Pregnancy (2004) noted that half of Latina girls in the U.S. become pregnant at least once by age 20.

These differences, however, are more often attributed to socioeconomic factors, such as poverty (Kirby et al., 2001; Murry, 1995; Santelli et al., 2000) and cultural differences (Kirby, 2001, as cited in Berglas et al., 2003), rather than to race or ethnicity in isolation. A larger percentage of Hispanics live in poverty and have low levels of educational attainment (Jaffee, 2002). Furthermore, although impoverished adolescents represent a minority of all teens, they have the majority of teen births (Berglas et al., 2003; Santelli et al., 2000).

## Consequences of Adolescent Childbearing

### Consequences for Teen Mothers

Although the negative consequences for teen mothers have been well documented, increasingly sophisticated research on teen pregnancy and teen parenthood has contributed to considerable debate in this area. The debate addresses whether negative consequences, such as low educational attainment and poverty, are caused by teen parenthood per se or whether these consequences stem from the preexisting disadvantages common among teen mothers, as compared to those adolescents who are not teen mothers (Berglas et al., 2003; Coley & Chase-Lansdale, 1998; Constantine & Navarez, 2003; Hoffman, 1998; Jaffee, 2002; Santelli et al., 2000). Nonetheless, teen parenthood does further limit the prospects of already disadvantaged adolescents. The following section discusses the most commonly addressed negative consequences of teen parenthood for adolescent women.

### Low Educational Attainment

The discussion of the relationship between low educational attainment and teen births is prominent in the literature. Recent studies have shown that giving birth does not necessarily prevent a young woman's graduation from high school;

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<sup>1</sup> Teen or adolescent refers to women ages 15-19 years. It is important to understand that although teen mothers are defined as young women ages 15-19, almost two-thirds of all teen births are to young women ages 18 and 19 (Ventura, Mathews, & Hamilton, 2001).

<sup>2</sup> When reading this report, it is important to keep in mind that teen pregnancy and teen births are distinct phenomena. What makes them distinct is that teen pregnancies do not always result in teen births and teen parenthood. Teen birth rates are affected by a young woman's decision about continuing their pregnancy, including seeking an abortion. Socioeconomic status is a factor in making this decision. The majority (almost three-quarters) of pregnant adolescents from families with higher incomes decide to postpone parenthood, compared to pregnant adolescents from families with lower incomes who often decide to give birth and become parents. Poor and low-income teens account for over three-quarters of adolescent mothers. In comparison, higher-income teenagers, who comprise more than half of all women ages 15-19, represent less than one-fifth of those adolescents who give birth (Alan Guttmacher Institute, 1995).

however, this depends on whether the young woman drops out of high school prior to becoming pregnant (Berkthold, Geis, & Kaufman, 1998; Manlove, 1998). Berkthold et al. (1998) found that adolescent women who became pregnant while in high school and gave birth after dropping out were as likely to complete high school as were those adolescent women who never had children. However, young women who became pregnant and gave birth after dropping out of high school were less likely to complete high school than were those young women who became pregnant prior to dropping out of high school and those who never had children.

Research evidence has also shown that even if teen mothers complete high school, they are still at an economic disadvantage, because the level of educational attainment of women who gave birth in their late 20s or 30s has also risen (Hofferth, Reid, & Mott, 2001). In their study, Hofferth et al. statistically predicted that only 3 in 10 teen mothers would attend college compared to 7 in 10 women who give birth in their late 20s. Because advanced education has become a necessity in today's job market, teen mothers were still at a disadvantage for securing employment that would lead to economic self-sufficiency.

### Single Parenthood

Although the national birth rate for unmarried teen mothers had increased steadily between the 1970s and early 1990s, the rate decreased between 1994 and 2002, from 45.8 to 35.4 live births to 1,000 unmarried women ages 15-19 (Martin et al., 2003). In 2000, 80% of teen births were to unmarried adolescent women (Martin et al., 2003). This high proportion of unmarried teenage mothers reflects the fact that today both adult and adolescent women are less likely to marry due to a pregnancy than were women from earlier generations (Ventura et al., 2001). In addition, teenage unwed mothers are more likely to marry than are unwed older mothers; but they are also more likely to divorce (Graefe & Lichter, 2002; see also Coley & Chase-Lansdale, 1998). This increases their chance of becoming the sole provider for their children.

Single-parent households face pressures that may not exist in two-parent households. Poverty rates are highest for families headed by single women, particularly Black and Hispanic single women. In 2001, 26.4% of female-headed families had incomes below the poverty level, compared with 13.1% of male-headed families and 4.9% of married-couple households (University of Michigan National Poverty Center, 2003).

### Poverty

Poverty among teen mothers has a strong relationship to coming from a disadvantaged background, low educational attainment, and single parenthood status (Coley & Chase-Lansdale, 1998). Teen mothers and their children are more likely to live in poverty and receive public assistance than are young women who delay parenthood (Coley & Chase-Lansdale, 1998). Almost 80% of teen mothers receive some public assistance, such as food stamps, WIC, and housing (Acs & Koball, 2003). In spite of this fact, teen mothers account for only 5% of the public assistance caseload (Boonstra, 2000; Alan Guttmacher Institute, 1995). However, three-quarters of unmarried women who begin childbearing in their teens enroll in public assistance programs within 5 years of giving birth (Boonstra, 2000).

### Pregnancy Complications

Teen mothers have greater exposure to poor nutrition, recreational drugs, tobacco, alcohol, and sexually transmitted infections, and experience stress at a higher rate than do women who gave birth at an older age (Chandra, Schiavello, Ravi, & Hook, 2002; Koniak-Griffin & Turner-Pluta, 2001). These health factors have been related to pregnancy complications for teen mothers, as well as poor health outcomes for their children.

Many of the complications that teens experience during and following pregnancy are related to their failure to seek prenatal care in the early stages of pregnancy. Prenatal care should begin during the first trimester and continue throughout pregnancy. Prenatal education helps the pregnant teen avoid risks such as alcohol, drugs, and smoking (U.S. Department of Health and Human Services, 2000). Lee and Grubbs (1995) found that the primary reasons for pregnant teens not seeking prenatal care during the first trimester of pregnancy included denying the pregnancy, not recognizing pregnancy symptoms, fear of parents' response to pregnancy, and lack of financial resources.

### Consequences for Children of Teen Mothers

Research evidence has shown that children of adolescent mothers have a higher risk of adverse perinatal and childhood outcomes than do children of older mothers. However, research has also indicated that when socioeconomic and other factors such as lack of prenatal care are accounted for, there are only minor differences in adverse outcomes between teen mothers and older mothers (Coley & Chase-Lansdale, 1998). The negative consequences for children of

teen mothers have been related to the same social, economic, and behavioral factors that place young women at risk for unplanned pregnancy (Cunnington, 2001). The most common negative consequences for the children of adolescent women are discussed in the following section.

### Poor Health Outcomes

Research evidence has shown a relationship between teen pregnancy and poor birth outcomes for the infant, such as low birthweight, intrauterine growth restrictions, premature birth, and perinatal mortality. These problems can also be associated with poor survival and further medical problems (Chandra et al., 2002; Koniak-Griffin & Turner-Pluta, 2001). For example, low birthweight infants (less than 2,500 grams) are at risk for numerous medical complications and long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities (U.S. Department of Health and Human Services, 2000). Adolescents generally have a low body mass index at the start of the pregnancy and gain less weight during the pregnancy than do older women, which often leads to premature and low birthweight births, especially among young adolescents under age 15 or 16 (Chandra et al., 2002; Cunnington, 2001).

In addition, a few research studies have reported that pregnant adolescents continue to engage in unprotected sexual activity during pregnancy and may therefore be at risk for acquiring STIs (Niccolai, ttier, Kershaw, Lewis, & Ickovics, 2003). A sexually transmitted infection (STI) during pregnancy can have negative health consequences for both the mother and her child. STIs can cause miscarriage, ectopic pregnancy (when the embryo implants outside of the uterus, usually in a fallopian tube), premature delivery, low birthweight, stillbirth, birth defects, and newborn illness and death, as well as pelvic inflammatory disease, cervical cancer, and infertility in the mother (Koniak-Griffin & Turner-Pluta, 2000; March of Dimes, 2002).

Researchers, however, have argued that some of the poor birth outcomes associated with teen pregnancy, such as low birthweight, have a stronger relationship with poverty, lack of social support, and late or no prenatal care than they do with the mother's age (Coley & Chase-Lansdale, 1998; Cunnington, 2001; Koniak-Griffin & Turner-Pluta, 2001).

### Reduced Child Functioning

Research in child functioning has focused on the educational and behavioral outcomes of children born to adolescents. Coley and Chase-Lansdale (1998) noted that during infancy,

no differences in functioning have been found between children of adolescent mothers and children of older mothers. However, during the preschool years and continuing into the school years, some children of adolescent mothers experience delays in cognitive development (Coley & Chase-Lansdale, 1998) and are less successful in school than are children of older women (Berglas & Brindis, 2003). These studies have also documented that preschool children of adolescent mothers often exhibit behavioral problems, including higher levels of aggression and lower impulse control than do children of older mothers (Coley & Chase-Lansdale, 1998). Furthermore, there is evidence to suggest that when the children of teen mothers reach adolescence they have higher rates of delinquency, school failure, early sexual activity, and pregnancy that do their peers born to older mothers (Coley & Chase-Lansdale, 1998). As with poor birth outcomes, cognitive and behavioral outcomes for children of teen mothers appear to have a stronger relationship to socioeconomic status and poverty than with the mother's age (Coley & Chase-Lansdale, 1998).

Additionally, many adolescent mothers lack knowledge about normal infant growth and development and mother-child interactions. Teen mothers are less verbal with their infants than are older mothers (Koniak-Griffin & Turner-Pluta, 2001). They also provide a less stimulating social environment (Constantine & Navarez, 2003). A teen mother's social and family environment, one involving poverty, lack of educational resources, and lack of family support, may also adversely affect early parenting practices. Adolescent mothers who have support from their families have greater self-esteem and life satisfaction, and less depression than adolescent mothers who lack such support (Koniak-Griffin & Turner-Pluta, 2001).

A recent study by Stevens-Simon et al. (2001) found that a combination of socio-demographic and psychosocial factors, such as poor family support and depression, predisposed adolescents in their study to the dysfunctional parenting styles that usually precede child abuse and neglect. These and other researchers have found that the children of adolescent parents are more likely to be abused or neglected and placed in foster care than are children of older mothers. This effect is stronger for later-born children than for first-born children of adolescent mothers (Coley & Chase-Lansdale, 1998; Stevens-Simon et al., 2001). Stevens-Simon et al. (2001) also found that those adolescent mothers who were at high risk for mistreating their children had trouble interpreting their infant's signals of discomfort and soothing the infant.

## Teen Births in the San Joaquin Valley

### Demographic Characteristics of the San Joaquin Valley

Over 3.2 million people reside in the San Joaquin Valley, of which 40.1% are Latino. Almost 20% of Valley residents were born outside the U.S. and nearly 40%, over age 5, speak a non-English language at home. Over one third of Valley residents over age 25 have not graduated from high school. Sixteen percent of Valley families live below the federal poverty level and 18.2% of families are headed by a female. (These data are presented in Appendix A.)

### Rates of Teen Births

Data from the California Department of Health Services show that the counties in the San Joaquin Valley have teen birth rates that are among the highest in the state. Although these rates did decrease between 1990 and 2002, for both California and the San Joaquin Valley (41.5% and 40.6%, respectively), the rates for Valley counties remain high (see Figure 1). Over the past decade, six of the eight Valley counties have consistently ranked among the highest in California for teen birth rates.

**Table 1**

Teen Birth Rates by County, 1994-1996 and 1999-2001				
County	Birth Rate per 1,000 Females Ages 15-19, 1994-1996	Rank Out of 58 California	Birth Rate per 1,000 Females Ages 15-19, 1999-2001	Rank Out of 58 California
Fresno	93.5	54	72.4	55
Kern	95.3	56	71.3	54
Kings	96.4	57	77.4	57
Madera	89.4	52	76.1	56
Merced	94.7	55	66.2	52
San Joaquin	76.6	49	58.4	47
Stanislaus	71.2	46	53.1	43
Tulare	97.9	58	78.3	58
<b>San Joaquin Valley Average</b>	<b>88.7</b>		<b>67.8</b>	
<b>California</b>	<b>66.6</b>		<b>47.7</b>	

\* The higher the numerical ranking, the higher the rate of teen births in a given county compared to other counties in the State of California.  
Source: California Department of Health Services (1998, 2003)

## Costs of Teen Births

A report from the Public Health Institute (Constantine & Navarez, 2003) estimated the annual cost to taxpayers for San Joaquin Valley teen births (based on rates for the year 2000) exceeded \$250 million, with overall societal costs exceeding \$570 million. Societal costs include taxpayer costs, estimated changes in earnings of the teen mothers, fathers, and children when they reached young adulthood, and privately paid medical costs. Furthermore, costs have been projected to increase as much as 24% by 2010 (Constantine & Navarez, 2003). Table 2 provides the number and rate of teen births, birth rate ranks, and the estimated annual costs to taxpayers and society.

**Table 2**

Teen Birth Rates and Estimated Annual Costs by County, 2000					
County	Number of Teen Births	Teen Birth Rate	Rank Out of 58 California Counties*	Estimated Annual Taxpayer Costs	Estimated Annual Societal Costs
Fresno	2,360	70.4	51	\$65,000,000	\$146,000,000
Kern	1,954	74	55	\$54,000,000	\$121,000,000
Kings	362	78.3	57	\$10,000,000	\$22,000,000
Madera	341	71.8	53	\$9,000,000	\$21,000,000
Merced	616	66.2	50	\$17,000,000	\$38,000,000
San Joaquin	1,356	61.1	47	\$38,000,000	\$84,000,000
Stanislaus	995	54.9	43	\$28,000,000	\$61,000,000
Tulare	1,250	78.5	58	\$35,000,000	\$77,000,000

\* The higher the numerical ranking, the higher the rate of teen births in a given county compared to other counties in the State of California.

Notes: Costs represent estimates of annual outlays and losses for 13 yearly cohorts of teen births in the pipeline at any given time. Cost analysis methods are described in detail in Constantine and Navarez's report (2003a).

These figures are rounded to nearest million, and if less than 1 million, rounded to nearest thousand.

These figures were adapted from the Supplemental Table 1 in Constantine and Navarez's report (2003b).

Although rates and rankings describe the prevalence of teen births in the San Joaquin Valley, county-level data fail to explain fully the social context in which teen births occur. The effects of family structure, community characteristics, culture and language, barriers to health access, poverty, and other factors become more clearly apparent through a community-level analysis as described in the following sections.

## Methodology

### Data Sources

This report presents a community-level analysis using six demographic variables: 1) Latino population, 2) foreign-born population, 3) population who speak a non-English language at home, 4) population without a high school diploma, 5) female-householder families, and 6) families with incomes below the poverty level. These variables were analyzed against the percentages of teen births in San Joaquin Valley communities. Percentages of teen births reflect the proportion that teen births (live births to women ages 15-19) represent out of all live births. Data for these indicators were extracted for each ZIP code from two different sources:

- The California Department of Health Services (2004a) *Number of Live Births by ZIP Code of Mother's Residence By Race/Ethnicity and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care, California 2001*.
- U.S. Census 2000 (Community Demographic variables (see above) by ZIP code)

### Data Synthesis

To simplify reporting and ensure greater statistical reliability, data for the 318 ZIP codes in the eight San Joaquin Valley counties (Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare) were aggregated into 61 community ZIP-code clusters, using the same community groupings as in *Health in the Heartland: The Crisis Continues* (Diringer, Curtis, Paul, & Deveau, 2004; see Appendix B for the list of clusters and their ZIP codes). Each community cluster in this report was ranked by the percentage of births to teen mothers (i.e., teen births as a percentage of all live births in 2001). All subsequent analyses were conducted using the same 61 community clusters (see Figure 2).

### Data Analysis

The percentage of teen births within each community cluster was tabulated by comparing the total number of teen births to the total number of live births within the cluster. The 61 clusters were partitioned into four quartiles, ranked by the percentage of teen births:

Quartile 1: Ranks 1-16 (lowest percentage of teen births)

Quartile 2: Ranks 17-31

Quartile 3: Ranks 32-46

Quartile 4: Ranks 47-61 (highest percentage of teen births)

A series of one-way analyses of variance (ANOVAs) were performed to analyze the relationship between community cluster percentages of teen births and the six community demographic variables discussed in Data Sources. All analyses were conducted using StatView 5.01 (Abacus Systems, Inc). An alpha level of .05 was used for all statistical tests. (Appendix C)

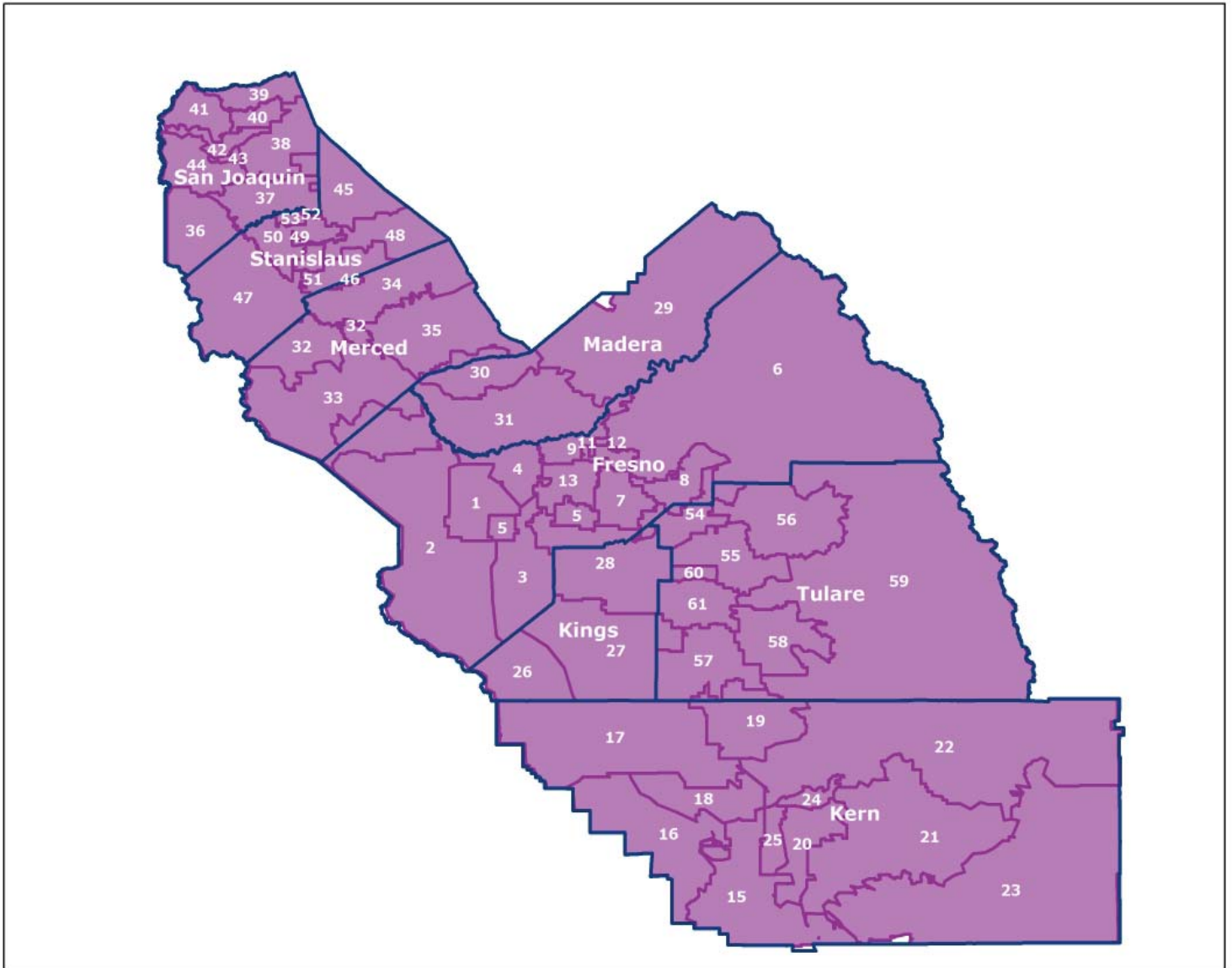
The ZIP-code data for teen births were geocoded and aggregated, and the community cluster data were displayed on a map of the San Joaquin Valley counties, using ArcView 9.0 (ESRI, Inc.) to provide a visual representation of community clusters by the percentage of teen births (see Figure 3).

### Data Limitations

The data used for this report are public data available from governmental agencies. The U.S. Census Bureau estimates were derived from a sample and are subject to both sampling and nonsampling errors. Sampling error in data arises from the selection of people and housing units included in the sample. Nonsampling error occurs as a result of errors that may take place during the data collection and processing stages. The community clusters used for the analysis in this report do not represent "true" communities, as they are an aggregation of postal ZIP codes rather than a city or town. Nevertheless, even with these limitations, this level of analysis permits a more detailed look at the epidemic of teen births in the San Joaquin Valley.

Figure 2

Community Clusters in the San Joaquin Valley



Note. The legend for this map is on the following page.

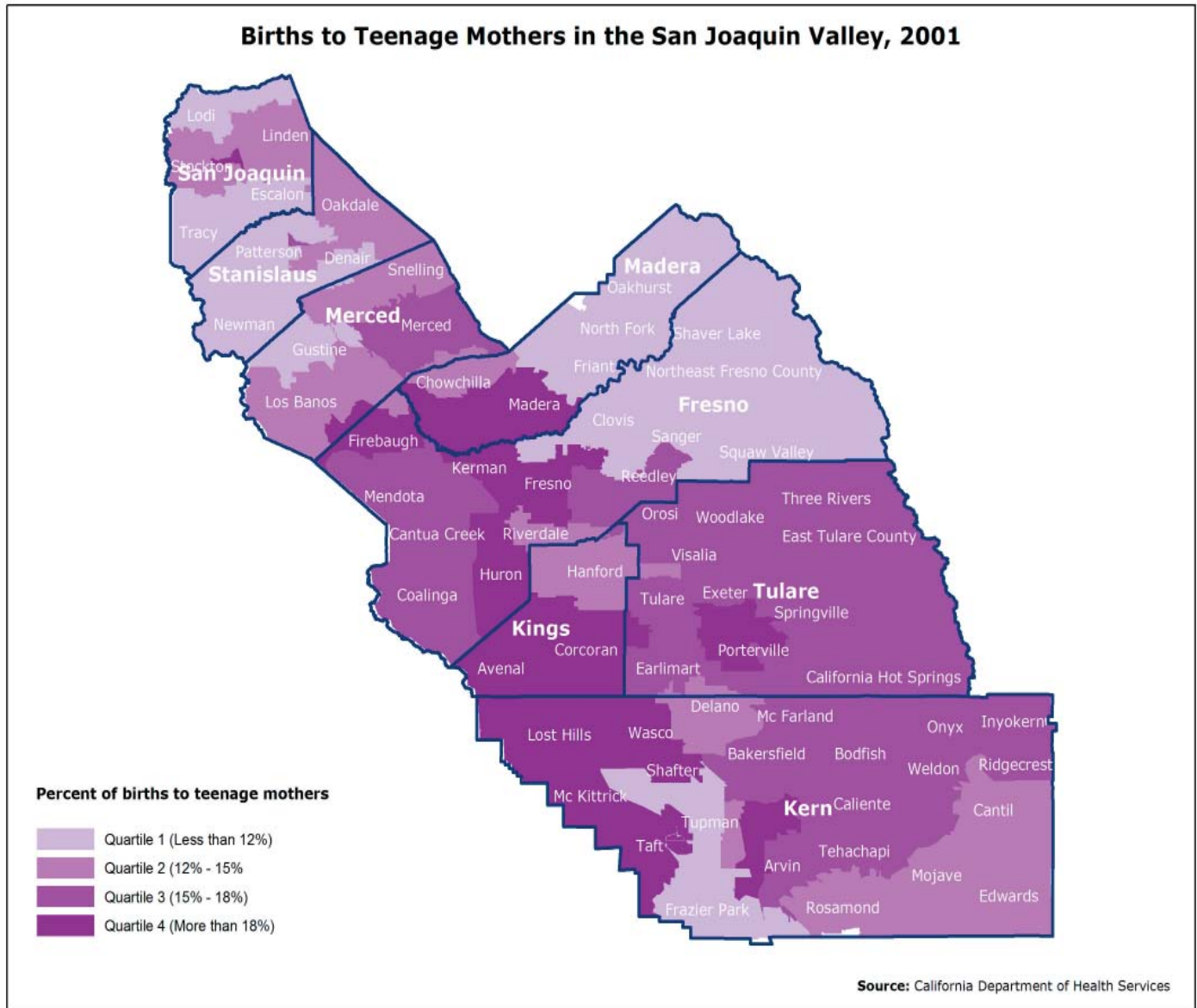
## Legend for the Community Cluster Map (Figure 2)

Map Area	County	Community Cluster	Map Area	County	Community Cluster
1	Fresno	San Joaquin	31	Madera	Madera
2	Fresno	Coalinga/ Mendota	32	Merced	Gustine
3	Fresno	Huron	33	Merced	Los Banos/ Dos Palos
4	Fresno	Kerman/ Biola	34	Merced	N. Merced Co./ Livingston
5	Fresno	Caruthers/ W. Selma	35	Merced	Merced/ Atwater
6	Fresno	Clovis/ Sanger	36	San Joaquin	Tracy
7	Fresno	Selma/ Fowler	37	San Joaquin	Manteca/Lathrop/ Escalon/ Ripon
8	Fresno	Reedley/ Parlier	38	San Joaquin	E. Stockton
9	Fresno	Herndon/ Pinedale	39	San Joaquin	Woodbridge
10	Fresno	North Fresno	40	San Joaquin	E. Lodi
11	Fresno	Central Fresno	41	San Joaquin	Lodi
12	Fresno	Southeast Fresno	42	San Joaquin	N. Stockton
13	Fresno	W. Fresno/ Burrel	43	San Joaquin	Central Stockton
14	Fresno	S. Fresno	44	San Joaquin	S. Stockton/ French Camp
15	Kern	Frazier Park	45	Stanislaus	Oakdale
16	Kern	Taft	46	Stanislaus	Turlock
17	Kern	Shafter-Wasco	47	Stanislaus	Patterson/ Newman
18	Kern	Buttonwillow/Elk Hills	48	Stanislaus	Waterford/ Hughson
19	Kern	Delano/ McFarland	49	Stanislaus	W. Modesto/ Empire
20	Kern	E. Bakersfield/ Lamont	50	Stanislaus	Modesto
21	Kern	Arvin/ Tehachapi	51	Stanislaus	Ceres/ Keyes
22	Kern	Inyokern	52	Stanislaus	Riverbank
23	Kern	Mojave	53	Stanislaus	N. Modesto/ Salida
24	Kern	N. Bakersfield	54	Tulare	Dinuba
25	Kern	Greater Bakersfield	55	Tulare	N. Visalia/ Exeter/ Farmersville
26	Kings	Avenal	56	Tulare	Woodlake
27	Kings	Corcoran	57	Tulare	Earlimart/ Pixley
28	Kings	Hanford/ Lemoore	58	Tulare	Porterville
29	Madera	The Mountains	59	Tulare	Lindsay
30	Madera	Chowchilla	60	Tulare	Visalia
			61	Tulare	Tulare



Figure 3

Community Clusters by the Percentage of Teen Births



## Results

### Teen Births

The number of teen births in each community cluster ranged from a low of 9 births in the cluster of Woodbridge to a high of 457 births in the Southeast Fresno cluster. The percentage of teen births ranged from a low of 6.7% in the San Joaquin County community cluster of Tracy to a high of 22.2% in the South Fresno cluster. The community cluster map in Figure 3, on the previous page shows the percentage of teen births in the 61 community clusters in the San Joaquin Valley. Detailed data for all community clusters are displayed in Appendix A.

Table 3 shows the 10 community clusters with the lowest percentage of teen births, ranging from 6.7% in the Tracy cluster in San Joaquin County to 11.2% in the Clovis/Sanger cluster in Fresno County. Table 4 shows the 10 community clusters with the highest percentage of teen births, ranging from 19.4% in the Caruthers/West Selma cluster in Fresno County to 22.2% in the South Fresno cluster in Fresno County.

**Table 3**

<b>Community Clusters With the Lowest Percentage of Teen Births</b>		
<b>County</b>	<b>10 Community Clusters With Lowest % of Teen Births</b>	<b>% of Teen Births</b>
San Joaquin	Tracy	6.7%
Kern	Buttonwillow/Elk Hills	7.2%
Kern	Frazier Park	7.3%
Fresno	Herndon/Pinedale	8.9%
Stanislaus	North Modesto/Salida	9.0%
San Joaquin	Lodi	9.4%
San Joaquin	Woodbridge	9.4%
Madera	Mountains	10.1%
San Joaquin	Manteca/Lathrop/Escalon/Ripon	10.2%
Fresno	Clovis/Sanger	11.2%

**Table 4**

<b>Community Clusters With the Highest Percentage of Teen Births</b>		
<b>County</b>	<b>10 Community Clusters With Highest % of Teen Births</b>	<b>% of Teen Births</b>
Fresno	Caruthers/West Selma	19.4%
San Joaquin	Central Stockton	19.6%
Kern	Taft	19.6%
Kings	Corcoran	20.1%
Kings	Avenal	20.1%
Fresno	Central Fresno	20.1%
Fresno	Huron	20.8%
Kern	East Bakersfield/Lamont	20.9%
Fresno	West Fresno/ Burrell	22.1%
Fresno	South Fresno	22.2%

The 61 community clusters were ranked by percentage of teen births and grouped accordingly into four quartiles. The average percentage of teen births in all quartiles was 15.1%, ranging from a low of 10.2% in Quartile 1 to a high of 20.0% in Quartile 4.

**Table 5**

<b>Quartiles of 61 Community Clusters Ranked by Percentage of Teen Births</b>				
<b>Quartile</b>	<b>Rank by % of Teen Births</b>	<b>Number of All Live Births</b>	<b>Number of Teen Births</b>	<b>% of Teen Births</b>
Quartile 1	1-16	14,475	1,474	10.2%
Quartile 2	17-31	14,403	2,043	14.2%
Quartile 3	32-46	14,508	2,386	16.5%
Quartile 4	47-61	14,576	2,893	20.0%
ALL QUARTILES		57,962	8,796	15.1%

*Notes:* Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

### **Ethnicity, Language, and Culture**

As can be seen in Table 6, Latinos constituted an average of 26.1% of the population in Quartile 1 (where the lowest percentage of teen births occur) and 57.6% of the population in Quartile 4 (where the highest percentage of teen births occur). Latina teens in the San Joaquin Valley have a birth rate that is 3 times higher than that for White and Asian teens (California Department of Health Services, Vital Statistics Query System, 2004b). The results of the ANOVA showed statistically significant differences between the four quartiles in the percentage of Latino population,  $F(3,57) = 15.30, p < .001$  (see Appendix C).

**Table 6**

<b>Latino Population According to Quartiles of Teen Births</b>			
<b>Quartiles of Teen Births</b>	<b>Number of Total Population</b>	<b>Number of Latino Population</b>	<b>% of Population Who Are Latino</b>
Quartile 1	955,178	241,397	26.1%
Quartile 2	817,228	289,976	36.5%
Quartile 3	769,141	387,983	56.5%
Quartile 4	707,625	384,544	57.6%
ALL QUARTILES	3,249,172	1,303,900	43.9%

*Notes:* Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-1 for a visual representation of the percent of live births to teenage mothers among the Latino population in the San Joaquin Valley (2001).

Cultural and language barriers can compromise utilization of and access to prenatal care among pregnant adolescents (Diringer et al., 2004). The community clusters with the highest proportion of teen births also had a high proportion of foreign-born and non-English-speaking populations. For example, in the community clusters with the highest percentages of teen births (Quartiles 3 and 4), foreign-born persons comprised 27% of the population, compared to 14.8% of the population in Quartile 1 (see Table 7). Similarly, close to twice as many people in the community clusters with the highest percentages of teen births spoke a non-English language at home (see Table 8). The results of the ANOVA showed statistically significant differences between the four quartiles on the percentage of foreign-born persons,  $F(3,57) = 6.56, p < .001$ , and the percentage of persons who speak a non-English language at home,  $F(3,57) = 10.53, p < .001$  (see Appendix C).

**Table 7**

<b>Foreign-Born Population According to Quartiles of Teen Births</b>			
<b>Quartiles of Teen Births</b>	<b>Number of Total Population</b>	<b>Number of Foreign-Born Population</b>	<b>% of Population Who Are Foreign Born</b>
Quartile 1	955,098	132,366	14.8%
Quartile 2	816,774	157,677	19.1%
Quartile 3	769,083	177,180	27.1%
Quartile 4	708,479	180,853	27.2%
<b>ALL QUARTILES</b>	<b>3,249,434</b>	<b>648,076</b>	<b>21.9%</b>

*Notes:* Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-2 for a visual representation of the percent of live births to teenage mothers among the foreign born population in the San Joaquin Valley (2001).

**Table 8**

<b>Population Over Age 5 Who Speak a Non-English Language at Home According to Quartiles of Teen Births</b>			
<b>Quartiles of Teen Births</b>	<b>Number of Population Over Age 5</b>	<b>Number of Population Over Age 5 Who Speak Non-English Language at Home</b>	<b>% of Population Over Age 5 Who Speak Non-English Language at Home</b>
Quartile 1	884,863	224,588	26.6%
Quartile 2	749,831	269,184	35.8%
Quartile 3	702,599	309,664	50.2%
Quartile 4	643,875	318,842	52.5%

*Notes:* Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-3 for a visual representation of the percent of live births to teenage mothers among the population in the San Joaquin Valley that speaks a non-English language at home (2001).

## Poverty

Research has shown that there is a higher percentage of teen births in lower-income groups (Berglas et al., 2003; Santelli et al., 2000). The San Joaquin Valley community clusters with the highest percentage of teen births had rates of poverty that were 3 times higher than those of the community clusters with the lowest percentage of teen births (see Table 9). The results of the ANOVA showed statistically significant differences between the four quartiles on the percentage of families living in poverty,  $F(3,57) = 36.43, p < .001$  (see Appendix C).

**Table 9**

Family Poverty According to Quartiles of Teen Births			
Quartiles of Teen Births	Number of All Families	Number of Families Below Poverty Level	% of Families Below Poverty Level
Quartile 1	244,908	21,802	8.6%
Quartile 2	195,699	29,099	14.7%
Quartile 3	178,959	35,013	21.0%
Quartile 4	151,882	38,147	26.1%
ALL QUARTILES	771,448	124,061	17.5%

Notes: Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-4 for a visual representation of the percent of live births to teenage mothers among families living below the poverty level in the San Joaquin Valley (2001).

*Below poverty level* refers to having an income below the poverty threshold as determined by the U.S. Census Bureau. The U.S. Census Bureau uses a set of income threshold that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is classified as being "below poverty level" (U.S. Census Bureau, 2003).

## Female Householders

Of the 771,448 San Joaquin Valley families, over 140,000 (17%) were headed by a female. As shown in Table 10, the communities with the highest percentage of teen births (Quartile 4) had a higher percentage of households headed by a female than did those communities with a lower percentage (Quartile 1). The results of the ANOVA showed statistically significant differences between the four quartiles on the percentage of female-householder families,  $F(3,57) = 7.26, p < .001$  (see Appendix C).

**Table 10**

Female-Headed Families According to Quartiles of Teen Births			
Quartiles of Teen Births	Number of All Families	Number of Female-Headed Families	% of Female-Headed Families
Quartile 1	244,908	36,460	13.4%
Quartile 2	195,699	35,840	16.8%
Quartile 3	178,959	33,104	17.1%
Quartile 4	151,882	34,677	20.8%
ALL QUARTILES	771,448	140,081	17.0%

Notes: Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-5 for a visual representation of the percent of live births to teenage mothers among female-headed families in the San Joaquin Valley (2001).

## Educational Attainment

Overall, in the San Joaquin Valley, one out of three people over the age of 25 (accounting for over 600,000 people) has not completed high school. As shown in Table 11, almost half of the people over the age of 25 who live in communities with the highest percentage of teen births (Quartile 4) had not completed high school, compared to just over 20% in communities with the lowest percentage of teen births (Quartile 1). The results of the ANOVA showed statistically significant differences between the four quartiles on the percentage of persons over the age of 25 without a high school diploma,  $F(3,57) = 16.67$ ,  $p < .001$  (see Appendix C).

**Table 11**

Educational Attainment According to Quartiles of Teen Births			
Quartiles of Teen Births	Number of Population Over Age 25	Number of Population Over Age 25 With Less Than a High School Education	% of Population Over Age 25 With Less Than a High School Education
Quartile 1	585,108	121,824	22.3%
Quartile 2	475,239	146,381	33.0%
Quartile 3	430,669	166,557	44.3%
Quartile 4	386,338	173,275	48.5%
ALL QUARTILES	1,877,354	608,037	36.8%

*Notes:* Quartile 1 reflects the lowest percentage of teen births and Quartile 4 reflects the highest.

See Appendix D-6 for a visual representation of the percent of live births to teenage mothers among the population of persons with less than a high school education in the San Joaquin Valley (2001).

## Limitations of Findings

In this study the unit of analysis is the community, not the individual. Although the findings of this study are in agreement with many of the characteristics of teen mothers that have been documented in statewide and national studies, these results should be interpreted in the context of community demographics rather than individual characteristics.

## Discussion

This report contains vital information about the prevalence of teen births in communities in the San Joaquin Valley. The results demonstrate the relationship between teen births and community characteristics. Communities with higher percentages of teen births also have higher percentages of residents living in poverty, families headed by a single female, low levels of educational attainment, foreign-born residents, and residents who speak a non-English language at home.

The analysis of teen births through a community cluster approach achieves three purposes. First, it places the focus of analysis on the observed characteristics of communities; this facilitates discussions about community action to reduce teen births. Second, the analysis expands knowledge about local population trends and piques interest in the direction they are growing. Third, it reveals obvious disparities in the prevalence of teen births across San Joaquin Valley communities.

## Implications of Findings

### Unique Community Characteristics

The community context in which teen mothers live is likely to influence their belief systems, educational aspirations, and cultural orientation. The strong association of poverty and low educational attainment with teen parenthood is echoed in the findings of this study. Furthermore, the influence of culture and language, especially among poor Latina women, may pose additional challenges to care providers who strive to lower teen birth rates.

### Expanding Populations and Birth Rates

Data have shown that the San Joaquin Valley has some of the highest rates of teen births in the state. This, coupled with an expanding population—especially among Latinos—suggests that this trend will continue. There is a high likelihood that many more children will be born into low-income families, to mothers who have limited formal education and little or no access to high-paying jobs.

### Costs of Teen Births to Communities

The costs of teen births extend beyond families, impacting local communities. Even if the rate of teen births in the San Joaquin Valley continued to decrease, those communities that have the highest rates of teen births would continue to experience proportionally higher costs. These costs can have devastating effects on local economies, especially in impoverished communities.

### Need for Prevention

Certainly, economic development in communities and community support for high educational attainment are keys to helping teens cope with the influences that often lead to teen childbearing. However, communities need new strategies for educating their members about adolescent health. Evidence supports the need to address issues such as cultural and linguistic barriers and limited access to health and family planning services to successfully educate people about the consequences of unprotected sexual activity and teen births. A number of teen pregnancy prevention efforts already exist in the San Joaquin Valley (see Appendix E). Also, two contemporary theories related to assessing potential for teen pregnancy are described in the following section. These theories may help communities to assess risk behaviors associated with teen pregnancy.

## Theoretical Frameworks for Assessing Community Risks Associated With Teen Births

### Risk/Protective Factor Theory

A key concept of risk/protective factor theory is that both risk and protective factors reside in interpersonal and intrapersonal domains, including one's social environment, social networks, personality, and behavior. This theory proposes that protective factors, such as supportive relationships with peers and family, academic achievement, and effective use of leisure time counteract risk factors, such as negative social circumstances or events (Jessor & Jessor, 1977).

Risk factors and protective factors are important to consider because they can influence behavior and outcomes. Therefore, the presence of risk and protective factors can have a great impact on whether an adolescent decides to engage in unprotected sexual activity and place herself at risk for unplanned pregnancy, sexually transmitted infections, and HIV/AIDS (Kirby, 2001). (For an inclusive list of all of the risk/protective factors related to adolescent sexual behavior, use of contraceptives, pregnancy, and childbearing, see Appendix F).

The risk/protective factor model, when used in designing intervention strategies for teen pregnancy and births, is a useful model for assessing risk behaviors among teens. This theoretical framework takes into account the contribution of community characteristics and social conditions, such as poverty, low educational attainment, and cultural attitudes toward teen sexuality and pregnancy prevention, as factors contributing to teen pregnancy. A risk/protective model also broadens understanding about possible points of intervention to reduce the prevalence of teen births. Teaching young people resistance strategies for avoiding unwanted sexual activity and unsafe sexual practices could ultimately protect them from the health and social consequences of teen childbearing, as well as STIs and HIV/AIDS. Developing informational and educational programs for Valley communities about local prevalence rates of teen births and promoting family discussions about pregnancy prevention could also function as protective factors.



### Assets Theory

Longitudinal survey research with 6th through 12th graders conducted by the Search Institute (2004) suggested that the presence of internal and external assets can make positive and protective contributions to the lives of children and adolescents. Researchers have developed a composite list of 40 developmental assets associated with positive youth development (see Appendix G). The developmental asset framework is characterized by two groupings, each consisting of 20 assets: 1) external assets, which are represented by the positive experiences young people gain from the world around them; and 2) internal assets, which are characterized by measures that support and empower young people. These assets also assist young people in setting and maintaining boundaries and expectations, and guide them in using time constructively. External assets identify important roles that families, schools, congregations, neighborhoods, and youth organizations can play in promoting healthy young people. Internal assets include characteristics of young people that can be supported, including positive values and identities, social competencies, and a commitment to learning (Search Institute, 2004).

Evidence gathered to date about external and internal assets can be used to promote the concept of *asset-building* for young people in the San Joaquin Valley. Asset-building is a term used for purposefully raising social consciousness about the risks that surround young people and building resources in the community that will have positive effects on their lives. An asset-building strategy also rests on the concept of community collaboration to develop intervention strategies that actively engage families and civic organizations.



## Recommendations

The challenge of addressing the persistently high rates of teen births in the San Joaquin Valley is likely to continue. Altering this trend will require many changes at the societal, community, and individual level. In this light, the following recommendations are offered:

### Increase Community Awareness

- Promote public discussion among educators, health and social service providers, families, and teens about the prevalence and prevention of teen births in local communities. This is critical for all communities, but especially for communities with high percentages of teen births.
- Encourage communities to identify risks and assets among local youth as a means of identifying future interventions for teen pregnancy. Approaches that incorporate assets can be developed for both males and females.

### Assess the Availability of Local Resources

- Identify agencies and programs in local communities that provide sexuality education and teen pregnancy prevention programs.
- Encourage communication among community programs to share resources, funding opportunities, and achievements in teen pregnancy prevention.
- Promote teen pregnancy prevention programs, especially those programs that equip parents to discuss sexuality and pregnancy prevention with their children.
- Support the development of activities and educational programs that accommodate the cultural and linguistic needs of the community.

## Conclusion

Despite the fact that the rate of teen births has fallen in the past ten years, San Joaquin Valley counties continue to have the highest teen birth rates in the state. This high rate of births to Valley teens continues to have negative consequences in the lives of young people and their families. Many of these young mothers will be relegated to a life of poverty, low educational attainment, and single parenthood. Their children will be subject to poor health outcomes and reduced child functioning. Additionally, the cost to their communities and society continues to rise. The poorest communities, those least able to support these young mothers and their children, continue to have the highest rates of teen births. If communities are to protect their young people efforts to reduce the rate of teen births must increase, so this vicious cycle can be stopped.

## Educate and Support

- Promote community and school-based programs that teach young people how to resist the pressure of engaging in unprotected sexual activity and safe sex practices.
- Support youth development interventions that promote employment and training opportunities, completion of high school, and access to higher education.
- Consider innovative approaches to deliver messages about preventing teen pregnancy utilizing the arts, media, role models, and peer networks.
- Provide interventions for pregnant teens that promote early prenatal care, proper nutrition, and cessation of smoking, alcohol use, and drug use.

## Seek Additional Resources

- Support increased funding of educational and informational interventions that encourage parents to talk to their children about sexual activity and pregnancy prevention.
- Engage community-based and faith-based organizations in local initiatives to promote discussion of teen pregnancy among families.
- Explore the implementation of public awareness campaigns that promote factually based discussions about healthy and age-appropriate expressions of teen sexuality.
- Support partnerships that promote educational attainment, youth development, and the creation of employment opportunities for young people in the San Joaquin Valley.

## References

- Acs, G., & Koball, H. (2003, June). *TANF and the status of teen mothers under age 18 (New Federalism, Series A, No. A-62)*. Retrieved September 2, 2004, from [http://www.urban.org/UploadedPDF/310796\\_A-62.pdf](http://www.urban.org/UploadedPDF/310796_A-62.pdf)
- Alan Guttmacher Institute. (1999). *Teen sex and pregnancy*. Retrieved August 31, 2004, from [http://www.guttmacher.org/pubs/fb\\_teen\\_sex.html#5](http://www.guttmacher.org/pubs/fb_teen_sex.html#5)
- Alan Guttmacher Institute. (1995). *Teenage pregnancy and the welfare reform debate*. Retrieved September 15, 2004, from <http://www.guttmacher.org/pubs/ib5.html>
- Berglas, N., & Brindis, C. (2003). *Adolescent pregnancy and childbearing in California*. Retrieved August 20, 2004, from California Research Bureau Web site: <http://www.library.ca.gov/crb/03/07/03-007.pdf>
- Berkthold, J., Geis, S., & Kaufman, P. (1998). *Subsequent educational attainment of high school dropouts* (NCES Publication No. 98-085). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved August 31, 2004, from <http://nces.ed.gov/pubs98/98085.pdf>
- Blum, R. W. (2001, April 20). *HIV, STDs, and teen pregnancy* [Transcript of an interview]. Denver, CO: National Conference of State Legislatures.
- Blum, R. W., & Rinehart, P. M. (1998). *Reducing the risk: Connections that make a difference in the lives of youth*. Retrieved from Center for Adolescent Health and Development, University of Minnesota Web site: [http://allaboutkids.umn.edu/cfahad/Reducing\\_the\\_risk.pdf](http://allaboutkids.umn.edu/cfahad/Reducing_the_risk.pdf)
- Boonstra, H. (2000, December). Welfare law and the drive to reduce illegitimacy. *Guttmacher Report on Public Policy*. Retrieved September 2, 2004, from <http://www.guttmacher.org/pubs/journals/gr030607.pdf>
- California Department of Health Services, Center for Health Statistics. (1998). *County health status profile: 1998*. Sacramento, CA: Author.
- California Department of Health Services, Center for Health Statistics. (2003). *County health status profile: 2003*. Retrieved August 13, 2004, from <http://www.dhs.ca.gov/hisp/chs/phweek/cprofile2003/Profile2003.pdf>
- California Department of Health Services, Center for Health Statistics. (2004a). *Number of live births by ZIP code of mother's residence by race/ethnicity and age of mother, infant birth weight, and mother's prenatal care, California 2001* [Data file]. Available from <http://www.dhs.ca.gov/hisp/chs/OHIR/Publication/ZIPCodeTables/bZIPs01.xls>
- California Department of Health Services, Center for Health Statistics, Vital Statistics Query System (2004b). *Live births by race/ethnicity, 2001* [Data query]. Available from <http://www.applications.dhs.ca.gov/vsq/default.asp>

- California Department of Health Services, Center for Health Statistics, 2001 Vital Statistics Data Tables. (2004c). *General fertility rate and birth rate by age of mother, California counties, 2001*. Retrieved September 13, 2004, from [http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/2001data/01Ch2Ex/2\\_31\\_2001.xls](http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/2001data/01Ch2Ex/2_31_2001.xls)
- California Department of Health Services, Center for Health Statistics, 2002 Vital Statistics Data Tables. (2004d). *General fertility rate and birth rate by age of mother, California counties, 2002*. Retrieved September 13, 2004, from <http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/2002data/02Ch2Ex/2-30-2002.xls>
- California Department of Health Services, Center for Health Statistics, 2003 Vital Statistics Data Tables. (2004e). *General fertility rate and birth rate by age of mother, California counties, 2003*. Retrieved September 13, 2004, from <http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/2003data/03Ch2Ex/2-30-2003.xls>
- California Department of Health Services, Center for Health Statistics, 2003 Vital Statistics Data Tables. (2004f). *General fertility rates, total fertility rates, and birth rates by age of mother, California, 1970, 1975, 1980, 1985, 1990-2003, by place of residence*. Retrieved September 13, 2004, from <http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/2003data/03Ch2Ex/2-02-2003.xls>
- California Department of Health Services, Maternal and Child Health Epidemiology Section. (2000). *Birth rate among mothers aged 15-19 and percent change in rate from previous year by mother's county of residence, California 1990-1998*. Retrieved September 14, 2004, from <http://www.mch.dhs.ca.gov/documents/pdf/teenbirthratebycounty1990-98.pdf>
- California Department of Health Services, Maternal and Child Health Epidemiology Section. (2004). California Department of Health Services teen birth rates (live births per 1,000 females, age 15-19 years) and annual percent change by county and year, California, 2000 to 2002. Retrieved September 14, 2004, from [http://www.mch.dhs.ca.gov/documents/pdf/00\\_02%20press%20release%20teen%20birth%20rates%204-16-02.pdf](http://www.mch.dhs.ca.gov/documents/pdf/00_02%20press%20release%20teen%20birth%20rates%204-16-02.pdf)
- California Department of Health Services, Sexually Transmitted Disease Control Branch. (2004). *Chlamydia, cases and rates for females ages 15-24, California counties and selected city health jurisdiction, 1999-2003, provisional data*. Retrieved October 5, 2004, from <http://www.dhs.ca.gov/ps/dcdc/STD/docs/Chlamydia%201999-2003%20Provisional%20Tables.pdf>
- Chandra, P. C., Schiavello, H. J., Ravi, B., Weinstein, A. G., & Hook, F. B. (2002). Pregnancy outcomes in urban teenagers. *International Journal of Gynecology and Obstetrics*, 79, 117-122.
- Coley, R. L., & Chase-Lansdale, P. L. (1998). Adolescent pregnancy and parenthood: Recent evidence and future directions. *American Psychologist*, 53, 152-166.
- Constantine, N. A., & Nevarez, C. R. (2003a). *No time for complacency: Teen Births in California*. Retrieved August 13, 2004, from <http://teenbirths.phi.org/TeenBirthsFullReport.pdf>

- Constantine, N. A., & Nevarez, C. R. (2003b). *Supplemental table 1. California county teen births and estimated annual costs, year 2000*. Retrieved August 13, 2004, from <http://teenbirths.phi.org/SupplementalTable1.pdf>
- Cunnington, A. J. (2001). What's so bad about teen pregnancy? *Journal of Family Planning and Reproductive Health Care, 27*, 36-41.
- Diringer, J., Curtis, K. A., Paul, C. M., & Deveau, D. R. (2004, February). *Health in the heartland: The crisis continues*. Fresno: Central Valley Health Policy Institute, California State University.
- Graefe, D. R., & Lichter, D. T. (2002). Marriage among unwed mothers: Whites, Blacks, and Hispanics compared. *Perspectives on Sexual and Reproductive Health, 34*, 286-293.
- Hofferth, S. L., Reid, L., & Mott, F. L. (2001). The effects of early childbearing on schooling over time. *Family Planning Perspectives, 33*, 259-267.
- Hoffman, S. D. (1998). Teenage childbearing is not so bad after all . . . or is it? A review of the new literature. *Family Planning Perspective, 30*, 236-239,243.
- Jaffee, S. R. (2002). Pathways to adversity in young adulthood among early childbearers. *Journal of Family Psychology, 16*, 38-49.
- Jessor, R., & Jessor, S. L. (1977). *Problem behavior and psychosocial development: A longitudinal study of youth*. New York: Academic Press.
- Kirby, D. (2001). Understanding what works and what doesn't in reducing adolescent sexual risk-taking. *Family Planning Perspective, 33*, 276-281.
- Kirby, D., Coyle, K., Gould J. B. (2001). Manifestations of poverty and birthrates among young teenagers in California ZIP code areas. *Family Planning Perspectives, 33*, 63-69.
- Koniak-Griffin, D., & Turner-Pluta, C. (2001). Health risks and psychosocial outcomes of early childbearing: A review of the literature. *Journal of Perinatal and Neonatal Nursing, 15*, 1-17.
- Lee, S. H., & Grubbs, L. M. (1995). *Pregnant teenagers' reasons for seeking or delaying prenatal care* [Abstract]. Retrieved August 16, 2004, from PubMed database.
- Manlove, J. (1998). The influence of high school dropout and school disengagement on the risk of school-age pregnancy. *Journal of Research on Adolescence, 8*, 187-220.
- March of Dimes. (2000). *Sexually transmitted infections in pregnancy*. Available from [www.marchofdimes.com](http://www.marchofdimes.com)
- Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., & Munson, M. L. (2003). Births: Final data for 2002. *National Vital Statistics Reports, 52*(10). Retrieved August 9, 2004, from [http://www.cdc.gov/nchs/fastats/pdf/nvsr52\\_10tB.pdf](http://www.cdc.gov/nchs/fastats/pdf/nvsr52_10tB.pdf)
- Murry, V. M. (1995). An ecological analysis of pregnancy resolution decisions among African American and Hispanic adolescent females. *Youth and Society, 26*, 325-350.

- National Campaign to Prevent Teen Pregnancy (2004, May). *Fact sheet: Teen sexual activity, pregnancy, and childbearing among Latinos in the United States*. Retrieved October 5, 2004, from <http://www.teenpregnancy.org/resources/reading/pdf/latinofs.pdf>
- Niccolai, L.M., Ethier, K.A., Kershaw, T.S., Lewis, J.B., & Ickovics, J.R. (2003). *Pregnant adolescents at risk: Sexual behaviors and sexually transmitted disease prevalence*. *American Journal of Obstetrics and Gynecology*, 188, 63-70.
- Santelli, J. S., Abma, J., Ventura, S., Lindberg, L., Morrow, B., Anderson, J. E., et al. (2004). Can changes in sexual behaviors among high school students explain the decline in teen pregnancy rates in the 1990s? *Journal of Adolescent Health*, 35, 80-90.
- Santelli, J. S., Lowry, R., Brener, N. D., & Robin, L. (2000). The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among US adolescents. *American Journal of Public Health*, 90, 1582-1588.
- Search Institute. (2004). *40 developmental assets*. Retrieved September 22, 2004, from <http://www.search-institute.org/assets/40Assets.pdf>
- Stevens-Simon, C., Nelligan, D., & Kelly, L. (2001). Adolescents at risk for mistreating their children. Part I: Prenatal identification. *Child Abuse and Neglect*, 6, 737-751.
- University of Michigan National Poverty Center. (2003). *Poverty in the United States: Frequently asked questions*. Retrieved August 16, 2004, from <http://www.npc.umich.edu/poverty/>
- Ventura, S. J., Mathews, T. J., & Hamilton, B. E. (2001). Births to teenagers in the United States: 1940-2000. *National Vital Statistics Reports*, 49(10). Retrieved August 16, 2004, from [http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_10.pdf)
- U.S. Census Bureau. (2003). Summary file 3: Technical documentation. Retrieved October 27, 2004, from <http://www.census.gov/prod/cen2000/doc.sf3.pdf>
- U.S. Department of Health and Human Services. (2000). *Healthy people 2010* (Vol. 1, 2nd ed.). Retrieved August 13, 2004, from <http://www.healthypeople.gov/document/HTML/Volume2/16MICH.htm>
- Young, T. M., Martin, S. S., Young, M. E., & Ting, L. (2001). Internal poverty and teen pregnancy. *Adolescence*, 36. Retrieved August 19, 2004, from ProQuest database.

## Demographic Characteristics in Community Clusters Ranked by Percentage of Teen Births

Cluster #	County	Cluster Name	% of Teen Births 2001	Rank % Teen Births	Quartile Teen Births	Total Population All Ages, 2000	Latino Population of Any Race, 2000	% Latino of Total Population, 2000	Foreign-Born Population, 2000	% Foreign-Born Population, 2000
6	Fresno	Clovis/ Sanger	11.2%	10	1	122,183	34,342	28.1%	13974	11.5%
9	Fresno	Herndon/ Pinedale	8.9%	4	1	172,045	41,590	24.2%	21211	12.3%
10	Fresno	North Fresno	12.5%	15	1	29,327	7,166	24.4%	4097	13.9%
15	Kern	Frazier Park	7.3%	3	1	26,433	4,110	15.5%	2772	10.6%
18	Kern	Buttonwillow/ Elk Hills	7.2%	2	1	42,900	6,710	15.6%	2832	6.6%
29	Madera	The Mountains	10.1%	8	1	23,476	1,757	7.5%	930	3.9%
32	Merced	Gustine	12.2%	12	1	7,868	3,024	38.4%	2253	28.4%
36	San Joaquin	Tracy	6.7%	1	1	70,048	18,954	27.1%	11092	15.8%
37	San Joaquin	Manteca/ Lathrop/ Escalon/ Ripon	10.2%	9	1	71,628	17,935	25.0%	8513	11.8%
39	San Joaquin	Woodbridge	9.4%	7	1	11,189	2,162	19.3%	994	9.1%
41	San Joaquin	Lodi	9.4%	6	1	54,350	9,227	17.0%	7801	14.3%
46	Stanislaus	Turlock	11.5%	11	1	70,728	20,583	29.1%	14797	21.0%
47	Stanislaus	Patterson/ Newman	12.4%	14	1	26,412	14,283	54.1%	7317	27.6%
50	Stanislaus	Modesto	12.5%	16	1	171,575	43,654	25.4%	25032	14.6%
52	Stanislaus	Riverbank	12.3%	13	1	16,514	7,373	44.6%	3647	22.1%
53	Stanislaus	N. Modesto/ Salida	9.0%	5	1	38,502	8,527	22.1%	5104	13.2%
19	Kern	Delano/ McFarland	15.0%	28	2	52,469	37,505	71.5%	19908	37.8%
23	Kern	Mojave	12.8%	17	2	38,323	7,591	19.8%	3787	9.9%
25	Kern	Greater Bakersfield	14.3%	23	2	128,304	39,177	30.5%	16408	12.8%
28	Kings	Hanford/ Lemoore	14.4%	25	2	95,070	34,990	36.8%	15062	15.8%
30	Madera	Chowchilla	15.0%	27	2	19,383	6,282	32.4%	2633	13.7%
33	Merced	Los Banos/ Dos Palos	15.1%	29	2	38,837	19,938	51.3%	8081	20.9%
34	Merced	N. Merced Co./ Livingston	13.4%	19	2	45,356	22,763	50.2%	15289	33.6%
38	San Joaquin	E. Stockton	14.3%	24	2	26,913	10,525	39.1%	5352	19.8%
40	San Joaquin	E. Lodi	14.9%	26	2	48,937	16,197	33.1%	10599	21.8%
42	San Joaquin	N. Stockton	13.0%	18	2	147,054	34,233	23.3%	29379	20.0%
44	San Joaquin	S. Stockton/ French Camp	15.2%	31	2	54,736	27,282	49.8%	17165	31.4%
45	Stanislaus	Oakdale	13.7%	22	2	25,958	4,476	17.2%	2369	9.2%
48	Stanislaus	Waterford/ Hughson	13.4%	20	2	16,163	4,897	30.3%	2534	15.8%
51	Stanislaus	Ceres/ Keyes	15.1%	30	2	34,988	12,742	36.4%	6068	17.4%
60	Tulare	Visalia	13.6%	21	2	44,737	11,378	25.4%	3043	6.8%

Cluster #	County	Cluster Name	Population Over Age 5 Who Speak Non-English Language At Home, 2000	% Over Age 5 Who Speak Non-English Language At Home, 2000	Population Over Age 25 With Less Than High School Education, 2000	% of Population Over Age 25 With Less Than High School Education, 2000	Families Below Poverty Level, 2000	% Families Below Poverty Level, 2000	Female-Householder Families, 2000	% Female-Householder Families, 2000
6	Fresno	Clovis/ Sanger	26,745	23.6%	14,959	20.1%	2,801	8.9%	4,688	14.8%
9	Fresno	Herndon/ Pinedale	38,177	24.0%	15,831	14.6%	3,688	8.1%	7,393	16.3%
10	Fresno	North Fresno	7,348	26.7%	2,631	15.8%	825	11.9%	1,450	20.9%
15	Kern	Frazier Park	4,347	17.7%	1,571	9.6%	391	5.6%	673	9.6%
18	Kern	Buttonwillow/ Elk Hills	5,336	13.5%	3,322	13.1%	529	4.6%	940	8.2%
29	Madera	The Mountains	1,663	7.4%	2,457	14.3%	519	7.2%	741	10.3%
32	Merced	Gustine	3,409	46.7%	1,918	40.7%	234	11.6%	202	10.0%
36	San Joaquin	Tracy	17,156	26.7%	9,212	21.7%	924	5.5%	1,874	11.2%
37	San Joaquin	Manteca/ Lathrop/ Escalon/ Ripon	15,171	22.7%	9,622	22.3%	1,321	7.1%	2,421	13.1%
39	San Joaquin	Woodbridge	1,904	18.5%	1,598	21.4%	193	6.2%	279	9.0%
41	San Joaquin	Lodi	11,798	23.1%	6,261	18.3%	1,383	9.6%	2,052	14.2%
46	Stanislaus	Turlock	23,300	35.9%	12,500	30.0%	2,158	12.5%	2,899	16.8%
47	Stanislaus	Patterson/ Newman	11,570	47.9%	5,484	37.5%	735	12.0%	809	13.2%
50	Stanislaus	Modesto	42,468	26.6%	27,039	25.6%	5,126	12.0%	8,077	18.9%
52	Stanislaus	Riverbank	6,235	41.3%	3,275	34.6%	361	8.8%	612	15.0%
53	Stanislaus	N. Modesto/ Salida	7,961	22.5%	4,144	17.7%	614	6.1%	1,350	13.5%
19	Kern	Delano/ McFarland	34,717	72.6%	15,327	52.8%	2,759	27.9%	2,075	21.0%
23	Kern	Mojave	6,493	18.5%	4,590	20.4%	1,203	12.1%	1,388	14.0%
25	Kern	Greater Bakersfield	30,728	26.2%	18,284	24.6%	4,711	14.6%	6,664	20.6%
28	Kings	Hanford/ Lemoore	27,014	31.2%	14,718	27.4%	3,241	13.7%	4,078	17.2%
30	Madera	Chowchilla	5,759	31.6%	5,257	39.4%	556	18.1%	396	12.9%
33	Merced	Los Banos/ Dos Palos	14,993	42.6%	7,833	35.8%	1,304	13.8%	1,333	14.1%
34	Merced	N. Merced Co./ Livingston	23,298	56.2%	11,583	46.6%	1,743	16.5%	1,362	12.9%
38	San Joaquin	E. Stockton	9,000	35.5%	6,241	40.2%	840	14.1%	889	14.9%
40	San Joaquin	E. Lodi	15,566	34.8%	9,554	32.6%	1,662	14.1%	2,079	17.6%
42	San Joaquin	N. Stockton	47,216	34.7%	21,288	24.4%	5,634	15.7%	7,852	21.9%
44	San Joaquin	S. Stockton/ French Camp	27,626	55.7%	13,256	44.7%	2,372	20.7%	2,648	23.2%
45	Stanislaus	Oakdale	3,826	16.0%	3,603	21.5%	501	7.2%	967	13.9%
48	Stanislaus	Waterford/ Hughson	4,156	27.8%	2,934	31.0%	489	11.7%	501	11.9%
51	Stanislaus	Ceres/ Keyes	10,742	33.7%	7,062	36.2%	1,016	11.9%	1,592	18.6%
60	Tulare	Visalia	8,050	19.4%	4,851	17.2%	1,068	9.0%	2,016	16.9%

Cluster #	County	Cluster Name	% of Teen Births 2001	Rank % Teen Births	Quartile Teen Births	Total Population All Ages, 2000	Latino Population of Any Race, 2000	% Latino of Total Population, 2000	Foreign-Born Population, 2000	% Foreign-Born Population, 2000
1	Fresno	San Joaquin	17.7%	45	3	9,018	7,853	87.1%	4830	52.7%
2	Fresno	Coalinga/ Mendota	17.1%	42	3	27,193	17,369	63.9%	7585	28.2%
7	Fresno	Selma/ Fowler	16.2%	39	3	52,825	34,747	65.8%	13833	26.4%
8	Fresno	Reedley/ Parlier	15.5%	33	3	40,444	29,414	72.7%	13375	32.8%
21	Kern	Arvin/ Tehachapi	15.8%	35	3	44,439	19,407	43.7%	9669	21.7%
22	Kern	Inyokern	16.2%	38	3	61,913	6,551	10.6%	2664	4.3%
24	Kern	N. Bakersfield	16.7%	41	3	102,049	50,128	49.1%	17305	17.0%
35	Merced	Merced/ Atwater	16.0%	36	3	118,367	49,917	42.2%	26613	22.5%
49	Stanislaus	W. Modesto/ Empire	18.0%	46	3	47,531	25,626	53.9%	14838	31.1%
54	Tulare	Dinuba	15.5%	32	3	53,143	35,695	67.2%	16244	30.7%
55	Tulare	N. Visalia/ Exeter/ Farmersville	17.2%	43	3	93,563	44,104	47.1%	18292	19.5%
56	Tulare	Woodlake	16.1%	37	3	21,604	14,318	66.3%	7402	34.1%
57	Tulare	Earlimart/ Pixley	17.3%	44	3	21,217	16,142	76.1%	8737	41.2%
59	Tulare	Lindsay	16.6%	40	3	19,677	11,135	56.6%	5045	25.4%
61	Tulare	Tulare	15.6%	34	3	56,158	25,577	45.5%	10748	19.2%
3	Fresno	Huron	20.8%	58	4	6,902	6,764	98.0%	3826	54.5%
4	Fresno	Kerman/ Biola	18.9%	48	4	14,835	9,381	63.2%	4390	29.5%
5	Fresno	Caruthers/ W. Selma	19.4%	52	4	5,827	3,261	56.0%	1919	32.4%
11	Fresno	Central Fresno	20.1%	57	4	65,626	31,853	48.5%	13688	20.8%
12	Fresno	Southeast Fresno	19.1%	51	4	124,984	50,631	40.5%	25476	20.3%
13	Fresno	W. Fresno/ Burrel	22.1%	60	4	42,617	21,935	51.5%	11157	26.3%
14	Fresno	S. Fresno	22.2%	61	4	47,997	31,130	64.9%	17520	36.8%
16	Kern	Taft	19.6%	54	4	20,401	3,217	15.8%	1551	7.5%
17	Kern	Shafter-Wasco	19.1%	50	4	40,425	27,410	67.8%	11137	27.6%
20	Kern	E. Bakersfield/ Lamont	20.9%	59	4	74,529	49,176	66.0%	22177	29.6%
26	Kings	Avenal	20.1%	56	4	14,696	9,667	65.8%	3723	25.3%
27	Kings	Corcoran	20.1%	55	4	27,009	16,116	59.7%	4508	16.7%
31	Madera	Madera	18.9%	49	4	87,149	54,131	62.1%	24864	28.6%
43	San Joaquin	Central Stockton	19.6%	53	4	57,534	30,091	52.3%	16122	28.0%
58	Tulare	Porterville	18.5%	47	4	77,094	39,781	51.6%	18795	24.4%
		TOTAL	15.2%			3,249,172	1,303,900	40.1%	648,076	19.9%



Cluster #	County	Cluster Name	Population Over Age 5 Who Speak Non-English Language At Home, 2000	% Over Age 5 Who Speak Non-English Language At Home, 2000	Population Over Age 25 With Less Than High School Education, 2000	% of Population Over Age 25 With Less Than High School Education, 2000	Families Below Poverty Level, 2000	% Families Below Poverty Level, 2000	Female-householder Families, 2000	% Female-Householder Families, 2000
1	Fresno	San Joaquin	6,706	81.5%	3,175	72.3%	414	23.1%	202	11.3%
2	Fresno	Coalinga/ Mendota	13,750	55.2%	7,618	48.6%	1,062	22.6%	675	14.3%
7	Fresno	Selma/ Fowler	26,964	56.0%	12,928	44.5%	2,368	19.6%	2,323	19.2%
8	Fresno	Reedley/ Parlier	23,118	62.4%	10,316	46.8%	1,879	20.7%	1,567	17.2%
21	Kern	Arvin/ Tehachapi	15,645	38.0%	9,099	34.2%	1,689	16.7%	1,133	11.2%
22	Kern	Inyokern	5,784	10.0%	10,291	25.2%	2,149	13.4%	2,981	18.6%
24	Kern	N. Bakersfied	33,472	36.2%	19,395	34.3%	5,138	21.3%	5,704	23.7%
35	Merced	Merced/ Atwater	45,162	41.7%	20,952	32.1%	5,229	18.7%	5,760	20.5%
49	Stanislaus	W. Modesto/ Empire	23,440	54.5%	12,542	50.4%	2,565	24.5%	2,233	21.4%
54	Tulare	Dinuba	27,577	57.4%	13,775	48.1%	2,577	21.0%	2,000	16.3%
55	Tulare	N. Visalia/ Exeter/ Farmersville	33,483	39.1%	17,910	34.3%	3,900	17.4%	3,940	17.6%
56	Tulare	Woodlake	11,770	59.5%	5,553	46.6%	1,140	22.7%	739	14.7%
57	Tulare	Earlimart/ Pixley	13,998	74.4%	6,704	67.2%	1,516	34.1%	768	17.3%
59	Tulare	Lindsay	8,838	48.7%	4,859	42.8%	1,043	22.1%	733	15.5%
61	Tulare	Tulare	19,957	39.2%	11,440	36.5%	2,344	17.0%	2,346	17.1%
3	Fresno	Huron	5,496	87.4%	2,777	80.2%	513	36.1%	292	20.6%
4	Fresno	Kerman/ Biola	8,082	59.1%	4,135	51.2%	720	21.3%	515	15.2%
5	Fresno	Caruthers/ W. Selma	2,933	54.1%	1,673	52.9%	231	18.0%	122	9.5%
11	Fresno	Central Fresno	25,898	43.6%	13,097	37.0%	4,310	29.1%	4,546	30.7%
12	Fresno	Southeast Fresno	46,543	40.8%	22,368	32.4%	5,982	20.3%	7,299	24.8%
13	Fresno	W. Fresno/ Burrel	19,452	50.4%	12,602	54.6%	2,947	35.7%	2,601	31.5%
14	Fresno	S. Fresno	28,950	67.7%	14,074	63.2%	3,640	38.8%	2,492	26.6%
16	Kern	Taft	3,142	16.4%	3,762	28.7%	847	18.0%	796	16.9%
17	Kern	Shafter-Wasco	21,466	58.5%	11,087	49.9%	1,751	23.2%	1,245	16.5%
20	Kern	E. Bakersfield/ Lamont	38,342	56.9%	21,788	57.5%	4,550	27.9%	3,784	23.2%
26	Kings	Avenal	8,111	58.7%	4,147	44.0%	469	28.3%	262	15.8%
27	Kings	Corcoran	12,321	48.3%	7,121	39.6%	881	24.8%	644	18.1%
31	Madera	Madera	40,813	51.6%	20,774	43.9%	3,882	19.4%	3,175	15.9%
43	San Joaquin	Central Stockton	25,772	49.5%	15,908	49.9%	3,540	28.6%	3,470	28.0%
58	Tulare	Porterville	31,521	45.0%	17,962	42.7%	3,884	21.8%	3,434	19.3%
		TOTAL	1,122,278	37.6%	608,037	32.4%	124,061	16.1%	140,081	18.2%

## Community Clusters and ZIP Codes

Cluster #	County	Cluster Name	Zip Code(s) in Community Cluster
1	Fresno	San Joaquin	93608, 93624, 93660, 93668
2	Fresno	Coalinga/ Mendota	93210, 93640
3	Fresno	Huron	93234
4	Fresno	Kerman/ Biola	93606, 93630
5	Fresno	Caruthers/ W. Selma	93609, 93627, 93652
6	Fresno	Clovis/ Sanger	93602, 93605, 93611, 93612, 93613, 93621, 93629, 93633, 93634, 93641, 93651, 93657, 93664, 93667, 93675
7	Fresno	Selma/ Fowler	93625, 93662, 93725, 93745
8	Fresno	Reedley/ Parlier	93616, 93648, 93649, 93654
9	Fresno	Herndon/ Pinedale	93650, 93704, 93711, 93720, 93722, 93741, 93755, 93765
10	Fresno	North Fresno	93710, 93729, 93740, 93759, 93784
11	Fresno	Central Fresno	93701, 93705, 93728, 93744, 93761, 93790, 93791, 93792, 93793, 93794
12	Fresno	Southeast Fresno	93703, 93726, 93727, 93782, 93844, 93888
13	Fresno	W. Fresno/ Burrell	93607, 93706, 93707, 93708, 93709, 93712, 93714, 93715, 93716, 93717, 93718, 93721, 93724, 93760, 93762, 93764, 93771, 93772, 93773, 93774, 93775, 93776, 93777, 93778, 93779, 93780, 93786
14	Fresno	S. Fresno	93702, 93750
15	Kern	Frazier Park	93222, 93225, 93311
16	Kern	Taft	93224, 93251, 93252, 93268, 93276
17	Kern	Shafter-Wasco	93249, 93263, 93280
18	Kern	Buttonwillow/ Elk Hills	93206, 93312
19	Kern	Delano/ McFarland	93215, 93216, 93250
20	Kern	E. Bakersfield/ Lamont	93217, 93220, 93241, 93307
21	Kern	Arvin/ Tehachapi	93203, 93518, 93531, 93561, 93570, 93581, 93582
22	Kern	Inyokern	93205, 93226, 93238, 93240, 93255, 93283, 93285, 93287, 93302, 93303, 93308, 93380, 93388, 93527
23	Kern	Mojave	93501, 93502, 93504, 93505, 93516, 93523, 93524, 93528, 93554, 93560, 93596
24	Kern	N. Bakersfield	93301, 93305, 93306, 93381, 93386, 93387
25	Kern	Greater Bakersfield	93304, 93309, 93313, 93382, 93383, 93384, 93385, 93389
26	Kings	Avenal	93204
27	Kings	Corcoran	93212, 93239, 93266
28	Kings	Hanford/ Lemoore	93202, 93230, 93231, 93232, 93242, 93245, 93246, 93656
29	Madera	The Mountains	93604, 93614, 93626, 93643, 93644, 93645, 93669
30	Madera	Chowchilla	93610
31	Madera	Madera	93622, 93637, 93638, 93639

Cluster #	County	Cluster Name	Zip Code(s) in Community Cluster
32	Merced	Gustine	95322
33	Merced	Los Banos/ Dos Palos	93620, 93635, 93661, 93665
34	Merced	N. Merced Co./ Livingston	95303, 95312, 95315, 95324, 95334, 95369, 95374, 95388
35	Merced	Merced/ Atwater	95301, 95317, 95333, 95340, 95341, 95342, 95343, 95344, 95348, 95365
36	San Joaquin	Tracy	95304, 95376, 95377, 95378, 95385
37	San Joaquin	Manteca/Lathrop/ Escalon/ Ripon	95320, 95330, 95331, 95336, 95366
38	San Joaquin	E. Stockton	95215, 95236
39	San Joaquin	Woodbridge	95220, 95227, 95258
40	San Joaquin	E. Lodi	95237, 95240, 95241, 95253
41	San Joaquin	Lodi	95209, 95242, 95686
42	San Joaquin	N. Stockton	95204, 95207, 95210, 95211, 95212, 95219, 95267, 95269, 95297
43	San Joaquin	Central Stockton	95202, 95203, 95205, 95290
44	San Joaquin	S. Stockton/ French Camp	95201, 95206, 95213, 95231, 95234
45	Stanislaus	Oakdale	95208, 95230, 95361, 95384
46	Stanislaus	Turlock	95316, 95380, 95381, 95382
47	Stanislaus	Patterson/ Newman	95313, 95360, 95363, 95387
48	Stanislaus	Waterford/ Hughson	95323, 95326, 95386
49	Stanislaus	W. Modesto/ Empire	95319, 95351
50	Stanislaus	Modesto	95350, 95352, 95353, 95354, 95355, 95357, 95358
51	Stanislaus	Ceres/ Keyes	95307, 95328
52	Stanislaus	Riverbank	95367, 95390
53	Stanislaus	N. Modesto/ Salida	95356, 95368
54	Tulare	Dinuba	93615, 93618, 93631, 93646, 93666, 93673
55	Tulare	N. Visalia/ Exeter/ Farmersville	93221, 93223, 93227, 93235, 93291, 93292, 93670
56	Tulare	Woodlake	93237, 93244, 93262, 93271, 93286, 93603, 93628, 93647
57	Tulare	Earlimart/ Pixley	93201, 93218, 93219, 93256, 93261, 93272
58	Tulare	Porterville	93257, 93258, 93267, 93270
59	Tulare	Lindsay	93207, 93208, 93247, 93260, 93265
60	Tulare	Visalia	93277, 93278, 93279
61	Tulare	Tulare	93274, 93275, 93282

# Appendix C

## Analysis of Variance of Frequency of Teen Births by Characteristics of San Joaquin Valley Communities

Percentage of Latino Population of Total Population, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	1.108	0.369	15.296	< .0001	45.887	1
Residual	57	1.377	0.024				
Means Table for % Latino Population of Total Population, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.261	0.116	0.029			
Quartile 2	15	0.365	0.143	0.037			
Quartile 3	15	0.565	0.183	0.047			
Quartile 4	15	0.576	0.173	0.045			
Fisher's PLSD Table for % Latino Population of Total Population, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				
Quartile 1, Quartile 2	-0.104	0.112	.0682				
Quartile 1, Quartile 3	-0.304	0.112	< .0001	S			
Quartile 1, Quartile 4	-0.315	0.112	< .0001	S			
Quartile 2, Quartile 3	-0.200	0.114	.0008	S			
Quartile 2, Quartile 4	-0.211	0.114	.0005	S			
Quartile 3, Quartile 4	-0.011	0.114	.8527				

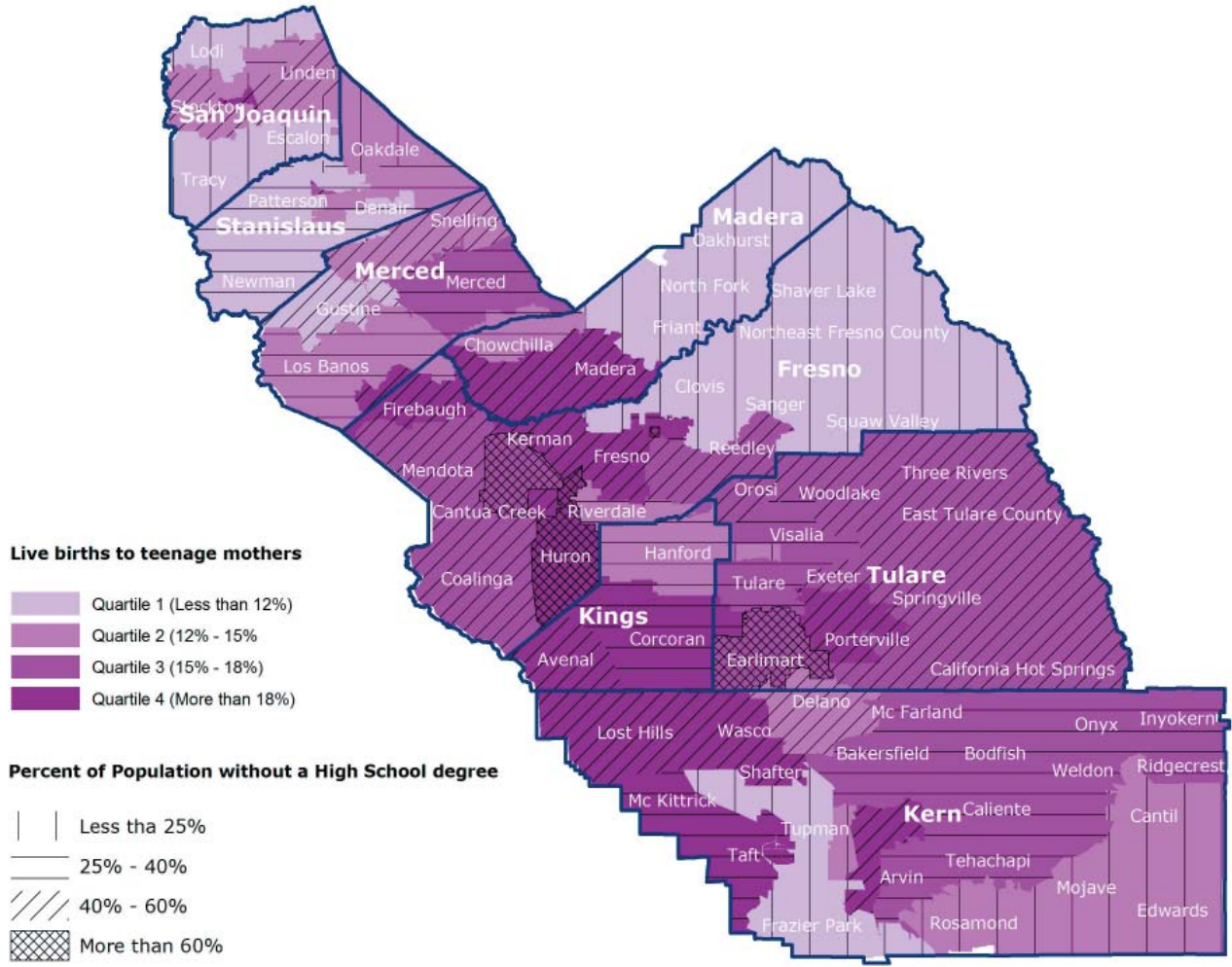
Percentage of Foreign-Born Population, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	0.176	0.059	6.555	.0007	19.665	.971
Residual	57	0.509	0.009				
Means Table for % of Foreign-Born Population, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.148	0.069	0.017			
Quartile 2	15	0.191	0.091	0.023			
Quartile 3	15	0.271	0.112	0.029			
Quartile 4	15	0.272	0.103	0.027			
Fisher's PLSD for % of Foreign-Born Population, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				
Quartile 1, Quartile 2	-0.043	0.068	.2103				
Quartile 1, Quartile 3	-0.123	0.068	.0006	S			
Quartile 1, Quartile 4	-0.124	0.068	.0006	S			
Quartile 2, Quartile 3	-0.08	0.069	.0239	S			
Quartile 2, Quartile 4	-0.081	0.069	.0221	S			

Percentage of Population Over Age 5 Who Speak Non-English Language at Home, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	0.703	0.234	10.533	< .0001	31.599	.999
Residual	57	1.268	0.022				
Means Table for % of Population Over Age 5 Who Speak Non-English Language at Home, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.266	0.113	0.028			
Quartile 2	15	0.358	0.155	0.040			
Quartile 3	15	0.502	0.173	0.045			
Quartile 4	15	0.525	0.151	0.039			
Fisher's PLSD for % of Population Over Age 5 Who Speak Non-English Language at Home, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				
Quartile 1, Quartile 2	-0.092	0.107	.0916				
Quartile 1, Quartile 3	-0.237	0.107	< .0001	S			
Quartile 1, Quartile 4	-0.26	0.107	< .0001	S			
Quartile 2, Quartile 3	-0.145	0.109	.0101	S			
Quartile 2, Quartile 4	-0.168	0.109	.0032	S			
Quartile 3, Quartile 4	-0.023	0.109	.6750				

Percentage of Families Below Poverty Level, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	0.267	0.089	36.426	< .0001	109.277	1
Residual	57	0.139	0.002				
Means Table for % of Families Below Poverty Level, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.086	0.027	0.007			
Quartile 2	15	0.147	0.049	0.013			
Quartile 3	15	0.210	0.047	0.012			
Quartile 4	15	0.261	0.067	0.017			
Fisher's PLSD for % of Families Below Poverty Level, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				
Quartile 1, Quartile 2	-0.061	0.036	.0011	S			
Quartile 1, Quartile 3	-0.124	0.036	< .0001	S			
Quartile 1, Quartile 4	-0.175	0.036	< .0001	S			
Quartile 2, Quartile 3	-0.063	0.036	.0010	S			
Quartile 2, Quartile 4	-0.114	0.036	< .0001	S			

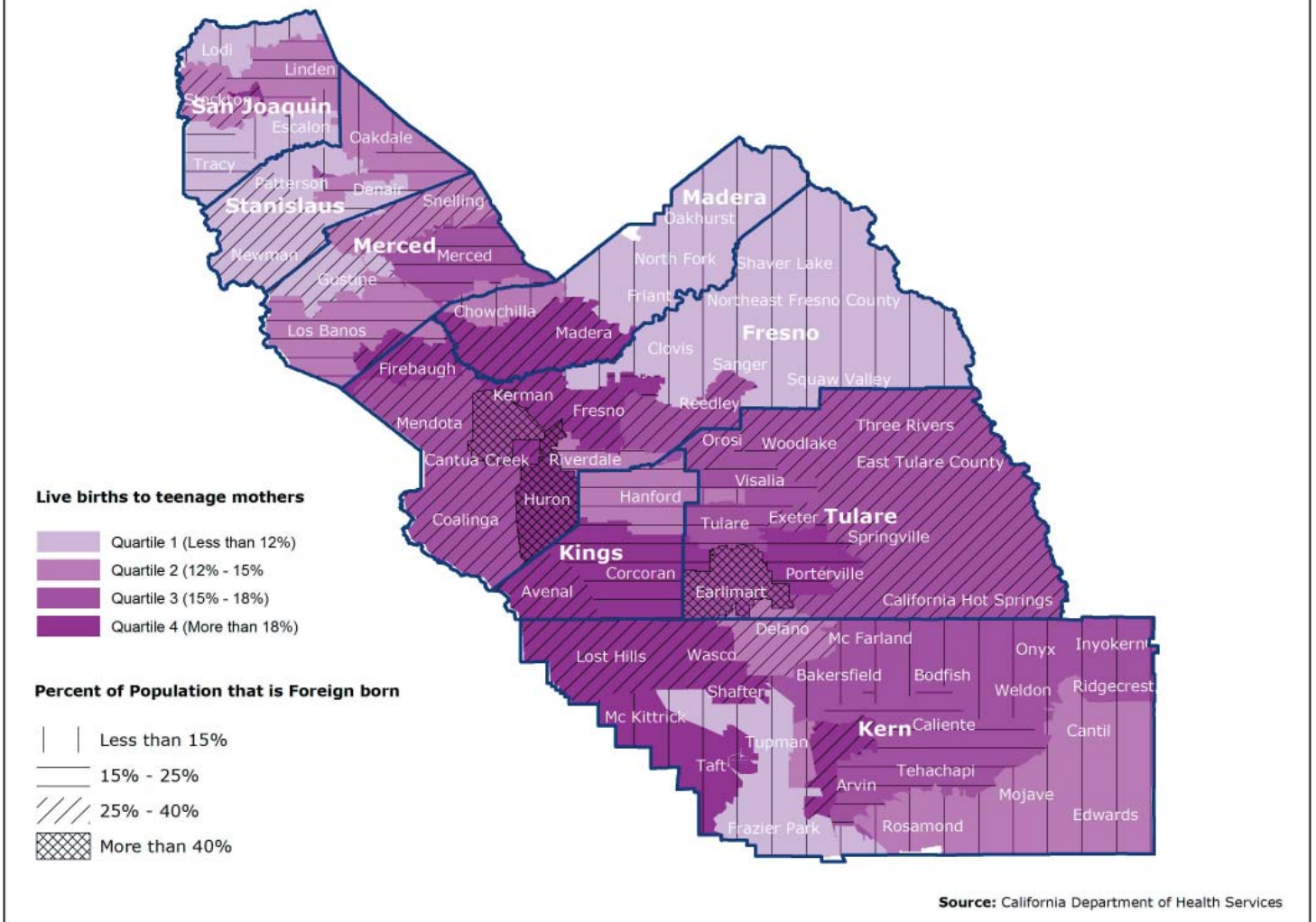
Percentage of Female-Householder Families, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	0.043	0.014	7.257	.0003	21.771	.984
Residual	57	0.112	0.002				
Means Table for % of Female-Householder Families, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.134	0.036	0.009			
Quartile 2	15	0.168	0.036	0.009			
Quartile 3	15	0.171	0.034	0.009			
Quartile 4	15	0.208	0.064	0.016			
Fisher's PLSD for % of Female-Householder Families, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				
Quartile 1, Quartile 2	-0.033	0.032	.0404S				
Quartile 1, Quartile 3	-0.036	0.032	.0259S				
Quartile 1, Quartile 4	-0.074	0.032	< .0001S				
Quartile 2, Quartile 3	-0.003	0.032	.8523				
Quartile 2, Quartile 4	-0.041	0.032	.0144S				
Quartile 3, Quartile 4	-0.038	0.032	.0230S				
Percentage of Population Over Age 25 With Less Than High School Education, 2000							
ANOVA Table	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\Lambda$	Power
Quartile Teen Births	3	0.646	0.215	16.665	< .0001	49.996	1
Residual	57	0.736	0.013				
Means Table for % of Population Over Age 25 With Less Than a High School Education, 2000							
Effect: Quartile Teen Births							
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>			
Quartile 1	16	0.223	0.091	0.023			
Quartile 2	15	0.33	0.105	0.027			
Quartile 3	15	0.443	0.127	0.033			
Quartile 4	15	0.485	0.128	0.033			
Fisher's PLSD for % of Population Over Age 25 With Less Than a High School Education, 2000							
Effect: Quartile Teen Births							
Significance level: .05							
	Mean Diff.	Crit. Diff.	<i>p</i>				

**Latino Population in the San Joaquin Valley, 2001**



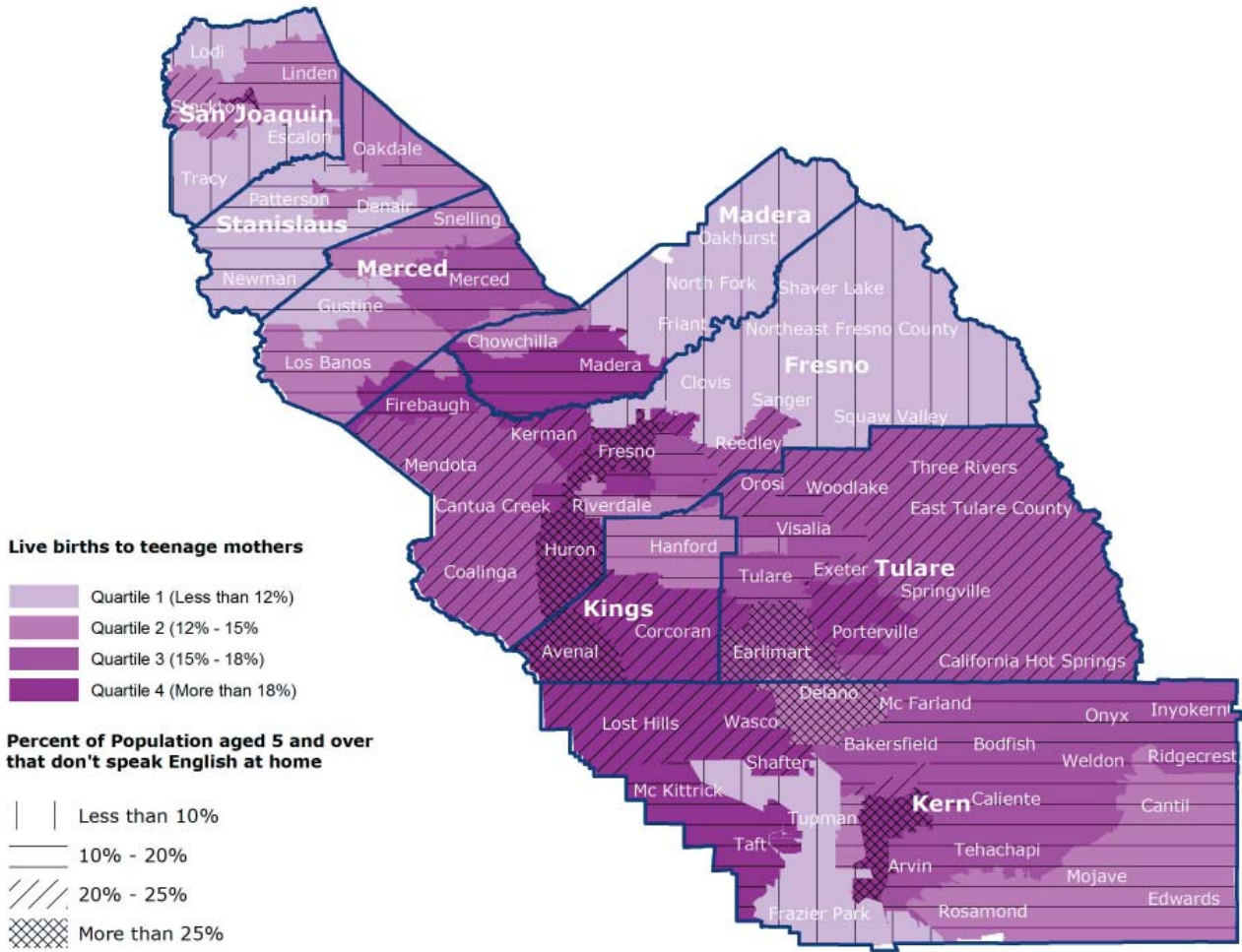
Source: California Department of Health Services

**Foreign Born Population in the San Joaquin Valley, 2001**



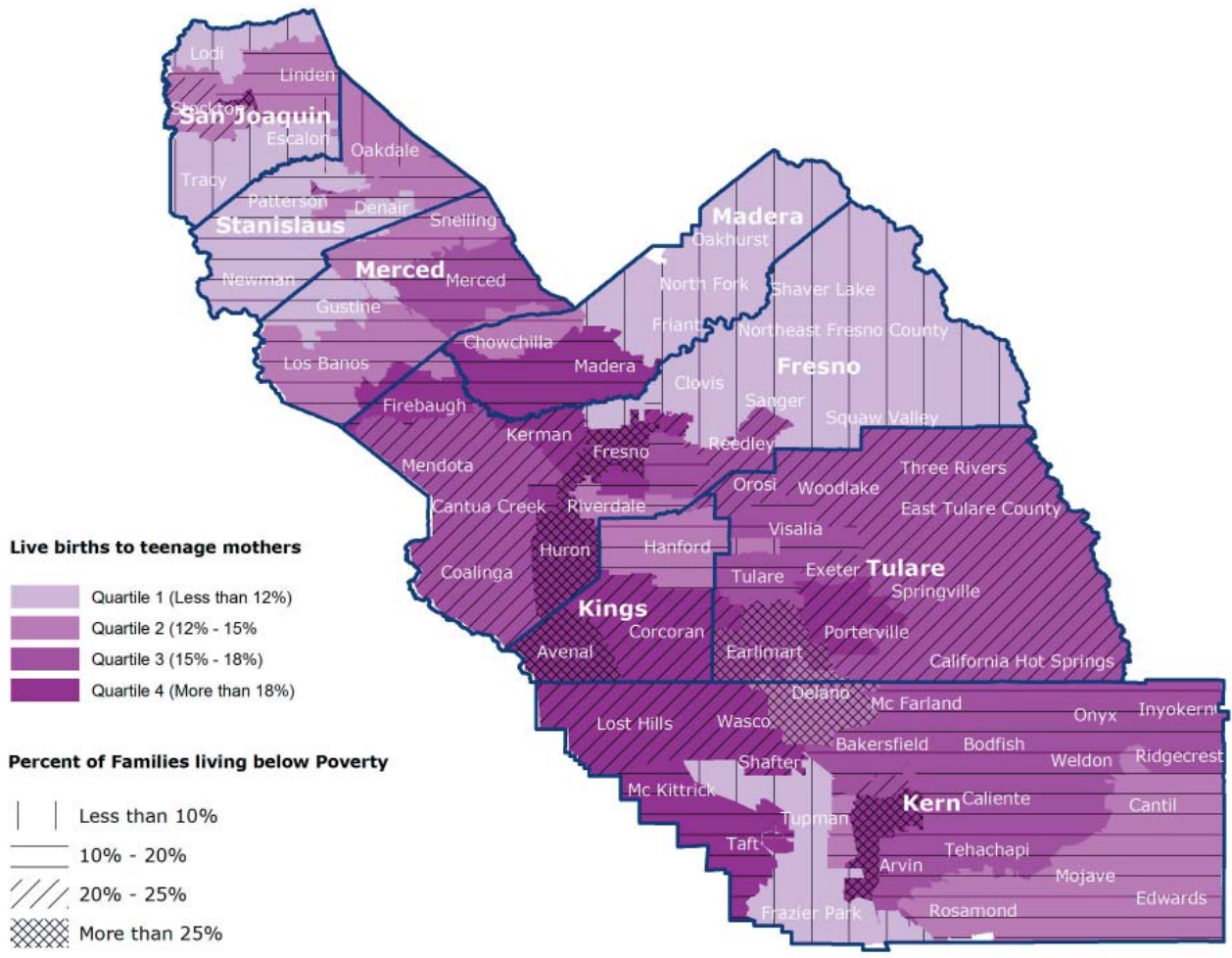


**Population aged 5 and over that don't speak English in the San Joaquin Valley, 2001**



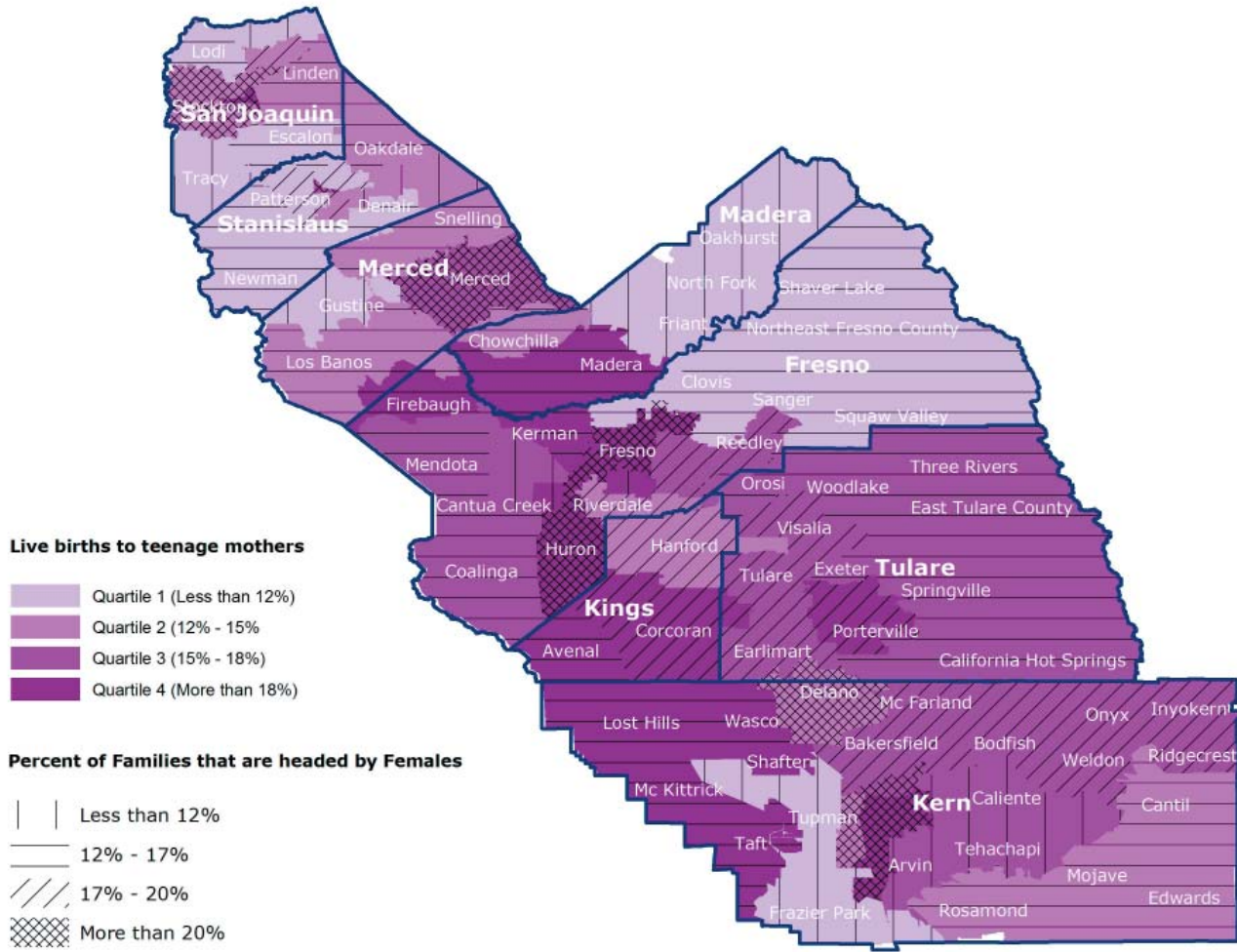
Source: California Department of Health Services

**Families living below Poverty in the San Joaquin Valley, 2001**



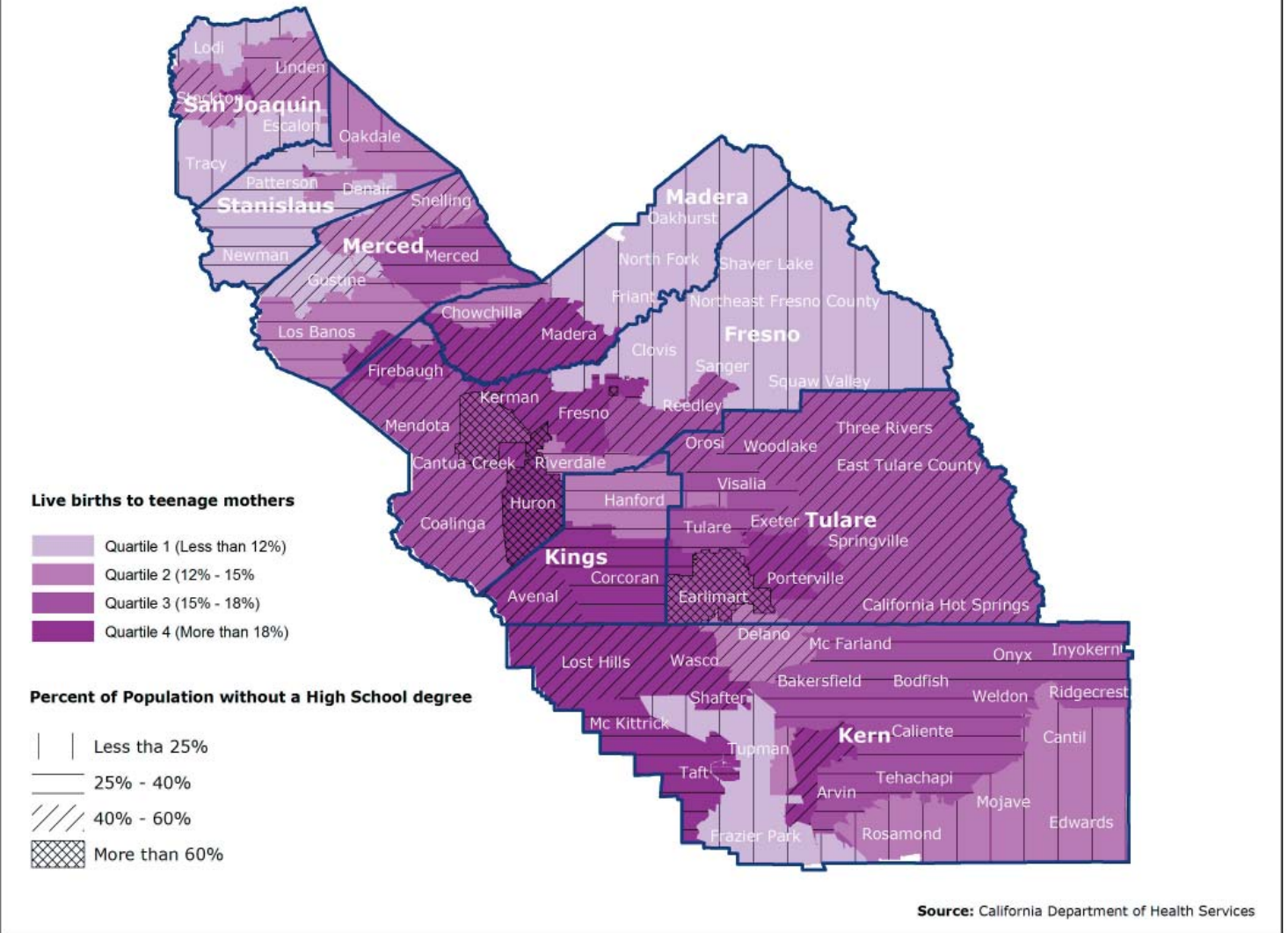
Source: California Department of Health Services

**Female Householder Families in the San Joaquin Valley, 2001**



Source: California Department of Health Services

**Population with less than High School Education in the San Joaquin Valley, 2001**



## San Joaquin Valley Community Resource List

### Fresno County

#### **California Health Collaborative - Fresno County Rural Teen Pregnancy Prevention Project**

1625 East Shaw Avenue, Suite 155

Fresno, CA 93710

Ph. (559) 244-4553

Fax (559) 221-6219

- ◆ Partners with community-based organizations to reduce teen pregnancy by providing sexuality education in agricultural communities in rural Fresno County

#### **Economic Opportunities Commission - Adolescent Family Life Program**

1900 Mariposa Mall, Suite 301

Fresno, CA 93721

Ph. (559) 263-1356

- ◆ Services include case management, community resources, and health and education information for pregnant or parenting teens
- ◆ The program goal is to improve health outcomes for infants, encourage continued education, and assist with family planning.

#### **Fresno Barrios Unidos Drop-In Center**

4403 Tulare Avenue

Fresno, CA 93702

Ph. (559) 453-9662

Fax (559) 453-9548

- ◆ Services include a youth drop-in center specializing in health education, support groups, and bilingual services, a gang-alternative program, a transitional program for previously incarcerated youth and a teen/young adult health clinic that provides HIV/STI testing and family planning services

#### **Fresno City College - Student Services Office**

1101 E. University

Fresno, CA 93741

Ph. (559) 442-8268

- ◆ Services include HIV testing and counseling

#### **Fresno County Human Services System - Department of Community Health**

1221 Fulton Mall

Fresno, CA 93721

Ph. (559) 445-3434

Fax (559) 445-3459

t.htm

- ◆ Services include STI/HIV education and prevention to adolescents and youth, STI testing and treatment as well as HIV testing and counseling
- ◆ Interventions include one-to-one outreach, group presentations, risk reduction workshops, risk reduction events, train-the-trainer workshops, community planning meetings, and community and cultural events

### **Fresno County Human Services System - Adolescent Family Life Program**

2589 N. Air, Suite 105

Fresno, CA 93727

Ph. (559) 253-5725

Fax (559) 455-0533

Assistance/AdolescentServices/AdolescentFamilyLifeProgram.htm

- ◆ Services include providing pregnant and parenting teens with assistance in obtaining a high school diploma or equivalent, health-related services and community referrals, and access to the mandatory Cal Learn program and The Better-Educated Successful Teens Club (B.E.S.T.).

### **Planned Parenthood Mar Monte**

650 N. Fulton Street

Fresno, CA 93728

Ph. (559) 488-4900

Fax (559) 488-4999

- ◆ Services include teen pregnancy education, reproductive and sexual health services, education on birth control, emergency contraception, sexually transmitted infections, parenting, women's health, and other birth and pregnancy-related services.

### **California State University, Fresno - Student Health Services Center (Area A)**

5044 N. Barton

Fresno, CA 93740

Ph. (559) 278-2734

- ◆ Services include HIV testing and counseling

## **Kern County**

### **Bakersfield Crisis Pregnancy Center**

2920 F Street, Suite C-5

Bakersfield, CA 93301

Ph. (661) 326-1907

- ◆ Services include no-cost pregnancy tests, adoption and post-abortion counseling, ultrasound examinations, health care and social service referrals, baby clothes and furniture, abstinence education, and youth presentations.

### **California State University, Bakersfield**

9001 Stockdale Hwy.

Bakersfield, CA 93311

Ph. (661) 664-2394

Fax (661) 664-3301

- ◆ Services include HIV testing and counseling.

**Clinica Sierra Vista**

2707 F Street  
Bakersfield, CA 93301  
Ph. (661) 324-0293  
Fax (559) 324-2510

- ◆ Services include several teen pregnancy-related programs: the Adolescent Family Life Program, a case management and home-visiting program for pregnant and parenting teens and their families; the Baby Think It Over Program, which provides infant stimulators; and the Adolescent Sibling Pregnancy Prevention Program (ASPPP), which targets younger brothers and sisters of AFLP and Cal-Learn clients
- ◆ Also provides HIV/STI education, prevention, testing, and counseling.

**Community Action Partnership - Kern Parent Child Center**

238 18th Street, Suite 4  
Bakersfield, CA 93301  
Ph. (661) 336-5272 ext. 24

- ◆ Services include case management for pregnant teens, counseling, peer counseling, community referrals, men's group meetings, a teen parent support group, and the Fatherhood Program.

**Community Action Partnership of Kern ñ HIV Outreach, Prevention, and Testing Programs**

300 19th Street  
Bakersfield, CA 93301  
Ph. (661) 336-0836  
Fax (661) 325-0836

- ◆ Services include education, prevention, and testing services for men between the ages of 18 and 35

**Kern County Department of Public Health**

1800 Mount Vernon Avenue  
Bakersfield, CA 93306  
Ph. (661) 868-0331  
Fax (661) 868-0263

- ◆ Services include family planning, pregnancy screening, STI testing and treatment, and HIV prevention education, street outreach, testing, and counseling.

**Planned Parenthood Mar Monte**

2535 16th Street, Suite 100  
Bakersfield, CA 93301  
Ph. (661) 634-1000  
Fax (661) 634-1040

- ◆ Services include teen pregnancy education, as well as reproductive and sexual health services, education on birth control, emergency contraception, sexually transmitted infections, parenting, women's health, other birth and pregnancy-related services, and STI/HIV testing and counseling

## Kings County

### Cyesis

959 Kattie Hammond Street  
Hanford, CA 93730  
Ph. (559) 589-7035  
Fax (559) 589-7007

Lemoore  
Ph. (559) 925-8117  
Fax (559) 924-6637

- ◆ A public school program serving pregnant and parenting school-aged teens in Hanford and Lemoore
- ◆ Services include basic education and information on female health and reproduction, prenatal care, sexually transmitted infections, and parenting skills.
- ◆ Services to the children of teen parents include child care and pre-school classes.

### Crossroads Pregnancy Center

206 W. Lacey Blvd., Suite A  
Hanford, CA 93230  
Ph. (559) 583-1900

- ◆ A Christian-based nonprofit center that provides parenting classes from prenatal to birth, free pregnancy testing, counseling on options for dealing with pregnancy, sexually transmitted infection information, and abstinence education

### Kings County Department of Public Health

330 Campus Drive  
Hanford, CA 93230  
Ph. (209) 584-1401  
Fax (209) 582-0927

- ◆ Services include prevention education, pregnancy testing, family planning services, emergency contraception, teen health and counseling, STI testing and treatment, and HIV testing and counseling

## Madera County

### Darin M. Camarena Health Centers - Teen Smart

109 North B Street  
Madera, CA 93638  
Ph. (559) 664-4000

- ◆ Services include community and school education on a variety of topics related to teen pregnancy and issues such as sexually transmitted infections, date rape, drugs and alcohol, a parenting program, and HIV testing and counseling

### Madera County Public Health Department

14215 Road 28  
Madera, CA 93638  
Ph. (559) 675-7893  
Fax (559) 674-7262

- ◆ Services include various programs related to teen pregnancy education and prevention, community outreach and education, teen responsibility, pregnancy assistance, referrals and other pregnancy-related services, STI testing and treatment, and HIV education, early intervention, prevention, testing, and counseling.
- ◆ Programs include Adolescent Family Life Program, Community Challenge Program, Nurturing Parenting Education for Pregnant/Parenting Teens, Reducing the Risk, and Male Involvement Program.



## Merced County

### **Boys and Girls Club of Merced - SMART Moves (Skills Mastery and Resistance Training)**

615 W. 15th Street  
Merced, CA 95340  
Ph. (209) 722-9922

- ◆ Services address issues related to substance abuse and early sexual activity by providing discussion groups, role-playing, assertiveness training, building of resistance and refusal skills, decision-making skills, and skills to evaluate media and peer influence
- ◆ The target population of this program is 6 to 15-year-olds

### **Merced County Health Department - Young Parents Program**

260 East 15th Street  
Merced, CA 95340  
Ph. (209) 381-1138  
Fax (209) 381-1173  
<http://web.co.merced.ca.us/health/MCH/YPP.htm>

- ◆ Services include counseling and referrals for teens who are pregnant or who are parents
- ◆ Assistance is provided for teen-pregnancy-related issues, including birth control, job training, counseling, healthcare and education, and case management
- ◆ The goal of the program is to promote health for teens and their children and to encourage healthy parent-child relationships

### **Merced Teen Pregnancy Prevention Project**

1729 Canal Street  
Merced, CA 95340  
Ph. (209) 724-0111  
Fax (209) 724-9046

- ◆ Program activities have included curriculum based classes at the Boys & Girls Clubs, Community Centers, teen conferences called “Steps To Your Dreams”, and youth development and parent involvement activities at Healthy House, a multicultural community center
- ◆ Services are targeted in the Merced County communities of Merced, Livingston, and Atwater

### **Merced County Health Department**

260 E. 15th Street  
Merced, CA 95340  
Ph. (209) 381-1010

- ◆ Services include STI testing and treatment and HIV education, prevention outreach, testing, and counseling.

## San Joaquin County

### **California Alliance Concerned with School Age Parenting and Pregnancy Prevention (CAC SAP)**

P.O. Box 188347  
Sacramento, CA 95818  
Ph. (916) 451-3904

- ◆ A statewide, regional coalition that seeks to increase the knowledge, skill and resources of individuals who are involved with adolescent pregnancy, parenting and prevention services
- ◆ Members include educators, social workers, health care providers, parents, policymakers, and other professionals.

### **Community Medical Centers**

East Channel Street  
Stockton, CA 95201  
Ph (209) 944-9763  
Fax (209) 944-4790

- ◆ Services include Latino HIV/AIDS education program, information and referrals, and HIV testing and counseling.

### **Pregnancy Help Center**

4255 Pacific Ave. Suite 8  
Stockton, CA 95207  
Ph. (209) 933-9131  
Fax (209) 933-9140

- ◆ Services are focused on Christian peer counseling for women of childbearing age facing unplanned parenthood
- ◆ Services include pregnancy testing, counseling, maternity and baby clothing, baby furniture, information and referrals for medical care, financial help, pregnancy-related classes, support groups, and HIV counseling.

### **Pregnancy Resource Center of Lodi**

1110 W. Kettleman Lane Suite 34  
Lodi, CA 95240  
Ph. (209) 368-7191  
Helpline (209) 368-7190  
Fax (209) 368-7659

- ◆ A nonprofit Christian organization providing parenting education, counseling, and referrals to community support services for women with unplanned or difficult pregnancies.

### **San Joaquin AIDS Foundation**

4330 North Pershing Ave., Ste. B-3  
Stockton, CA 95207  
Ph. (209) 476-8533  
Fax (209) 476-8142

- ◆ Services include HIV education for youth and at-risk youth in alternative and continuation schools and community centers, street outreach, HIV testing and counseling, distribution of condoms, information, referrals, and support groups.

### **San Joaquin County Public Health Services**

1601 E. Hazelton Avenue

Stockton, CA 95201

Ph. (209) 468-3412, (209) 953-3647

Fax (209)468-3823, (209) 959-3668

- ◆ A variety of programs are available, including Teen Pregnancy Prevention, Male Involvement Program, Adolescent Programs, and Adolescent Family Life Program
- ◆ Services include pregnancy prevention education, training, referrals for counseling and medical needs, STI testing and treatment, and HIV education, prevention, testing, and counseling.

## **Stanislaus County**

### **Health Services Agency of Stanislaus County**

830 Scenic Drive (Building 3)

Modesto, CA 95350

Ph. (800) 834- 8171

- ◆ Services include programs that focus on providing teen pregnancy education, birth control, information on sexually transmitted infections, training and workshops, referrals to community agencies, STI testing and treatment, and HIV testing and counseling.
- ◆ Several programs are available that address teen pregnancy issues, such as the Adolescent Family Life Sibling Program and The Real Project

### **Planned Parenthood**

1431 Mc. Henry Ave Suite 100

Modesto, CA 95350

Ph. (209) 579-2300

- ◆ Services include birth control and reproductive health counseling, family planning, male exams, all methods of birth control, breast exams, pap smears, testicular exams, pregnancy tests, STI testing and treatment, HIV testing and counseling, and emergency contraceptives.

## **Tulare County**

### **Tulare Teen Pregnancy Family Life Education - School Health Program**

7000 Doe Avenue, Building 300

Visalia, CA 93291

Ph. (559) 651-0130

Fax (559) 651-0172

[www.tcoe.org/Health/FamilyLifeEd.htm](http://www.tcoe.org/Health/FamilyLifeEd.htm)

- ◆ Services include family life education presentations, career-awareness classroom activities, education on sexually transmitted infections and proper decision-making, and interactive classroom workshops that demonstrate the social, emotional, legal, and financial consequences of having children too early

**Tulare County Health and Human Services Agency - HIV/AIDS Program**

132 North Valley Oaks Drive

Visalia, CA 93292

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- ◆ Services include teen pregnancy prevention, assistance to teen parents so they can continue with their education, preventive health services for mothers, infants, and children preventative health services, and HIV/AIDS education, prevention, testing and counseling.

**Woodlake Family Resource Center**

168 N. Valencia

Woodlake, CA 93286

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- ◆ Services include case management, community services, health and nutrition programs, social and family support, parenting classes, prenatal care, mental health counseling, a program that provides infant stimulators, and the Teenage Parenting and the Baby Think It Over Programs

## Protective and Risk Factors Related to Adolescent Sexual Behavior, Use of Contraceptives, Pregnancy, and Childbearing

### **Community - Community disadvantage and disorganization**

- High level of education (P)
- High unemployment rate (R)
- High income level (P)
- High crime rate (R)

### **Family - Structure and economic advantage of the teenager's families**

- Two (versus one) parents (P)
- Changes in parental marital status (R)
- High level of parental education (P)
- High parental income level (P)

### **Positive family dynamics and attachment**

- Parental support and family connectedness (P)
- Sufficient parental supervision/monitoring (P)

### **Family attitudes about and modeling of sexual risk-taking and early childbearing**

- Mother's early age at first sex and first birth (R)
- Single mother's dating and cohabitation behaviors (R)
- Conservative parental attitudes about premarital sex or teen sex (P)
- Positive parental attitudes about contraception (P)
- Older sibling's early sexual behavior and age of first birth (R)

### **Peer - Peer attitudes and behavior**

- High grades among friends (P)
- Peer's substance use and delinquent and non-normative behavior (R)
- Sexually active peers (or perception thereof) (R)
- Positive peer norms or support for condom or contraception use (P)

### **Partner - Partner attitudes**

- Partner support for contraception (P)

### **Sexual abuse**

- History of prior sexual coercion or abuse (R)

### **Teen - Biological antecedents**

- Older age and greater physical maturity (R)
- Higher hormone levels (R)

### **Ethnicity**

- Being White (versus ethnic minority) (P)

### **Attachment to and success in school**

- Good school performance (P)
- Educational aspirations/plans for the future (P)

### **Attachment to religious institutions**

Frequent religious attendance (P)

### **Problem or risk-taking behaviors**

Tobacco, alcohol, or drug use (R)

Problem behaviors or delinquency (R)

Other risk behaviors (R)

### **Emotional distress**

Higher level of stress (R)

Depression (R)

Suicide ideation (R)

### **Characteristics of relationship with partners**

Early and frequent dating (R)

Going steady, having a close relationship (R)

Greater number of romantic partners (R)

Having a partner three or more years older (R)

### **Sexual beliefs, attitudes, and skills**

Conservative attitudes toward premarital sex (P)

Greater perceived susceptibility to pregnancy, STD/HIV (P)

Importance of avoiding pregnancy, childbearing and STD (P)

Greater knowledge about contraception (P)

More positive attitudes about contraception (P)

Greater perceived self-efficacy in using condoms or contraception (P)

(R= Risk Factor; P = Protective Factor)

*This list of factors is the result of a meta-analysis of 300 studies conducted over the last 28 years (Kirby, 2001).*



## 40 Developmental Assets<sup>®</sup>

Search Institute<sup>SM</sup> has identified the following building blocks of healthy development that help young people grow up healthy, caring, and responsible.



Category	Asset Name and Definition	
<b>External Assets</b>	<b>Support</b> <ol style="list-style-type: none"> <li><b>1. Family Support</b>-Family life provides high levels of love and support.</li> <li><b>2. Positive Family Communication</b>-Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents.</li> <li><b>3. Other Adult Relationships</b>-Young person receives support from three or more nonparent adults.</li> <li><b>4. Caring Neighborhood</b>-Young person experiences caring neighbors.</li> <li><b>5. Caring School Climate</b>-School provides a caring, encouraging environment.</li> <li><b>6. Parent Involvement in Schooling</b>-Parent(s) are actively involved in helping young person succeed in school.</li> </ol>	
	<b>Empowerment</b> <ol style="list-style-type: none"> <li><b>7. Community Values Youth</b>-Young person perceives that adults in the community value youth.</li> <li><b>8. Youth as Resources</b>-Young people are given useful roles in the community.</li> <li><b>9. Service to Others</b>-Young person serves in the community one hour or more per week.</li> <li><b>10. Safety</b>-Young person feels safe at home, school, and in the neighborhood.</li> </ol>	
	<b>Boundaries &amp; Expectations</b> <ol style="list-style-type: none"> <li><b>11. Family Boundaries</b>-Family has clear rules and consequences and monitors the young person's whereabouts.</li> <li><b>12. School Boundaries</b>-School provides clear rules and consequences.</li> <li><b>13. Neighborhood Boundaries</b>-Neighbors take responsibility for monitoring young people's behavior.</li> <li><b>14. Adult Role Models</b>-Parent(s) and other adults model positive, responsible behavior.</li> <li><b>15. Positive Peer Influence</b>-Young person's best friends model responsible behavior.</li> <li><b>16. High Expectations</b>-Both parent(s) and teachers encourage the young person to do well.</li> </ol>	
	<b>Constructive Use of Time</b> <ol style="list-style-type: none"> <li><b>17. Creative Activities</b>-Young person spends three or more hours per week in lessons or practice in music, theater, or other arts.</li> <li><b>18. Youth Programs</b>-Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community.</li> <li><b>19. Religious Community</b>-Young person spends one or more hours per week in activities in a religious institution.</li> <li><b>20. Time at Home</b>-Young person is out with friends "with nothing special to do" two or fewer nights per week.</li> </ol>	
	<b>Internal Assets</b>	<b>Commitment to Learning</b> <ol style="list-style-type: none"> <li><b>21. Achievement Motivation</b>-Young person is motivated to do well in school.</li> <li><b>22. School Engagement</b>-Young person is actively engaged in learning.</li> <li><b>23. Homework</b>-Young person reports doing at least one hour of homework every school day.</li> <li><b>24. Bonding to School</b>-Young person cares about her or his school.</li> <li><b>25. Reading for Pleasure</b>-Young person reads for pleasure three or more hours per week.</li> </ol>
		<b>Positive Values</b> <ol style="list-style-type: none"> <li><b>26. Caring</b>-Young person places high value on helping other people.</li> <li><b>27. Equality and Social Justice</b>-Young person places high value on promoting equality and reducing hunger and poverty.</li> <li><b>28. Integrity</b>-Young person acts on convictions and stands up for her or his beliefs.</li> <li><b>29. Honesty</b>-Young person "tells the truth even when it is not easy."</li> <li><b>30. Responsibility</b>-Young person accepts and takes personal responsibility.</li> <li><b>31. Restraint</b>-Young person believes it is important not to be sexually active or to use alcohol or other drugs.</li> </ol>
		<b>Social Competencies</b> <ol style="list-style-type: none"> <li><b>32. Planning and Decision Making</b>-Young person knows how to plan ahead and make choices.</li> <li><b>33. Interpersonal Competence</b>-Young person has empathy, sensitivity, and friendship skills.</li> <li><b>34. Cultural Competence</b>-Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds.</li> <li><b>35. Resistance Skills</b>-Young person can resist negative peer pressure and dangerous situations.</li> <li><b>36. Peaceful Conflict Resolution</b>-Young person seeks to resolve conflict nonviolently.</li> </ol>
		<b>Positive Identity</b> <ol style="list-style-type: none"> <li><b>37. Personal Power</b>-Young person feels he or she has control over "things that happen to me."</li> <li><b>38. Self-Esteem</b>-Young person reports having a high self-esteem.</li> <li><b>39. Sense of Purpose</b>-Young person reports that "my life has a purpose."</li> <li><b>40. Positive View of Personal Future</b>-Young person is optimistic about her or his personal future.</li> </ol>

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