

The Problems of Teenage Pregnancy and Parenting

Options for the Legislature

Office of the Legislative Analyst
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Introduction

Introduction

This report is submitted pursuant to Chapter 941, Statutes of 1986 (AB 3959). Chapter 941 required the Health and Welfare Agency, in consultation with the State Department of Education, the Youth and Adult Correctional Agency, the Department of Justice, the Department of Finance, and the Office of Criminal Justice Planning, to (1) identify all state agencies that administer programs directing services to pregnant and parenting teens, (2) gather available information on these programs from each identified agency, and (3) provide copies of the assembled information to the Legislative Analyst by November 1, 1987.

Chapter 941 specified that the information collected from each agency, to the extent data are available in existing documents, should include the number of teens served and their characteristics; a description of the services available to them; any identified need for services; a description of the service delivery system; the objectives of each program and any evaluation data on the extent to which the program has met its objectives; and the cost of services provided.

Chapter 941 further required the Legislative Analyst to (1) review, summarize, and analyze the assembled information and (2) provide recommendations to the Legislature.

This report is our response to Chapter 941.

In order to provide the Legislature with a broad perspective on this issue, and a better evaluation of the need for and effectiveness of particular services, this report focuses on the "problems" of teenage pregnancy and parenting, as well as the services. This is not to imply that all teenage pregnancies are a "problem". They are not. In addition, not all teenage pregnancies result in many of the problems we discuss. However, we do identify the needs and problems of pregnant and parenting teens in order to evaluate services provided by state and local programs for this segment of our population.

Chapter I explores the problems that are associated with teen pregnancy and parenting. Chapter II describes the dimensions of the teen pregnancy problem in California and the factors contributing to teen pregnancy. Chapter III contains descriptions of existing state programs that serve pregnant and parenting teens, including the cost of services provided. Chapter IV reviews various studies that (1) have identified what influences teenagers in making choices regarding sexual activity and coping with unplanned pregnancy and (2) assess the effectiveness of various services and programs in dealing with the teen pregnancy and parenting problem. Finally, Chapter V summarizes our recommendations regarding state services for pregnant and parenting teens.

This report was prepared by Susan Ehrlich, Donna Olsson, and Paul Warren. Research assistance was provided by Malcolm Fleming and Rachel Lodge. Secretarial services were provided by Patricia Skott, and the report was formatted for publication by Suki O'Kane. ♦

Executive Summary

Executive Summary

The Problem. Contrary to some reports, the incidence of teenage pregnancy and parenting in California is not getting worse. In 1986, 33,459 infants were born to mothers ages 10 through 18 in California, which represents roughly the same birth rate to teenagers that has occurred since 1970.

Nevertheless, teen pregnancy can result in serious problems. For example, teenage mothers are more likely to be dependent on welfare at some point in their lives than mothers who have children in their 20s and 30s. In addition, teenagers also are more likely to have low-birthweight babies, who tend to have more long-term health problems than other babies. Rates of accidental death among infants of teenagers also are higher than average, which may signal neglect on the part of these parents.

Programs in California. In California, six state agencies administer 27 separate programs that provide services and benefits to pregnant and parenting teens. We identified a total of \$265 million in expenditures made by 11 of the 27 programs. Expenditure data for the remaining 16 programs are not available. Just as important, state agencies do not always know the types of services that specific programs provide to pregnant and parenting teens. As a result, the Legislature cannot obtain a complete picture of the amount and type of services that are available to this population.

In addition, programs that serve pregnant and parenting teens are not well coordinated in many areas of the state. The lack of coordination may make it difficult for teenagers to obtain information on the range of services available. This lack of coordination also may result in some duplication of services in particular areas.

Services That Have Been Shown To Work. Evaluations that we reviewed concerning the effectiveness of specific services often contained flaws that limit the applicability of the findings. Despite the limitations, we believe these studies demonstrate that certain types of services can reduce the incidence of teen pregnancy, increase school attendance and educational performance of pregnant and parenting teens, and improve the health of a teenager's infant. Research also indicates that targeting services to certain groups of teenagers—for instance, those who are low-income, do poorly in school, or whose mother or sister had a child as a teenager—could increase the impact of scarce resources.

Recommendations: A Place to Start. Given the lack of information about services and the lack of coordination where services do exist, we believe the first step to address the problems related to teen pregnancy and parenting is for the state and local governments to initiate a planning process. While a planning process takes time and costs money, we be-

lieve that the benefits would exceed the costs and that such a process could accomplish the following important objectives:

- Identify available resources and ensure that services delivered are as effective as possible.
- Coordinate the provision of services to help teenagers find the services they need and to minimize duplication of service.
- Target services in order to maximize the impact that services have on teenagers who are most likely to become pregnant.
- Identify the gaps in services where additional funds are needed. ♦

Summary of Recommen- dations

Summary of Recommendations

We recommend:

1. *State and Local Plans.* We recommend the Legislature require the Health and Welfare Agency, in conjunction with the State Department of Education, to prepare a plan to address the problems related to teen pregnancy and parenting. This plan should include a strategy for encouraging the development of plans at the county and/or regional levels (see page 33).

2. *Assessing Available Education Resources.* We recommend that the Legislature require the State Department of Education (SDE) to issue a report describing local school district services that are available for (1) meeting the educational needs of pregnant and parenting teens and (2) preventing teen pregnancy. The report should include information on program funding and services levels as well as the types and effectiveness of services provided. We further recommend that the

Legislature require SDE to (1) distribute a handbook to junior high and high schools in the state regarding effective services for pregnant and parenting teens and (2) provide additional technical assistance as needed to these schools (see page 34).

3. *Eliminating Administrative Barriers to School Attendance.* We recommend that the Legislature require SDE to report on the administrative barriers that may prevent pregnant and parenting teens from returning to a regular school setting (see page 35).

4. *Additional Information on GAIN Participation Needed.* We recommend the Legislature require the Department of Social Services to report on the extent to which the Greater Avenues For Independence (GAIN) program is providing education and training services to pregnant and parenting teenagers or to teens who are otherwise mandated to participate in the program (see page 36). ♦

Chapter I

Chapter I

What Are the Problems Associated with Teenage Pregnancy and Parenting?

In this chapter, we discuss why teenage pregnancy and parenting can pose problems to teenage mothers and what the consequences of these problems are to the teenagers themselves, the children of the teens, and to society. This is not to say that all teenage pregnancies are necessarily problematic, nor do all teenage parents have many of the problems we describe. Clearly, many do not.

In our report, we have mainly focused on teenage women rather than men for two reasons. First, most fathers of babies born to teenage mothers are not teenagers themselves. In California in 1985, only 28 percent of these fathers were teenagers.¹ Second, very little information is available on the problems experienced by teen fathers. This does not mean teenage men do not experience problems as a result of teenage pregnancies. Without data, however, these problems cannot be pinpointed.

Teen Pregnancy Presents Difficult Choices

The first major problems associated with teen pregnancy arise because the pregnancies are often unexpected and unwanted. Under these circumstances, a pregnant teen has two difficult choices: having an abortion or delivering the baby. Abortion incurs medical costs

and to many, it runs counter to strongly held moral and ethical beliefs. Delivering the baby results in disruption of schooling and medical costs, at the least. If the girl keeps the baby, she faces all the additional problems associated with teen parenting, discussed in the next section.

Teen Parenting Poses Many Problems

Generally, a teen choosing to keep the baby experiences two types of problems. First, teen mothers often lack education and training needed to compete in the job market, with the result that they typically have lower incomes and higher welfare dependency rates than other women. Second, teen mothers often do not possess the maturity needed to be good parents, which may result in harm to their children.

Lower Educational Attainment And Reduced Earning Power. Studies show that women who had children as teenagers subsequently earn significantly less than women who did not. These studies cannot tell whether this reduction in earning power is caused by the time that teen mothers spend out of the job market or whether earnings are low because of educational deficits.² It is clear, however, that pregnant teens are much more

¹ *Adolescent Pregnancy and Parenting in California: Building a Strategic Plan for Action*, Claire D. Brindis and Rita J. Jeremy, University of California at San Francisco, 1988, pg 26.

² *Teenage Parents: Their Ambitions and Attainments*, Gus W. Haggstrom et al., The Rand Corporation, 1981, pg 103.

likely to drop out of school than other teens: 60 percent to 80 percent of teen mothers are not in school nine months after giving birth.³

Teenage mothers also have a history of dependence on public welfare. One national study estimated that 60 percent of female AFDC recipients under the age of 30 had been teenage parents, as compared with 35 percent of the women under the age of 30 who had not received public assistance.⁴ A 1985 survey of California AFDC recipients indicates that approximately one-half of the single-parent women on aid and one-third of the wives in two-parent families receiving welfare had their first child as teenagers.⁵ Teen mothers constitute a large share of welfare recipients because they tend to stay on aid for a longer period of time. For instance, national statistics indicate that some groups of unmarried mothers under age 30 who were high school drop-outs have an average stay on welfare of 10 years.⁶ In contrast, the average welfare recipient's stay on aid ranges from 8 to 27 months.

Immaturity Creates Problems for Children of Teen Mothers. Teen mothers have to cope with multiple stresses—raising a child, financial pressures associated with being a parent, and the tensions associated with growing up that are typical of the teenage years. The lack of coping skills associated with the teen years often affects the teenager's child and may

contribute to the following problems among teenage parents:

- *Teenagers are more likely to have low-birthweight babies.* For the most part, this is because teenagers, particularly young teenagers, for a variety of reasons, are less likely to receive adequate prenatal care. The younger the teenager, the more likely she will have a low-birthweight baby. Low-birthweight babies are at a higher risk of having health problems.⁷
- *Rates of accidental death among infants of teenagers is higher than average.* While the incidence of reported child abuse among teens is not higher than other age groups, two studies have documented higher incidences of burns, suffocations, and car accidents among babies of teenage mothers. The researchers suggest that these higher accident rates may signal neglect on the part of parents.⁸

Thus, children often feel the impact of a mother's decision to have a child in her teens. Available research indicates they are more likely to be poor, more likely to have health problems at infancy, and may be more likely to be neglected than are children born of older mothers. Since these problems often shape a child's life, teen pregnancy has a legacy that influences California today and well into the future. ♦

³ "Paths to Adolescent Parenthood: Implications for Prevention," Louise H. Flick, *Public Health Reports*, March-April 1986, pg 2.

⁴ "Teenage Pregnancy and Welfare Dependency," *Family Planning Perspectives*, Vol. 10, no. 4, (July/August 1978), as cited in *Reducing Poverty Among Children*, Congressional Budget Office, May 1985, pg 111.

⁵ *Quarterly Survey of Recipients of Aid to Families with Dependent Children*, 1985, California Department of Social Services, Sacramento, California, February 1987.

⁶ *The Dynamics of Dependence: The Routes of Self-Sufficiency*, Mary Jo Bane and David T. Ellwood, Urban Systems Research and Engineering Inc., Cambridge, Massachusetts, 1983.

⁷ *Adolescent Pregnancy and Parenting in California*, pg 58.

⁸ *Adolescent Pregnancy and Parenting in California*, pg 55.

Chapter II

Chapter II

How Extensive Is the Teen Pregnancy/Parenting Problem in California?

This chapter describes the extent of the teen pregnancy/parenting problem in California. First, we examine the number of teen births and the birth rate for teenagers over time. Then we examine how birth rates differ for teenagers of different ages, places of residence, and race or ethnicity. Not surprisingly, there are large differences in teen birth rates for different subgroups of teenagers. Second, we review data on abortions. The data on abortions are not as comprehensive as birth data. Regional abortion data suggest that pregnancy rates (births plus abortions) vary much less than birth rates; that is, one reason

why some counties have high birth rates is because fewer pregnancies in these counties are terminated through abortion.

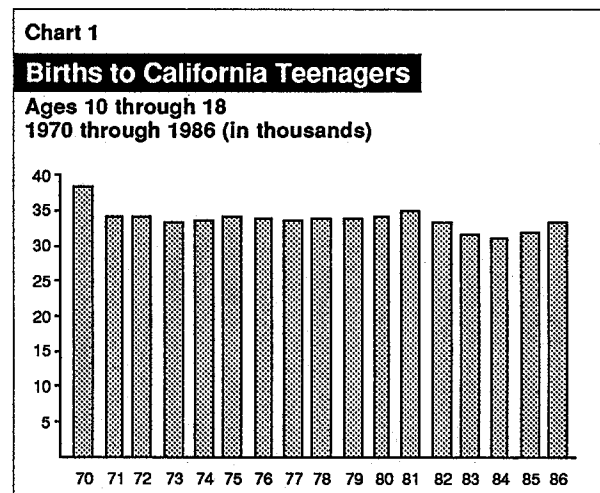
For this report, we principally focus on the experience of females ages 10 through 18. This is somewhat at odds with the normal practice, which defines teenagers as the group aged 10 through 19. We have not included 19-year olds because most youth graduate from high school at age 18, and thus pregnancy is not as disruptive in their lives as pregnancy at an earlier age.

Teen Birth Rate Relatively Steady

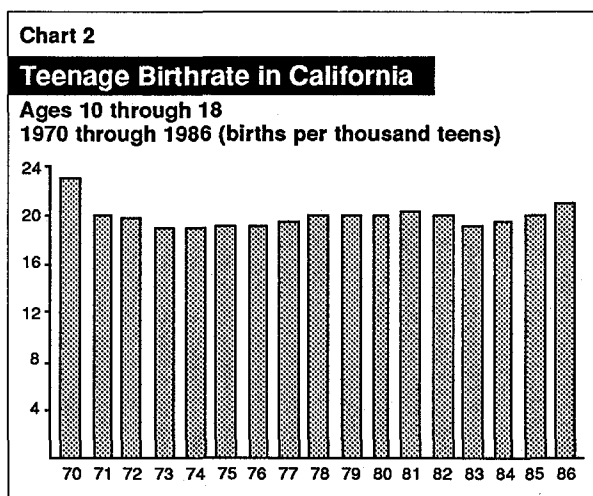
Chart 1 shows the number of births that teenagers aged 10 through 18 accounted for in California from 1970 through 1986. As the chart suggests, the number of teen births has been relatively steady over this period, averaging 34,000 births each year.

The chart also shows that there was a slight dip in teen births during the early 1980s. Increases during 1985 and 1986, however, have restored the number of teen births to its recent historical average. In 1986, there were 33,459 infants born to mothers ages 10 through 18.

Teen birth rates—the number of children born per thousand teenagers—follow the

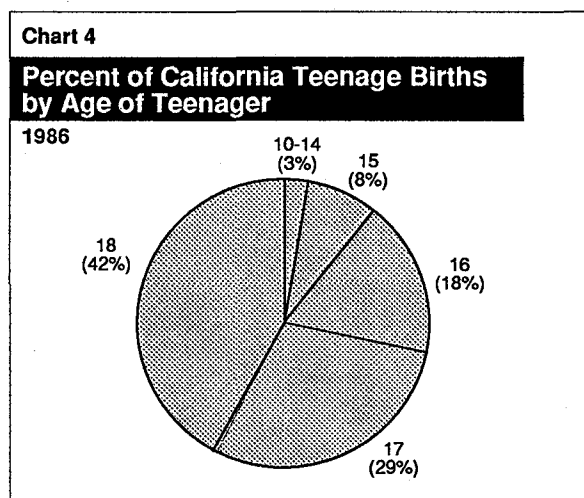
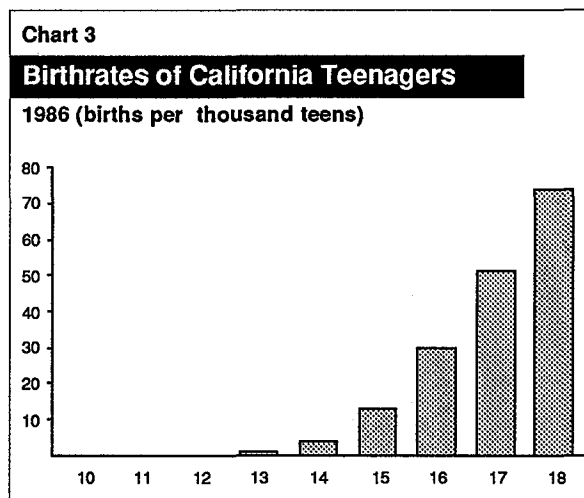


same pattern over the period 1970 through 1986. That the rates have been fairly steady may be surprising to some who believe the teen birth rate has been rising rapidly. Chart 2 displays the teen birth rate in California during this period. As the chart illustrates, birth rates have been between 19 and 21 births per thousand teens since 1971. The dip in the number of births that occurred during the 1980s is reflected in the rates as well. The rate was at its lowest in 1983, and has increased each year since. The rate in 1986 was 21 per thousand, an increase of 8.2 percent over the 1983 low of 19.4 per thousand. It is too early to tell whether the increase since 1983 reflects a long-term increase in teen birth rates, or random variations in the rate.



Birth Rates Increase Markedly As Age Increases. Chart 3 shows the 1986 birth rates for each age group and Chart 4 shows the percent of total teenage births accounted for by each age group. As Chart 4 indicates, the majority of deliveries each year are by 17- and 18-year olds. In 1986, these two groups accounted for 71 percent (29 percent and 42 percent respectively) of all births to teenagers. As Chart 3 shows, birth rates for 10-, 11-, and 12-year olds are virtually nonexistent. At age 13, the rate approaches 1 per thousand. At age 15, the rate exceeds 14 per thousand. The rates increase

for each year of age until age 18, when the rate reaches 73 per thousand. (To place these rates in perspective, the state's birth rate for women in their 20s averages between 115 and 120 births per thousand women.)

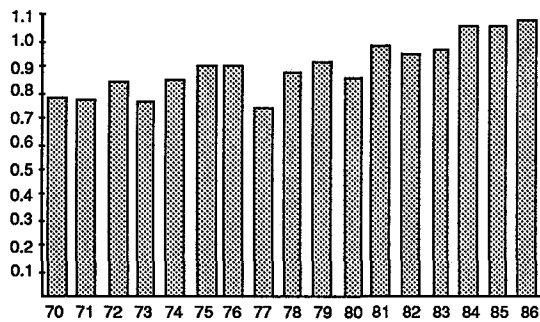


Increasing Rates For Younger Teenagers. While the overall teen birth rate has remained relatively steady since 1970, the rate for the youngest teenagers—the 10- through 14-year old group—has increased significantly. Chart 5 displays birth rates for this group. As the chart illustrates, birth rates for the 10- through 14-year old group have increased from about

Chart 5

Birthrate of California Teenagers Aged 10 through 14

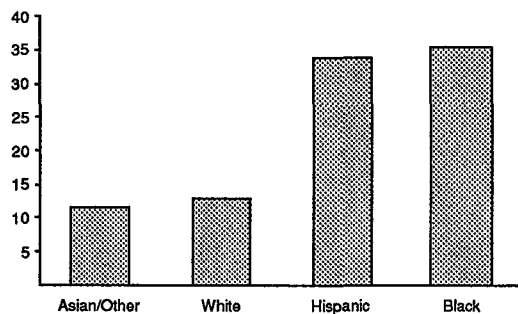
1970 through 1986 (births per thousand teens)



0.8 per thousand in 1970 to almost 1.1 per thousand in 1986. According to the Department of Health Services, this increase is due to significant increases in the birth rates for 13- and 14-year olds. Rates for 13-year olds have increased from 0.57 in 1970 to 0.84 in 1986, a jump of 49 percent. Similarly, for 14-year olds, the rate increased from 3.3 in 1970 to 4.3 in 1986. This represents an increase of 29 percent.

Birth Rates Differ Significantly By Race and Ethnicity. Chart 6 displays estimated 1986 birth rates for four ethnic/racial groups. As the chart illustrates, Hispanic and black teens aged 10 through 18 have birth rates of approximately 35 per thousand. The rates for

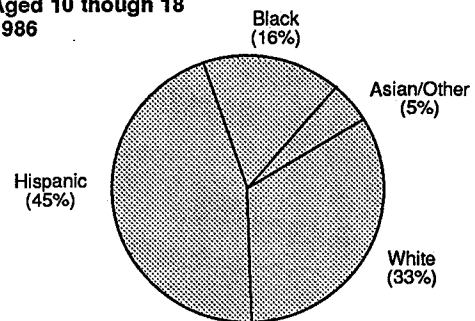
Chart 6

Teen Birthrates in California by Race and EthnicityAged 10 through 18
1986 (births per thousand teens)

these groups are almost three times the rate for white and Asian teens, which were 13 and 12 per thousand, respectively, in 1986. We have not seen any studies that indicate why these rates are so different. It may be that factors other than race/ethnicity—such as poverty, education and religious beliefs—account for much of the differences between groups.

These higher rates mean that Hispanic and black teenagers account for a higher percentage of births than their numbers in the teen population would suggest. As Chart 7 shows, for instance, Hispanics account for 45 percent of teen births. Hispanics, however, make up

Chart 7

Percent of California Teenage Births by Race or Ethnicity of MotherAged 10 through 18
1986

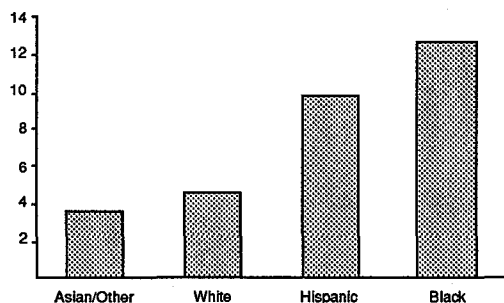
only 28 percent of the female teen population. Similarly, while black teenagers constitute 9.4 percent of the teenage population, they account for 16 percent of the births to teenagers. As a result, areas of the state with significant Hispanic and black populations generally have higher teen birth rates.

The variation in teen birth rates for different racial and ethnic groups implies that women in these groups have children earlier in their lives. Chart 8 displays the percent of all births that teenagers ages 10 through 18 accounted for in 1986. As the chart illustrates, teenagers account for 13 percent of all births to black women, and 10 percent of all births to Hispan-

Chart 8

Teen Births in California as a Percent of Births to Women of All Ages

By Race and Ethnicity
1986



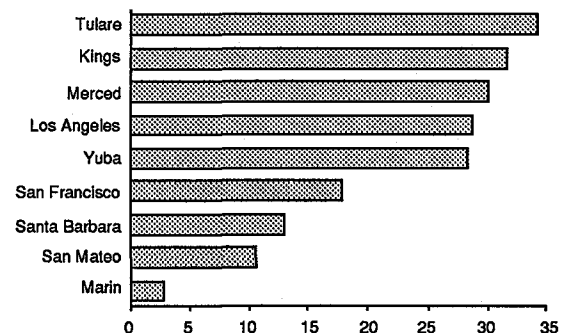
ics. For whites and Asians, the proportion is lower, averaging 5 percent and 4 percent, respectively.

County Rates Vary Widely. Chart 9 displays teen birth rates for selected counties. These counties were selected to illustrate the range of county rates. Rural counties in the San Joaquin Valley tend to have the highest teen

Chart 9

Selected County Teen Birth Rates Age 10 through 18

1986 (births per thousand teenagers)



birth rates—Tulare, Kings, and Merced Counties have the highest teen birth rates in the state. On the other hand, Santa Barbara, San Mateo, and Marin—all relatively wealthy counties—have the lowest rates in the state. Data are not available to precisely identify the factors accounting for the variation in county rates.

Abortion Rates Affect Birth Rates

Birth rates do not reliably describe *pregnancy* rates because more than half of all teen pregnancies in California terminate with an abortion. Birth rates may not represent good proxies for *relative* pregnancy rates if certain groups are more or less likely to have an abortion than other groups.

Data on abortions are not readily available in the same fashion as are birth data, in part because the state does not routinely collect data on all abortions. Many analysts feel that the best estimate of the number of abortions conducted in the state is done by the Allan Guttmacher Institute (AGI). In 1985, AGI estimates that teenagers between the ages of 10 and 19 underwent 71,125 abortions. The comparable birth statistics for that age group are 51,216 births during 1985. These statistics imply that for every 10 teen births there were 14 teen abortions.

The institute does not estimate county abortion rates. We have estimated *regional* abortion rates using AGI data in conjunction with Medi-Cal data, in order to (1) review the geographic distribution of births, abortions, and pregnancies and (2) examine the choice that teenagers make between births and abortions. Appendix A discusses the methodology for our regional estimates. Due to data limitations, we define teens as aged 10 through 19.

The regions are defined as follows: *north state* (the seven counties in the northern tip of the state); *north valley* (the 12 counties that make up the Sacramento and northern San Joaquin valleys); *bay area* region (the nine counties that surround the San Francisco Bay); the *mountain* region (the 11 counties in the Sierra Nevada mountains and its foothills); *south valley* (the eight counties in the southern San Joaquin valley plus Monterey and San

Benito); and *south state* region (Los Angeles and eight surrounding counties).

The two valley regions have comparable pregnancy rates. The birth and abortion rates for the two regions are quite different, however. The data suggest that teenagers in the north valley are more likely to have abortions, whereas teenagers in the south valley are more likely to allow the pregnancy to go to term.

The other two primarily rural regions show greater disparity than the valley regions. The mountain region has significantly lower birth rates (28 percent lower) and somewhat lower abortion rates than the north state region (9

percent lower). The net result of these differences is a pregnancy rate in the mountain region that is 17 percent lower than the north state region. Data are not available to readily explain why the behavior of teenagers in the mountain region is so different than the behavior in the north state.

The urban regions show major differences as well. The bay area region has much lower birthrates than the south state (33 percent lower) but higher abortion rates (37 percent higher). These disparate trends end up offsetting each other. Pregnancy rates in the two regions are roughly similar—the south state rate is only 6 percent higher.

California Compared With Other States

Chart 10 shows how California's teen pregnancy, birth, and abortion rates compared with the national rates in 1984, the most recent year for which information is available for the 15 through 19 age group. As the chart indicates, California's teen birth rate is almost equal to the national average. The state's teen abortion rate, however, is 60 percent higher than the national average, while the pregnancy rate is 26 percent higher than the national average.

These 1984 data can be used to compare California with the nation as a whole, but not to compare California with other states. The most recent state-by-state teen pregnancy data available is for 1980. Appendix B pro-

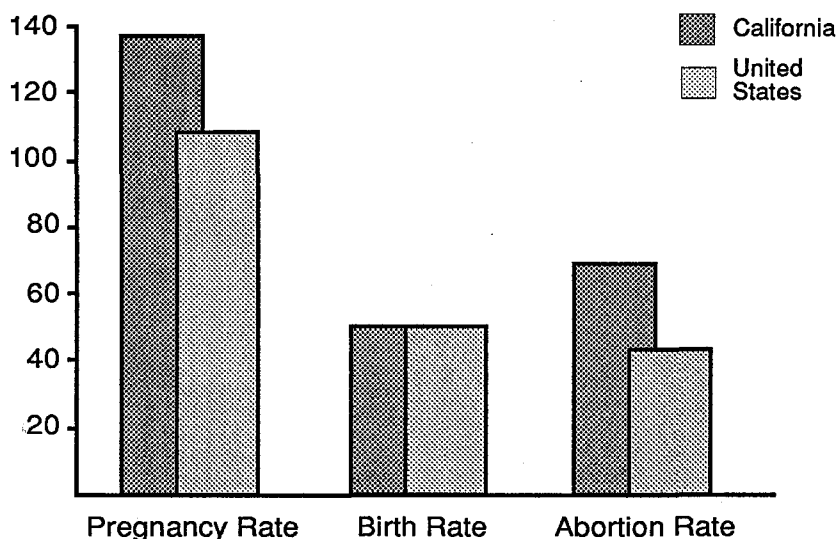
vides this information for each state for 1980. Based on our analysis of 1984 U.S. and California data, we believe that the rates of pregnancy, births, and abortions for teenagers aged 15 through 19 did not change significantly between 1980 and 1984 (though birth rates for women aged 20 through 44 did increase significantly).

As Appendix B indicates, California's estimated 1980 teen pregnancy rate was second highest in the nation. The state's estimated teen birth rate was almost equal to the national average, while its estimated teen abortion rate was the highest in the nation. Based on these figures, the state's teen birth rate appears to reflect a relatively high use of abortion. ♦

Chart 10

Comparison of California and the United States Teen Pregnancy, Birth, and Abortion Rates^a

Ages 15 through 19 (per thousand teenagers)
1984



^a Sources for United States data: Birth data from the *Statistical Abstract of the United States*, 1987; Population data from *Estimates of the Population of the United States by Age, Sex, and Race: 1980-86*; U.S. Department of Commerce, Bureau of the Census; Abortion estimate based on 1983 abortion data from 1987 *Statistical Abstract*; Pregnancy estimate is derived from birth and abortion data.
Sources for California data: Birth data and abortion estimates from Department of Health Services, Health Demographics Section; pregnancy estimate is derived from birth and abortion data.

Chapter III

Chapter III

Description of Existing California Programs

In this chapter, we discuss the 27 state and federally funded programs identified by the Health and Welfare Agency (HWA) that serve pregnant and/or parenting teens. Approximately 4 percent of the total identified expenditures are for prevention-related services. The remaining funds are used to provide services once pregnancy occurs. Four programs—primarily health and welfare programs that are available to all poor families—account for

about 90 percent of the total identified funding. Eight other major programs are either targeted specifically to pregnant and parenting teens, or include components that are targeted to this group. With the exception of two programs, which are case management programs designed to coordinate various services, the programs we identified generally are not coordinated well at either the state or local level.

Many State Programs Serve Pregnant and Parenting Teens

In California, six state agencies currently administer 27 separate programs that provide services and benefits to pregnant and parenting teens. The agencies are:

- Department of Social Services (DSS);
- Department of Health Services (DHS);
- Department of Alcohol and Drug Programs (DADP);
- State Department of Education (SDE);
- Employment Development Department (EDD); and
- California Youth Authority (CYA).

Table 1 lists the state programs for pregnant and parenting teens by type of service provided, and gives summary information on eligibility requirements, caseloads, and current-year estimated costs. As Table 1 indi-

cates, estimated expenditures and caseload information for pregnant and parenting teens are not available for more than one-half of the programs (16 out of 27), primarily because the programs do not collect the necessary data. For example, funding for several SDE-administered programs is supported with state apportionment funding (general revenues), and is not budgeted separately. Consequently, the SDE does not collect information on specific service and funding levels for these programs.

Table 1 excludes three specific types of programs: (1) core curriculum education programs that serve all teens and that are not targeted to the specific needs of pregnant and/or parenting teens, (2) programs that serve the children of teen parents, such as the Child Health and Disability Prevention

Table 1
Programs In California That Serve Pregnant and/or Parenting Teens (PPTs)^a
1987-88
(dollars in thousands)

PROGRAMS AVAILABLE FOR PPTS	TYPE OF PROGRAM/ SERVICES PROVIDED	REQUIREMENTS TO QUALIFY	ESTIMATED NUMBER OF PPT CLIENTS 1987-88	ESTIMATED EXPENDITURES FOR PPTS			EXPLANATION/COMMENTS
				STATE	FEDERAL	TOTAL	
PREVENTION-RELATED SERVICES AVAILABLE FOR PPTS ^b							
Office of Family Planning (DHS)	Family planning; information and education	Targets women under 200% of poverty level	126,000	\$9,843	--	\$9,843	Also provides information and education services to an additional 100,000 teens including PPTs In 1986-87, \$8 million served 18,500 teens, including PPTs, in 46 school districts School districts may voluntarily operate these programs
School-Based Pupil Motivation and Maintenance (SDE)	Dropout and truancy prevention; outreach activities	Targets teens in enrollment area of participating schools	N/A	N/A	N/A	N/A	
Family Life Education (SDE)	Reproduction and sexuality education	Teens, with parental consent, in participating schools	N/A	N/A	N/A	N/A	
Subtotals, Prevention-related Services			126,000	\$9,843	--	\$9,843	
HEALTH, NUTRITION AND SOCIAL SERVICES PROGRAMS AVAILABLE FOR PPTS ^b							
HEALTH Medi-Cal (DHS) ^c	Health care including pregnancy-related care	Public assistance recipients; income-eligible	40,850	\$25,400	\$18,200	\$43,600	Estimated averages based on our analysis of 1985-86 actual service level and expenditure data. Estimated averages are likely to vary by +/-5 percent
Maternal and Child Health Community-Based Perinatal Services (DHS)	Health care, counseling and education	Low-income pregnant and parenting teens in geographic target areas	3,486	1,400	--	1,400	
Booth Memorial Center – Pregnant Teens Alcohol Use Prevention Project (DADP)	Training on dangers of alcohol and drug use during pregnancy	Alameda County teens in pregnant minor programs	100	N/A	N/A	N/A	Total cost of project to date is \$32,000. Some additional PPTs are served indirectly through public service messages
Tule River Alcoholism Program (DADP)	Training on dangers of alcohol use during pregnancy	Indian teens	80	--	48	48	Also serves 200 Indian women, including some PPTs, through annual health fair
Anti-Drug Abuse Act, High Risk Youth (DADP)	Provides grants to local agencies for drug use prevention activities targeted to high risk youth	Teens and youth at high risk of using drugs	N/A	N/A	N/A	N/A	Approximately \$650,000 in federal funds is available in 1987-88 for services to high risk youth, including PPTs

Table 1 Continued

Table 1 Continued							
PROGRAMS AVAILABLE FOR PPTS	TYPE OF PROGRAM/ SERVICES PROVIDED	REQUIREMENTS TO QUALIFY	ESTIMATED NUMBER OF PPT CLIENTS 1987-88	ESTIMATED EXPENDITURES FOR PPTS			EXPLANATION/COMMENTS
				STATE	FEDERAL	TOTAL	
HEALTH, NUTRITION AND SOCIAL SERVICES PROGRAMS (continued)							
Anti-Drug Abuse Act, Drug Free Schools in Communities (DADP/SDE)	Provides grants to schools for drug use prevention activities.	Teens and youth enrolled in school, including those at high risk of using drugs	N/A	N/A	N/A	N/A	Approximately \$14.2 million in federal funds is available in 1987-88, including \$2.1 million for high risk youth, that includes PPTs
SOCIAL SERVICES Aid to Families with Dependent Children (DSS) ^c	Cash grants	Income eligible	22,470	73,000	83,000	167,000	Total expenditures include an additional \$11 million in county funds for administration
Licensed Maternity Home Care Program (DSS) ^c	Residential care: service referrals	Unmarried, pregnant women under age 21	618	2,254	--	2,254	
Child Support (DSS)	Locates absent parent; establishes and enforces child support orders	None	N/A	N/A	N/A	N/A	Total program funding of \$159 million includes services to some PPTs
State Children's Trust Fund, perinatal projects (DSS)	Child abuse and neglect prevention	Parents at risk of abuse or neglect	N/A	N/A	N/A	N/A	Total cost of \$701,000 for 3-year project includes funding for 45 PPTs
Booth Memorial Center - Community Placement for Youth Authority Wards (CYA)	Residential and child care services for PPT wards and their children while wards attend school or work	PPT wards incarcerated through the CYA, and their children under age 2	8	N/A	N/A	N/A	Services also include counseling, job placement, "life skills" training. Expected to start-up by May 1988.
NUTRITION Food Stamps (DSS) ^c	Food vouchers	Income eligible	13,360	--	14,100	14,100	State and counties also incur some administrative costs
Special Supplemental Food Program for Women, Infants, and Children (DHS) ^c	Food supplements	Low-income pregnant, lactating and post-partum women and children	25,200	--	14,400	14,400	Estimate based on analysis of expected 1987-88 total expenditures and service levels
Pregnant and Lactating Students Nutrition Program (SDE) ^c	Food supplements; nutrition education	Pregnant or lactating students in participating schools	1,800	306	--	306	Operates in 48 public schools and 5 other sites
Subtotals, Health, Nutrition and Social Services Programs			107,964	\$102,360	\$129,748	\$243,108	

Table 1 Continued

PROGRAMS AVAILABLE FOR PPTS	TYPE OF PROGRAM/ SERVICES PROVIDED	REQUIREMENTS TO QUALIFY	ESTIMATED NUMBER OF PPT CLIENTS 1987-88	ESTIMATED EXPENDITURES FOR PPTS			EXPLANATION/COMMENTS
				STATE	FEDERAL	TOTAL	
EDUCATION AND TRAINING SERVICES AVAILABLE FOR PPTS							
EDUCATION Pregnant Minors (SDE) ^c	Counseling and guidance services	Pregnant students in participating schools	N/A ^d	N/A ^d	N/A ^d	N/A ^d	In 1985-86, services were provided in approximately 100 school districts and 11 county offices of education
Independent Study (SDE)	Flexible education scheduling	Enrolled students	N/A ^d	N/A ^d	N/A ^d	N/A ^d	Serves 40,000 teens, including PPTs
Continuation Education (SDE)	Compulsory part-time school attendance	Aged 16-18; voluntarily and involuntarily transferred from comprehensive high schools	N/A ^d	N/A ^d	N/A ^d	N/A ^d	Serves 1,800 teens, including PPTs
Vocational Education ^e (various programs) (SDE)	Vocational training; education; job develop- ment; internships; may provide child care and transportation	Teen parents; some programs restricted to minority or economically disadvantaged teens	2,500	--	N/A	N/A	Projection based on 1985-86 data
Adult Education/Parenting Education (SDE)	Parenting training	Teen parents	N/A	N/A	N/A	N/A	
School Age Parenting and Infant Development (SDE) ^c	Child care and parenting training; some service referral	85 percent teen parents, and 15 percent other students	1,300	\$6,700	--	\$6,700	Operates in 57 school districts and 3 county offices of education
EMPLOYMENT/TRAINING Job Training Partnership Act (various programs) (EDD) ^c	Job training, education and employment services	Economically disadvan- taged teens	N/A	N/A	N/A	N/A	In 1986-87, \$142 million funded services for at least 90,500 youth, including some PPTs
Employment Services (EDD)	Employment information and service; job develop- ment services	Economically disadvan- taged teens	N/A	N/A	N/A	N/A	130 statewide field offices serve adults and teens, including some PPTs
Greater Avenues for Inde- pendence (DSS) ^c	Job training; job search and placement; education	AFDC applicants and recipients	N/A	N/A	N/A	N/A	Total funding appropriated in 1987-88 is \$150 million. This amount will increase signifi- cantly as the program phases in throughout the state. Generally, PPTs are not required to participate, but may volunteer
Subtotals, Education and Training Services				\$6,700	--	\$6,700	

Table 1 Continued

Table 1 Continued							
PROGRAMS AVAILABLE FOR PPTS	TYPE OF PROGRAM/ SERVICES PROVIDED	REQUIREMENTS TO QUALIFY	ESTIMATED NUMBER OF PPT CLIENTS 1987-88	ESTIMATED EXPENDITURES FOR PPTS			EXPLANATION/COMMENTS
				STATE	FEDERAL	TOTAL	
CASE MANAGEMENT SERVICES AVAILABLE FOR PPTS							
Adolescent Family Life Program (DHS) ^c	Comprehensive services; case management	Entering teens under age 17	4,400	\$2,260	\$2,650	\$4,910	Services may continue to age 21 under specific circumstances
Totals, Services for PPTs			242,164	\$121,163	\$132,398	\$264,561	
^a This list excludes (1) programs targeted only to the children of teen parents, (2) core curriculum education programs, and (3) capital outlay expenditures associated with PPT services. Abbreviations are: Department of Alcohol and Drug Programs (DADP); State Department of Education (SDE); Department of Health Services (DHS); Employment Development Department (EDD); Department of Social Services (DSS); California Youth Authority (CYA); Pregnant and/or parenting teens (PPTs); Not available (N/A). ^b These programs also serve teens after pregnancy occurs. ^c This program is described in more detail later in this chapter. ^d Funding is provided though general school district revenue; specific program funding is not separated out. ^e Includes the following programs: sex equity set aside, single parent/homemaker, minority single parent set aside, SOLO grants, and Title III-A/community-based organization.							

(CHDP) program, and (3) capital outlay programs associated with services provided to pregnant and parenting teens.

Table 1 also excludes a variety of programs funded by local governments or private agencies. For example, there are local programs serving pregnant and parenting teens that have broad discretion with their funding (such as local school districts or Service Delivery Areas under the Job Training Partnership Act program) or programs that are funded by private nonprofit organizations.

Annual Expenditures on Pregnant and Parenting Teens Exceeds \$250 Million. As Table 1 indicates, estimated identifiable 1987-88 state, federal, and associated county expenditures for pregnant and parenting teens in California are \$264.6 million. The General Fund will finance \$121.2 million, or 46 percent, of these estimated expenditures, the federal government will fund \$132.4 million, or 50 percent and counties will fund \$11 million, or 4 percent. These expenditures will provide services to an estimated 242,000 teens.

The following data limitations should be kept in mind when using the information contained in Table 1:

- **The table does not provide an unduplicated count of services provided.** For example, some teens are served by several programs. Information on the total unduplicated number of pregnant and parenting teens served is not available.
- **The table does not include the total costs associated with teen pregnancy.** In many cases, teenage parenthood may result in increased use of state-subsidized services (AFDC and Medi-Cal, for example) into the adult years. The table provides information only for one year's services to current pregnant and parenting teens.

Most Costs Due to Health and Welfare Needs. Table 1 groups the programs that serve pregnant and parenting teens into four categories based on the type of services provided: (1) prevention-related services, (2)

health, nutrition and social services, (3) education and training services, and (4) comprehensive services. These categories are described below.

- **Prevention-Related Services.** Although we identified three programs which provide various types of prevention-related services to teens, we could identify expenditures for only one program—\$9.8 million in 1987-88 for the Family Planning program. The Family Planning program serves an estimated 126,000 teens. The identified funding in this category accounts for 4 percent of total estimated expenditures for pregnant and parenting teens. Because the cost of family planning services is relatively low, however, the Family Planning program provides 52 percent of all the client services we identified.
- **Health, Nutrition and Social Services.** Estimated identifiable 1987-88 expenditures for the 14 programs in this category are \$243 million. The programs serve an estimated 108,000 teens. This category accounts for 92 percent of total estimated expenditures, and 45 percent of all client services. Four of these programs account for approximately 90 percent of all identifiable expenditures for pregnant teens: AFDC (\$167 million); Medi-Cal (\$43.6 million); Special Supplemental Food program for Women, Infants and Children (WIC) (\$14.4 million); and Food Stamps (\$14.1 million). These programs are discussed in greater detail later in this chapter.
- **Education and Training Services.** Although we identified nine programs in this category, expenditures are available for only one—\$6.7 million in 1987-88 for the School-Age Parenting and Infant Development (SAPID) program. We were able to identify service levels for SAPID (1,300 teens) and for vocational education (2,500 teens). The identified

funding in this category accounts for approximately 3 percent of total identified expenditures and for about 2 percent of client services.

- **Comprehensive Case Management Services.** This category contains one program specifically targeted to teens, the Adolescent Family Life program (AFLP), which is discussed in greater detail later in this chapter. The AFLP is budgeted at \$4.9

million in the current year, and will serve approximately 4,400 teens. This program accounts for approximately 2 percent of total identified expenditures and client services. In addition, the Greater Avenues for Independence (GAIN) program provides case management in conjunction with its education and job training services. These services are available to all its participants, including teenagers.

Most Programs Provide Services After Pregnancy Occurs

Because prevention-related services are less expensive than other types of services, they account for 52 percent of identified client services but for only 4 percent of identified expenditures. While the programs funded through the remaining 96 percent of identified expenditures may provide some prevention-related services, particularly for teens who have had a prior pregnancy, these programs generally

provide services after teens become pregnant or after they give birth. The percentage of services dedicated to prevention services may be understated, however, since the SDE was unable to identify expenditure and service levels for the dropout prevention and family life education programs that are provided by local school districts.

Services to Teens Generally Are Not Well-Coordinated

Based on our field visits and on our analysis of the information submitted by the Health and Welfare Agency, we found that services to teens are not well-coordinated. This results in at least two problems:

- The lack of coordination may make it difficult for teens to learn about the range of services available. For example, some schools we visited needed more information about the various health and welfare programs available for pregnant and parenting teens. None of the schools we visited knew that some federal vocational education funds may be used to meet the child care and transportation needs of teen parents, or that certain Job Training Partnership Act (JTPA) programs may be available for pregnant and parenting teens.
- The lack of coordination between programs also may result in some duplication of services provided. Programs that

provide similar services, such as WIC and the Pregnant and Lactating Nutrition program (which provide food supplements to pregnant or parenting women), may duplicate services to teens. In addition, three programs that provide some similar services, such as counseling and referrals to various social services programs, to pregnant and parenting teens—SAPID, AFLP, and Pregnant Minors—are not coordinated at the state level, and we know of only a few instances where these programs are coordinated at the local level.

We view coordination as one of the most effective ways to connect women to needed services. In addition, coordination represents one of the least expensive ways for the Legislature to improve the delivery of services to teens. We discuss options for improving program coordination at both the state and local levels in Chapter V.

Description of Major Programs

In this section, we provide detailed descriptions of (1) five major programs that are specifically targeted to pregnant and parenting teens, (2) two major programs that have specific components targeted to this group, and (3) four income maintenance and health programs that serve poor people of all ages including pregnant and parenting teens, that account for most of the state's expenditures for pregnant and parenting teens.

Major Targeted Programs

The following five major programs are specifically targeted to pregnant and parenting teens.

Pregnant Minors. The Pregnant Minors program, administered by the State Department of Education (SDE), provides counseling and guidance to pregnant students. The SDE does not collect data on program expenditures or service levels. Although program funding was at one time provided separately to school districts, following enactment of Proposition 13 in 1978, it was included in school district general revenues.

The Auditor General (AG), who completed a special study to identify 1985-86 funding for this program, estimated expenditures at \$8.5 million. The study also found that the program was administered by approximately 100 school districts (10 percent of all school districts) and 11 county offices of education.

Under this program, enrolled students who have not graduated from high school are eligible for counseling and guidance services upon medical certification of pregnancy, and are admitted as vacancies occur, based on local program priorities. Eligibility continues until the end of the semester in which delivery occurs. Pregnant Minors programs may be located at or near comprehensive or continuation schools, or they may be self-contained programs at other sites. School districts that have both a SAPID (see below) and Pregnant Minors program transfer pregnant students

to the SAPID program following delivery, space permitting.

School Age Parenting and Infant Development (SAPID). The SAPID program, administered by SDE, provides supervised child care and parenting education on or near school campuses. Participating students are also enrolled in career development classes and are often informally referred to social services, health, and nutrition programs, as appropriate. The program is budgeted at \$6.7 million in 1987-88, and will serve approximately 1,300 teens and 1,100 children.

SAPID programs are administered by 57 local school districts (6 percent of all school districts) and three county offices of education to serve junior high school and high school students who are working toward a diploma. Pregnant and parenting students must comprise 85 percent of program enrollment. Schools are required to fund the remaining 15 percent of program participants through non-SAPID resources. Students are invited into the program as capacity permits, based on local admission priorities.

Adolescent Family Life Program (AFLP). The AFLP is a case management program designed to assist pregnant and parenting teens to obtain needed health, educational and social services in a coordinated manner. The program is administered by the Department of Health Services (DHS) and is budgeted at \$4.9 million in the current year, providing services to an estimated 4,400 teens. The program's objectives are to assist pregnant teens to experience a healthy pregnancy, maintain infant health, promote completion of school or vocational training, develop parenting skills and delay subsequent unplanned pregnancies.

AFLP case management services are provided through local health departments, hospitals, schools, or other community organizations that contract with the DHS. Teens are

referred to a variety of services, including counseling, nutrition assessment and supervision, parenting education, child care, transportation, academic and vocational education, and health care. Unlike the SAPID and Pregnant Minors programs, which are available only to students, the AFLP is available to all pregnant and parenting teens under age 17. Services may continue until teens reach age 21, under specified circumstances.

Licensed Maternity Home Care. Seven maternity home facilities under contract with the Department of Social Services (DSS) currently provide food, shelter, personal care, protection, and supervision to unmarried, pregnant women under age 21. The program will spend approximately \$2.3 million to serve about 618 pregnant women in the current year.

Pregnant women who enter the program must also be offered the following services: counseling and information related to child health and welfare services; and referral to health care, education, psychiatric, child placement, family planning, and adoption services. Some programs provide vocational training for those enrolled.

Pregnant and Lactating Nutrition Program. The Pregnant and Lactating Nutrition program provides nutritional supplements and nutrition education to pregnant and lactating teens enrolled in participating schools. The program, administered by SDE, will spend approximately \$306,000 to serve about 1,800 teens in 1987-88.

Major Programs That Target Pregnant and Parenting Teens

The following two major programs contain components that are specifically targeted to pregnant and/or parenting teens.

Greater Avenues for Independence (GAIN). The GAIN program, administered by DSS, provides employment and training services to AFDC recipients to help them become financially self-sufficient. In 1987-88, total funding appropriated for GAIN is \$150 million; however, no information is available on the expen-

diture and service levels related specifically to pregnant and parenting teens. Generally, pregnant and parenting teens are exempt or deferred from mandatory GAIN participation. They may, however, volunteer for the program.

Some counties plan to target women who are at risk of becoming teen mothers. For example, Napa County has set up a program called "Second Chance" for (1) 16- and 17-year old high school dropouts who are required to participate in GAIN (as children of AFDC parents) and (2) dropouts under age 22 with young children who volunteer for GAIN. The program provides education in the morning and a "job club" in the afternoon. Job clubs help participants assess their job interests and skills, and teach them how to put together a resume and how to interview for jobs. Job clubs also include discussion sessions on family planning and parenting.

Los Angeles County also intends to target teen parents in GAIN. The county, which plans to implement GAIN in September 1988, is considering two strategies: (1) coordinating with other agencies already serving teen parents to ensure that those agencies (such as schools and community colleges) refer teen parents to GAIN when appropriate, and (2) making efforts to place GAIN participants who are teen parents with service providers who have existing programs for this group. The county is also considering special outreach programs for teen parents.

Job Training Partnership Act (JTPA). JTPA, which is administered at the state level by the Employment Development Department (EDD) and locally by 51 Service Delivery Areas (SDAs), provides training and employment for low-income individuals. JTPA will spend \$142 million in 1987-88 to serve approximately 90,500 teens and young adults, including an unknown number of pregnant and parenting teens.

Although there is no requirement that SDAs use their JTPA funds to serve pregnant teens,

some SDAs have designed their programs to target this population. For example, the Tulare County SDA has developed the Teenage Parenting Program that is designed specifically for pregnant and parenting teens. The program's purpose is to find jobs for these teens or get them back in school.

In addition to these two programs, there has been an increasing focus at the state and local level to serve more youth with JTPA discretionary funds. For example, the SDAs are encouraged to submit proposals to the State Job Training Coordinating Council (SJTCC), the state's JTPA policy-making body, for programs that promote coordination between SDAs and the schools. In 1986-87, over \$5 million was awarded to such programs. The SJTCC estimates the majority of these funds were used for programs designed to serve youth. In the current year, the SJTCC voted to give priority to programs that serve high-risk youth, including pregnant and parenting teens.

Income Maintenance and Health Programs That Account for the Majority of Expenditures

The following programs account for approximately 90 percent of the total expenditures for pregnant and parenting teens that we identified.

Aid to Families with Dependent Children (AFDC). The AFDC program will spend approximately \$167 million to serve about 22,500 teens in the current year. Administered by DSS, the program provides cash grants to certain families and children whose income is not sufficient to meet their basic needs. Families are eligible for grants under the AFDC program if they have a child who is financially needy due to the death, incapacity, or continued absence of one parent or the unemployment of one or both parents. In addition, pregnant women who meet AFDC income criteria may qualify for AFDC for themselves beginning in the second trimester of pregnancy. Pregnant women who are eligible for AFDC

also receive a \$70 monthly special needs payment.

California Medical Assistance Program (Medi-Cal). The Medi-Cal program, administered by DHS, provides necessary health care services to public assistance recipients and other specified low-income individuals. Based on past usage of services, the Medi-Cal program will spend approximately \$44 million in the current year to provide services to about 41,000 pregnant teens. Medi-Cal services are available to teens if they are (1) members of a family that receives AFDC payments, (2) low-income and under age 18, or (3) low-income and pregnant. Beginning in 1987-88, the Medi-Cal program included comprehensive perinatal services, including nutrition and psychosocial counseling as benefits to pregnant women.

Special Supplemental Food Program for Women, Infants, and Children (WIC). WIC is a federal program administered by the DHS that provides supplemental foods and nutrition education to women and their children who are (1) low-income (below 200 percent of the federal poverty level) and (2) at "nutritional risk" (this means at risk of developing a medical problem that can be affected or alleviated by dietary intervention). The WIC program will spend approximately \$14.4 million to serve about 25,200 teens in 1987-88. Because the funds available are not sufficient to serve all eligible participants, California enrolls individuals on a priority basis. In 1985, the WIC served approximately 28 percent of all estimated eligible participants in California. Because pregnant and parenting teens are generally at high risk for poor birth outcomes and because their children often are at high risk for poor health, a disproportionate number of teens are served in the WIC program, relative to their total proportion of births.

Food Stamps. The Food Stamps program helps subsidize the purchase of food by low-income individuals and families. The Food Stamps program, administered by DSS, will

spend approximately \$14.1 million to subsidize the cost of food for about 13,360 pregnant and parenting teens in 1987-88. While families that receive AFDC also receive food stamps,

Food Stamp income guidelines make benefits available to a broader cross-section of the low-income population. ♦

Chapter IV

Chapter IV

Effectiveness of Programs Addressing the Problems of Teenage Pregnancy

This chapter reviews findings from a number of academic and policy research reports that bear on the design of programs serving pregnant and parenting teens. The first section discusses research findings on what influences teenagers in making choices regard-

ing sexual activity and coping with unplanned pregnancy. The next four sections discuss evaluations of specific types of programs. The final section summarizes the implications of these studies for program design and targeting.

What Influences Teenage Women in Making Choices?

This section discusses the series of choices teenage women make regarding sexual activity and coping with unplanned pregnancy. These choices are: whether to become sexually active, whether to use contraceptives, whether to terminate an unplanned pregnancy or deliver the baby, whether to keep the baby or give it up for adoption, and whether to stay in school.

Sexual Activity. The likelihood of sexual activity increases as teenagers grow older. In fact, as teens age, sexual activity rates increase at a pace that is comparable to the birth rates described previously. Rates of sexual activity begin to increase rapidly at age 15, when approximately 5 percent of teenage women are sexually active, growing to 44 percent of all teenage women by age 18.

Research has not been able to identify precisely the types of women who are likely to be

sexually active at an early age (using variables such as religion, socioeconomic status, family relationship, etc.). This research, however, suggests that an increased likelihood of a teen being sexually active is associated with a group of factors, including poverty, low grade averages, and low personal aspirations. Teens who are sexually active also seem to be less independent and to more closely identify themselves as part of a couple.

Contraceptive Use. Research suggests that 80 percent to 90 percent of teenagers who become pregnant did not explicitly plan to become pregnant. Of these 80 percent to 90 percent of teenagers who become pregnant, research suggests that about one-third took action to contracept pregnancy (but failed) and the remaining two-thirds made no effort to contracept pregnancy.¹ Researchers believe that so many sexually active teenagers fail to

¹ "Paths to Adolescent Parenthood: Implications for Prevention," Louise H. Flick, *Public Health Reports*, March-April 1986, pg 2.

use contraception because they know that their sexual activity is frowned upon by society, and therefore, they subconsciously want to deny their actions by not planning to use contraceptives.²

Abortion Versus Continuing the Pregnancy. Once pregnant, teenagers must choose whether to terminate or continue the pregnancy. Research has identified three general influences that affect the decisionmaking of pregnant teens: (1) the socioeconomic status and educational skills of the teenager, (2) the teen's cultural characteristics, and (3) the choices made by a teenager's role models and peers.

First, those choosing to continue the pregnancy tend to be more disadvantaged than teenagers who choose abortion, and are the least aware of the demands of childrearing. Continuing the pregnancy is associated with poverty, poor school performance, and low confidence levels and life aspirations. One study estimates that poor teenagers with below average basic educational skills are six times as likely to become parents than are teenagers from non-poor families who have average or above-average basic educational skills.³

Second, a group of cultural characteristics are associated with continuing the pregnancy rather than abortion. Strongly held religious views are often associated with continuing the pregnancy to term. Large families and a teen's strong relationship with her mother are also traits common to many teens who choose to continue pregnancy. Studies indicate that Mexican-American teenagers are more likely to choose continuing the pregnancy over abortion than black or white teenagers. It is difficult to tell what factors determine the preference of Mexican-Americans for continuing the pregnancy.

Third, role models and peers appear to have powerful influences on the decisions of teenagers to continue the pregnancy or abort. Teenagers are more likely to continue the pregnancy if they have a sibling that became pregnant and delivered the baby. There is strong evidence that mothers also play an important role in teenagers' choices. One study found that two-thirds of teen mothers who came from poor families had mothers who had begun their childbearing as teens.⁴ Peers also influence a pregnant teenager's choice of continuing the pregnancy or abortion. Research indicates that teens who choose to continue the pregnancy are more likely to know other teenage mothers.

Adoption Versus Keeping the Baby. After choosing to continue her pregnancy, a teenager must choose whether to keep her child or give it up for adoption. Research on the issue of adoption indicates that only about 10 percent of teenage mothers choose to give their children up for adoption. The research studies that examine the adoption choice suggest that (1) younger teenagers are less likely to choose adoption and (2) teen mothers who keep their children tend to have less education and are less likely to be enrolled in school. Thus, the teens who are less prepared for the responsibilities of parenting in terms of maturity and formal education appear to be more likely to keep their babies rather than give their children up for adoption.

Continuing With Education. School attendance and parenting affect each other. On the one hand, high school dropouts are more likely than their in-school peers to choose to continue a pregnancy over abortion. This is consistent with the general finding that teenagers with low educational aspirations are more likely to become parents than other pregnant teenagers. On the other hand, teen-

² "Teenage Pregnancy and Motherhood: A Review of the Literature," Susan Phipps-Yonas, *American Journal of Orthopsychiatry*, July 1980, pg 411.

³ "Welfare and Teen Pregnancy: What Do We Know? What Do We Do?," Children's Defense Fund, November 1986, pg 3. Data derived from the National Longitudinal Survey of Young Women.

⁴ "Early Subsequent Pregnancy Among Economically Disadvantaged Teenage Mothers," D.F. Polit and J.R. Kahn, as cited in "Welfare and Teen Pregnancy: What Do We Know? What Do We Do?," Children's Defense Fund, November 1986.

agers who are in school when they become pregnant find it difficult to stay in school. One study estimated school attendance rates for teenagers nine months after delivery at 17 percent for whites and 39 percent for blacks.⁵ Generally, these low rates are blamed on lack of child care, other financial problems, and the desire to spend time "mothering" the baby. We could not find any studies that precisely explore why the dropout rate is so high.

Implications. These findings suggest two ways to approach program design: (1) the types of services that may reduce the number of teenage pregnancies and (2) the specific groups of teens that might benefit the most from such services. Regarding the types of services, programs that address problems of

poverty, low grade averages, and low personal aspirations may reduce sexual activity and encourage teens to stay in school. In addition, programs that teach teenagers about contraceptive options and the consequences of unprotected sexual activity may reduce the number of sexually active teens who become pregnant.

Regarding the targeting of services, the studies we reviewed identify specific groups of teenagers at higher risk, and thus suggest different ways of targeting services. For example, prevention services could be targeted to teenagers who are poor, have low grade averages, and low personal aspirations, based on teacher, counselor, or other professional evaluations.

Prevention Programs: Evaluations Suggest That Some Programs Are Successful

Below, we discuss the evaluations of three specific types of prevention programs. First, we review family planning services, which distribute contraceptives and educate teens about their use. Second, we discuss school-based health clinics, which provide a range of health and social services to high school students. Third, we review the evidence regarding one type of school dropout program that also focuses on teen pregnancy avoidance.

We believe these evaluations represent the best studies available regarding the effectiveness of these services. These studies are not entirely satisfactory, however, for two reasons. First, it is not always known which *types* of services provided by the programs had an impact on teen pregnancy. For example, school-based health clinics and dropout prevention programs provide an array of services to participants. The evaluations we reviewed did not isolate services to determine which were responsible for changes in pregnancy

rates. Therefore, the evaluations should be viewed as assessing the value of a *package* of services rather than any particular component.

Second, the studies often do not examine whether services have a different impact on various groups of teenagers. The racial and ethnic makeup or socioeconomic status of the study group, for instance, may play a role in how successful specific services are. Since most studies we examined did not conduct this type of analysis, the evaluations do not permit a determination of the impacts that services may have on different groups of teenagers.

Thus, these evaluations cannot be generalized to apply to all prevention programs because local programs may include very different types of services or serve different groups of teens. In one area, for example, prevention programs may primarily attempt to reduce pregnancy rates by encouraging abstinence,

⁵ "Child Support and Alimony: 1978," *Current Population Reports*, U.S. Department of Commerce, 1981, as cited in *Reducing Poverty Among Children*, Congressional Budget Office, May 1985, p 110.

while in other areas, prevention programs may encourage the use of contraceptives.

Family Planning Services Appear Cost-Effective. In October 1983, the University of California, San Francisco, performed a study of family planning services in California. It found that on average, for each dollar of family planning funds spent on the program's total clientele, \$6.60 was saved in AFDC, Medi-Cal, food stamps, and other supportive social services costs. For the Medi-Cal beneficiaries served by the program, the savings averaged \$89 for each dollar spent.

We have two reservations regarding these findings:

- The estimated savings apply to all family planning recipients, not just teenagers. The study did not specifically identify the value of providing services to teenagers. While it seems reasonable that these savings also would apply to teenagers, family planning services may be more or less effective for this population.
- The study found that the level of services available in 1983 resulted in significant savings. Additional expenditures for family planning may not yield benefits at the same rate, however. For example, because extraordinary savings result from serving Medi-Cal recipients, if additional family planning dollars served a lower proportion of Medi-Cal recipients, the cost-effectiveness of the additional funds might be less than that suggested by the study.

School-Based Health Clinics May Help Prevent Teen Pregnancy. Since the early 1980s, school-based health clinics have been established across the country, including some areas in California, as a way to not only provide teenagers with better access to primary health care services, but also as a way to prevent teen pregnancy. These clinics generally provide primary medical services, sexuality and contraceptive education, and individual and group counseling. Generally, they do not dispense contraceptives.

Although the data are not yet conclusive regarding their effectiveness in preventing teenage pregnancies, clinics in St. Paul, Minnesota and Baltimore, Maryland report positive initial results. For example, the evaluation of the Baltimore program found the program resulted in (1) decreases in both pregnancy rates and births and (2) a delay in sexual activity and increased knowledge about contraception.

The study did not isolate which of the types of service provided by these clinics was responsible for these positive outcomes. As a result, it cannot be determined whether teaching about contraception or other services were responsible for lowering teen pregnancy rates. Our discussions with school-based clinic staff in California suggest that this reduction in teen pregnancy may come from the clinics' ability to increase teenagers' self-esteem and communication skills, rather than from their referrals to contraceptive services. This is because, according to these providers, much of what these clinics do is to provide counseling and case management services in order to improve teen self-esteem, sense of responsibility, communication skills, and even to intervene in difficult family situations.

Certain Drop-Out Prevention Programs May Help in Preventing Teen Pregnancy. For the past four years, a combination of private foundation and Job Training Partnership Act funds have been used for a unique dropout prevention program in San Diego and Fresno SDAs. This project, which is targeted to 14- and 15-year olds, combines remedial education with "life skills" education. The latter portion of the program includes education about alcohol and drug abuse, sexuality, abstinence and contraceptive use, and the impact of teen pregnancy on long-term life opportunities. The program has been evaluated using randomly assigned test and control groups, and appears to be effective in improving the participants' (1) math and reading skills, (2) knowledge about sexuality and contraceptive use and (3) use of contraceptives.

Although increased contraceptive use generally is associated with reduced teen pregnancy rates, the program's evaluation of participant and control groups is not yet complete. Therefore, it is unclear whether these services actually reduced pregnancy rates. Because of its initial success, however, the program may be replicated this year in the Napa, Long Beach, and San Bernardino SDAs.

Evaluations of Nutrition and Health Programs Demonstrate Their Effectiveness

Studies evaluating the success of nutrition and health programs more clearly demonstrate the value of specific services than studies of prevention programs. Below, we review a recent evaluation of WIC, which provides food and nutrition education to low-income women, and discuss general research findings related to comprehensive prenatal care programs.

Nutrition Programs Can Improve Infant Health Outcomes. In 1985 the federal Department of Agriculture published an evaluation of the effectiveness of the WIC program in improving maternal and child health. The study found that WIC was effective on a number of levels, including (1) increasing the likelihood that women would receive adequate prenatal care, (2) improving infant birthweight, and (3) increasing the likelihood that children would be immunized.

Early, Comprehensive Prenatal Care Improves Infant Birthweight. Research indicates that teenagers are much more likely to deliver low birthweight babies than are other women. Infants born at low birthweight are more likely to die or be ill than are their counterparts of normal weight. For example, two-thirds of all infants who die in their first year of life are born at low birthweights. In addition, most of the infants admitted to neonatal intensive care units (NICUs) are born at low birthweights. Medical experts agree that early prenatal care reduces the chances that a woman will have a low birthweight baby.

Comprehensive Case Management: Effective in the Short Term; Long-Term Impact in Question

Case management programs are designed to assist pregnant and parenting teenagers to obtain health, education and social services that teens need to cope with pregnancy and parenting. For example, teenagers could be assisted by being: (1) referred to WIC and early comprehensive prenatal care, (2) encouraged to remain or re-enroll in school, and assisted in reducing barriers to doing so, and (3) provided parenting skills instruction. There have been a number of studies demonstrating the short term effectiveness of these services, although their impact over the long term is less certain. Below, we review the results of three studies that examined the success of case management services.

The evaluation of Project Redirection is the most complete evaluation of a case management program that we reviewed. Project Redirection, a national case management program with one of its sites in Riverside, California, was evaluated over a long period of time. The evaluators interviewed students at 12 and 24 months after they left the program. The program was shown to reduce the incidence of low birthweight, improve school continuation, and increase enrollment. These positive outcomes tended to disappear over the longer term, however. It is not clear why these effects disappear over time. The evaluators speculated that problems with the control group may have contributed to the services' apparent lack of significant ongoing impact. On the other hand, these results may demonstrate the difficulty of the problems that need to be addressed, and the need for continuing services to maintain the progress of participants.

The Teen Age Pregnancy and Parenting (TAPP) program in San Francisco also has been shown to reduce the incidence of low birthweight, improve school continuation, and increase enrollment. The school-based

program combines direct child care and educational services with case management services to assure that comprehensive educational, health, and social services are provided. The Lawndale program, which serves teenagers in the Inglewood area of Los Angeles, has been shown to have a positive effect on birthweight. The program provides educational, counseling, and health services, as well as referrals to other social services.

The state's Adolescent Family Life program (AFLP) includes an evaluation component. This evaluation will examine the extent to which the AFLP can make an impact on birthweight and school enrollment. It will also evaluate the program's ability to match teens with needed services. Case management programs can only be effective if there are services available to coordinate on behalf of teenagers. The AFLP evaluation will provide evidence that could help the Legislature determine whether or not there are enough services available to meet the needs of teens in specific geographic areas.

Preliminary data from the evaluation show that the program has connected teens with needed services, particularly child care and transportation. In addition, these preliminary data indicate that the program has the same positive impact as Project Redirection on birthweight and school enrollment.

Education Services: Very Little Information Available

There are a variety of programs offered through the State Department of Education (SDE) and local school districts to assist pregnant and parenting teens. Most notably, many local school districts administer SAPID programs, which provide child care and parenting education, and/or Pregnant Minors programs, which provide counseling and guidance. Although 42 of the state's 58 counties contain at least one of these programs, and some programs have existed for 15 years or more, the SDE has not evaluated the effectiveness of these programs in helping pregnant or parenting teens to remain in school, or in improving infant health outcomes. Furthermore, we know of only two local programs that have been evaluated—the TAPP program and the Lawndale program, which we discussed earlier. Both these programs rely heavily on coordination with other funding sources and programs, however, and thus may not be representative of other SAPID and/or Pregnant Minors programs.

Adoption Services: The Unexplored Option

We could not find any evaluations examining the effectiveness of specific programs in encouraging teenagers to give up their children for adoption. Expanding such programs could provide additional options to teenagers who wish to continue their pregnancies to term.

Research Implications for Program Design and Targeting

These findings suggest that (1) specific services can reduce the number of teen pregnancies or reduce the consequences associated with teen pregnancies and births and (2) prevention services could be targeted at specific groups of high-risk teenagers. Specifically, this research suggests:

- *Family Planning Services and Specified Dropout Prevention Programs Appear*

Successful in Reducing Teen Pregnancy Rates. Family planning services may help prevent teen pregnancy and result in cost savings. Dropout prevention programs may help prevent teen pregnancy in two ways: by improving teenagers' skills so they are more likely to remain in school, and by increasing their knowledge about contraception and what life is

really like once a teenager has a child.

- ***Prevention Services Could Be Targeted at High-Risk Groups To Maximize the Impact of Funding.*** Based on the studies we mentioned previously, prevention services could be targeted to teenagers who are poor, have low grade averages, and low personal aspirations if the state's goal is to maximize the impact of funding. In addition, effective targeting of prevention services could focus on (1) young teenagers (because sexual activity begins at early ages and because educational and life aspirations are formed early), (2) teenagers who attend schools that have high pregnancy rates (because the behavior of peers and siblings has a significant affect on teens), and (3) teenagers of families on welfare whose mothers gave birth in their teens.
- ***Specific Dropout and Comprehensive Case Management Programs Improve School Attendance of Teenagers.*** Evaluations of specific programs demonstrate that certain types of in-school and comprehensive case management programs can improve school attendance and educational attainment. More information is needed, however, about the impact of most school-based prevention and education programs in California, particularly two of the major programs targeted specifically to pregnant and parenting teens, the Pregnant Minor program and the SAPID program.
- ***Comprehensive Case Management and Nutrition Programs for Teens Appear to Improve Health Outcomes.*** Specifically, these services are designed to improve birthweight outcomes and general maternal and child health. In six months to a year, more information about the AFLP will be available, which may enable policymakers to (1) understand more specifically which health, education, or welfare services are needed by which teens, or (2) more effectively identify geographic areas that lack needed services.
- ***The Use of Adoption as an Alternative to Parenting Has Received Little Attention.*** An increased use of adoption as an alternative to parenting could expand the options available to teenagers who wish to continue their pregnancies to term. ♦

Chapter V

Chapter V

Conclusions and Recommendations

In this chapter, we outline the recommendations and options that result from the findings described in previous chapters.

Teen Pregnancy: Little Guidance For Addressing a Difficult Problem

Our review of teen pregnancy and parenting in California reveals the following:

- *Overall, very little is known about the programs in California that attempt to prevent or ameliorate the problems associated with teen pregnancy.* For many programs, there is no information on who and how many teens are served and how much these services cost or save the state. For prevention programs administered by local schools, there is no information on what services are provided. As a result, it cannot be ascertained to what extent these programs are meeting the needs of pregnant and parenting teens.
- *The programs that serve pregnant and parenting teens are not coordinated well in many areas of the state.* This may result in some inefficiencies in service and funding. For example, even in areas where extensive services are available, pregnant teens may not be able to find all the various services on their own. The lack of coordination also may result in duplication or inefficient allocation of services in some areas.
- *Specific programs can reduce the incidence of teen pregnancy or improve teen parenting and pregnancy outcomes.* These programs include specific prevention programs, case management, and health services programs.
- *Research suggests that targeting services on those teens who are most likely to get pregnant or give birth may have more cost-effective results.* For example, growing rates of pregnancy among younger teens suggest that prevention and support services targeted to this group could have more impact than general provision of such services.

Where Do We Go From Here?

Because there is relatively little information about (1) what services are available to prevent teen pregnancy and to support pregnant and parenting teens and (2) how effective the existing services are, we are not able to recommend to the Legislature a comprehensive action plan.

Given the lack of information about these services and the lack of coordination where services do exist, we believe that the first step to address the problems related to teen pregnancy and parenting is for both the state and local or regional groups to initiate a planning process. While such a planning process takes time and costs money, we believe that the benefits would far exceed these costs. This planning would provide more information about what services are available, how effective they are, and how well they address various local needs. With this information, the Legislature could more effectively develop, coordinate, and target scarce resources.

In the next section, we outline what, in our view, would be involved in developing these plans. In the following sections, we make a number of additional recommendations for collecting more information and evaluating programs, and discuss options for developing a more coordinated and targeted system of service delivery. These recommendations and options could be incorporated into a larger planning process or could be implemented separately from such a plan.

The State and Local Governments Should Have Plans for Addressing the Problems Related to Teen Pregnancy and Parenting

We recommend that the Legislature require the Health and Welfare Agency, in conjunction with the State Department of Education, to prepare a plan to address the problems related to teen pregnancy and parenting. This plan should include a strategy for encouraging the development of plans at the county and/or regional levels.

Based on our review, we believe that putting together a plan is the first step state and local agencies should take to address the problems related to teen pregnancy and parenting. Ideally, the planning process would progress concurrently at the state and the local levels and would involve the following:

- *Deciding which individuals or agencies would develop the plan.* At the state level, we believe the SDE and HWA are the most appropriate agencies to collaborate in producing a plan. This is because these two agencies, in combination, are responsible for overseeing most of the 27 programs that currently serve pregnant and/or parenting teens. At the local level, planning could occur on a county or a regional level, with county Boards of Supervisors working with local school districts. These planning groups could appoint a task force to develop the plan or could contract with an appropriate organization to write the plan. At the local level, the GAIN program provides a model for such a coordinated local planning effort.
- *Developing goals and objectives.* Long-term goals could include, for example, reducing the incidence of teenage pregnancy to the nationwide average within 10 years. Other goals might be to reduce the incidence of low birthweight among the teenagers having children or to reduce the dropout rate among pregnant and parenting high school students.
- *Identifying the nature of the problem.* For example, each planning group would identify which groups of teenagers are most in need of specific services.
- *Identifying resources to address the problem.* In general, this would involve identifying the agencies that are currently providing services to either prevent or ameliorate the problems of teen pregnancy and parenting.

- *Assessing the effectiveness of the services available.* This would involve evaluating the effectiveness of available services.
- *Assessing the needs for improving and coordinating existing services, and expanding services.* These needs could involve better coordination of existing services, different distribution of services, or expanding services.

While the processes would initially be similar at the state and local levels, over the long run we view the state and local entities as having complementary planning roles. For example, the HWA and SDE would set state-wide goals, review local plans, and provide technical assistance to local planning agencies in meeting those goals. Local planning agencies would develop specific plans that describe their local situations and address their unique needs.

Developing these plans would most likely require specific funding. Potential funding sources include the General Fund, a combination of state and local funds (perhaps on a matching basis), or private funds. Public funds could be allocated to designated county or regional entities, based on population or another measure directly related to the incidence of teenage pregnancy or births. Alternatively, the state could issue requests for proposals for these funds for which county governments in conjunction with local school districts, for example, would be eligible to apply. Ideally, such an allocation formula would have some incentive for areas with high rates of teen pregnancy or births to apply. Depending on the scope of a plan, we estimate, based on the cost of similar plans, that the cost of developing a state plan could be up to \$200,000. Comprehensive local plans in larger areas could cost up to a similar amount.

The State Department of Education Should Collect and Disseminate More Information Regarding Services for Pregnant and Parenting Teens

We recommend that the Legislature require the State Department of Education to issue a report describing local school district services that are currently available for (1) meeting the education-related needs of pregnant and parenting teens and (2) preventing teen pregnancy. The report should include information on program funding and service levels and on the types and effectiveness of services provided.

We further recommend that the Legislature require the State Department of Education (SDE) to distribute a handbook to junior high and high schools statewide regarding effective prevention services as well as services for pregnant and parenting teens and to provide additional technical assistance as needed to these schools.

Based on our analysis of the information submitted by the HWA, and on our field visits to various schools, we find the following:

- As Table 1 of this report indicates, many of the services for pregnant and parenting teens about which the least is known are those available through local school districts. Without this information, it is difficult to get a total picture of the services available in different areas, or whether the services provided are effective in their efforts to prevent or ameliorate the educational, health, and social problems related to teenage parenting and pregnancy.
- Based on our discussions with school personnel, we believe many schools do not have a wide range of information

regarding effective services for pregnant and parenting teens; thus, the schools have little analytical basis for choosing which programs to offer. In addition, we found that some schools were not aware that certain program funds, such as federal vocational education funds, may be used to meet the child care, transportation, or other needs of teen parents.

Our analysis indicates that the Legislature, in its oversight capacity, could benefit from having additional information about the services that school districts provide to pregnant and parenting teens. In particular, this information could assist the Legislature in its deliberations about program funding needs and program improvement.

We believe the SDE would also benefit from having this information, by using it to meet the needs of pregnant and parenting teens who are at risk of dropping out, or who need particular services in order to complete their education. Finally, we believe local school districts themselves would also benefit to the extent they use the information to respond to the needs of local pregnant and parenting teens.

Therefore, to improve the information on the amount and effectiveness of education services targeted at pregnant and parenting teens, we recommend that the Legislature require the SDE to issue a report regarding the services available for pregnant and parenting teenagers, and services available to prevent teenage pregnancy. This report should include information on the statewide programs administered by SDE listed in Table 1 of this report, as well as any other statewide programs that are available. To the extent possible, the report should also include examples of how state programs are implemented at the school district level.

The report should include the following information on each program:

- The number of teens served.

- The types of services provided through the program.
- The amount of program funding provided for these services.
- The effectiveness of the program in reducing dropout rates, increasing academic achievement, reducing the number of teen pregnancies, and reducing repeat births among pregnant and parenting teens, to the extent this information is available through SDE and/or local school districts.

Finally, the report should recommend steps that the SDE can take in encouraging school districts to (1) provide services needed in the community, based on the extent of the teen pregnancy problem in their area, and (2) change the services provided so that they are most likely to be effective in addressing the problem.

In order to meet the needs of school districts, the Legislature should require that the SDE develop a handbook, based on the information gathered for the statewide report, regarding effective services for pregnant and parenting teens. The SDE should distribute the handbook to junior high and high schools statewide and should provide additional technical assistance to these schools as necessary.

The State Department of Education Should Encourage School Districts to Remove Any Identified Barriers Which Prevent Pregnant and Parenting Teens from Returning to the Regular School Curriculum

We recommend that the Legislature require the State Department of Education to report on the administrative barriers that may prevent pregnant and parenting teens from returning to a regular school setting.

Based on our field visits, we found that pregnant and parenting teens are nearly always enrolled in continuation schools or other alternative education programs rather than regular programs. It is not clear whether these

teens choose alternative education programs because the programs offer flexible class schedules, child care, or other services that are attractive to teen parents, or whether they are discouraged from enrolling in their regular school due to administrative policies. For example, according to some school personnel, districts often direct returning dropouts to enroll in independent study, continuation schools, or adult education courses.

We believe that the Legislature, as it reviews various education programs, needs to know the extent to which there are administrative policies that discourage pregnant and parenting teens from enrolling in regular education programs. This is important because regular school enrollment may improve teens' academic and career opportunities and, in turn, the economic well-being of their children.

Recommendation. In order to assist the Legislature in its oversight of services provided to pregnant and parenting teens, we recommend that the Legislature require the State Department of Education (SDE) to report on the administrative barriers that discourage pregnant and parenting teens from continued enrollment in regular school curriculum. The report should also recommend steps that the department and the Legislature, as appropriate, can take in encouraging school districts to remove any such barriers.

GAIN Information Needed

We recommend that the Legislature require the Department of Social Services (DSS) to report on the extent to which the GAIN program is providing education and training services to pregnant and parenting teenagers or to teenagers who are otherwise mandated to participate in the program.

The GAIN program provides education, training, child care, and other services to pregnant and parenting teens who receive AFDC. In addition, teenagers under the age of 18 who

are not in school and whose families receive AFDC are required to participate in the program. If the program serves a large number of teenagers, it could result in a major increase in the amount of services available to teenagers, including pregnant and parenting teens.

The GAIN program also acts as a case management program. The program assesses the need of participants for additional education and training, as well as the need for support services, such as child care. As a result, GAIN could serve as the focus for local pregnancy and parenting programs for teens who are receiving welfare.

At the current time, the DSS cannot determine the extent to which the GAIN program is serving pregnant and parenting teens. The department advises that current county reports do not indicate which services pregnant and parenting teens are receiving. Given the potential impact of GAIN as a source of services as well as a coordination program, we believe it is important for the Legislature to know how the program is serving pregnant and parenting teens who are receiving AFDC.

Accordingly, we recommend that the Legislature require the DSS to report on the status of its efforts to address services to pregnant and parenting teens under the GAIN program. Specifically, the report should address the following: (1) the extent to which counties are serving pregnant and parenting teens through GAIN, (2) the availability of specific outcome data on pregnant or parenting teens participating in the program, and plans to collect data on this group, (3) the barriers to effectively serving this group under existing program guidelines, and the department's efforts to remove these barriers, and (4) the department's efforts to work with the SDE and other agencies to develop program design suggestions appropriate for serving this group.

Options for Coordinating Existing Programs

In this section, we suggest a variety of options for improving the coordination of local programs. Even though relatively little information about the services is available, we found that the various programs that serve pregnant and parenting teens are not coordinated well in many areas of the state. We believe that increased program coordination will limit duplication of services and improve the range of services that may be offered to each teenager.

Local Coordination. We identified a number of actions local agencies could take in order to improve service coordination:

- **Information Gathering.** A local agency in each county could regularly compile and distribute a list of local programs that serve pregnant and parenting teens. Some counties already produce such lists for other types of services, such as drug prevention. The lists include information on addresses and phone numbers, the days and hours that services are available, costs and eligibility requirements, and types of services provided. Such lists may include private, as well as public, services. The lists are then distributed to school counselors and teachers, social service and health agencies, subsidized child care programs, and job training groups. To some extent, case management programs such as AFLP have this information available for their own use in serving clients, although there are no formal distribution mechanisms for the information.
- **Referral Networks.** Currently, the SDE administers a statewide child care resource and referral (R&R) network that operates in each of the state's 58 counties. Each county R&R provides information on licensed child care to all interested

parents. A similar network could be established for pregnant and parenting teens. The network could collect information about available programs and services for these teens, including both public and private programs, and provide this information to interested teens. The network could run separately or in conjunction with other existing local programs.

State-Level Coordination. We identified two options that could allow state agencies to promote local coordination:

- **State Contract Incentives.** State departments could require that agencies awarded program funds for prevention services and for other services to pregnant and parenting teens demonstrate that they are coordinating services with other groups by, for example, submitting memoranda of understanding (MOUs) with local school districts and other health and social service agencies providing services within certain geographic boundaries. This option could also involve allocating additional program funds as an incentive to those school districts or local agencies that develop a plan to coordinate services. For example, the DHS requires MOUs as part of its contracts with local AFLPs.
- **Expansion of "Case Management" Services.** Expanding existing case management programs, such as AFLP or GAIN, could help to serve more pregnant and parenting teens with existing services. Preliminary evaluation data from AFLP shows that this program has been effective in connecting teens with the services they need. These data could also be quite helpful in identifying unmet needs in certain parts of the state.

Options for Better Targeting of Existing Programs

Because so little of the information HWA submitted was about specific services available for pregnant and parenting teens (see Table 1), it is highly unlikely that the various state agencies are systematically targeting services to these teenagers based on relative need in geographic areas or among age or ethnic groups. For example, the SAPID program, which serves many pregnant and parenting teens, is not specifically targeted to these groups.

In this section, we suggest options the Legislature could adopt to target scarce resources to the teenagers at highest risk of becoming pregnant or of suffering adverse health and educational consequences as a result of pregnancy or parenting. In Chapters II and III, we discussed how the teen pregnancy and parenting problem varies in different areas of the state, as well as the social and cultural factors that are associated with specific aspects of the problem. These data have implications for targeting certain types of programs in specific areas or on particular groups of people, as we discuss in Chapter IV.

- **Pregnancy Prevention Programs.** Prevention services could be targeted to specific geographic areas or specific age groups. For example, they could be targeted on young teenagers because birth rates are increasing among these teens.

They could also be targeted on teenagers who attend schools that have high pregnancy rates and on teenagers of families on welfare whose mother or sisters gave birth as teenagers, because these groups of teens are at higher risk for becoming pregnant. Finally, they could be targeted on specific geographic areas where there are high concentrations of teenagers who have low grade averages and high rates of poverty. This is because these teenagers are more likely to become pregnant than other teenagers.

- **Education and Job Training Programs.** Since teen mothers are more likely to be long-term welfare recipients, providing education and job training to these individuals may significantly improve their chances of finding employment that allows them to end dependence on AFDC. Indeed, most evaluations of job training programs indicate that programs have a greater impact on the most disadvantaged participants. Thus, targeting teen mothers on AFDC could maximize the impact of services on the welfare population. For example, teen mothers could actively be solicited—since they currently cannot be required to participate in GAIN-type services until their youngest child is six.

Options for Additional Services

At the current time, we cannot recommend spending additional funds on services for pregnant and parenting teenagers because (1) service levels that are currently available are unclear and (2) the effectiveness of many types of available services is not known.

If the Legislature chooses to provide additional funds, however, our review has identified several programs that warrant high prior-

ity. We included programs in this list if (1) based on the studies we reviewed, they appeared to be effective in preventing teen pregnancy or ameliorating some of the associated problems and (2) the demand appears to exceed the services currently available. These services include:

- **Family Planning Services.** Expanding family planning services is likely to be

cost-effective in reducing ongoing support costs for teenagers and their children. Currently, the Family Planning program serves about 50 percent of the eligible women—and an unknown proportion of teenagers—in the state. The program does not specifically target teenagers.

- **Dropout Prevention Programs.** The programs in the San Diego and Fresno SDAs, funded in part through the JTPA program, appear to be effective in improving the participants' (1) math and reading skills, (2) knowledge about sexuality and contraceptive use, and (3) use of contraceptives. The program also may have two additional benefits: it may help prevent teens from dropping out of school and from becoming pregnant.
- **Comprehensive Prenatal Care.** Providing these services to pregnant teenagers is likely to improve pregnancy outcomes among teens.
- **WIC Services.** The WIC program has been shown to improve maternal and child health.

- **Adolescent Family Life Program.** This program provides case management services to a small portion of the pregnant and parenting teens in the state. The program appears to be effective in referring teenagers to services, improving birth outcomes, and keeping pregnant and parenting teens in school.

Based on our field visits, a number of education programs may also be potential candidates for expansion. To the extent that family life education programs can effectively prevent pregnancies among teenagers, these programs would also be candidates for expansion. Similarly, to the extent that SAPID or other child care programs can be effective as dropout prevention tools, these programs also may warrant expansion. However, the SDE needs to provide the Legislature with more specific analytical information regarding the services available and their effectiveness before we could recommend their expansion. ♦

Appendices

Appendix A

Regional Abortion Estimates: Data and Methodology

The state does not collect data on all abortions. The Alan Guttmacher Institute (AGI) has estimated the number of abortions in California, by age group, for 1985. The AGI does not estimate the number of abortions performed on a county or regional basis, however.

We developed estimates of the number of abortions on a regional basis using the AGI estimates in conjunction with Medi-Cal abortion data. Specifically, we distributed the statewide number of abortions as estimated by the AGI to regions using the proportion of Medi-Cal-funded abortions that takes place in each region. (Medi-Cal data track abortions by where they were performed, not by where the recipient lives. We assume that recipients had the abortion in the same region as the one in which they live.)

Our six regions are as follows: *north state* (the seven counties in the northern tip of the state); *north valley* (the 12 counties that make up the Sacramento and northern San Joaquin valleys); *bay area* region (the nine counties that surround the San Francisco Bay); the *mountain* region (the 11 counties in the Sierra Nevada mountains and its foothills); *south valley* (the eight counties in the southern San Joaquin valley plus Monterey and San Benito); and *south state* region (Los Angeles and eight surrounding counties).

Table 2 shows the estimated abortion rates resulting from this procedure, birth rates from the Department of Health Services and the estimated pregnancy rate—calculated using the abortion and the birth rates.

Table 2
The Number of Births, Abortions, and Pregnancies
Per Thousand Teenagers in California,
Age 10 through 19, 1985

Region	Birth Rate ^b	Estimated Abortion Rate ^c	Estimated Pregnancy Rate ^d
North valley	30.2	52.3	93.8
South valley	39.0	40.2	91.0
South state	29.3	36.0	74.9
Bay area	19.5	42.9	70.6
Mountain	18.8	36.2	62.4
North state	26.1	39.9	75.2
State average	28.3	39.2	77.1

^a Regional abortion and pregnancy rates should be compared for grouped regions only. Rates for other regions may not be comparable.

^b Birth data are from the Department of Health Services.

^c County abortion figures are estimated using the AGI estimate and distributing the statewide total to counties using the proportion of Medi-Cal-funded abortions that takes place in each county. (Medi-Cal data tracks abortions by where they were performed, not by where the recipient lives. We assume that recipients had the abortion in the region as the one in which they live.)

^d Pregnancy rates are calculated using births plus abortions plus an imputed number of miscarriages. The number of miscarriages is assumed to total 20 percent of births plus 10 percent of abortions.

The abortion estimates displayed in Table 2 are not perfect estimates. Because we used Medi-Cal data to infer regional abortion rates, our estimates are affected by regional differences in Medi-Cal populations. For example, our methodology would estimate a higher overall abortion rate in regions that have a larger-than-average Medi-Cal population. As a result, we believe that our methodology overestimates abortion rates in primarily rural areas (north state, mountain, and valley regions) and underestimates rates in primarily urban and suburban areas (bay area and south state regions).

To offset this bias, we have paired the estimates into three groups. We believe the paired regions are reasonably comparable because similar proportions of births to teenagers were funded by Medi-Cal during 1985. Comparing the two regions in each group, therefore, provides good relative estimates of the abortion rate. We caution that readers should be very careful using these data: *Comparisons of regions that are not paired together may not accurately contrast their relative abortion and pregnancy rates.* ♦

Appendix B

Comparison of State Pregnancy, Birth and Abortion Rates: California and the Other 49 States

Table 3			
The Number of Pregnancies per Thousand Females			
Ages 15 through 19 By State			
1980			
PREGNANCIES		PREGNANCIES	
TOP FIFTH		25	Delaware 105
1	Nevada 144	26	Hawaii 105
2	California 140	27	West Virginia 103
3	Texas 137	28	Indiana 102
4	Florida 131	29	Michigan 102
5	Georgia 131	30	Kansas 101
6	Wyoming 127		
7	New Mexico 126	31	Ohio 101
8	Mississippi 125	32	Illinois 100
9	Alaska 124	33	New York 100
10	Arizona 123	34	Idaho 96
		35	New Jersey 96
11	Maryland 122	36	Utah 95
12	Washington 122	37	Vermont 94
13	Oklahoma 119	38	Montana 93
14	Louisiana 118	39	Pennsylvania 90
15	Oregon 118	40	Maine 87
16	Alabama 117	BOTTOM FIFTH	
17	Arkansas 117	41	South Dakota 86
18	South Carolina 114	42	Massachusetts 85
19	Colorado 113	43	Wisconsin 85
20	Tennessee 113	44	Rhode Island 83
		45	New Hampshire 81
21	Kentucky 111	46	Connecticut 80
22	North Carolina 110	47	Nebraska 80
	U.S. Average 110	48	Iowa 77
23	Virginia 107	49	Minnesota 77
24	Missouri 106	50	North Dakota 75

Source: The Alan Guttmacher Institute, *U.S. and Cross-National Trends in Teenage Sexual and Fertility Behavior*. New York: The Alan Guttmacher Institute.

Table 4
The Number of Births per Thousand Females Ages 15-19 By State
1980

BIRTH RATE			BIRTH RATE		
TOP FIFTH			U.S. Average		53
1	Mississippi	84	26	South Dakota	53
2	Wyoming	79	27	Ohio	52
3	Louisiana	76	28	Delaware	51
4	Arkansas	75	29	Hawaii	51
5	Oklahoma	75	30	Oregon	51
6	Texas	74			
7	New Mexico	72	31	Colorado	50
8	Kentucky	72	32	Virginia	48
9	Georgia	72	33	Montana	48
			34	Maine	47
10	Alabama	68	35	Washington	47
11	West Virginia	68	36	Michigan	45
12	South Carolina	65	37	Nebraska	45
13	Arizona	65	38	Iowa	43
14	Utah	65	39	Maryland	43
15	Alaska	64	40	North Dakota	42
16	Tennessee	64			
17	Florida	59	BOTTOM FIFTH		
18	Idaho	59	41	Pennsylvania	41
19	Nevada	59	42	Wisconsin	40
			43	Vermont	39
20	North Carolina	58	44	Minnesota	35
21	Missouri	58	45	New York	35
22	Kansas	57	46	New Jersey	35
23	Indiana	57	47	New Hampshire	34
24	Illinois	56	48	Rhode Island	33
25	California	53	49	Connecticut	31
			50	Massachusetts	28

Source: The Alan Guttmacher Institute, *U.S. and Cross-National Trends in Teenage Sexual and Fertility Behavior*. New York: The Alan Guttmacher Institute.

Table 5		
The Number of Abortions per Thousand Females Aged 15-19 By State		
1980		
ABORTIONS		ABORTIONS
TOP FIFTH		
1	California	69
2	Nevada	67
3	Maryland	64
4	Florida	55
5	New York	53
6	Oregon	52
7	Colorado	49
8	New Jersey	48
9	Massachusetts	47
10	Virginia	45
11	Michigan	44
12	Texas	43
13	Vermont	43
	U.S. Average	42
14	Alaska	42
15	Hawaii	41
16	Connecticut	40
17	Washington	40
18	Georgia	40
19	Arizona	40
20	Delaware	40
21	Rhode Island	39
22	Pennsylvania	38
23	New Hampshire	37
24	North Carolina	37
25	New Mexico	36
26	Ohio	35
27	Wisconsin	34
28	South Carolina	33
29	Tennessee	33
30	Missouri	33
31	Alabama	32
32	Montana	32
33	Minnesota	31
34	Kansas	30
35	Indiana	30
36	Illinois	30
37	Wyoming	29
38	Oklahoma	27
39	Maine	27
40	Arkansas	25
BOTTOM FIFTH		
41	Nebraska	24
42	Louisiana	24
43	Iowa	23
44	Idaho	23
45	Kentucky	22
46	North Dakota	22
47	Mississippi	22
48	South Dakota	21
49	West Virginia	20
50	Utah	15
Source: The Alan Guttmacher Institute, <i>U.S. and Cross-National Trends in Teenage Sexual and Fertility Behavior</i> . New York: The Alan Guttmacher Institute.		

Appendix C

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