# APPENDIX A

## COST BENEFIT ANALYSIS OF THE TRANSITION GUARDIAN PLAN

Tom Packard, D.S.W.
School of Social Work
San Diego State University
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## I. INTRODUCTION AND PURPOSE

The purpose of this report is to document expected key costs and benefits of the Transition Guardian Plan (TGP), a proposal to provide expanded transitional benefits and support to former foster youth from their 18th to 23rd birthdays. After a brief overview, the program's logic model and assumptions will be presented. Program costs will then be described, followed by a discussion of expected benefits from increased tax revenues due to higher education levels and salaries, and cost avoidance from reduced use of prison and TANF (Temporary Assistance to Needy Families, the country's major welfare program for poor families). Costs and benefits will be analyzed using three scenarios: one cohort going through the program and subsequent work careers, forty cohorts over 40-year working careers, and the same 40 cohorts assuming a 75% success rate for the program.

Comprehensive cost benefit analysis studies are common in business and educational settings, but not in human service organizations (Cohen, 1998; Yates, 1996). In addition to difficulties noted below regarding measurement of variables, there has been limited financial support to do the in-depth amount of study and analysis necessary to fully describe the impacts of social service programs.

In terms of measurement and analysis, cost benefit analysis is often an imprecise science. Key variables in human services programs are often difficult to define precisely, and the cause and effect relationships among factors under consideration are often complex, with multiple factors and challenges in measurement. Key factors in cost benefit analysis include the nature of the assumptions made about the variables, the ways they are measured, and the causal relationships among them. In the discussion below, assumptions regarding the variables are explicitly stated. Another limitation is in the data used to measure variables. In some cases, only national data or relatively old data are easily available. All data sources are indicated in the discussion below.

The Transition Guardian Plan (TGP), described elsewhere in this report, is expected, based on results of similar programs for former foster youth (FFY), to have significant benefits on former foster youth which can be represented in terms of financial benefits to the State of California. Specific financial benefits expected and described here are:

- Cost avoidance from fewer admissions to State prison
- Cost avoidance from fewer FFY receiving TANF payments
- Benefits to the State and Federal treasuries due to higher income taxes paid based on improved lifetime employment earnings through increased education (receipt of the GED, AA degrees, and BA degrees).

Other financial benefits will accrue to California as a whole due to increased lifetime earnings of these FFY. Only benefits from income tax revenues are documented here, but there will be additional economic stimulus effects from the increased spending of these FFY through their purchasing, saving, and investing at higher levels. This rationale is used for policies such as lowering taxes on businesses to stimulate local economic growth, which is assumed to benefit the economy and the State as a whole. Other tax revenues such as sales taxes and property taxes will also be enhanced by increased economic potential of these FFY.

Successful implementation of the TGP will also have other savings due to cost avoidance. Studies (e.g., Courtney, et al., 2005; Pecora, et al., 2005; Nedell, et al., 2002; Fagnoni, 1999) have documented poor outcomes for FFY in areas such as use of mental health services, homelessness, use of welfare beyond TANF such as food stamps, substance abuse, and second generation foster care. Cost savings in these and other areas were not computed here, but they are likely to be significant.

In addition to the financial benefits to the State and society, the benefits for individual former foster youth through the presence of a mentor/guardian who can provide many of the emotional and practical supports that are normally provided by a biological parent are expected to be powerful and long-lasting for these individual former foster youth, who would otherwise be abruptly on their own at age 18, with perhaps no family members or supports as they enter adulthood.

A logic model which shows relevant characteristics of young adults from the population at large, FFY, and FFY who participate in TGP is represented in Figure 1.

**FIGURE 1: LOGIC MODEL**

| INPUTS | THROUGHPUTS | EXPECTED OUTCOMES: Self Sufficiency |
|---|---|---|
| **Young adults from the population at large who turn 18**: ranging from wealthy to poor, varying strengths and risk factors | Variable health care, schools, social supports (e.g., financial and housing help during college) | HS graduation, college or technical training, graduate school, good jobs, minimal crime or welfare |
| **Current former foster youth**: risk factors including poverty, substance abuse, etc. | Variable to inadequate health care, schools, housing, social supports | High levels of incarceration and welfare, poor job prospects |
| **TGP former foster youth:** risk factors including poverty, substance abuse, etc. | TGP payments and services extended to age 23; mentoring and support from transition guardian substituting for traditional family supports | Educational attainment, employment, welfare usage, prison in the same proportions as the population at large |

The purpose of this report is to document expected key costs and benefits of the TGP. The most significant cost, of course, will be the monthly stipends paid to former foster youth from their 18$^{th}$ to 23$^{rd}$ birthdays. Additional costs will be $100 per month per youth for each FFY guardian, and 15% of these total costs for administration and evaluation of the program. Benefits will be specified in three areas. First, based on research of FFY, benefits in terms of costs avoided are expected in terms of decreased costs for welfare (Temporary Assistance to Needy Families, or TANF, the program which replaced Aid to Families with Dependent Children through the 1996 welfare reform legislation) and incarceration in State prison. It is important to note that computations regarding TANF and prison are based only on FFY who complete all five years of the TGP, a conservative assumption. It seems likely that some FFY

who complete less than the five years will also have reductions in TANF use and/or prison. These possible savings are not included. Next, using data on annual earnings of workers with varying amounts of formal education up to and including the Bachelor's degree, the added value of having an FFY who would otherwise have been a high school dropout earn a GED, Associate's degree, or Bachelor's degree will be documented.

## II. ASSUMPTIONS AND DATA

Several fundamental assumptions undergird this analysis. First, it is assumed that, through the TGP, participating former foster youth will be expected to achieve outcomes equivalent to those of the California population at large. For example, it will be assumed that the TGP will provide a former foster youth with enough supports, guidance, and mentoring to enable these FFYs to achieve academically at levels of California young adults as a whole. By the same token, it is expected that the program can prevent the use of welfare services and prevent crime leading to prison, thereby decreasing costs of these programs to the citizens of California. Other factors, including mental health and the use of mental health services, unwanted pregnancies, and other health issues are likely to be impacted by this program, but these will not be included in this analysis. Data for this study come from a wide range of sources, including federal and state data, reports, and evaluations, and reports by university research centers and foundations interested in the quality of life outcomes of former foster youth. There are many important gaps in easily available data. To compensate for this limitation, the data sources and assumptions made are identified for each aspect of the analysis.

Next, costs for the TGP will be presented. This summary will be followed by analysis of costs and benefits in the areas listed above: education and earnings, prison, and welfare usage. Finally, an overall analysis using data in spreadsheet format will summarize overall costs and benefits expected from this program.

## III. COSTS FOR THE TRANSITION GUARDIAN PLAN

Approximately 4,200 foster youth in California emancipate each year (California Welfare Services CWS/CMS reports, Average 2000 - 2005). It is likely that 70% of the youth who emancipate each year (former foster youth: FFY) will participate for the first year of the program. That number will likely decrease in each year of the program. A conservative estimate of the decrease in participation is as follows: the second year will likely see 65% participation, the third year 60%, the fourth year 55% and the fifth year 50%. Stipends end at age 23. Therefore, if 70% of FFY participate, 2,940 will enter the program each year. The FFY will receive a stipend on a graduated payment scale as indicated in Table 1.

The guardian will be reimbursed at a rate of $100 a month: $100/month x 12 = $1,200/year x 5 = $6,000.

The administration and evaluation costs are estimated at 15% of the total program costs. These costs include:

1) Court costs for appearances
2) Additional Department of Social Services (DSS) staff to keep outcome data
3) Additional DSS staff to administer the program and conduct necessary background checks, etc., on guardians
4) Costs of initial implementation

As indicated in Table 1, total costs for one FFY completing the five-year program would be: $34,968 (stipend) + 6,000 (guardian) = $40,968 + $6,145 (15% Administration and Evaluation) = $47,113. These costs per youth decrease based on how many years the youth is in the program.

**TABLE 1: COSTS PER YOUTH PER YEAR FOR ELEMENTS OF TGP FOR FIVE YEARS**

| YEAR | Monthly stipend | Annual stipend | Guardian | 15% administration & evaluation | TOTAL PER YEAR | CUMULATIVE 5-YEAR TOTAL |
|---|---|---|---|---|---|---|
| 1 | $850 | $10,200 | $1,200 | $1,710 | $13,110 | $13,110 |
| 2 | $765 | $9,180 | $1,200 | $1,557 | $11,937 | $25,047 |
| 3 | $612 | $7,334 | $1,200 | $1,282 | $9,826 | $34,873 |
| 4 | $429 | $5,148 | $1,200 | $952 | $7,300 | $42,173 |
| 5 | $258 | $3,096 | $1,200 | $644 | $4,940 | $47,113 |
| TOTALS | | $34,968 | $6,000 | $6,145 | | $47,113 |

Based on expectations that 5% of participants will drop out each year, numbers of participating FFY and the related costs are indicated in Table 2. For example, with 2,940 FFY expected to complete one year, at a cost of $13,110 per FFY for Year One, the cost for all FFY for Year One would be $38,543,400. The cumulative total costs for a 5-year cohort of FFY completing the program in the numbers indicated would be $123,129,930.

**TABLE 2: CUMULATIVE TOTAL COSTS FOR ALL YOUTH EXPECTED TO PARTICIPATE IN TGP**

| Years participation | % participating | # participating | Cost/youth per year | Cost/all youth for one year | Cumulative Total |
|---|---|---|---|---|---|
| 1 | 70 | 2,940 | $13,110 | $38,543,400 | $38,543,400 |
| 2 | 65 | 2,730 | $11,937 | $32,588,010 | $71,131,410 |
| 3 | 60 | 2,520 | $9,826 | $24,761,520 | $95,892,930 |
| 4 | 55 | 2,310 | $7,300 | $16,863,000 | $112,755,930 |
| 5 | 50 | 2,100 | $4,940 | $10,374,000 | $123,129,930 |

The figures above are essentially the costs for the program. This program targets FFY who have not graduated from high school. A major expectation of the program is that the stipend and guardian assistance will enable FFY to achieve higher levels of education. There are costs associated with these youth receiving their GED or attending college, but these costs are not documented because, with available data, per-student costs cannot be easily computed. These costs are assumed to be absorbed through existing budgets and funding mechanisms for GED and college education.

## IV. BENEFITS

Most benefits described below will be based on the number of FFY expected to complete all five years: 2,100. Some benefits are expected to accrue to those not completing the full program, and in the case of education, these benefits are projected. For example, even if a FFY does not complete college, completion of an AA degree, or even a GED for FFY who were high

school dropouts, will have a significant impact on lifetime earnings. These benefits are projected below. In another vein, completion of portions of TGP are likely to have some effect on less use of TANF and less incarceration, but savings are based only on those who complete the program. These analyses all assume 100% success rate for these youth. The cost-benefit computations will also be done assuming a 75% success rate.

For simplicity, cost savings from fewer FFY on TANF or in prison are counted in one year: Year Six, when the savings are likely to begin.

***PRISON***

The general population rate of imprisonment for new felons is 0.13% (California Department of Corrections and Rehabilitation: Prisoners and Parolees, p. 40); the rate for FFY is 4% (Nedell, et al., 2002, p. 69). Completion of TGP is assumed to result in all of those completing the program to achieve the same rate of imprisonment as the general population. The difference between 4% for FFY and 0.13% for the general population is 3.87%. These savings will be computed separately for males and females, because data based on gender are available. FFY are 62% female and 38% male (Nedell, et al., 2002). Prison inmates are 21% female and 79% male (California Department of Corrections and Rehabilitation, 2005a). The median prison term for males is 16.5 months, and for females, 13.4 months (California Department of Corrections and Rehabilitation, 2005a). (Mean prison terms are 25.6 months for males and 17.8 months for females. The more conservative median figures are used here.) The cost for State Prison is $34,150/year, or $2,846/month (California Department of Corrections and Rehabilitation, 2005b). Having FFY achieve the same rates as the general population amounts to a reduction of 3.87%. This represents 81 fewer FFY in prison (based on 2,100 FFY who complete the program). Of this number, 64 (79% of the prison population) would be male, and 17 (21% of the prison population) would be female.

The cost of 16.5 months in prison for males would be $46,959 X 64 males = $3,005,376. The cost of 13.4 months for females would be $38,136 X 17 females = $648,312. The total State Prison first admission savings would then be $3,653,688. Fifty-three percent of parolees recidivate within 2 years. Applying the same computations to this number, 53% of 81, or 42 fewer recidivating (33 male, 9 female), results in costs for 33 males amounting to $1,549,647. Similar costs for 9 females are $343,224. The total prison recidivism savings are $1,892,871. The total prison and recidivism savings are therefore $3,653,688 + 1,982,871 = $5,636,559.

***WELFARE***

Nearly 30% of female FFY receive TANF at some point, with 50% receiving it at some time during the first six years after emancipation (Nedell, et al., 2002). Twenty-five percent received AFDC/TANF in each of the 6 years after emancipation (Nedell, et al., 2002). By contrast, 6% of the general population received TANF in 1999 (Administration for Children and Families). Female FFY are about 4 times more likely to receive welfare as other young mothers (Nedell, et al., 2002, p. 75-76). These data are from a study based on youth emancipating during the years of 1992-1997. This period includes more years before TANF than after its implementation in 1996. Overall welfare usage declined as TANF was implemented, so TANF participation may be overstated here.

According to Nedell, et al. (2002), “Many of these [emancipated foster youth] are likely to use all of the five years now permitted for lifetime adult welfare receipt while they are still

very young parents" (p. 80). It is assumed that completion of TGP will result in all of those completing the program achieving the same rate of welfare usage as the general population, rather than the 60 months expected by Nedell, et al. Using TANF rates of 6% for the general population and 25% for FFY (close to the ratio of 1:4 noted above), completion of TGP will reduce female FFY welfare rate 19% (25 – 6). These calculations assume TANF payments for 1 mother (FFY) and 2 children for the expected TANF period of 60 months. With FFY being 62% female (Nedell), 62% of 2,100, or 1,302 female FFY, can be expected to avoid TANF. Using a monthly TANF payment for 1 mother and 2 children of $704 (National Center for Children in Poverty) times 60 months times 1,302 female FFY, cost avoidance savings amount to $54,996,480.

## ***EDUCATION BENEFITS FROM HIGHER RATES OF GRADUATION: LIFETIME EARNINGS IMPROVEMENTS***

It has been clearly documented that workers with high school, community college and college degrees have progressively higher annual incomes based on education (U.S. Census Bureau). These figures are used here to assess the differentials between the FFY who would have otherwise remained high school dropouts who, because of their involvement in TGP, achieve higher rates of formal education completion. As of 1980, the most recent data easily available (Bureau of Labor Statistics, 1980) indicate that males will work 40 years, and females will work 30 years, the current average for American workers. These figures considered mortality conditions and labor force entry and exit rates as of 1979-1980. This adjusts for the fact that some workers die or for other reasons leave the labor force before the traditional retirement at age 65 and in some cases work longer. Since 1980, there has been an increase of females in the work force, resulting in work careers longer than 30 years, so it is assumed here that women entering the labor market over the next few years will have career lengths equivalent to men. One other recent cost-benefit study of former foster youth (Contardo, et al., 2005) used 40 years for both men and women. State and Federal tax increases due to higher incomes and higher total incomes are thus assumed to be received for 40 years. Salary data for varying amounts of formal education are indicated in Tables 3A and 3B.

This analysis assumes that the TGP will result in FFY achieving educational outcomes at the BA, AA, and GED levels that the California population as a whole achieves. For example, 50% of FFY graduate from high school, whereas 70% of all youth do (National Center for Education Statistics). This would represent a 20% increase in high school graduation (50% to 70%) for TGP participants, represented here by completion of the GED, since these FFY will be over 18. Using similar rates for higher education, the increases would be 35% for community college (2% to 37%), and 20% (1% to 21%) (Casey Alumni Studies: Improving Family Foster Care) for college graduation.

The benefit of increased education will be reflected in the differences in State and Federal taxes on the additional earnings for these FFY (high school dropout vs. BA, etc.): direct impacts on the State and Federal Treasuries. Using a broader measure, benefits will also be computed based on the additional lifetime salary incomes of FFY. This reflects not simply direct benefits to the State and Federal Treasuries, but also the benefits in terms of stimulating and supporting the State economy as a whole through added income for purchasing, saving, and investing.

Salary data used are reflected in Tables 3A and 3B, one for State taxes and the second for Federal taxes. The first pair of columns shows annual income for males and females with different levels of education. The second pair of columns shows marginal tax rates for the

salaries indicated, using 2005 tax rates. The third pair of columns shows taxes paid, computed by multiplying annual income by the tax rate. The final three columns reflect total taxes paid by all FFY who achieve designated education levels, multiplying taxes paid by the numbers of FFY in each category. These numbers are indicated in the following paragraphs. These computations do not account for any tax deductions or credits, which would result in a lower effective tax rate for actual taxes paid.

**TABLE 3A: EDUCATION LEVELS, SALARIES, STATE TAX RATES, AND TAX REVENUE INCREASES**

| | ANNUAL INCOME | | STATE TAX RATE | | TAXES PAID/ INDIVIDUAL | | TOTAL TAX REVENUE INCREASES FOR ALL FFY | | |
|---|---|---|---|---|---|---|---|---|---|
| **Education** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **M & F** |
| **HS dropout** | $26,277 | $19,162 | 0.06 | 0.04 | $1,577 | $766 | | | |
| **HS diploma or GED** | $35,725 | $26,029 | 0.08 | 0.06 | $2,858 | $1,562 | | | |
| **Drop-GED Difference** | $9,448 | $6,867 | | | $1,281 | $795 | $143,515 | $144,737 | $288,252 |
| **AA** | $44,404 | $33,481 | 0.093 | 0.08 | $41,230 | $2,678 | | | |
| **Drop-AA Difference** | $18,127 | $14,319 | | | $25,523 | $1,912 | $428,896 | $521,976 | $950,872 |
| **BA** | $57,220 | $22,519 | 0.093 | 0.04 | $5,321 | $901 | | | |
| **Drop-BA Difference** | $30,943 | $22,519 | 0.06 | 0.04 | $3,744 | $134 | $299,587 | $17,456 | $317,044 |

**TOTAL ANNUAL STATE TAX REVENUE INCREASES $1,556,167**

Table 3B shows the same data as Table 3A, except that Federal tax rates and taxes paid are substituted for State tax rates and taxes paid.

**TABLE 3B: EDUCATION LEVELS, SALARIES, FEDERAL TAX RATES, AND TAX REVENUE INCREASES**

| | ANNUAL INCOME | | FEDERAL TAX RATE | | TAXES PAID/ INDIVIDUAL | | TOT TAX REVENUE INCREASES FOR ALL FFY | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **M & F** |
| **HS dropout** | $26,277 | $19,162 | 0.15 | 0.15 | $3,942 | $2,874 | | | |
| **HS dipl or GED** | $35,725 | $26,029 | 0.28 | 0.28 | $10,003 | $7,288 | | | |
| **Drop-GED Difference** | $9,448 | $6,867 | | | $6,061 | $4,414 | $678,882 | $803,315 | $1,482,198 |
| **AA** | $44,404 | $33,481 | 0.28 | 0.28 | $12,433 | $9,375 | | | |
| **Drop-AA Difference** | $18,127 | $14,319 | | | $8,491 | $6,500 | $1,426,584 | $1,774,604 | $3,201,187 |
| **BA** | $57,220 | $22,519 | 0.28 | 0.28 | $16,022 | $6,305 | | | |
| **Drop-BA Difference** | $30,943 | $22,519 | 0.28 | 0.15 | $12,080 | $3,431 | $966,404 | $446,033 | $1,412,437 |

**TOTAL ANNUAL FEDERAL TAX REVENUE INCREASES $6,095,822**

Table 4 shows the total State and Federal tax increases indicated at the bottoms of Tables 3A and 3B.

**TABLE 4: TOTAL STATE AND FEDERAL TAX INCREASES PER YEAR**

| | |
|---|---|
| State tax increases | $1,556,167 |
| Federal tax increases | $6,095,822 |
| Total annual tax increases | $7,651,989 |

Next, assumptions and computations for these increases will be presented.

**HIGH SCHOOL GED:**

Continuing with the assumption logic above, it is assumed here that completion of 1 year of TGP will result in 2,940 of those FFY achieving the same rate of high school graduation through a GED as the rate for the general population (70%). This will mean a 20% increase in high school graduation (50% to 70%). This analysis assumes that half of these youth would have been dropouts, representative of the whole foster youth population. Fifty percent of FFY who complete 1 year of TGP = 2,940 FFY. With half of these being high school dropouts (1,470), a 20% increase in this number = 294. Gender of FFY: 62% F, 38% M (Nedell, et al., 2002) = 182 F, 112 M. Increased State tax revenues from this group would be $288,252, and increased Federal revenues would be $1,482,198.

**AA DEGREE:**

Similar to the assumption for the BA degree, it is assumed here that completion of 3 years of TGP will result in those FFY achieving the same rate of community college graduation as the rate for the general population. According to Nedell, et al, (p. 60), 2 % of FFY received an AA degree, while nationally 37% did. This would mean a 35% increase (2% to 37%) in order for FFY to reach levels of the general population. This analysis assumes that half of these youth would have been dropouts, representative of the whole foster youth population. 50% of FFY who complete 3 years of TGP = 50% of 2,520 FFY = 1,260 FFY. A 35% increase in this number = 441. Using gender data cited above, 273 additional female and 168 additional male FFY are expected to graduate from community college. Increased State tax revenues from this group would be $950,872 and increased Federal revenues would be $3,201,187.

**BA DEGREE:**

It is assumed here that, based on the effects of the TGP program model, the completion of TGP will result in all of those completing the program to achieve the same rate of college graduation as the rate for the general population. This will mean a 20% increase in college graduation (1% to 21%). This analysis assumes that half of these youth would have been dropouts, representative of the whole foster youth population. Fifty percent of FFY who complete 5 years of TGP = 2,100 FFY. With half of these being high school dropouts (1,050), a 20% increase in this number = 210. Using gender data cited above, 130 additional female and 80 additional male FFY are expected to graduate from college. Increased State tax revenues from this group would be $317,044 and increased Federal revenues would be $1,412,437.

## V. ANALYSIS OF COSTS AND BENEFITS

The data described above have been inserted into spreadsheets to compute program costs (constant for all scenarios) and benefits of the program using three different scenarios:

1. analysis of one cohort of FFY over a 40-year working career, using as benefits cost avoidance regarding prison and TANF, and increased income to the State and Federal governments represented by *increased tax revenues* based on higher earnings due to more education
2. an analysis of cohorts for 40 years, projected over their 40-year careers, representing *actual total costs and benefits for the entire TGP*; and
3. an analysis similar to scenario 2, using a *75% success rate*.

Analysis of one cohort over 40 years

As can be seen in Table 5, program costs are approximately $38.5 million for Year 1, decreasing to approximately $10 million for Year 5. These decreases are due to decreases in FFY continuing each year and decreases in the subsidies as indicated in Tables 1 and 2 above. The total cost of one cohort is approximately $123 million (see Table 2).

Benefits begin in Year 2, when increases in taxes paid begin to accrue for FFY who complete one year of the program and are assumed to have obtained their GED with no subsequent college. In Year 4, increases are reflected for those who complete an AA degree and do not go on for a BA. In Year 6, increases begin for youth who complete all 5 years of the program and obtain a BA degree. Completion of a BA degree at a CSU campus takes approximately 5 years, so that figure is used here. Salaries, based on averages noted above, remain constant as averages for the 40 years of employment, representing the averages for FFY achieving each education level.

Also included in Year 6 are savings of nearly $55 million of TANF payments, assumed to be avoided for those female FFY who complete the program. For the sake of simplicity, this amount is all counted in one year. Year 6 also reflects, as a one-time cost avoidance, $5.6 million savings related to State prison costs.

With Year 1 costs of over $38 million, the cost-benefit analysis begins with a $38.5 million deficit. In Year 2, the deficit is nearly $31 million, with an offset from taxes paid by GED recipients. The annual deficits decrease each year due to lower program costs and additional savings. Year 6 shows savings of over $68 million, due mainly to TANF savings and the fact that the cohort has completed the 5-year program. In future years, there are annual benefits of approximately $7.65 million, due to increased tax revenues, until the FFY retire.

**TABLE 5: COSTS AND BENEFITS FOR ONE COHORT OVER THE COURSE OF THE PROGRAM AND 40 YEARS OF WORK, USING INCREASED FEDERAL AND STATE TAXES AS BENEFITS**

| | | COSTS | BENEFITS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | FFY | Program | Less | Less | INCREASES IN TAXES PAID | | | Total | Costs- | Cumulative |
| | Age | Costs | Prison | TANF | GED | AA | BA | Benefits | benefits | Cost-Ben |
| 1 | 18 | 38,543,400 | | | | | | 0 | -38,543,400 | -38,543,400 |
| 2 | 19 | 32,588,010 | | | 1770450 | | | 1,770,450 | -30,817,560 | -69,360,960 |
| 3 | 20 | 24,761,520 | | | 1770450 | | | 1,770,450 | -22,991,070 | -92,352,030 |
| 4 | 21 | 16,863,000 | | | 1770450 | 4,152,059 | | 5,922,509 | -10,940,491 | -103,292,521 |
| 5 | 22 | 10,374,000 | | | 1770450 | 4,152,059 | | 5,922,509 | **-4,451,491** | -107,744,012 |
| 6 | 23 | | 5,636,559 | 54,996,480 | 1770450 | 4,152,059 | 1729480 | 68,285,028 | **68,285,028** | -39,458,984 |
| 7 | 24 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | -31,806,995 |
| 8 | 25 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | -24,155,006 |
| 9 | 26 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | -16,503,017 |
| 10 | 26 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | -8,851,028 |
| 11 | 28 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | **-1,199,039** |
| 12 | 29 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | **6,452,950** |
| 13 | 30 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 14,104,939 |
| 14 | 31 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 21,756,928 |
| 15 | 32 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 29,408,917 |
| 16 | 33 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 37,060,906 |
| 17 | 34 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 44,712,895 |
| 18 | 35 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 52,364,884 |
| 19 | 36 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 60,016,873 |
| 20 | 37 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 67,668,862 |
| 21 | 38 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 75,320,851 |
| 22 | 39 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 82,972,840 |
| 23 | 40 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 90,624,829 |
| 24 | 41 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 98,276,818 |
| 25 | 42 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 105,928,807 |
| 26 | 43 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 113,580,796 |
| 27 | 44 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 121,232,785 |
| 28 | 45 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 128,884,774 |
| 29 | 46 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 136,536,763 |
| 30 | 47 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 144,188,752 |
| 31 | 48 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 151,840,741 |
| 32 | 49 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 159,492,730 |
| 33 | 50 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 167,144,719 |
| 34 | 51 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 174,796,708 |
| 35 | 52 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 182,448,697 |
| 36 | 53 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 190,100,686 |
| 37 | 54 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 197,752,675 |
| 38 | 55 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 205,404,664 |
| 39 | 56 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 213,056,653 |
| 40 | 57 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 220,708,642 |
| 41 | 58 | | | | 1770450 | 4,152,059 | 1729480 | 7,651,989 | 7,651,989 | 228,360,631 |
| 42 | 59 | | | | | 4,152,059 | 1729480 | 5,881,539 | 5,881,539 | 234,242,170 |
| 43 | 60 | | | | | 4,152,059 | 1729480 | 5,881,539 | 5,881,539 | 240,123,709 |
| 44 | 61 | | | | | | 1729480 | 1,729,480 | 1,729,480 | 241,853,189 |
| 45 | 62 | | | | | | 1729480 | 1,729,480 | 1,729,480 | 243,582,669 |
| 46 | 63 | | | | | | | 0 | 0 | **243,582,669** |
| TOTALS: | | 123,129,930 | 5,636,559 | 54,996,480 | 70,818,000 | 166,082,360 | 69,179,200 | 366,712,599 | 243,582,669 | |

The far right column shows cumulative cost-benefit figures for the cohort over the years. The first-year deficit increases to $69 million in Year 2, climbing to over $107 million in Year 5. There is a steep drop in the deficit in Year 6, with drops of approximately $7.6 million each year. In Year 12, the cumulative deficit becomes a benefit, with annual increases in net benefit of approximately $7.65 million. Benefits continue to increase until the last group retires at age 63. At that point, there is a net benefit of $243.6 million. In other words, considering just direct costs and benefits to the State and Federal governments, including increases in taxes paid, the program results in a net benefit of $243.6 million for one cohort over their careers. If these costs are discounted at a rate of 3% using present value of 2006 dollars, the program costs are $114,729,661, rather than just over $123 million. Using the same formula, benefits, which in constant dollars total over $366 million, are discounted to $212,824,638. Using discounted

dollars, the cumulative net benefit for a cohort is $98,094,977. The benefit-cost ratio for one cohort is 2.98 (1.85 in present value). These figures are shown in Table 6.

**TABLE 6: COSTS, BENEFITS, AND BENEFIT-COST RATIOS FOR ONE COHORT**

| | Costs | Benefits | Benefits-costs | Benefit-cost ratio |
|---|---|---|---|---|
| Constant dollars | $123,129,930 | $366,712,599 | $243,582,669 | 2.98 |
| Present value, discounted at 3% | $114,729,661 | $212,824,638 | $98,094,977 | 1.85 |

Cost benefit analysis using costs and benefits for cohorts for 40 years, projected over their 40-year careers

The analysis above looks only at one cohort of FFY. In fact, a new cohort will reach emancipation each year, and these total costs are important to show the overall financial impact of the program over the coming decades. Table 7 shows the total costs and benefits for 40 years of cohorts, over their projected 40-year careers.

**TABLE 7: COMPLETE PROJECTIONS OF STIPEND COSTS AND BENEFITS FOR 40 YEARS**

| COST/YEAR | BENEFITS | BENEFITS-COSTS | CUMULATIVE BENEFITS-COSTS | YEAR |
|---|---|---|---|---|
| 38543400 | 0 | -38543400 | -34832925 | 1 |
| 71131410 | 1,770,450 | -69360960 | -107,904,360 | 2 |
| 95892930 | 3,540,900 | -92352030 | -200,256,390 | 3 |
| 112755930 | 9,463,409 | -103292521 | -303,548,911 | 4 |
| 123129930 | 15,385,918 | -107744012 | -411,292,923 | 5 |
| 123129930 | 83,670,946 | -39458984 | -450,751,907 | 6 |
| 123129930 | 91,322,935 | -31806995 | -482,558,902 | 7 |
| 123129930 | 98,974,924 | -24155006 | -506,713,908 | 8 |
| 123129930 | 106,626,913 | -16503017 | -523,216,925 | 9 |
| 123129930 | 114,278,902 | -8851028 | -532,067,953 | 10 |
| 123129930 | 121,930,891 | **-1199039** | **-533,266,992** | 11 |
| 123129930 | 129,582,880 | **6452950** | -526,814,042 | 12 |
| 123129930 | 137,234,869 | 14104939 | -512,709,103 | 13 |
| 123129930 | 144,886,858 | 21756928 | -490,952,175 | 14 |
| 123129930 | 152,538,847 | 29408917 | -461,543,258 | 15 |
| 123129930 | 160,190,836 | 37060906 | -424,482,352 | 16 |
| 123129930 | 167,842,825 | 44712895 | -379,769,457 | 17 |
| 123129930 | 175,494,814 | 52364884 | -327,404,573 | 18 |
| 123129930 | 183,146,803 | 60016873 | -267,387,700 | 19 |
| 123129930 | 190,798,792 | 67668862 | -199,718,838 | 20 |
| 123129930 | 198,450,781 | 75320851 | -124,397,987 | 21 |
| 123129930 | 206,102,770 | 82972840 | **-41,425,147** | 22 |
| 123129930 | 213,754,759 | 90624829 | **49,199,682** | 23 |
| 123129930 | 221,406,748 | 98276818 | 147,476,500 | 24 |
| 123129930 | 229,058,737 | 105928807 | 253,405,307 | 25 |
| 123129930 | 236,710,726 | 113580796 | 366,986,103 | 26 |

| | | | | |
|---|---|---|---|---|
| 123129930 | 244,362,715 | 121232785 | 488,218,888 | 27 |
| 123129930 | 252,014,704 | 128884774 | 617,103,662 | 28 |
| 123129930 | 259,666,693 | 136536763 | 753,640,425 | 29 |
| 123129930 | 267,318,682 | 144188752 | 897,829,177 | 30 |
| 123129930 | 274,970,671 | 151840741 | 1,049,669,918 | 31 |
| 123129930 | 282,622,660 | 159492730 | 1,209,162,648 | 32 |
| 123129930 | 290,274,649 | 167144719 | 1,376,307,367 | 33 |
| 123129930 | 297,926,638 | 174796708 | 1,551,104,075 | 34 |
| 123129930 | 305,578,627 | 182448697 | 1,733,552,772 | 35 |
| 123129930 | 313,230,616 | 190100686 | 1,923,653,458 | 36 |
| 123129930 | 320,882,605 | 197752675 | 2,121,406,133 | 37 |
| 123129930 | 328,534,594 | 205404664 | 2,326,810,797 | 38 |
| 123129930 | 336,186,583 | 213056653 | 2,539,867,450 | 39 |
| 123129930 | 343,838,572 | 220708642 | 2,760,576,092 | 40 |
| | 351,490,561 | 351490561 | 3,112,066,653 | 41 |
| | 355,601,650 | 355601650 | 3,467,668,303 | 42 |
| | 359,712,739 | 359712739 | 3,827,381,042 | 43 |
| | 355,519,710 | 355519710 | 4,182,900,752 | 44 |
| | 351,326,681 | 351326681 | 4,534,227,433 | 45 |
| | 283,041,653 | 283041653 | 4,817,269,086 | 46 |
| | 275,389,664 | 275389664 | 5,092,658,750 | 47 |
| | 267,737,675 | 267737675 | 5,360,396,425 | 48 |
| | 260,085,686 | 260085686 | 5,620,482,111 | 49 |
| | 252,433,697 | 252433697 | 5,872,915,808 | 50 |
| | 244,781,708 | 244781708 | 6,117,697,516 | 51 |
| | 237,129,719 | 237129719 | 6,354,827,235 | 52 |
| | 229,477,730 | 229477730 | 6,584,304,965 | 53 |
| | 221,825,741 | 221825741 | 6,806,130,706 | 54 |
| | 214,173,752 | 214173752 | 7,020,304,458 | 55 |
| | 206,521,763 | 206521763 | 7,226,826,221 | 56 |
| | 198,869,774 | 198869774 | 7,425,695,995 | 57 |
| | 191,217,785 | 191217785 | 7,616,913,780 | 58 |
| | 183,565,796 | 183565796 | 7,800,479,576 | 59 |
| | 175,913,807 | 175913807 | 7,976,393,383 | 60 |
| | 168,261,818 | 168261818 | 8,144,655,201 | 61 |
| | 160,609,829 | 160609829 | 8,305,265,030 | 62 |
| | 152,957,840 | 152957840 | 8,458,222,870 | 63 |
| | 145,305,851 | 145305851 | 8,603,528,721 | 64 |
| | 137,653,862 | 137653862 | 8,741,182,583 | 65 |
| | 130,001,873 | 130001873 | 8,871,184,456 | 66 |
| | 122,349,884 | 122349884 | 8,993,534,340 | 67 |
| | 114,697,895 | 114697895 | 9,108,232,235 | 68 |
| | 107,045,906 | 107045906 | 9,215,278,141 | 69 |
| | 99,393,917 | 99393917 | 9,314,672,058 | 70 |
| | 91,741,928 | 91741928 | 9,406,413,986 | 71 |
| | 84,089,939 | 84089939 | 9,490,503,925 | 72 |
| | 76,437,950 | 76437950 | 9,566,941,875 | 73 |
| | 68,785,961 | 68785961 | 9,635,727,836 | 74 |
| | 61,133,972 | 61133972 | 9,696,861,808 | 75 |
| | 53,481,983 | 53481983 | 9,750,343,791 | 76 |
| | 45,829,994 | 45829994 | 9,796,173,785 | 77 |

| | | | | |
|---|---|---|---|---|
| | 38,178,005 | 38178005 | 9,834,351,790 | 78 |
| | 30,526,016 | 30526016 | 9,864,877,806 | 79 |
| | 22,874,027 | 22874027 | 9,887,751,833 | 80 |
| | 15,222,038 | 15222038 | 9,902,973,871 | 81 |
| | 9,340,499 | 9340499 | 9,912,314,370 | 82 |
| | 3,458,960 | 3458960 | 9,915,773,330 | 83 |
| | 1,729,480 | 1729480 | 9,917,502,810 | 84 |
| 4,751,001,150 | 14,668,503,960 | 9,917,502,810 | | |

As the table indicates, each year begins with 5 years of annual costs, beginning at $38.5 million in Year 1. Starting in Year 5, annual costs for all 5 cohorts in the program stabilize at $123,129,930. Ultimate costs for 40 cohorts total $4.75 billion. Cumulative benefits begin at $1,770,450 in the second year, exceed $100 million by Year 9, and reach a total of over $14.6 billion when the last cohort retires in Year 84. Costs exceed benefits until Year 12, with benefits then increasing each year thereafter due to increasing numbers of FFY entering the workforce for careers of 40 years. The cumulative cost-benefit deficit of the program peaks at -$533,266,992 in Year 11, and declines thereafter. The program begins to show a net cumulative benefit in Year 23, with benefits continuing every year thereafter. If these costs are discounted at a rate of 3% using present value of 2006 dollars, the program costs are $2,680,840,940, rather than just over $4.7 billion. Using the same formula, benefits, which in constant dollars total over $14 billion, are discounted to just over $5 billion. Using discounted dollars, the cumulative net benefit for the first 40 cohorts is $2,386,133,827. The benefit-cost ratio is 3.1 (1.9 in present value dollars). These figures are shown in Table 8.

**TABLE 8: COSTS, BENEFITS, AND BENEFIT-COST RATIOS FOR 40 COHORTS OVER THEIR CAREERS**

| | Costs | Benefits | Benefits-costs | Benefit-cost ratio |
|---|---|---|---|---|
| Constant dollars | $4,751,001,150 | $14,668,503,960 | $9,917,502,810 | 3.1 |
| Present value, discounted at 3% | $2,680,840,940 | $5,066,974,767 | $2,386,133,827 | 1.9 |

Cost benefit analysis using costs and benefits for all cohorts at 75% Success Rate

Next, costs and benefits for all cohorts will be computed assuming a 75% success rate. While the above computations assume that all FFY participants achieve maximum success in avoiding TANF and prison and all achieve education and salary levels comparable with the general population, this analysis assumes that, in total, 75% of FFY participants in TGP achieve these successful outcomes. For example, hypothetically, this would mean that 75% of female FFY avoid TANF, 75% of FFY avoid prison, and 75% of FFY achieve desired educational and salary outcomes.

Table 9 shows costs and cumulative benefits and cost-benefit figures.

**TABLE 9: COMPLETE PROJECTIONS OF STIPEND COSTS AND BENEFITS FOR 40 YEARS ASSUMING 75% SUCCESS RATE**

| YEAR | COST | BENEFITS | TOTAL BENEFITS-COSTS | CUMULATIVE BENEFIT-COST |
|---|---|---|---|---|
| 1 | 38543400 | 0 | -38543400 | -38543400 |
| 2 | 71131410 | 1327837 | -69803572 | -108,346,973 |
| 3 | 95892930 | 2655675 | -93237255 | -201,584,228 |
| 4 | 112755930 | 7097557 | -105658373 | -307,242,601 |
| 5 | 123129930 | 11539439 | -111590491 | -418,833,092 |
| 6 | 123129930 | 62753210 | -60376720 | -479,209,813 |
| 7 | 123129930 | 68492201 | -54637729 | -533,847,542 |
| 8 | 123129930 | 74231193 | -48898737 | -582,746,279 |
| 9 | 123129930 | 79970185 | -43159745 | -625,906,024 |
| 10 | 123129930 | 85709177 | -37420754 | -663,326,777 |
| 11 | 123129930 | 91448168 | -31681762 | -695,008,539 |
| 12 | 123129930 | 97187160 | -25942770 | -720,951,309 |
| 13 | 123129930 | 102926152 | -20203778 | -741,155,087 |
| 14 | 123129930 | 108665144 | -14464787 | -755,619,874 |
| 15 | 123129930 | 114404135 | -8725795 | -764,345,669 |
| 16 | 123129930 | 120143127 | **-2986803** | **-767,332,472** |
| 17 | 123129930 | 125882119 | **2752189** | -764,580,283 |
| 18 | 123129930 | 131621111 | 8491181 | -756,089,102 |
| 19 | 123129930 | 137360102 | 14230172 | -741,858,930 |
| 20 | 123129930 | 143099094 | 19969164 | -721,889,766 |
| 21 | 123129930 | 148838086 | 25708156 | -696,181,610 |
| 22 | 123129930 | 154577078 | 31447148 | -664,734,463 |
| 23 | 123129930 | 160316069 | 37186139 | -627,548,324 |
| 24 | 123129930 | 166055061 | 42925131 | -584,623,193 |
| 25 | 123129930 | 171794053 | 48664123 | -535,959,070 |
| 26 | 123129930 | 177533045 | 54403115 | -481,555,955 |
| 27 | 123129930 | 183272036 | 60142106 | -421,413,849 |
| 28 | 123129930 | 189011028 | 65881098 | -355,532,751 |
| 29 | 123129930 | 194750010 | 71620090 | -283,912,661 |
| 30 | 123129930 | 200489012 | 77359082 | -206,553,580 |
| 31 | 123129930 | 206228003 | 83098073 | -123,455,507 |
| 32 | 123129930 | 211966995 | 88837065 | **-34,618,442** |
| 33 | 123129930 | 217705987 | 94576057 | **59,957,615** |
| 34 | 123129930 | 223444979 | 100315049 | 160,272,664 |
| 35 | 123129930 | 229183970 | 106054040 | 266,326,704 |
| 36 | 123129930 | 234922962 | 111793032 | 378,119,736 |
| 37 | 123129930 | 240661954 | 117532024 | 495,651,760 |
| 38 | 123129930 | 246400946 | 123271016 | 618,922,775 |
| 39 | 123129930 | 252139937 | 129010007 | 747,932,783 |
| 40 | 123129930 | 257878929 | 134748999 | 882,681,782 |
| 41 | | 263617921 | 263617921 | 1,146,299,702 |
| 42 | | 266701238 | 266701238 | 1,413,000,940 |
| 43 | | 269784554 | 269784554 | 1,682,785,494 |
| 44 | | 266639783 | 266639783 | 1,949,425,277 |
| 45 | | 263495011 | 263495011 | 2,212,920,287 |

| | | | | |
|---|---|---|---|---|
| 46 | | 212281240 | 212281240 | 2,425,201,527 |
| 47 | | 206542248 | 206542248 | 2,631,743,775 |
| 48 | | 200803256 | 200803256 | 2,832,547,031 |
| 49 | | 195064265 | 195064265 | 3,027,611,296 |
| 50 | | 189325273 | 189325273 | 3,216,936,569 |
| 51 | | 183586281 | 183586281 | 3,400,522,850 |
| 52 | | 177847289 | 177847289 | 3,578,370,139 |
| 53 | | 172108298 | 172108298 | 3,750,478,436 |
| 54 | | 166369306 | 166369306 | 3,916,847,742 |
| 55 | | 160630314 | 160630314 | 4,077,478,056 |
| 56 | | 154891322 | 154891322 | 4,232,369,378 |
| 57 | | 149152331 | 149152331 | 4,381,521,709 |
| 58 | | 143413339 | 143413339 | 4,524,935,048 |
| 59 | | 137674347 | 137674347 | 4,662,609,395 |
| 60 | | 131935355 | 131935355 | 4,794,544,750 |
| 61 | | 126196364 | 126196364 | 4,920,741,113 |
| 62 | | 120457372 | 120457372 | 5,041,198,485 |
| 63 | | 114718380 | 114718380 | 5,155,916,865 |
| 64 | | 108979388 | 108979388 | 5,264,896,253 |
| 65 | | 103240397 | 103240397 | 5,368,136,650 |
| 66 | | 97501408 | 97501408 | 5,465,638,055 |
| 67 | | 91762413 | 91762413 | 5,557,400,468 |
| 68 | | 86023421 | 86023421 | 5,643,423,889 |
| 69 | | 80284430 | 80284430 | 5,723,708,318 |
| 70 | | 74545438 | 74545438 | 5,798,253,756 |
| 71 | | 68806446 | 68806446 | 5,867,060,202 |
| 72 | | 63067454 | 63067454 | 5,930,127,656 |
| 73 | | 57328463 | 57328463 | 5,987,456,119 |
| 74 | | 51589471 | 51589471 | 6,039,045,590 |
| 75 | | 45850479 | 45850479 | 6,084,896,069 |
| 76 | | 40111487 | 40111487 | 6,125,007,556 |
| 77 | | 34372496 | 34372496 | 6,159,380,051 |
| 78 | | 28633504 | 28633504 | 6,188,013,555 |
| 79 | | 22894512 | 22894512 | 6,210,908,067 |
| 80 | | 17155520 | 17155520 | 6,228,063,587 |
| 81 | | 11416529 | 11416529 | 6,239,480,116 |
| 82 | | 7005374 | 7005374 | 6,246,485,490 |
| 83 | | 2594220 | 2594220 | 6,249,079,710 |
| 84 | | 1297110 | 1297110 | 6,250,376,820 |
| | 4,751,001,150 | 11,001,377,970 | 6,250,376,820 | |

As in the other tables, program costs stabilize at $123,129,930 annually in Year 5. Benefits computed at a 75% success rate begin at approximately $1.3 million for Year 2, increase to over $100 million in Year 13, and exceed $11 billion when the last cohort retires in Year 84. The program begins the first year with a deficit of over $38.5 million, with the annual deficit increasing to over $100 million in Year 5 and declining thereafter. The cumulative deficit peaks at over –$767 million in Year 16 and then declines. The program ends its cumulative deficit in Year 33, and generates a net benefit thereafter. If these costs are discounted at a rate of 3% using present value of 2006 dollars, the program costs are $2,680,840,940, rather than just over $4.7 billion. Using the same formula, benefits, which in constant dollars total over $11

billion, are discounted to just under $4 billion. Using discounted dollars, the cumulative net benefit for the first 40 cohorts is $1,119,390,135. The benefit-cost ratio is 2.3 (1.4 in present value dollars). These figures are shown in Table 10.

**TABLE 10: COSTS, BENEFITS, AND BENEFIT-COST RATIOS FOR 40 COHORTS OVER THEIR CAREERS ASSUMING 75% SUCCESS RATE**

| | Costs | Benefits | Benefits-costs | Benefit-cost ratio |
|---|---|---|---|---|
| Constant dollars | $4,751,001,150 | $11,001,377,970 | $6,250,376,820 | 2.3 |
| Present value, discounted at 3% | $2,680,840,940 | $3,800,231,075 | $1,119,390,135 | 1.4 |

## VI. SUMMARY

After four years of increasing startup costs as new FFY enter the program, the TGP model eventually reaches and maintains annual costs of over $123 million for the five cohorts in the program at any one time. Assuming that the program is successful, benefits from increased education resulting in additional tax revenues received from FFY who earn more income due to higher levels of education as well as costs avoided from less use of TANF and prison result in net financial benefits to California. Specifically, these benefits include:

- One cohort costs approximately $123 million, and results in benefits of over $366 million, for a net benefit of over $243 million.
- The ratio of benefits to costs for one cohort is 2.98 (1.85 using present value dollars).
- Over the 40-year careers of 40 cohorts of FFY, there would be net benefits of $9,917,502,810. If this amount is discounted to present value dollars, the benefit is $2,386,133,827.
- This results in a benefit-cost ratio of 3.1 to 1 (1.9 using present value dollars).
- If these same cohorts are assumed to be 75% successful in avoiding TANF and prison and achieving salaries consistent with their education levels, the net benefit is $6,250,376,820.
- At a 75% success rate, the benefit-cost ratio is 2.3 (1.4 in present dollars).
- The savings documented here are only for FFY who complete designated portions of the TGP. It is likely that other benefits, such as decreased TANF costs, will result from improved outcomes of FFY in the program who do not complete the full five years of the program. These benefits cannot be computed precisely.
- Other cost avoidance benefits such as reduced use of services including mental health and substance abuse treatment are not documented here, but could be significant.

- Other financial benefits will accrue to California as a whole due to increased lifetime earnings of these FFY, due to additional economic stimulus effects from their purchasing, saving, and investing at higher levels. Other tax revenues such as sales taxes and property taxes will also be enhanced by increased economic potential of these FFY.

- In purely financial terms, using the variables analyzed here, the program, if fully successful, would have a benefit-cost ratio of 3 to 1 (using present value dollars, the ratio is nearly 2 to 1).

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