(the adjudication rate, the use of placement, and average length of stay) associated with these offenders. Although there were minor offense-specific variations from the overall sources of change, all of the major offense categories contributed to the increase in the number of juveniles committed to residential facilities (table 3).

The commitment population through 2002 is projected in the analysis by using a mathematical flow model based on the approach first developed by Stollmack (1973) to project prison populations (see “A Brief History of Corrections Population Projection Methods” on page 14). Future populations are projected by relating flows to stocks by length of stay—the inverse of which represents the turnover rate of the population. The model requires explicit assumptions about the case processing factors that might influence the size of confinement populations. For example, the model must include assumptions about changes in referrals and length of stay. Will the number of court referrals continue to rise through the year 2002, or will it stabilize at the 1997 level?

Figure 5: How much did each source of change contribute to the overall change in the population of juveniles in commitment from 1993 to 1997?

![Graph showing the contribution of each source of change to the overall change in the population of juveniles in commitment from 1993 to 1997.](image)

Note: Components of change may not add to total due to rounding.


Will average length of stay increase or decrease? Assumptions about how these components will or will not change after 1997 have a significant effect on projections of the juvenile population in facilities. The following analysis considers several possible scenarios to project a range of 2002 commitment populations.

Five projections of the commitment population were developed, each based on a different set of assumptions (figure 6). These projections (referred to as A, B, C, D, and E) yield commitment populations ranging from almost 53,000 to more than 102,000 by the year 2002 (figure 7). For example, if 1997 conditions were to persist for 5 years after 1997 (projection A), the number of juveniles in commitment facilities in 2002 would be expected to remain at the 1997 level (about 53,000 juveniles). In other words, if juvenile courts were to continue to commit juveniles to residential placement at the 1997 rate, to adjudicate cases at the 1997 rate, and to hold juveniles in facilities for an average of 109 days, just as in 1997, the commitment population would remain at the 1997 level.

Conditions in the juvenile justice system rarely remain unchanged for several years at a time. There are specific reasons to doubt that the conditions of 1997 would continue for very long beyond 1997. First, the commitment population was growing at an increasing rate between 1993 and 1997. Second, the number of cases referred to juvenile courts also increased, and this was responsible for a large part of the total increase in the commitment population. In addition, the average length of stay changed between 1993 and 1997, growing from 96 to 109 days. Improbable changes in case processing would have had to occur for admissions and length of stay to have remained constant after 1997. For admissions to stabilize, for example, the increase in the number of referrals to juvenile court between 1993 and 1997 would have had to reverse itself after 1997 or the use of residential placement would have had to decrease sharply. These changes are unlikely, given trends observed between 1993 and 1997.