

2001 Program Accountability Measures Report : A Two-Year Analysis



Prepared by the Bureau of Data and Research
Florida Department of Juvenile Justice
Management Report Number 2001-4

March 2001

Jeb Bush
Governor

W. G. "Bill" Bankhead
Secretary



STATE OF FLORIDA
DEPARTMENT OF JUVENILE JUSTICE

March 2001

Dear Colleagues:

It is with great pleasure that I present Management Report #2001-4, *Program Accountability Measures of DJJ Commitment Programs*. This document summarizes two years of measurement by the Department of Juvenile Justice regarding cost effectiveness of programs that serve committed delinquent youth. Produced by our Bureau of Data and Research, the report presents measures of the cost and effectiveness of 169 residential and non-residential commitment programs, allowing for comparisons among programs and across levels.

Program Accountability Measures scores may be thought of as grades: 70 is average and anything above 85 is outstanding. Simply put, a program gets a high score for having a higher success rate than expected given the recidivism risk factors of the youth served, and a lower than average cost. The observed one-year success rate is compared to the expected recidivism rate for each program. Programs in each table are rank ordered based on the resulting scores.

To request additional copies of this report, please contact the Bureau of Data and Research at (850) 487-4097 or visit our web site: www.djj.state.fl.us/RnD.

Sincerely,

W.G. "Bill" Bankhead
Secretary

Introduction

The Program Accountability Measures Report provides a comparison of the relative cost and effectiveness of programs that provide supervision, care, custody, and treatment for youth committed to the Florida Department of Juvenile Justice (DJJ). This report is mandated by Florida Statute 985.404, which requires the Department of Juvenile Justice to rank commitment programs based on client outcomes and program costs.

The desired outcome of juvenile justice commitment programs is a reduction in recidivism. However, juvenile commitment programs serve youths with widely varying backgrounds, offending histories, and likelihood of continuing criminal activities, so a simple side-by-side comparison of recidivism rates of youths released from various programs does not indicate whether or not programs have *reduced* recidivism. In fact, such a method would unfairly penalize programs that serve the most challenging youths, and over-estimate the effectiveness of those serving relatively less difficult offenders. Outcome measures for juvenile justice facilities must take into consideration the likelihood of recidivism for the specific youths committed to each program.

Fortunately, it is possible to use statistical methods to predict, with substantial precision, the percentage of youths likely to recidivate based on the risk factors of the youth assigned to each program. The Bureau of Data and Research within the Florida Department of Juvenile Justice developed the expected success measure, which has received national recognition by the National Center for Juvenile Justice (NCJJ) under a National Institute of Justice program that identifies best practices in the use of juvenile justice data. The development of the PAM measures involved analysis of the records of 17,408 Florida youths in order to determine which factors best predict success, or non-recidivism. These factors are employed to calculate an “expected success rate” for the specific group of youths who attend each commitment program. (See Appendix 2 for details.)

The effectiveness of each program in promoting law-abiding behavior is measured by comparing the actual success rate of youths who complete the program to the expected success rate, based on the youth’s initial likelihood of recidivating. This model ensures that programs serving more difficult youths are not penalized unfairly due to the relatively high level of recidivism risk of the youths they serve, and provides a realistic measure of program effectiveness for those programs serving less challenging youths.

This year’s report builds upon the foundation of last year’s report by incorporating a confidence interval, or margin of error, for the expected recidivism measure. The expected success rate plus or minus the margin of error is referred to as the expected success range. Comparing observed success rates to the confidence interval allows policymakers to assess whether differences between observed and expected recidivism are statistically significant.

Each program’s cost per youth is also compared to the average cost per youth for all programs. The cost and effectiveness measures are combined to give each program a Program Accountability Measures (PAM) score, with a maximum of 100. (See Appendix 3 for details.)

Overview of the Report

Description of the Measures

Program Effectiveness Measures

The desired outcome of juvenile justice commitment programs is a reduction in recidivism. Since different programs serve youths with different probabilities of recidivating, evaluating programs based on recidivism rates alone does not indicate whether or not a program has *reduced* recidivism. Rather than simply compare programs in terms of their recidivism rates, the Program Accountability Measures (PAM) take into account the probability of recidivism for youths assigned to a program. To do so, data are used to calculate how well a program is expected to do, on the basis of the youths' probability of recidivism, plus or minus a margin of error. This value, referred to as the *expected success range*, is then compared to how well the program actually performed, or the *observed success rate*. For definitions of all terms used in the measures, please see Appendix 1. Details on the calculation of the expected success range can be found in Appendix 2.

Program Cost Measures

Each program's cost per youth is calculated by dividing total DJJ expenditures for the fiscal year by the number of youth completing the program in that year. Program cost per youth is compared to the cost per youth for all programs included in the report.

Combining Cost and Effectiveness Measures

As in previous reports, the Program Accountability Measures (PAM) score combines the cost and effectiveness measures, as described above, standardized across all DJJ commitment programs, with a maximum score of 100. For more on PAM computations including a step-by-step computation of the PAM score, please refer to Appendix 3.

Part 1: Tables and Charts by Restrictiveness Level

For the convenience of DJJ managers, who evaluate the effectiveness of programs within restrictiveness levels, this section presents effectiveness and cost measures and PAM scores by restrictiveness level.

Part 2: Tables and Charts by Effectiveness and Cost Categories

To provide a comprehensive overview, this section presents effectiveness and cost measures and PAM scores for all commitment programs, from the most effective to the least effective. Each program is categorized by its effectiveness and cost relative to all other commitment programs, regardless of restrictiveness level.

Categories of Program Effectiveness

Program effectiveness data are presented for the following categories.

- **Highly Effective Programs:** These programs are defined as having observed success rates that are 7% or more above the upper limit of the expected success range. This difference is great enough that we can be 99% confident that it would not occur by chance. The difference is statistically significant.

- **Effective Programs:** These programs are defined as having observed success rates that exceed the upper limit of the expected success range by 2% to 7%, and the difference is great enough that we can be 99% confident that it would not occur by chance. The difference is statistically significant.
- **Average Programs:** These programs are defined as having observed success rates that are within the expected success range, and thus not statistically significant, or less than 2% above or below the expected success range for the youth assigned to a program.
- **Below Average Programs:** These programs are defined as having observed success rates that are 2% to 7% lower than the lower limit of the expected success range, and we can be 99% confident that a difference of this size would not occur by chance. The difference is statistically significant.
- **Least Effective Programs:** These programs are defined as having observed success rates that are 7% or more below the lower limit of the range for expected success rates and the difference is great enough that we can be 99% confident that it would not occur by chance. The difference is statistically significant.

Program Cost Categories

Each program's cost per youth is compared to the cost per youth for all programs included in the report. In Section II, programs are classified as low-, medium-, or high-cost relative to all other programs within each of the five effectiveness categories. The distribution of program costs per youth is as follows.

- The cost of roughly one-third of all commitment programs is less than \$15,000 per youth. These programs are classified as "low cost".
- The cost is between \$15,000 and \$24,500 per youth for another third of the programs. These programs are classified as "moderate cost".
- The remaining programs cost over \$24,500 per youth and are classified as "high cost".

Data Preparation and Analysis

The DJJ Bureau of Data and Research compiled all data used for the computation of the expected success rate and the program accountability index, and conducted the regression analysis. Data were compiled from the Juvenile Justice Information System (JJIS), the Florida Department of Law Enforcement (FDLE) and the Florida Department of Corrections (DC). Dr. Aki Kamata of the Department of Educational Research at Florida State University developed the methodology and computed the confidence intervals, dependent on the number of youth released, for each program's observed and expected success rates.

To view the Program Accountability Measures report electronically, please visit our website at <http://www.djj.state.fl.us/RnD/>.

Part 1
Department of Juvenile Justice
Commitment Program
Cost and Effectiveness Measures by
Restrictiveness Level

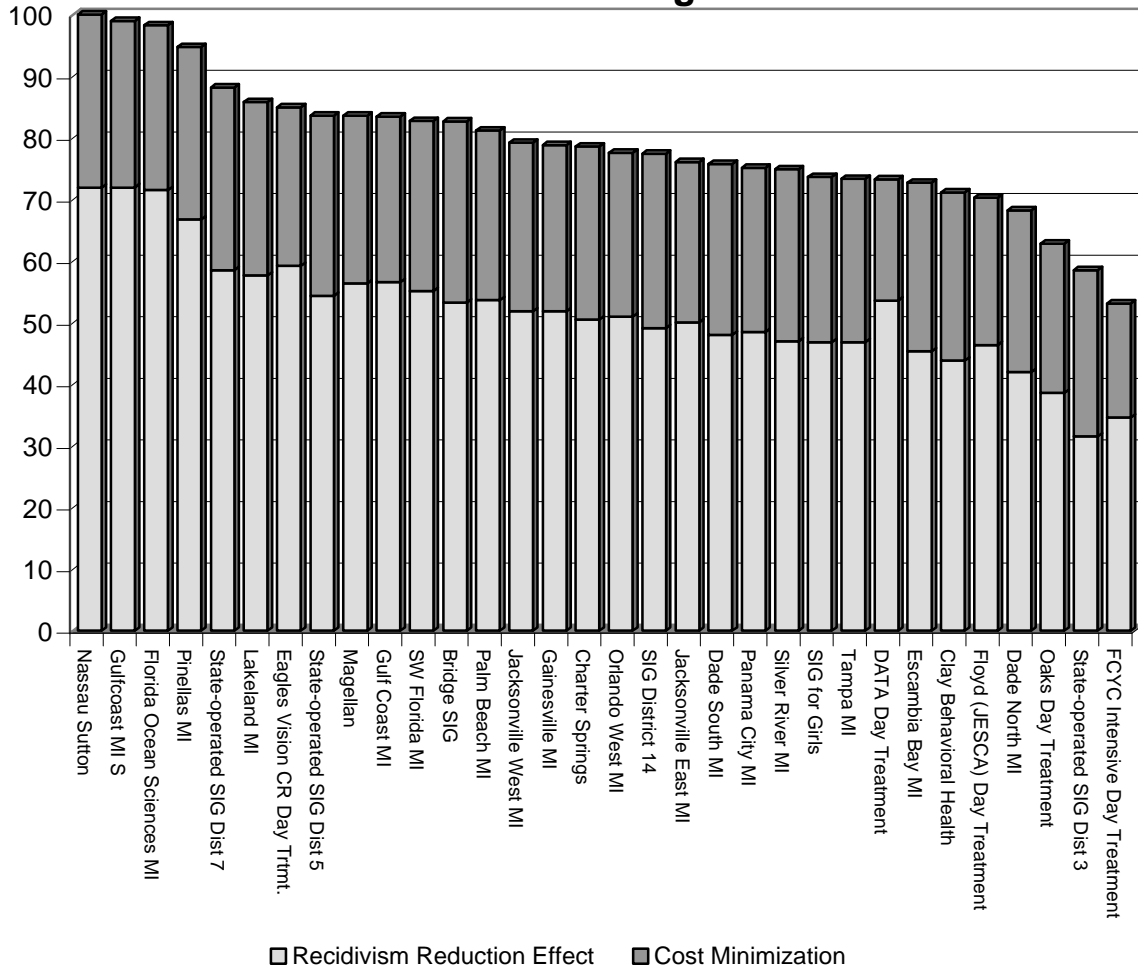
Tables and Charts

Mimumum-Risk Programs

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Highly Effective Programs (Success rates 7% or more above the expected range.)							
Sutton Place of Nassau SIG	17	82%	54% - 57%	26%	\$183,750	\$10,809	100
Gulfcoast Marine Institute South	19	89%	65% - 67%	22%	\$279,127	\$14,691	99
Florida Ocean Sciences Marine Institute	38	84%	60% - 62%	22%	\$597,167	\$15,715	98
Pinellas Marine Institute	39	74%	55% - 57%	17%	\$381,574	\$9,784	95
Special Intensive Group District 7	178	78%	66% - 68%	10%	\$536,747	\$3,015	88
Lakeland Marine Institute	32	75%	63% - 66%	9%	\$237,740	\$7,429	86
Crosswinds/Rainwater Day Treatment	30	87%	71% - 75%	11%	\$492,750	\$16,425	85
Magellan Case Management SIG	125	75%	64% - 67%	9%	\$1,348,192	\$10,786	84
Gulf Coast Marine Institute	23	74%	63% - 65%	9%	\$279,127	\$12,136	83
SW Florida Marine Institute	29	72%	63% - 65%	7%	\$252,657	\$8,712	83
DATA Day Treatment	18	78%	68% - 71%	7%	\$648,787	\$36,044	73
Effective Programs (Success rates 2% up to 7% above the expected range.)							
Special Intensive Group District 5	94	69%	60% - 63%	6.4%	\$285,625	\$3,039	84
The Bridge Special Intensive Group	250	74%	66% - 69%	5.4%	\$540,000	\$2,160	83
Palm Beach Marine Institute	51	75%	66% - 68%	6%	\$456,554	\$8,952	81
Jacksonville West Marine Institute	92	73%	66% - 68%	4.5%	\$856,232	\$9,307	79
Gainesville Marine Institute	32	66%	59% - 61%	4.6%	\$342,078	\$10,690	79
Charter Springs Intensive Work Program SIG	52	67%	62% - 64%	3.1%	\$321,308	\$6,179	79
Orlando West Marine Institute	67	70%	64% - 66%	3.7%	\$760,945	\$11,357	78
Jacksonville East Marine Institute	69	72%	67% - 70%	2.9%	\$870,178	\$12,611	76
Average Programs (Success rates within the expected success range or less than 2% above or below.)							
Special Intensive Group District 14	284	64%	60% - 62%	1.8%	\$1,309,728	\$4,612	77
Dade South Marine Institute	85	67%	63% - 66%	1.1%	\$598,003	\$7,035	76
Panama City Marine Institute	29	72%	68% - 71%	1.6%	\$317,518	\$10,949	75
Silver River Marine Institute	106	59%	57% - 59%	0%	\$604,975	\$5,707	75
Special Intensive Group for Girls	17	71%	69% - 74%	0%	\$159,018	\$9,354	74
Tampa Marine Institute	34	68%	66% - 69%	0%	\$353,800	\$10,406	73
Escambia Bay Marine Institute	81	62%	63% - 65%	-1.5%	\$559,031	\$6,902	73
JESCA Day Treatment	85	62%	61% - 64%	0%	\$1,655,640	\$19,478	70
Below Average Programs (Success rates 2% up to 7% below the expected range.)							
Clay Behavioral Health SIG	49	59%	62% - 64%	-3%	\$299,970	\$6,122	71
Dade North Marine Institute	59	53%	57% - 60%	-4.5%	\$546,602	\$9,264	68
Least Effective Programs (Success rates 7% or more below the expected range.)							
Oaks Day Treatment	81	54%	61% - 64%	-7%	\$1,314,000	\$16,222	63
Special Intensive Group District 3	57	49%	63% - 66%	-14%	\$156,131	\$2,739	59
Friends of CYF Intensive Day Treatment	19	42%	52% - 54%	-10%	\$657,000	\$34,579	53

*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Contribution of Cost and Effectiveness Measures to PAM Score, Minimum-Risk Programs

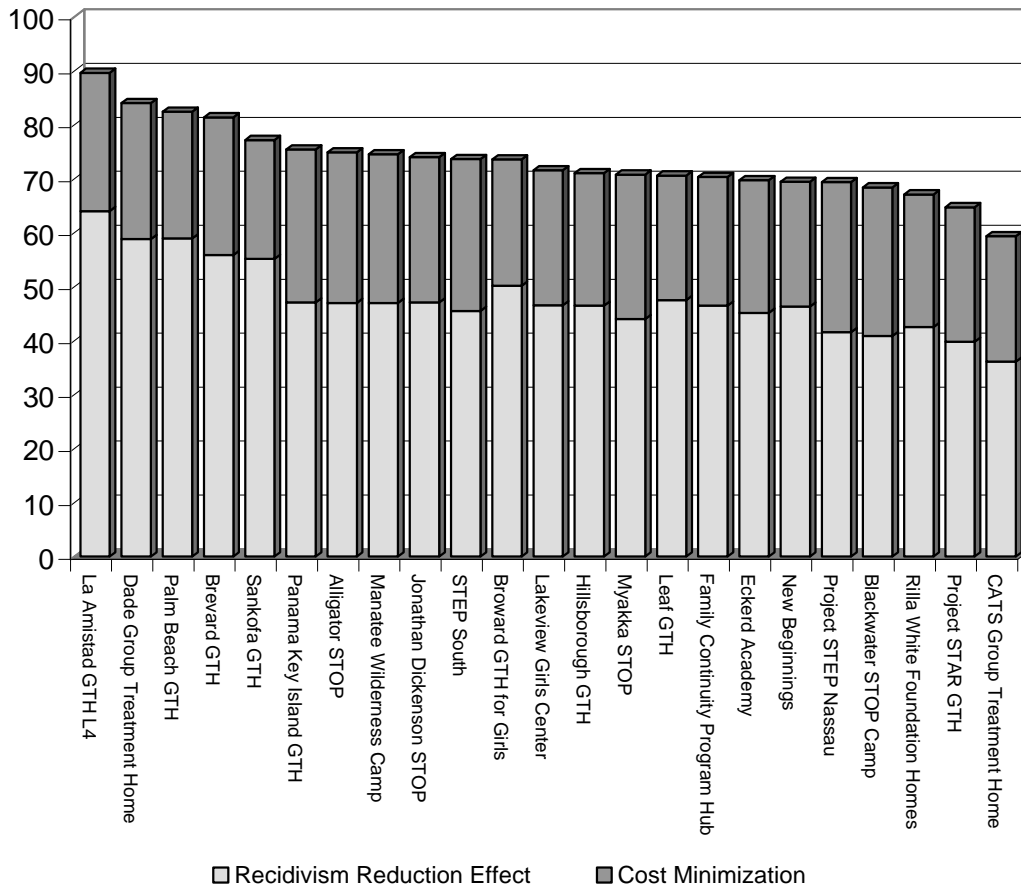


Low-Risk Programs

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Highly Effective Programs (Success rates 7% or more above the expected range.)							
La Amistad Group Treatment Home	24	54%	34% - 39%	16%	\$444,879	\$18,537	90
Dade Group Treatment Home	22	50%	35% - 39%	11%	\$388,650	\$17,666	84
Palm Beach Group Treatment Home	24	46%	30% - 35%	11%	\$578,680	\$24,112	82
Brevard Group Treatment Home	63	43%	30% - 35%	8%	\$1,054,340	\$16,736	81
Sankofa Group Treatment Home	32	59%	49% - 51%	8%	\$930,750	\$29,086	77
Effective Programs (Success rates 2% up to 7% above the expected range.)							
Broward Group Treatment Home for Girls	22	77%	69% - 74%	3.5%	\$496,400	\$22,564	74
Average Programs (Success rates within the expected success range or less than 2% above or below.)							
Panama Key Island Group Treatment Home	101	50%	50% - 52%	0%	\$438,000	\$4,337	75
Alligator Short-Term Offender Program	271	58%	58% - 61%	-0.2%	\$1,397,257	\$5,156	75
Manatee Wilderness Camp	200	55%	53% - 56%	0%	\$1,379,291	\$6,896	75
Jonathan Dickenson Short-Term Offender Progr	129	59%	57% - 59%	0%	\$1,097,100	\$8,505	74
STEP South	139	55%	57% - 59%	-1.6%	\$519,097	\$3,735	74
Lakeview Girls Center	42	71%	71% - 75%	0%	\$663,390	\$15,795	71
Hillsborough Group Treatment Home	40	30%	30% - 34%	-0.1%	\$688,470	\$17,212	71
Leaf Group Treatment Home PEMHS	43	74%	68% - 73%	1.2%	\$981,580	\$22,827	71
Family Continuity Program	135	45%	44% - 48%	0%	\$2,618,387	\$19,395	70
Eckerd Academy	147	53%	54% - 57%	-1.3%	\$2,409,000	\$16,388	70
New Beginnings	19	68%	65% - 70%	0%	\$415,140	\$21,849	69
Below Average Programs (Success rates 2% up to 7% below the expected range.)							
Myakka Short-Term Offender Program	152	49%	51% - 53%	-2.5%	\$1,375,781	\$9,051	71
Project STEP Nassau	464	57%	62% - 65%	-5.1%	\$1,739,293	\$3,748	69
Blackwater Short-Term Offender Program Cam	283	51%	56% - 59%	-5.7%	\$1,278,459	\$4,518	68
Rilla White Foundation Family Homes	155	56%	60% - 63%	-3.6%	\$2,466,174	\$15,911	67
Project Star Group Treatment Home	61	61%	67% - 72%	-6.1%	\$838,450	\$13,745	65
Least Effective Programs (Success rates 7% or more below the expected range.)							
CATS Group Treatment Home	42	57%	67% - 72%	-9%	\$743,550	\$17,704	59

*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Contribution of Cost and Effectiveness Measures to PAM Score, Low-Risk Programs

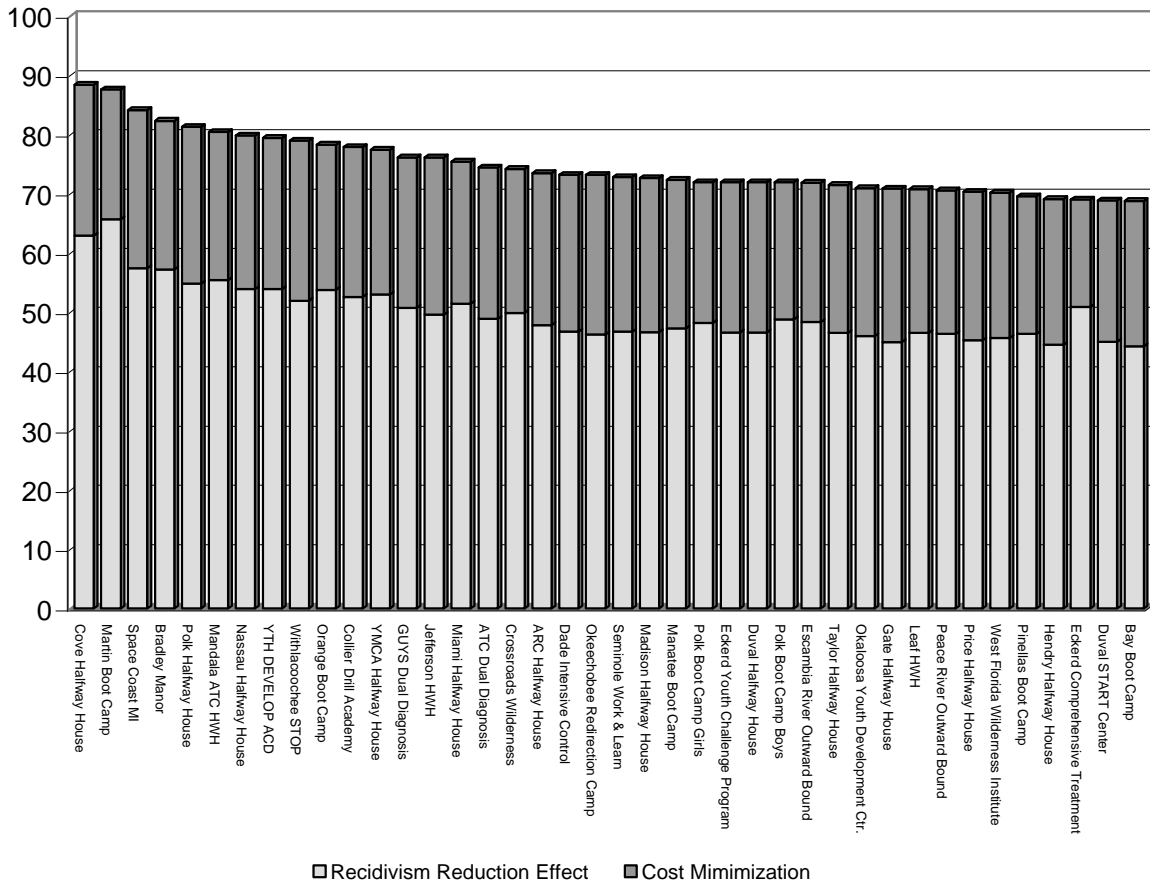


Moderate-Risk Programs

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Highly Effective Programs (Success rates 7% or more above the expected range.)							
Cove Halfway House	39	87%	68% - 73%	15%	\$711,033	\$18,232	88
Martin Boot Camp	75	81%	61% - 64%	17%	\$2,326,650	\$31,022	88
Space Coast Marine Institute	124	64%	52% - 54%	9%	\$1,549,875	\$12,499	84
Bradley Manor	72	46%	32% - 36%	10%	\$1,314,000	\$18,000	82
Polk Halfway House	103	62%	53% - 55%	7%	\$1,312,207	\$12,740	81
Mandala ATC Halfway House	66	58%	47% - 50%	8%	\$1,178,250	\$17,852	80
Effective Programs (Success rates 2% up to 7% above the expected range.)							
Nassau Halfway House	91	68%	59% - 62%	6.6%	\$1,354,980	\$14,890	80
Youth Development Academy	119	65%	56% - 58%	6.3%	\$1,795,684	\$15,090	79
Withlacoochee STOP	130	64%	57% - 59%	4.7%	\$1,370,498	\$10,542	79
Orange Boot Camp	75	63%	54% - 56%	6.5%	\$1,505,400	\$19,056	78
Collier Drill Academy	101	64%	57% - 59%	5.4%	\$1,642,500	\$16,262	78
YMCA Halfway House	45	82%	72% - 76%	5.9%	\$876,000	\$19,467	77
Grove Unique Youth Services Dual Diagnosis	72	63%	56% - 59%	3.7%	\$1,111,875	\$15,443	76
Jefferson Halfway House	100	60%	55% - 57%	2.6%	\$1,149,750	\$11,498	76
Miami Halfway House	81	63%	56% - 58%	4.5%	\$1,667,215	\$20,332	75
ATC Dual Diagnosis	155	59%	55% - 57%	2%	\$2,721,825	\$14,401	74
Crossroads Wilderness	92	61%	55% - 58%	3.4%	\$1,823,978	\$19,826	74
Polk Boot Camp Boys	133	60%	55% - 58%	2.4%	\$3,587,100	\$22,994	72
Eckerd Comprehensive Treatment Program	38	63%	55% - 58%	5.3%	\$1,606,000	\$42,263	69
Bridges Academy	20	80%	70% - 75%	5.3%	\$926,246	\$46,312	68
Forestry Youth Academy	37	73%	64% - 67%	6.3%	\$2,920,000	\$78,919	64
Camp E-Nini-Hassee	17	76%	67% - 72%	4.6%	\$2,194,513	\$129,089	62
Average Programs (Success rates within the expected success range or less than 2% above or below.)							
ARC Halfway House	210	60%	57% - 59%	1.2%	\$2,936,550	\$13,984	74
Dade Intensive Control	91	51%	48% - 51%	0%	\$976,467	\$10,730	73
Okeechobee Redirection Camp	250	57%	57% - 59%	-0.4%	\$2,265,556	\$9,062	73
Seminole Work and Learn Center	91	57%	57% - 59%	0%	\$1,085,400	\$11,927	73
Madison Halfway House	94	37%	33% - 37%	0%	\$1,149,750	\$12,231	73
Manatee Boot Camp	85	60%	57% - 59%	0.8%	\$1,505,400	\$16,187	72
Polk Boot Camp Girls	55	78%	72% - 76%	1.9%	\$1,184,750	\$21,156	72
Eckerd Youth Challenge Program	172	55%	54% - 56%	0%	\$2,473,448	\$14,381	72
Duval Halfway House	126	60%	60% - 63%	-0.1%	\$1,755,013	\$13,929	72
Escambia River Outward Bound	104	54%	49% - 52%	1.9%	\$2,235,881	\$21,499	72
Taylor Halfway House	89	53%	52% - 55%	0%	\$1,405,026	\$15,787	72
Okaloosa Youth Development Center	41	52%	52% - 55%	-0.6%	\$614,766	\$14,994	71
Gate Halfway House	78	44%	45% - 48%	-1.6%	\$938,510	\$12,032	71
Leaf Halfway House	88	72%	70% - 75%	0%	\$1,561,032	\$17,739	71
Peace River Outward Bound	97	42%	40% - 43%	0%	\$1,790,625	\$18,460	71
Price Halfway House	114	56%	57% - 60%	-1.1%	\$1,750,204	\$15,219	70
West Florida Wilderness Institute	94	59%	59% - 61%	-0.7%	\$1,642,500	\$17,289	70

*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Contribution of Cost and Effectiveness Measures to PAM Score, Moderate-Risk Programs

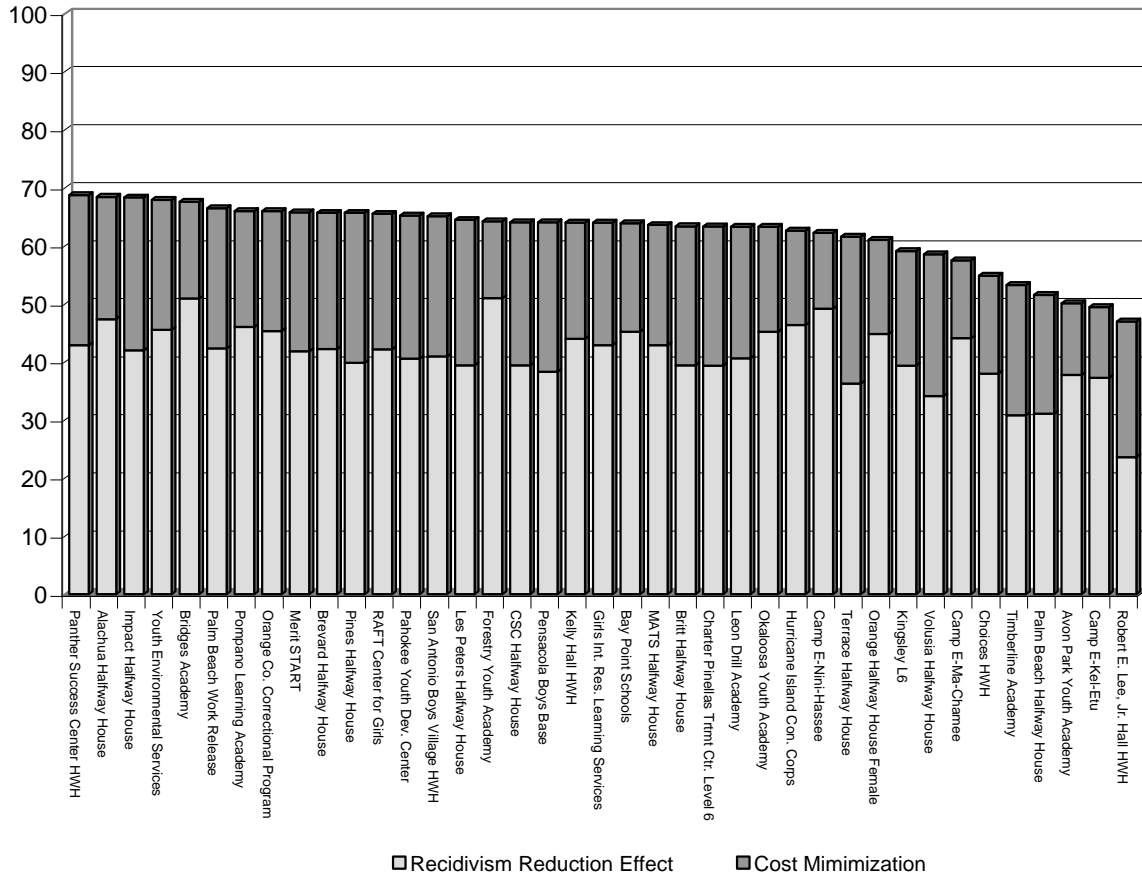


Moderate-Risk Programs, Continued

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Average Programs, Cont. (Success rates within the expected success range or less than 2% above or below.)							
Pinellas Boot Camp	105	50%	50% - 53%	0%	\$2,299,050	\$21,486	70
Hendry Halfway House	109	50%	52% - 54%	-1.8%	\$1,795,684	\$16,474	69
Duval START Center	103	43%	44% - 48%	-1.3%	\$1,946,677	\$18,900	69
Alachua Halfway House	55	78%	72% - 77%	1.4%	\$1,640,961	\$29,836	68
Youth Environmental Services	77	55%	55% - 57%	-0.6%	\$1,860,985	\$24,169	68
Pompano Learning Academy	55	53%	50% - 52%	0.4%	\$1,842,558	\$33,501	66
Orange County Correctional Program	38	55%	56% - 58%	-0.3%	\$1,186,034	\$31,211	66
Kelly Hall Halfway House	50	58%	60% - 62%	-1.6%	\$1,642,500	\$32,206	64
Bay Point Schools	165	60%	59% - 62%	0%	\$6,411,050	\$38,390	64
Okaloosa Youth Academy	23	52%	52% - 54%	0%	\$927,966	\$40,346	63
Hurricane Island Conservation Corps	40	59%	55% - 58%	1.4%	\$1,889,912	\$47,248	63
Orange Halfway House Female	45	69%	66% - 71%	0%	\$2,115,390	\$47,009	61
Camp E-Ma-Chamee	42	52%	49% - 52%	0.1%	\$2,648,840	\$63,068	57
Below Average Programs (Success rates 2% up to 7% below the expected range.)							
Bay Boot Camp	82	54%	56% - 58%	-2%	\$1,505,400	\$16,543	69
Panther Success Center Halfway House	112	50%	53% - 56%	-3.4%	\$1,314,000	\$11,732	69
Impact Halfway House	142	54%	58% - 60%	-4.3%	\$1,368,750	\$9,639	68
Palm Beach Work Release	80	57%	61% - 64%	-3.8%	\$1,357,580	\$16,970	66
Merit START	59	29%	33% - 37%	-4.2%	\$1,057,062	\$17,916	66
Brevard Halfway House	81	67%	70% - 75%	-3.7%	\$1,601,948	\$19,777	66
Pines Halfway House	81	63%	69% - 74%	-6.2%	\$867,526	\$10,710	66
RAFT Center for Girls	49	67%	71% - 76%	-3.8%	\$1,018,146	\$19,964	66
Pahokee Youth Development Center	1097	47%	52% - 55%	-5.3%	\$16,916,759	\$15,393	65
San Antonio Boys Village Halfway House	83	41%	46% - 49%	-5.1%	\$1,350,025	\$16,265	65
Leslie Peters Halfway House	142	48%	55% - 57%	-6.7%	\$1,791,681	\$12,617	64
CSC Halfway House	91	43%	49% - 52%	-6.5%	\$1,314,000	\$14,440	64
Girls Intensive Residential Learning Services	30	63%	66% - 71%	-2.5%	\$867,394	\$28,913	64
MATS Halfway House	90	50%	52% - 55%	-2.4%	\$2,737,500	\$30,417	64
Britt Halfway House	84	45%	51% - 54%	-6.3%	\$1,452,682	\$17,090	63
Charter Pinellas Treatment Center	64	63%	69% - 74%	-6.4%	\$1,116,125	\$17,171	63
Leon Drill Academy	153	50%	55% - 57%	-5%	\$3,762,075	\$22,000	63
Kingsley Center	41	66%	72% - 76%	-5.7%	\$1,324,997	\$32,317	59
Choices Halfway House	17	59%	65% - 70%	-6.1%	\$735,600	\$43,271	55
Avon Park Youth Academy	54	56%	61% - 64%	-5.3%	\$4,470,489	\$81,282	50
Camp E-Kel-Etu	29	45%	51% - 53%	-5.9%	\$3,113,617	\$107,366	49
Least Effective Programs (Success rates 7% or more below the expected range.)							
Pensacola Boys Base	144	51%	59% - 61%	-8%	\$1,494,762	\$10,380	64
Terrace Halfway House	82	41%	51% - 53%	-10%	\$872,250	\$10,637	62
Volusia Halfway House	120	40%	52% - 54%	-12%	\$1,489,193	\$12,410	59
Timberline Academy	40	53%	67% - 72%	-14%	\$777,150	\$19,429	53
Palm Beach Halfway House	72	31%	44% - 47%	-14%	\$1,865,703	\$25,913	52
Robert E. Lee, Jr. Hall Halfway House	78	29%	51% - 53%	-21%	\$867,750	\$11,125	47

*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Contribution of Cost and Effectiveness Measures to PAM Scores for Programs with Average Effectiveness: Moderate-Risk, Continued



High-Risk Programs

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Highly Effective Programs (Success rates 7% or more above the expected range.)							
Tiger Success Serious Habitual Offender Progra	47	70%	55% - 58%	13%	\$1,370,625	\$29,162	82
Vernon Place	65	94%	74% - 78%	15%	\$2,920,000	\$44,923	81
Florida Evironmental Institute	33	73%	57% - 60%	12%	\$1,700,743	\$51,538	75
Elaine Gordon Treatment Center	22	82%	65% - 69%	13%	\$3,659,826	\$152,493	73
Mantatee Adolescent Treatment Sex Offender P	47	79%	64% - 67%	11%	\$2,768,421	\$56,498	72
Effective Programs (Success rates 2% up to 7% above the expected range.)							
Palm Beach Youth Center	35	66%	57% - 60%	5.7%	\$1,351,522	\$38,615	71
Glen Mills School	165	67%	61% - 64%	2.7%	\$6,409,423	\$38,845	67
CSC Serious Habitual Offender Program	49	55%	50% - 53%	2.3%	\$2,409,104	\$49,165	63
Everglades Youth Development Center	111	61%	56% - 59%	2.1%	\$5,517,535	\$49,264	63
Dozier Training School for Boys	235	63%	57% - 59%	3.4%	\$17,917,977	\$75,286	61
Average Programs (Success rates within the expected success range or less than 2% above or below.)							
ARC Intensive Halfway House	45	58%	54% - 57%	0.7%	\$1,176,860	\$26,152	69
Big Cypress Wilderness Institute	67	55%	55% - 58%	-0.2%	\$1,907,125	\$28,465	67
Charter Pinellas Treatment Center	109	73%	68% - 73%	0.1%	\$3,432,350	\$30,646	67
Marion Youth Development Center	146	54%	55% - 57%	-0.8%	\$4,899,989	\$33,562	65
Broward Intensive Halfway House	65	52%	51% - 54%	0%	\$2,615,342	\$40,236	63
NAFI Serious Habitual Offender Program	51	61%	57% - 60%	1.2%	\$2,325,050	\$44,713	63
Eckerd Youth Development Center	256	55%	55% - 57%	0%	\$15,838,206	\$61,627	57
Hillsborough Academy Intensive Res. Trtmt.	17	29%	25% - 30%	0%	\$2,007,500	\$111,528	57
Below Average Programs (Success rates 2% up to 7% below the expected range.)							
Greenville Academy	65	52%	55% - 57%	-2.2%	\$1,387,000	\$21,338	67
PATH Intensive Halfway House	32	47%	50% - 52%	-2.9%	\$693,500	\$21,672	66
Kingsley Center	73	67%	70% - 75%	-2.5%	\$2,020,952	\$26,946	65
Polk Youth Development Center	580	53%	56% - 58%	-2.7%	\$17,076,084	\$29,190	64
Panther Success Center Intensive Halfway Hous	73	48%	55% - 57%	-6.8%	\$1,664,400	\$22,800	61
Marion Intensive Treatment Facility	86	51%	56% - 58%	-4.4%	\$3,295,468	\$37,449	59
Hillsborough Alternative Residential Program	23	48%	51% - 54%	-3%	\$1,204,500	\$52,370	56
ARC Serious Habitual Offender Program	38	47%	53% - 55%	-5.2%	\$1,898,000	\$49,947	54
Least Effective Programs (Success rates 7% or more below the expected range.)							
CSC Intensive Halfway House	69	42%	51% - 53%	-9%	\$1,387,000	\$20,101	60
Youth Academy	59	46%	54% - 56%	-8%	\$1,733,750	\$26,673	58
Eckerd Intensive Halfway House	62	44%	52% - 55%	-9%	\$2,032,676	\$32,785	55
NAFI Intensive Halfway House	42	40%	58% - 60%	-17%	\$1,038,920	\$24,736	48
Jackson Juvenile Offender Correctional Center	23	43%	52% - 55%	-9%	\$4,222,125	\$183,571	46
Hillsborough Serious Habitual Offender Program	51	37%	51% - 54%	-14%	\$2,367,572	\$46,423	44

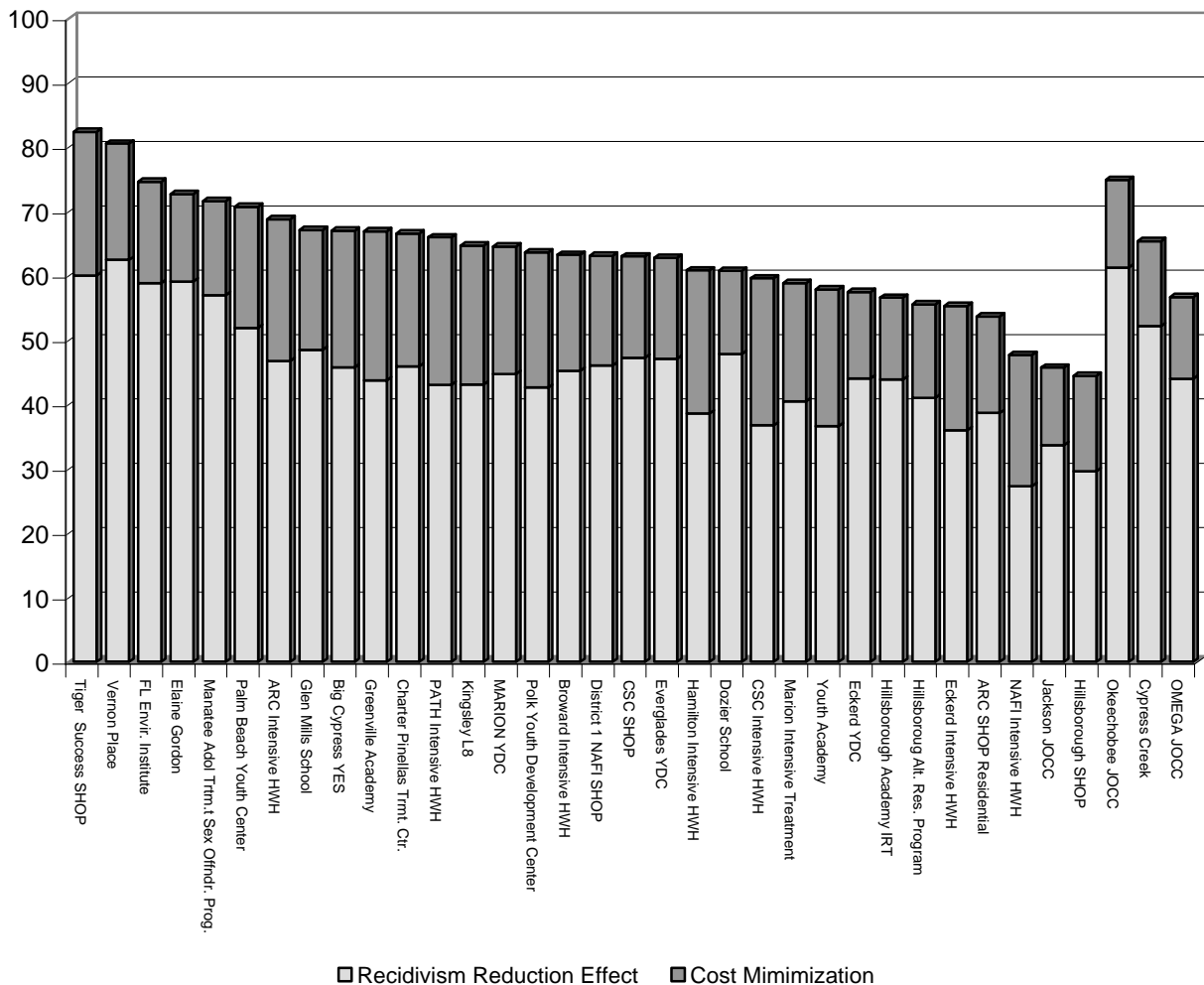
*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Maximum-Risk Programs

	N	Observed Success Rate	Expected Success Range*	% Above or Below Expected	Expenditures Over 2 Years	Cost per Youth	PAM Score
Highly Effective Programs (Success rates 7% or more above the expected range.)							
Okeechobee Juv. Offender Correctional Ctr.	44	77%	59% - 62%	15%	\$6,693,923	\$152,135	75
Cypress Creek	57	72%	61% - 65%	7%	\$5,348,931	\$93,841	65
Average Programs (Success rates within the expected success range or less than 2% above or below.)							
OMEGA Juvenile Correctional Center	46	63%	59% - 63%	0.1%	\$4,635,500	\$96,573	57

*Rounded to the nearest 1%. The percent above or below expected may differ by less than 1% due to rounding.

Contribution of Cost and Effectiveness Measures to PAM Score, High-Risk & Maximum Risk Programs



Part 2

Department of Juvenile Justice

Commitment Program Results

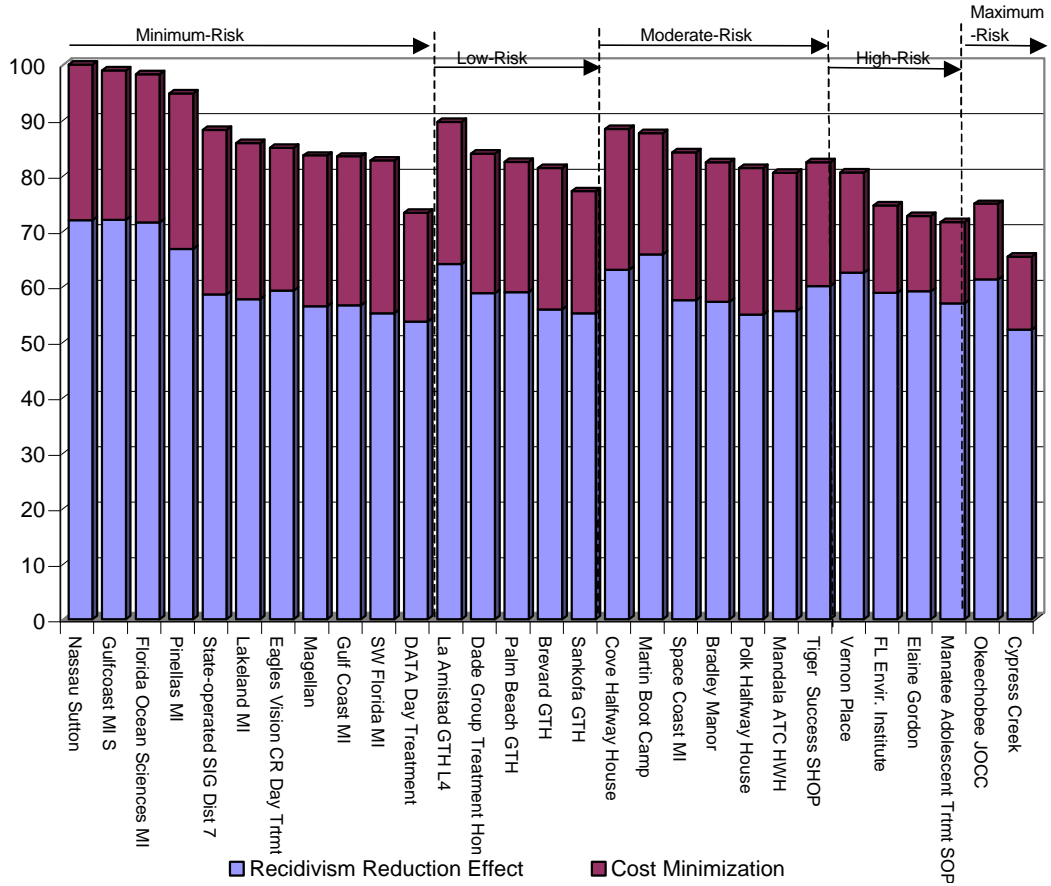
by Effectiveness and Cost Category

Tables and Charts

Highly Effective Programs

Level	N	Effectiveness Measures			Cost Measures		PAM Score
		Observed Success Rate	Expected Success Range	% Above Expected	Expenditures	Cost per Youth	
Low Cost							
2	17	82%	54% - 57%	26%	\$183,750	\$10,809	100
2	19	89%	65% - 67%	22%	\$279,127	\$14,691	99
2	39	74%	55% - 57%	17%	\$381,574	\$9,784	95
2	178	78%	66% - 68%	10%	\$536,747	\$3,015	88
2	32	75%	63% - 66%	9%	\$237,740	\$7,429	86
6	124	64%	52% - 54%	9%	\$1,549,875	\$12,499	84
2	125	75%	64% - 67%	9%	\$1,348,192	\$10,786	84
2	23	74%	63% - 65%	9%	\$279,127	\$12,136	83
2	29	72%	63% - 65%	7%	\$252,657	\$8,712	83
6	103	62%	53% - 55%	7%	\$1,312,207	\$12,740	81
Moderate Cost							
2	38	84%	60% - 62%	22%	\$597,167	\$15,715	98
4	24	54%	34% - 39%	16%	\$444,879	\$18,537	90
6	39	87%	68% - 73%	15%	\$711,033	\$18,232	88
2	30	87%	71% - 75%	11%	\$492,750	\$16,425	85
4	22	50%	35% - 39%	11%	\$388,650	\$17,666	84
4	24	46%	30% - 35%	11%	\$578,680	\$24,112	82
6	72	46%	32% - 36%	10%	\$1,314,000	\$18,000	82
4	63	43%	30% - 35%	8%	\$1,054,340	\$16,736	81
6	66	58%	47% - 50%	8%	\$1,178,250	\$17,852	80
High Cost							
6	75	81%	61% - 64%	17%	\$2,326,650	\$31,022	88
8	47	70%	55% - 58%	13%	\$1,370,625	\$29,162	82
8	65	94%	74% - 78%	15%	\$2,920,000	\$44,923	81
4	32	59%	49% - 51%	8%	\$930,750	\$29,086	77
10	44	77%	59% - 62%	15%	\$6,693,923	\$152,135	75
8	33	73%	57% - 60%	12%	\$1,700,743	\$51,538	75
2	18	78%	68% - 71%	7%	\$648,787	\$36,044	73
8	22	82%	65% - 69%	13%	\$3,659,826	\$152,493	73
8	47	79%	64% - 67%	11%	\$2,768,421	\$56,498	72
10	57	72%	61% - 65%	7%	\$5,348,931	\$93,841	65

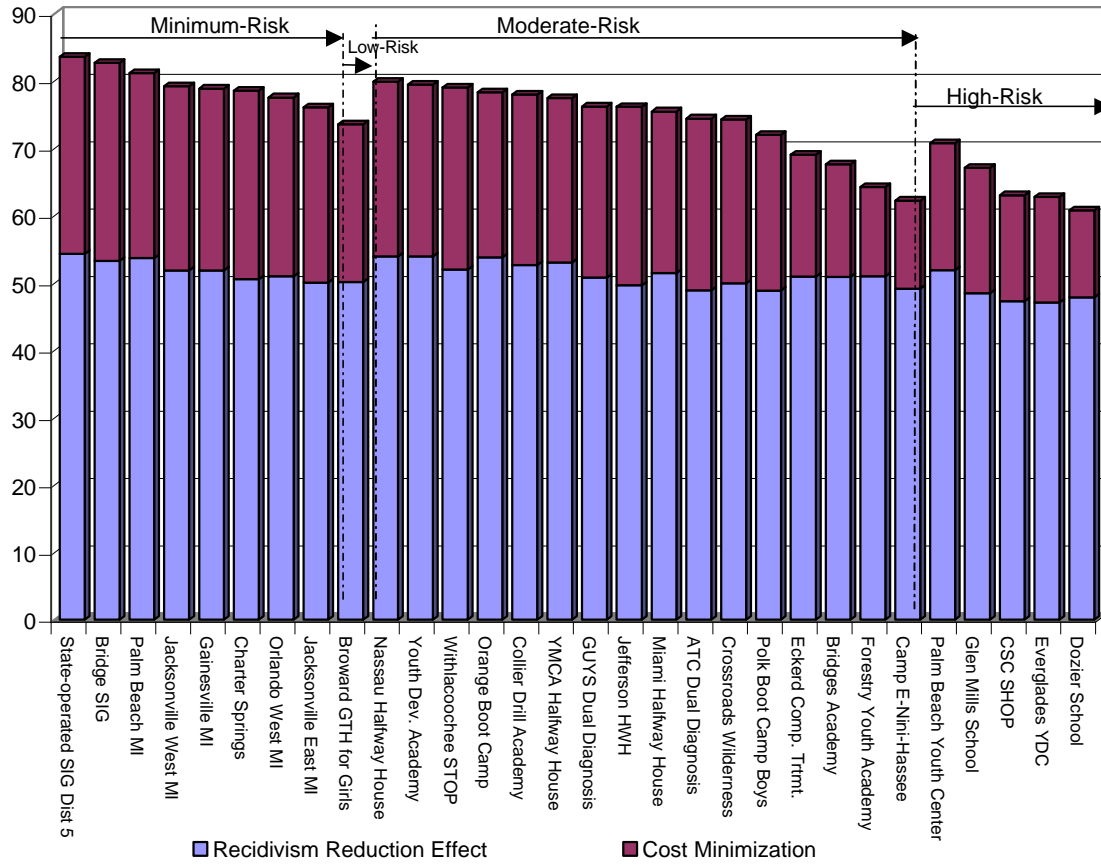
Contribution of Cost and Effectiveness Measures to PAM Scores for Highly Effective Programs



Effective Programs

Level	Effectiveness Measures				Cost Measures		PAM Score	
	N	Observed	Expected	% Above Expected	Expenditures	Cost per Youth		
		Success Rate	Success Range					
Low Cost								
2	Special Intensive Group District 5	94	69%	60% - 63%	6.4%	\$285,625	\$3,039	84
2	The Bridge Special Intensive Group	250	74%	66% - 69%	5.4%	\$540,000	\$2,160	83
2	Palm Beach Marine Institute	51	75%	66% - 68%	6%	\$456,554	\$8,952	81
6	Nassau Halfway House	91	68%	59% - 62%	6.6%	\$1,354,980	\$14,890	80
2	Jacksonville West Marine Institute	92	73%	66% - 68%	4.5%	\$856,232	\$9,307	79
6	Withlacoochee STOP	130	64%	57% - 59%	4.7%	\$1,370,498	\$10,542	79
2	Gainesville Marine Institute	32	66%	59% - 61%	4.6%	\$342,078	\$10,690	79
2	Charter Springs Intensive Work Program SIG	52	67%	62% - 64%	3.1%	\$321,308	\$6,179	79
2	Orlando West Marine Institute	67	70%	64% - 66%	3.7%	\$760,945	\$11,357	78
6	Jefferson Halfway House	100	60%	55% - 57%	2.6%	\$1,149,750	\$11,498	76
2	Jacksonville East Marine Institute	69	72%	67% - 70%	2.9%	\$870,178	\$12,611	76
6	ATC Dual Diagnosis	155	59%	55% - 57%	2%	\$2,721,825	\$14,401	74
Moderate Cost								
6	Youth Development Academy	119	65%	56% - 58%	6.3%	\$1,795,684	\$15,090	79
6	Orange Boot Camp	75	63%	54% - 56%	6.5%	\$1,505,400	\$19,056	78
6	Collier Drill Academy	101	64%	57% - 59%	5.4%	\$1,642,500	\$16,262	78
6	YMCA Halfway House	45	82%	72% - 76%	5.9%	\$876,000	\$19,467	77
6	Grove Unique Youth Services Dual Diagnosis	72	63%	56% - 59%	3.7%	\$1,111,875	\$15,443	76
6	Miami Halfway House	81	63%	56% - 58%	4.5%	\$1,667,215	\$20,332	75
6	Crossroads Wilderness	92	61%	55% - 58%	3.4%	\$1,823,978	\$19,826	74
4	Broward Group Treatment Home for Girls	22	77%	69% - 74%	3.5%	\$496,400	\$22,564	74
6	Polk Boot Camp Boys	133	60%	55% - 58%	2.4%	\$3,587,100	\$22,994	72
High Cost								
8	Palm Beach Youth Center	35	66%	57% - 60%	5.7%	\$1,351,522	\$38,615	71
6	Eckerd Comprehensive Treatment Program	38	63%	55% - 58%	5.3%	\$1,606,000	\$42,263	69
6	Bridges Academy	20	80%	70% - 75%	5.3%	\$926,246	\$46,312	68
8	Glen Mills School	165	67%	61% - 64%	2.7%	\$6,409,423	\$38,845	67
6	Forestry Youth Academy	37	73%	64% - 67%	6.3%	\$2,920,000	\$78,919	64
8	CSC Serious Habitual Offender Program	49	55%	50% - 53%	2.3%	\$2,409,104	\$49,165	63
8	Everglades Youth Development Center	111	61%	56% - 59%	2.1%	\$5,517,535	\$49,264	63
6	Camp E-Nini-Hassee	17	76%	67% - 72%	4.6%	\$2,194,513	\$129,089	62
8	Dozier Training School for Boys	235	63%	57% - 59%	3.4%	\$17,917,977	\$75,286	61

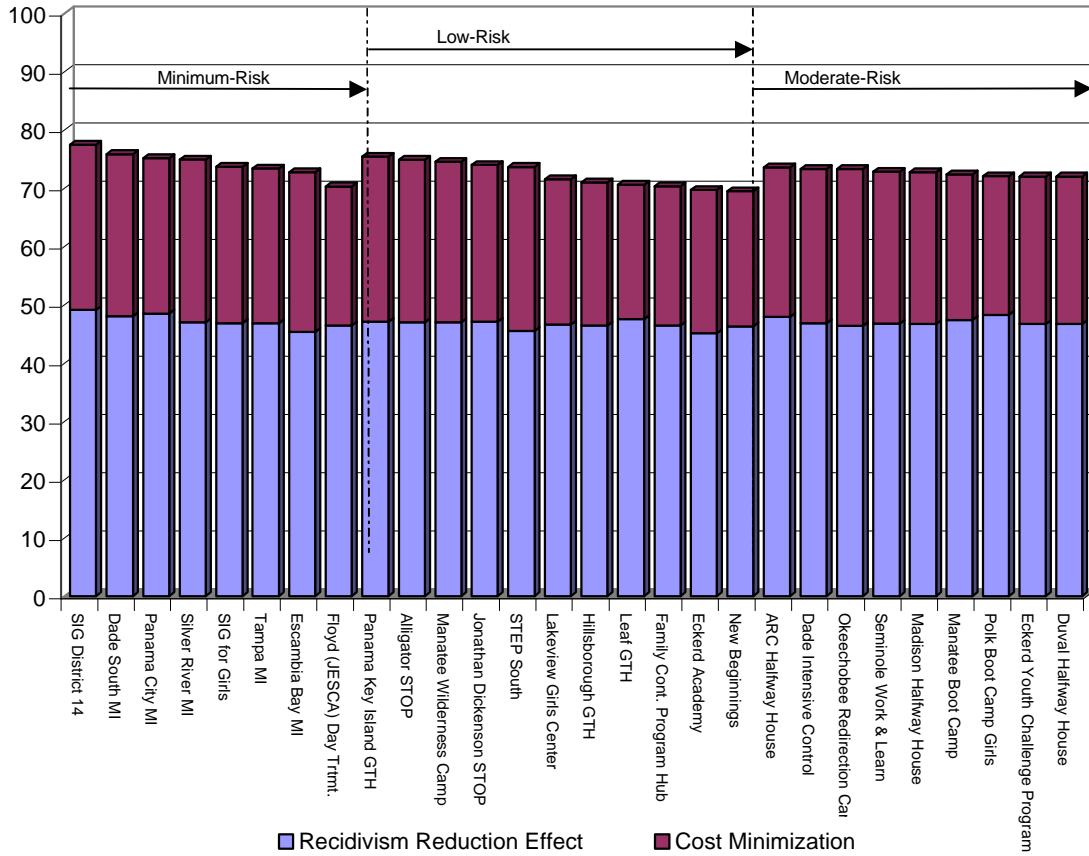
Contribution of Cost and Effectiveness Measures to PAM Scores for Effective Programs



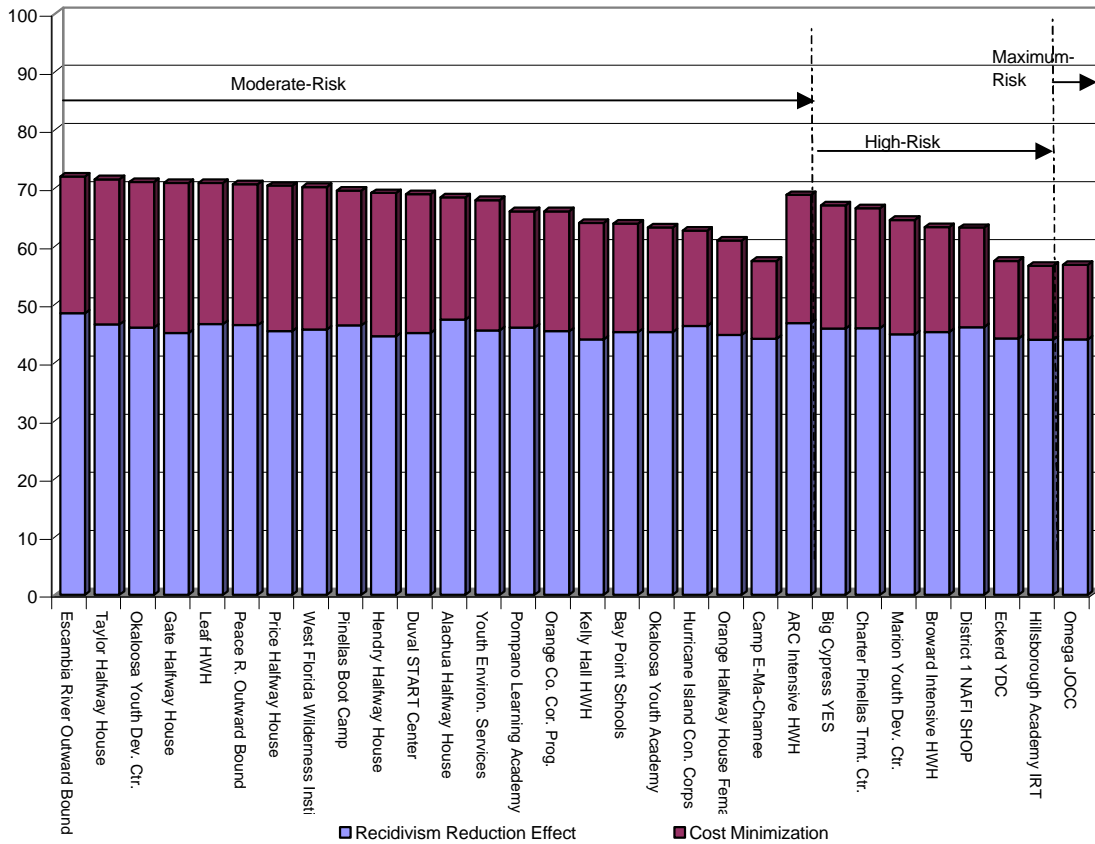
Average Programs

Level	N	Effectiveness Measures			Cost Measures		PAM Score
		Observed Success Rate	Expected Success Range	% Above or Below Expected	Expenditures	Cost per Youth	
Low Cost							
2	284	64%	60% - 62%	1.8%	\$1,309,728	\$4,612	77
2	85	67%	63% - 66%	1.1%	\$598,003	\$7,035	76
4	101	50%	50% - 52%	0%	\$438,000	\$4,337	75
2	29	72%	68% - 71%	1.6%	\$317,518	\$10,949	75
2	106	59%	57% - 59%	0%	\$604,975	\$5,707	75
4	271	58%	58% - 61%	-0.2%	\$1,397,257	\$5,156	75
4	200	55%	53% - 56%	0%	\$1,379,291	\$6,896	75
4	129	59%	57% - 59%	0%	\$1,097,100	\$8,505	74
2	17	71%	69% - 74%	0%	\$159,018	\$9,354	74
4	139	55%	57% - 59%	-1.6%	\$519,097	\$3,735	74
6	210	60%	57% - 59%	1.2%	\$2,936,550	\$13,984	74
2	34	68%	66% - 69%	0%	\$353,800	\$10,406	73
6	91	51%	48% - 51%	0%	\$976,467	\$10,730	73
6	250	57%	57% - 59%	-0.4%	\$2,265,556	\$9,062	73
6	91	57%	57% - 59%	0%	\$1,085,400	\$11,927	73
2	81	62%	63% - 65%	-1.5%	\$559,031	\$6,902	73
6	94	37%	33% - 37%	0%	\$1,149,750	\$12,231	73
6	172	55%	54% - 56%	0%	\$2,473,448	\$14,381	72
6	126	60%	60% - 63%	-0.1%	\$1,755,013	\$13,929	72
6	41	52%	52% - 55%	-0.6%	\$614,766	\$14,994	71
6	78	44%	45% - 48%	-1.6%	\$938,510	\$12,032	71
Moderate Cost							
6	85	60%	57% - 59%	0.8%	\$1,505,400	\$16,187	72
6	55	78%	72% - 76%	1.9%	\$1,184,750	\$21,156	72
6	104	54%	49% - 52%	1.9%	\$2,235,881	\$21,499	72
6	89	53%	52% - 55%	0%	\$1,405,026	\$15,787	72
4	42	71%	71% - 75%	0%	\$663,390	\$15,795	71
4	40	30%	30% - 34%	-0.1%	\$688,470	\$17,212	71
6	88	72%	70% - 75%	0%	\$1,561,032	\$17,739	71
6	97	42%	40% - 43%	0%	\$1,790,625	\$18,460	71
4	43	74%	68% - 73%	1.2%	\$981,580	\$22,827	71
6	114	56%	57% - 60%	-1.1%	\$1,750,204	\$15,219	70
4	135	45%	44% - 48%	0%	\$2,618,387	\$19,395	70
2	85	62%	61% - 64%	0%	\$1,655,640	\$19,478	70
6	94	59%	59% - 61%	-0.7%	\$1,642,500	\$17,289	70
4	147	53%	54% - 57%	-1.3%	\$2,409,000	\$16,388	70
6	105	50%	50% - 53%	0%	\$2,299,050	\$21,486	70
4	19	68%	65% - 70%	0%	\$415,140	\$21,849	69
6	109	50%	52% - 54%	-1.8%	\$1,795,684	\$16,474	69
6	103	43%	44% - 48%	-1.3%	\$1,946,677	\$18,900	69
6	77	55%	55% - 57%	-0.6%	\$1,860,985	\$24,169	68
High Cost							
8	45	58%	54% - 57%	0.7%	\$1,176,860	\$26,152	69
6	55	78%	72% - 77%	1.4%	\$1,640,961	\$29,836	68
8	67	55%	55% - 58%	-0.2%	\$1,907,125	\$28,465	67
8	109	73%	68% - 73%	0.1%	\$3,432,350	\$30,646	67
6	55	53%	50% - 52%	0.4%	\$1,842,558	\$33,501	66
6	38	55%	56% - 58%	-0.3%	\$1,186,034	\$31,211	66
8	146	54%	55% - 57%	-0.8%	\$4,899,989	\$33,562	65
6	50	58%	60% - 62%	-1.6%	\$1,642,500	\$32,206	64
6	165	60%	59% - 62%	0%	\$6,411,050	\$38,390	64
8	65	52%	51% - 54%	0%	\$2,615,342	\$40,236	63
6	23	52%	52% - 54%	0%	\$927,966	\$40,346	63
8	51	61%	57% - 60%	1.2%	\$2,325,050	\$44,713	63
6	40	59%	55% - 58%	1.4%	\$1,889,912	\$47,248	63
6	45	69%	66% - 71%	0%	\$2,115,390	\$47,009	61
8	256	55%	55% - 57%	0%	\$15,838,206	\$61,627	57
6	42	52%	49% - 52%	0.1%	\$2,648,840	\$63,068	57
10	46	63%	59% - 63%	0.1%	\$4,635,500	\$96,573	57
8	17	29%	25% - 30%	0%	\$2,007,500	\$111,528	57

Contribution of Cost and Effectiveness Measures to PAM Scores for Average Programs, Minimum-Risk through Moderate-Risk



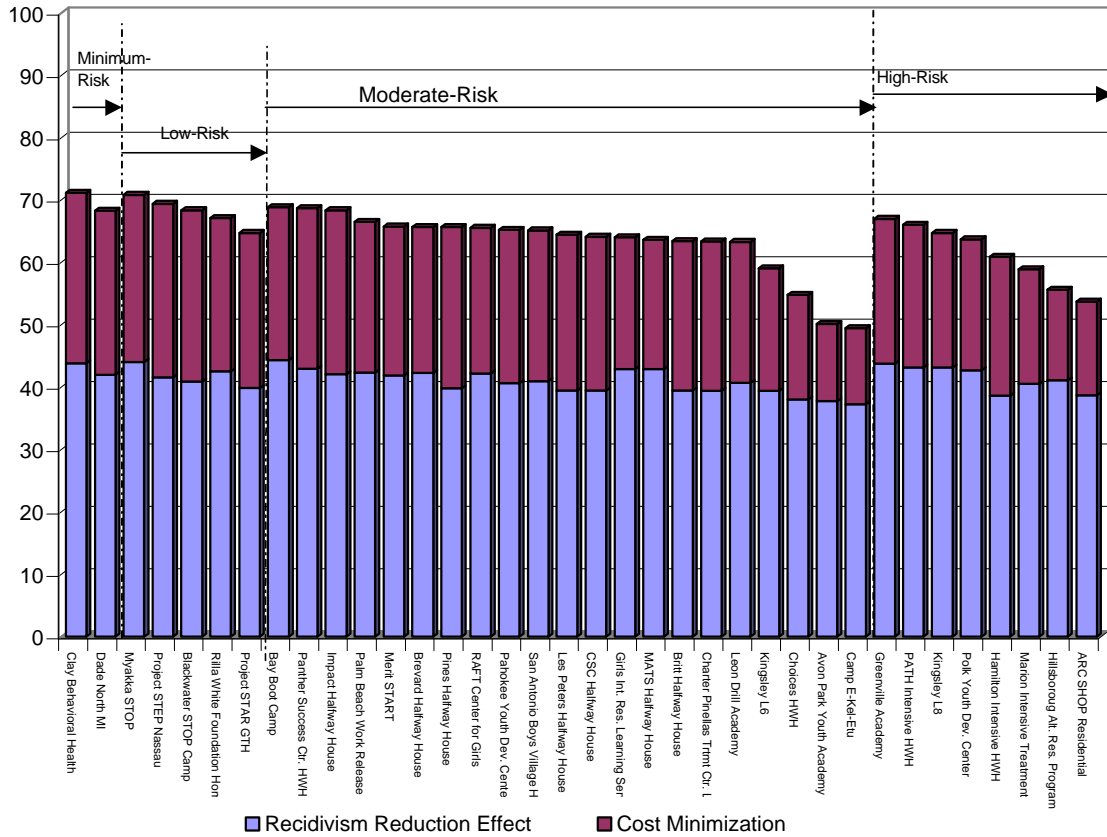
Contribution of Cost and Effectiveness Measures to PAM Scores for Programs with Average Effectiveness, Moderate through Maximum-Risk



Below Average Programs

Level	N	Effectiveness Measures			Cost Measures		PAM Score	
		Observed Success Rate	Expected Success Range	% Below Expected	Expenditures	Cost per Youth		
Low Cost								
2	Clay Behavioral Health SIG	49	59%	62% - 64%	-3%	\$299,970	\$6,122	71
4	Myakka Short-Term Offender Program	152	49%	51% - 53%	-2.5%	\$1,375,781	\$9,051	71
4	Project STEP Nassau	464	57%	62% - 65%	-5.1%	\$1,739,293	\$3,748	69
6	Panther Success Center Halfway House	112	50%	53% - 56%	-3.4%	\$1,314,000	\$11,732	69
4	Blackwater Short-Term Offender Program	283	51%	56% - 59%	-5.7%	\$1,278,459	\$4,518	68
6	Impact Halfway House	142	54%	58% - 60%	-4.3%	\$1,368,750	\$9,639	68
2	Dade North Marine Institute	59	53%	57% - 60%	-4.5%	\$546,602	\$9,264	68
6	Pines Halfway House	81	63%	69% - 74%	-6.2%	\$867,526	\$10,710	66
4	Project Star Group Treatment Home	61	61%	67% - 72%	-6.1%	\$838,450	\$13,745	65
6	Leslie Peters Halfway House	142	48%	55% - 57%	-6.7%	\$1,791,681	\$12,617	64
6	CSC Halfway House			- 52%	6	14,000	440	
Moderate Cost								
6	Bay Boot Camp	82	54%	56% - 58%	-2%	\$1,505,400	\$16,543	69
4	Rilla White Foundation Family Homes	155	56%	60% - 63%	-3.6%	\$2,466,174	\$15,911	67
8	Greenville Academy	65	52%	55% - 57%	-2.2%	\$1,387,000	\$21,338	67
6	Palm Beach Work Release	80	57%	61% - 64%	-3.8%	\$1,357,580	\$16,970	66
8	PATH Intensive Halfway House	32	47%	50% - 52%	-2.9%	\$693,500	\$21,672	66
6	Merit START	59	29%	33% - 37%	-4.2%	\$1,057,062	\$17,916	66
6	Brevard Halfway House	81	67%	70% - 75%	-3.7%	\$1,601,948	\$19,777	66
6	RAFT Center for Girls	49	67%	71% - 76%	-3.8%	\$1,018,146	\$19,964	66
6	Pahokee Youth Development Center	1097	47%	52% - 55%	-5.3%	\$16,916,759	\$15,393	65
6	San Antonio Boys Village Halfway House	83	41%	46% - 49%	-5.1%	\$1,350,025	\$16,265	65
6	Britt Halfway House	84	45%	51% - 54%	-6.3%	\$1,452,682	\$17,090	63
6	Charter Pinellas Treatment Center	64	63%	69% - 74%	-6.4%	\$1,116,125	\$17,171	63
6	Leon Drill Academy	153	50%	55% - 57%	-5%	\$3,762,075	\$22,000	63
8	Panther Success Center Intensive Hall	73	48%	55% - 57%	-6.8%	\$1,664,400	\$22,800	61
High Cost								
8	Kingsley Center	73	67%	70% - 75%	-2.5%	\$2,020,952	\$26,946	65
6	Girls Intensive Residential Learning Site	30	63%	66% - 71%	-2.5%	\$867,394	\$28,913	64
8	Polk Youth Development Center	580	53%	56% - 58%	-2.7%	\$17,076,084	\$29,190	64
6	MATS Halfway House	90	50%	52% - 55%	-2.4%	\$2,737,500	\$30,417	64
6	Kingsley Center	41	66%	72% - 76%	-5.7%	\$1,324,997	\$32,317	59
8	Marion Intensive Treatment Facility	86	51%	56% - 58%	-4.4%	\$3,295,468	\$37,449	59
8	Hillsborough Alternative Residential Program	23	48%	51% - 54%	-3%	\$1,204,500	\$52,370	56
6	Choices Halfway House	17	59%	65% - 70%	-6.1%	\$735,600	\$43,271	55
8	ARC Serious Habitual Offender Program	38	47%	53% - 55%	-5.2%	\$1,898,000	\$49,947	54
6	Avon Park Youth Academy	54	56%	61% - 64%	-5.3%	\$4,470,489	\$81,282	50
6	Camp E-Kel-Etu	29	45%	51% - 53%	-5.9%	\$3,113,617	\$107,366	49

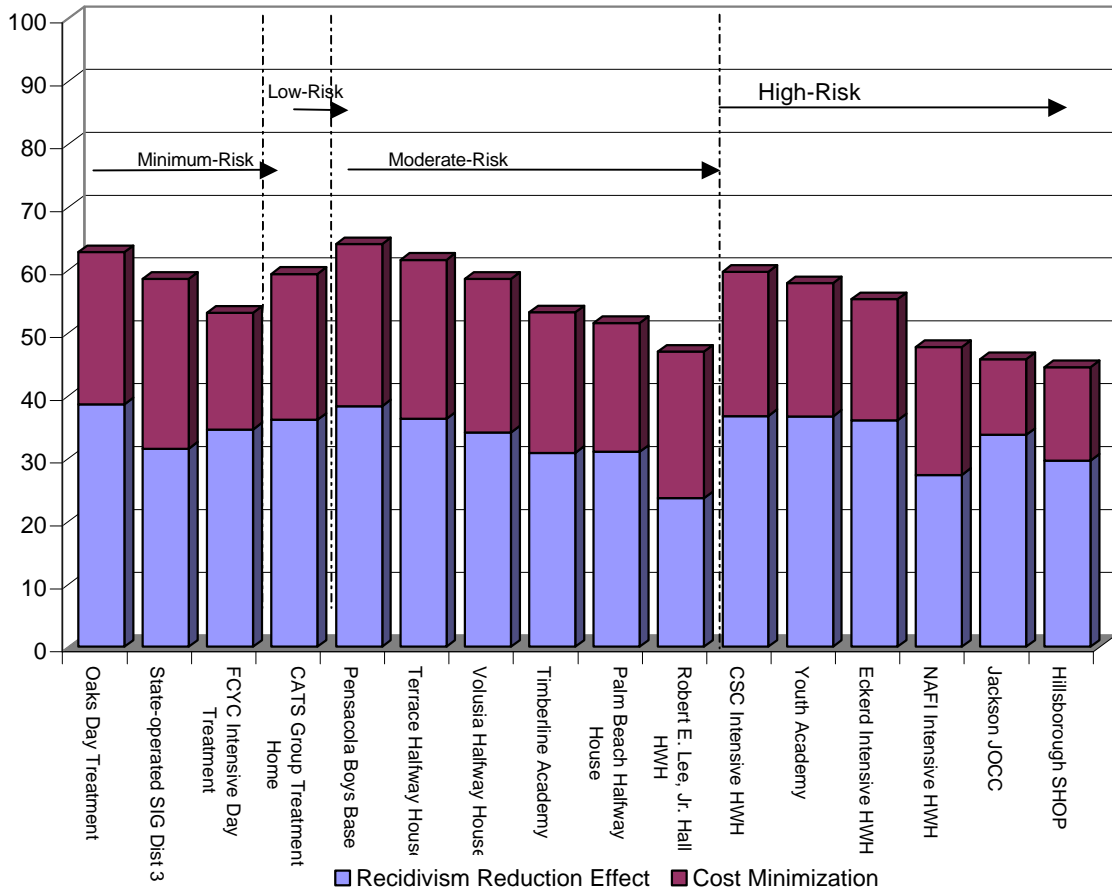
Contribution of Cost and Effectiveness Measures to PAM Scores for Programs with Below Average Effectiveness



Least Effective Programs

Level	Effectiveness Measures				Cost Measures		
	N	Observed Success Rate	Expected Success Range	% Below Expected	Expenditures	Cost per Youth	PAM Score
Low Cost							
6 Pensacola Boys Base	144	51%	59% - 61%	-8%	\$1,494,762	\$10,380	64
6 Terrace Halfway House	82	41%	51% - 53%	-10%	\$872,250	\$10,637	62
6 Volusia Halfway House	120	40%	52% - 54%	-12%	\$1,489,193	\$12,410	59
2 Special Intensive Group District 3	57	49%	63% - 66%	-14%	\$156,131	\$2,739	59
6 Robert E. Lee, Jr. Hall Halfway House	78	29%	51% - 53%	-21%	\$867,750	\$11,125	47
Moderate Cost							
2 Oaks Day Treatment	81	54%	61% - 64%	-7%	\$1,314,000	\$16,222	63
8 CSC Intensive Halfway House	69	42%	51% - 53%	-9%	\$1,387,000	\$20,101	60
4 CATS Group Treatment Home	42	57%	67% - 72%	-9%	\$743,550	\$17,704	59
6 Timberline Academy	40	53%	67% - 72%	-14%	\$777,150	\$19,429	53
High Cost							
8 Youth Academy	59	46%	54% - 56%	-8%	\$1,733,750	\$26,673	58
8 Eckerd Intensive Halfway House	62	44%	52% - 55%	-9%	\$2,032,676	\$32,785	55
2 Friends of CYF Intensive Day Treatment	19	42%	52% - 54%	-10%	\$657,000	\$34,579	53
6 Palm Beach Halfway House	72	31%	44% - 47%	-14%	\$1,865,703	\$25,913	52
8 NAFI Intensive Halfway House	42	40%	58% - 60%	-17%	\$1,038,920	\$24,736	48
8 Jackson Juvenile Offender Correctional Center	23	43%	52% - 55%	-9%	\$4,222,125	\$183,571	46
8 Hillsborough Serious Habitual Offender Program	51	37%	51% - 54%	-14%	\$2,367,572	\$46,423	44

Contribution of Cost and Effectiveness Measures to PAM Scores for the Least Effective Programs



Appendix 1

Definition of Terms

Recidivism: a subsequent juvenile adjudication or adult conviction for an offense that occurred within one year of a youth's release from a Department of Juvenile Justice commitment program to the community or a conditional release program.

Recidivism pool: a pool of 17,408 youth released from a residential or non-residential program to the community or a conditional release program between July 1, 1997 and June 30, 1999. Recidivism is tracked for one year after each youth's release. Therefore, the recidivism period ended at the end of FY 1999-2000 for youth released at the end of FY 1998-99.

Included Programs: residential and non-residential programs, excluding conditional release programs, with at least 15 youths released between July 1, 1997 and June 30, 1999. Programs must have been open for at least the last six months of FY 1998-99. Programs closed during the first year of the two-year period, or the first half of the second year, are not included.

Success rate: the percentage of non-recidivists within one year after release among youths released from a program.

Expected success rate: the average probability of success for youth released from a program, based on the risk factors for recidivism, as calculated by logistic regression analysis. The risk factors that were significant in predicting recidivism include the number of prior adjudications, age at first offense, age at release, and gender.

Expected success range: the expected success rate plus or minus the margin of error, which is a 99% confidence interval for the measure of expected success. If the observed success rate falls below the lower limit or exceeds the upper limit of the expected success range, the probability that the difference is due to random error is less than 1%

Percentage above expected: the percentage difference between the observed success rate of youth released and the upper limit of the confidence interval of the expected success rate.

Percentage below expected: the percentage difference between the observed success rate of youth released and the lower limit of the confidence interval of the expected success rate.

Program completions: youth in the recidivism pool, plus those released to residential transition programs at an equal or lower restrictiveness level. Youths who leave without completing a program, including those who are laterally transferred to other programs that are not transitional or conditional release programs, are not counted as program completions.

Program cost per youth: Total DJJ expenditures for each program divided by the number of youth completing the program during FY 1998-1999 through FY 1999-2000. (see definition of program completions above).

Standardization: conversion of these separate measures to a uniform scale so they can be combined into a single measure; a process similar to converting all grades to a scale of 100. Cost and effectiveness measures are standardized by dividing each program's value on the measure by the standard deviation for the distribution of values for all included programs. Since standardization for DJJ commitment programs was conducted across all programs and levels, it is possible to compare PAM scores for programs in different restrictiveness levels, as well as within a particular level.

Cost minimization index: the negative of the standardized measure for cost per youth, inverted to allow lower costs to contribute positively in the PAM score. Cost is standardized by dividing

the program cost per youth by the standard deviation of program costs per youth among all programs included in the report.

Recidivism reduction effect, or program effectiveness index: the difference between the observed success rate and the upper limit (for positive differences) or lower limit (for negative differences) of the expected success range. The difference is standardized by dividing it by the standard deviation of those differences among all programs in the report.

Program accountability measures (PAM) score: The PAM index is calculated by adding the program cost index, weighted as one third, and the program effectiveness index, weighted as two-thirds of the total. The combined index is then standardized and transformed into a PAM score based on a grade distribution with a maximum of 100, an average of 70, and a minimum of 40.

Appendix 2

Calculating Program Effectiveness Based on the Recidivism Risk Factors of Youths Assigned to Each Program

The expected success rate was developed to take into account the differing risk of recidivism for the types of youths assigned to different programs, allowing comparison of each program’s performance relative to the risk of recidivism for the youth assigned to that program.

In preparation of the last year’s report, the risk factors predictive of recidivism were determined empirically and the method of calculating program accountability measures was revised to more accurately reflect each program’s performance relative to the risk of recidivism of the youth served. An expected success rate was calculated for each program, using logistic regression analysis.

Recidivism is defined as whether a youth released from a Department of Juvenile Justice commitment program in FY 1997-98, or FY 1998-99, had a subsequent juvenile adjudication or adult conviction for an offense that occurred within one year of release from the program. Success is defined as non-recidivism.

Following the same procedure used in last year’s report, logistic regression analysis was used to calculate a probability of recidivism, referred to as the recidivism risk score, from the four risk factors identified below for each of 17,408 youths with complete data released from commitment programs in FY 1997-98 and FY 1998-99. An expected success rate was calculated for each program by averaging the recidivism risk scores for the youth released from that program

Risk Factors Used in the Logistic Regression Analysis
Age at Release from this Commitment
Age at First Offense
Number of Prior Adjudications
Gender

A model with these four risk factors maximized the accuracy of prediction. For this cohort of youths, age at first offense contributed a small but statistically significant improvement to the regression model with the three predictors used in last year’s report. Correlations among the four variables were checked, and none were sufficiently strong to present problems of multicollinearity that would interfere with the accuracy of the analysis. A prediction based on the recidivism risk scores derived from the logistic regression analysis was accurate 63% of the time in predicting success or recidivism for individuals.

Of the factors available in the data, age appears to be the most significant single variable in determining the likelihood of recidivism. Age and prior offense history are the risk factors most strongly associated with recidivism, but they work in opposite directions. Recidivism increases with an increase in the number of prior adjudications. One would expect the number of prior adjudications to increase with age. However, controlling for prior adjudications, recidivism

decreases with age. In other words, the data suggest younger offenders are more likely to recidivate than older offenders when compared to those with similar offense histories.

The number of prior adjudications was transformed mathematically to improve the consistency of the model in predicting recidivism for all risk levels. The most effective transformation was the square root of the natural logarithm of the number of prior adjudications. Statistical tests suggest that the model is sufficiently accurate for use in predicting recidivism rates for programs, and did not suggest any significant violation of the assumptions required for regression analysis.

Recidivism risk scores were averaged for all youths assigned to a program to determine an expected recidivism rate for the program, and the expected recidivism rate was subtracted from one hundred percent to determine the expected success rate. The expected success rate at the program level had a correlation of .758 with the observed success rate, and explained 57 percent of the variation in success rates among programs. Each program's expected success rate represents the average probability of success based on the risk factors of youths released from the program.

The FY 2000-2001 Program Accountability Measures report incorporates a confidence interval for expected recidivism, referred to as the expected recidivism range, in order to answer the following question: "How large a difference between expected and actual recidivism is necessary for a given size of program in order to be 99 percent confident that the difference is not due to random error?"

Dr. Aki Kamata of the Department of Educational Research at Florida State University has developed a procedure for estimating confidence intervals specific to this multi-level problem. The procedure developed can be used to determine the magnitude of differences between observed and expected recidivism that could occur by chance given the various sample sizes equivalent to the number of youths released from the programs. It estimates a confidence interval for the expected success rate for programs that are in effect sub-samples from the logistic regression results.

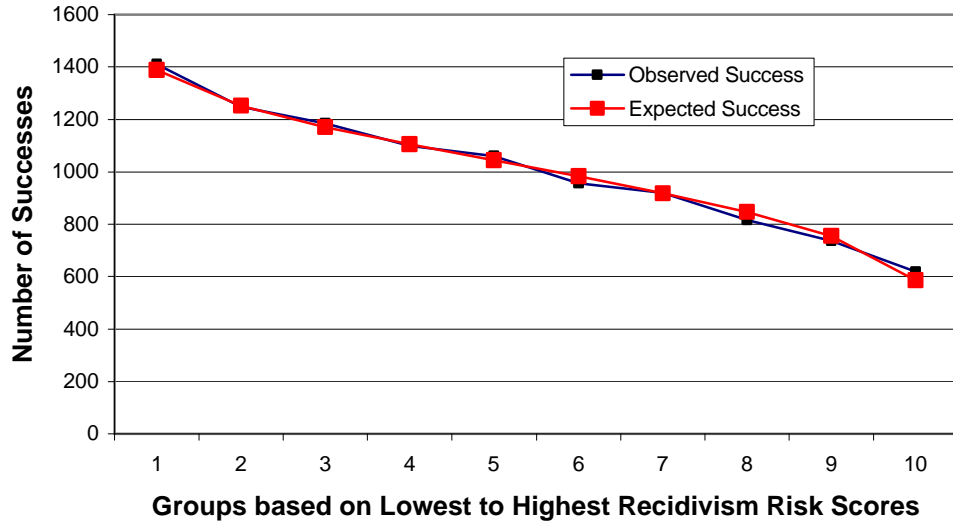
First, the logistic regression coefficients are estimated at the individual level for the intercept and the four independent variables (the risk factors). The covariance matrix is also estimated for the individual level logistic regression results. For each program, the regression formulae for all individuals in the program are used to estimate the probability of recidivism. The covariance matrix is then used to estimate the standard error for each individual. The standard error is used in estimating the confidence interval.

The confidence interval allows a comparison between expected and observed recidivism taking into account an estimate of random error in the measure of expected success. It allows 99 percent confidence that any differences between the actual and observed recidivism rate and the upper or lower limit of the confidence interval for expected recidivism are not due to random error, and would not be observed if youth with the same values for the risk factors were randomly selected from the population of youths.

Subtracting a program's observed success rate from the upper or lower limits of the confidence interval for the expected success rate allows an assessment of the effect of each program in promoting law-abiding behavior.

The number of successes among equally sized groups of youth with increasing recidivism risk scores, and the accuracy of the prediction based on expected recidivism, are depicted in the following chart.

Number of Successes Observed and Expected Among Youth Ranked from Lowest to Highest on Recidivism Risk Scores



Limitations

These measures are intended to be used to assist in evaluating program outcomes and not for predicting outcomes for individuals, as they explain only a portion of the variation in recidivism rates among individuals. They are not intended for individual prediction, and are not valid for that purpose.

Risk Factors Used to Calculate Effectiveness Measures for Minimum-Risk Programs

Minimum-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
Charter Springs Intensive Work Program SIG	4.2	13.7	17.0	85%	62% to 64%	67%
Clay Behavioral Health SIG	3.3	13.7	16.5	82%	62% to 64%	59%
Dade North Marine Institute	3.3	13.2	16.2	100%	57% to 60%	53%
Dade South Marine Institute	2.9	13.7	16.7	93%	63% to 66%	67%
DATA Day Treatment	3.6	13.7	17.3	72%	68% to 71%	78%
Crosswinds/Rainwater Day Treatment	4.1	13.9	16.3	0%	71% to 75%	87%
Escambia Bay Marine Institute	3.6	13.9	16.6	78%	63% to 65%	62%
Friends of Children, Youth & Families Int. Day Trtmt.	5.4	12.8	16.5	100%	52% to 54%	42%
Florida Ocean Sciences Marine Institute	4.6	13.8	16.8	84%	60% to 62%	84%
JESCA Day Treatment	3.5	13.3	16.5	82%	61% to 64%	62%
Gainesville Marine Institute	3.8	13.5	16.4	87%	59% to 61%	66%
Gulf Coast Marine Institute	3.3	13.7	16.8	87%	63% to 65%	74%
Gulfcoast Marine Institute South	3.3	13.8	16.4	68%	65% to 67%	89%
Jacksonville East Marine Institute	2.5	13.8	16.7	84%	67% to 70%	72%
Jacksonville West Marine Institute	2.6	14.1	16.7	87%	66% to 68%	73%
Lakeland Marine Institute	5.1	13.8	17.2	75%	63% to 66%	75%
Magellan Case Management SIG	3.6	13.6	16.7	71%	64% to 67%	75%
Sutton Place of Nassau SIG	4.7	13.4	16.1	82%	54% to 57%	82%
Oaks Day Treatment	3.3	13.7	16.0	69%	61% to 64%	54%
Orlando West Marine Institute	3.7	13.9	16.8	78%	64% to 66%	70%
Palm Beach Marine Institute	3.8	13.7	17.6	88%	66% to 68%	75%
Panama City Marine Institute	3.0	14.3	16.3	52%	68% to 71%	72%
Pinellas Marine Institute	6.5	12.8	16.6	79%	55% to 57%	74%
The Bridge Special Intensive Group	2.5	13.7	16.3	71%	66% to 69%	74%
Special Intensive Group for Girls	3.7	13.3	15.9	0%	69% to 74%	71%
Special Intensive Group District 14	4.3	13.4	16.4	74%	60% to 62%	64%
Silver River Marine Institute	4.0	13.3	16.4	89%	57% to 59%	59%
Special Intensive Group District 3	4.0	13.2	16.9	77%	63% to 66%	49%
Special Intensive Group District 5	5.7	13.5	16.8	68%	60% to 63%	69%
Special Intensive Group District 7	4.0	13.9	17.0	70%	66% to 68%	78%
SW Florida Marine Institute	4.1	14.2	17.0	86%	63% to 65%	72%
Tampa Marine Institute	3.8	13.9	17.2	76%	66% to 69%	68%

Risk Factors Used to Calculate Effectiveness Measures for Low-Risk Programs

Low-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
Alligator Short-Term Offender Program	3.8	13.8	16.6	100%	58% to 61%	58%
Broward Group Treatment Home for Girls	4.1	13.5	16.0	0%	69% to 74%	77%
Blackwater Short-Term Offender Program Camp	4.0	13.7	16.4	100%	56% to 59%	51%
Brevard Group Treatment Home	5.1	11.0	13.4	100%	30% to 35%	43%
CATS Group Treatment Home	4.4	13.3	15.7	0%	67% to 72%	57%
Dade Group Treatment Home	4.1	11.6	13.8	100%	35% to 39%	50%
Eckerd Academy	4.5	13.3	16.4	100%	54% to 57%	53%
Family Continuity Program	5.5	11.8	14.5	66%	44% to 48%	45%
Hillsborough Group Treatment Home	5.9	10.5	13.6	100%	30% to 34%	30%
Jonathan Dickenson Short-Term Offender Program	4.1	13.9	16.6	100%	57% to 59%	59%
La Amistad Group Treatment Home	4.1	11.3	13.6	100%	34% to 39%	54%
Lakeview Girls Center	3.8	14.1	16.1	0%	71% to 75%	71%
Myakka Short-Term Offender Program	4.9	13.2	16.1	100%	51% to 53%	49%
New Beginnings	4.8	13.6	15.7	0%	65% to 70%	68%
Panama Key Island Group Treatment Home	5.5	13.1	16.2	100%	50% to 52%	50%
Leaf Group Treatment Home PEMHS	4.4	13.2	16.0	0%	68% to 73%	74%
Project STEP Nassau	3.3	13.8	16.3	78%	62% to 65%	57%
Sankofa Group Treatment Home	5.9	12.8	16.1	100%	49% to 51%	59%
STEP South	4.4	13.9	16.7	100%	57% to 59%	55%
Palm Beach Group Treatment Home	4.8	10.2	13.4	100%	30% to 35%	46%
Project Star Group Treatment Home	4.0	13.2	15.6	0%	67% to 72%	61%
Rilla White Foundation Family Homes	3.5	13.0	15.5	55%	60% to 63%	56%
Manatee Wilderness Camp	4.8	13.4	16.3	100%	53% to 56%	55%

Risk Factors Used to Calculate Effectiveness Measures for Moderate-Risk Programs

Moderate-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
Alachua Halfway House	4.6	13.3	16.7	0%	72% to 77%	78%
ARC Halfway House	5.7	13.3	17.2	100%	57% to 59%	60%
ATC Dual Diagnosis	5.6	13.8	16.9	100%	55% to 57%	59%
Avon Park Youth Academy	6.1	13.8	18.0	100%	61% to 64%	56%
Bay Boot Camp	4.6	13.6	16.6	100%	56% to 58%	54%
Bay Point Schools	5.0	13.4	17.3	100%	59% to 62%	60%
Bradley Manor	6.0	11.1	14.0	100%	32% to 36%	46%
Brevard Halfway House	5.1	13.4	16.5	0%	70% to 75%	67%
Bridges Academy	4.6	13.4	16.3	0%	70% to 75%	80%
Britt Halfway House	7.6	12.9	17.0	100%	51% to 54%	45%
Camp E-Kel-Etu	4.7	13.2	16.0	100%	51% to 53%	45%
Camp E-Ma-Chamee	3.3	12.7	15.1	100%	49% to 52%	52%
Camp E-Nini-Hassee	6.5	13.0	16.4	0%	67% to 72%	76%
Charter Pinellas Treatment Center Level 6	5.5	13.2	16.4	0%	69% to 74%	63%
Choices Halfway House	5.5	13.5	16.0	0%	65% to 70%	59%
Collier Drill Academy	3.8	13.7	16.4	100%	57% to 59%	64%
Cove Halfway House	4.6	13.2	16.0	0%	68% to 73%	87%
Crossroads Wilderness	5.7	13.4	17.0	0%	55% to 58%	61%
CSC Halfway House	6.9	12.4	16.5	0%	49% to 52%	43%
Dade Intensive Control	4.3	12.6	15.5	0%	48% to 51%	51%
Duval Halfway House	3.7	13.4	16.9	0%	60% to 63%	60%
Duval START Center	3.8	11.9	14.8	0%	44% to 48%	43%
Eckerd Comprehensive Treatment Program	4.5	12.5	16.6	0%	55% to 58%	63%
Eckerd Youth Challenge Program	5.2	13.1	16.6	0%	54% to 56%	55%
Escambia River Outward Bound	4.7	12.8	15.9	0%	49% to 52%	54%
Forestry Youth Academy	4.9	14.3	17.8	0%	64% to 67%	73%
Gate Halfway House	4.7	12.7	15.2	0%	45% to 48%	44%
Girls Intensive Residential Learning Services	5.9	13.1	16.2	0%	66% to 71%	63%
Grove Unique Youth Services Dual Diagnosis	5.0	14.0	16.8	100%	56% to 59%	63%
Panther Success Center Halfway House	5.0	13.1	16.4	100%	53% to 56%	50%
Hendry Halfway House	5.6	13.3	16.5	100%	52% to 54%	50%
Impact Halfway House	4.1	13.5	16.7	100%	58% to 60%	54%
Jefferson Halfway House	5.1	13.1	16.8	100%	55% to 57%	60%
Kelly Hall Halfway House	5.6	13.9	17.5	100%	60% to 62%	58%
Kingsley Center Girls Level 6	4.8	13.8	16.6	0%	72% to 76%	66%
Orange Boot Camp	6.0	13.7	16.8	100%	54% to 56%	63%
Hurricane Island Conservation Corps	6.1	13.1	17.1	100%	55% to 58%	59%
Leaf Halfway House	5.4	13.6	16.7	0%	70% to 75%	72%

Risk Factors Used to Calculate Effectiveness Measures for Moderate-Risk Programs, Continued

Moderate-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
Leon Drill Academy	5.5	13.2	16.8	100%	55% to 57%	50%
Leslie Peters Halfway House	5.7	13.0	16.9	100%	55% to 57%	48%
Madison Halfway House	5.1	11.3	13.8	100%	33% to 37%	37%
Manatee Boot Camp	4.9	13.3	16.9	100%	57% to 59%	60%
Mandala ATC Halfway House	7.0	12.1	16.2	100%	47% to 50%	58%
Martin Boot Camp	4.7	14.0	17.5	100%	61% to 64%	81%
MATS Halfway House	5.8	12.7	16.6	100%	52% to 55%	50%
Merit START	4.5	11.0	13.6	100%	33% to 37%	29%
Miami Halfway House	4.4	13.4	16.6	100%	56% to 58%	63%
Nassau Halfway House	4.0	13.7	16.8	100%	59% to 62%	68%
Okaloosa Youth Development Center	5.6	13.6	16.5	100%	52% to 55%	52%
Okaloosa Youth Academy	6.1	13.6	16.6	100%	52% to 54%	52%
Okeechobee Redirection Camp	4.9	13.6	16.9	100%	57% to 59%	57%
Orange County Correctional Program	5.7	13.4	17.1	100%	56% to 58%	55%
Orange Halfway House Female	6.8	13.3	16.4	0%	66% to 71%	69%
Pahokee Youth Development Center	6.1	12.9	16.7	100%	52% to 55%	47%
Palm Beach Work Release	5.0	13.5	17.7	100%	61% to 64%	57%
Palm Beach Halfway House	5.7	12.3	15.5	100%	44% to 47%	31%
Peace River Outward Bound	5.5	11.8	14.9	100%	40% to 43%	42%
Pensacola Boys Base	4.3	14.1	16.9	100%	59% to 61%	51%
Pinellas Boot Camp	7.2	13.1	16.7	100%	50% to 53%	50%
Pines Halfway House	5.2	13.6	16.4	0%	69% to 74%	63%
Polk Boot Camp Boys	5.8	13.4	17.1	100%	55% to 58%	60%
Polk Boot Camp Girls	5.4	13.8	16.9	0%	72% to 76%	78%
Polk Halfway House	5.8	13.0	16.6	100%	53% to 55%	62%
Pompano Learning Academy	7.9	12.5	16.9	100%	50% to 52%	53%
Price Halfway House	5.6	13.3	17.2	100%	57% to 60%	56%
Robert E. Lee, Jr. Hall Halfway House	6.7	13.3	16.7	100%	51% to 53%	29%
RAFT Center for Girls	4.9	13.5	16.6	0%	71% to 76%	67%
San Antonio Boys Village Halfway House	7.0	12.3	16.1	100%	46% to 49%	41%
Seminole Work and Learn Center	5.0	13.6	16.9	100%	57% to 59%	57%
Space Coast Marine Institute	5.5	13.3	16.4	100%	52% to 54%	64%
Taylor Halfway House	5.5	13.1	16.5	100%	52% to 55%	53%
Terrace Halfway House	6.4	13.0	16.6	100%	51% to 53%	41%
Timberline Academy	6.0	13.5	16.3	0%	67% to 72%	53%
Volusia Halfway House	6.9	13.0	16.8	100%	52% to 54%	40%
West Florida Wilderness Institute	4.2	13.8	16.9	100%	59% to 61%	59%
Withlacoochee STOP	4.7	13.5	16.8	100%	57% to 59%	64%
YMCA Halfway House	5.6	13.5	17.0	0%	72% to 76%	82%
Youth Environmental Services	5.8	12.8	17.0	100%	55% to 57%	55%
Youth Development Academy	5.1	13.6	16.8	100%	56% to 58%	65%

Risk Factors Used to Calculate Effectiveness Measures for High-Risk Programs

High-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
ARC Intensive Halfway House	7.6	12.9	17.5	100%	54% to 57%	58%
ARC Serious Habitual Offender Program	6.6	12.9	16.7	100%	53% to 55%	47%
Big Cypress Wilderness Institute	7.1	13.1	17.5	100%	55% to 58%	55%
Broward Intensive Halfway House	7.9	12.1	17.0	100%	51% to 54%	52%
Charter Pinellas Treatment Center Level 8	7.0	13.1	16.8	0%	68% to 73%	73%
CSC Intensive Halfway House	7.6	12.4	17.0	100%	51% to 53%	42%
CSC Serious Habitual Offender Program	8.6	11.8	17.2	100%	50% to 53%	55%
NAFI Serious Habitual Offender Program	6.2	12.9	17.3	100%	57% to 60%	61%
Hillsborough Serious Habitual Offender Program	7.8	12.3	17.0	100%	51% to 54%	37%
Dozier Training School for Boys	6.3	13.1	17.3	100%	57% to 59%	63%
Eckerd Intensive Halfway House	6.7	12.5	16.9	100%	52% to 55%	44%
Elaine Gordon Treatment Center	2.9	12.9	17.1	100%	65% to 69%	82%
Everglades Youth Development Center	7.3	13.1	17.6	100%	56% to 59%	61%
Eckerd Youth Development Center	6.6	12.8	17.2	100%	55% to 57%	55%
Florida Environmental Institute	8.0	12.5	17.8	100%	57% to 60%	73%
Glen Mills School	6.3	13.4	17.9	100%	61% to 64%	67%
Greenville Academy	5.8	13.1	16.9	100%	55% to 57%	52%
Panther Success Center Int Halfway House	5.1	12.9	16.5	100%	55% to 57%	48%
Hillsborough Alternative Residential Program	7.8	11.7	16.8	100%	51% to 54%	48%
Hillsborough Academy Int Residential Prgm	9.5	9.4	13.9	100%	25% to 30%	29%
Kingsley Center Girls Level 8	6.5	13.0	17.0	0%	70% to 75%	67%
Jackson Juvenile Offender Correctional Center	7.6	13.0	17.2	100%	52% to 55%	43%
Marion Intensive Treatment Facility	6.7	13.2	17.2	100%	56% to 58%	51%
Marion Youth Development Center	7.0	12.7	17.3	100%	55% to 57%	54%
Mantatee Adolescent Trtmt Sex Offender Prgm	2.7	13.4	17.0	100%	64% to 67%	79%
NAFI Intensive Halfway House	5.3	13.5	17.2	100%	58% to 60%	40%
PATH Intensive Halfway House	7.2	12.2	16.8	100%	50% to 52%	47%
Palm Beach Youth Center	7.4	12.6	17.7	100%	57% to 60%	66%
Polk Youth Development Center	7.3	12.8	17.4	100%	56% to 58%	53%
Tiger Success Serious Habitual Offender Program	5.9	12.3	17.1	100%	55% to 58%	70%
Vernon Place	5.8	13.7	17.4	0%	74% to 78%	94%
Youth Academy	7.2	12.9	17.2	100%	54% to 56%	46%

Risk Factors Used to Calculate Effectiveness Measures for Maximum-Risk Programs

Maximum-Risk Programs	# of Adjudicated Referrals	Age at 1st Referral	Age at Release	% Male	Expected Success Range	Success Rate
Cypress Creek	8.0	12.4	18.5	100%	61% to 65%	72%
Okeechobee Juvenile Offender Correctional Center	6.7	13.4	17.7	100%	59% to 62%	77%
Omega Juvenile Correctional Center	9.6	12.5	18.5	100%	59% to 63%	63%

Appendix 3

Calculating the Program Accountability Measures (PAM) Index

1. **Calculate the program effect in reducing recidivism.** This is the difference between the program’s success rate and the upper limit of its expected success rate (if observed success is higher than expected) or the lower limit of its expected success range (if observed success is lower than expected). If the observed success rate is within the confidence interval, the difference is not statistically significant and is counted as 0.

Program: Polk Halfway House
 Non-recidivism: 62%
 Expected non-recidivism range: 53% - 55%
 Percent above expected: 62% - 55% = 7%

2. **Calculate the program’s cost per completion** by dividing total DJJ expenditures by the total number of completions during the tracking period.

Cost: \$1,312,207 / 103 = \$12,740 Cost per Successful Completion

3. **Standardize:** For the program effectiveness component, subtract the programs percent above the upper or lower limit of the expected range from the mean percent above or below the expected range, and divide by the standard deviation of the differences.

$$Z_{\text{success}} = (.072 - .009) / .072 = .88 \quad \left\{ \begin{array}{l} \text{Mean: 0.009} \\ \text{Standard deviation: .072} \end{array} \right.$$

Note: The top-scoring program had a program effect that was more than three standard deviations above the mean and was given an automatic maximum z score of 3.

For cost, subtract the program cost per youth from the mean program cost per youth, and divide by the standard deviation for the cost.

$$Z_{\text{cost}} = (\$12,740 - \$20,802) / \$13,049 = -.62 \quad \left\{ \begin{array}{l} \text{Mean: - \$20,802} \\ \text{Standard deviation: \$13,049} \end{array} \right.$$

Note: Any program having a cost per successful completion that was 3 standard deviations or more above the mean cost per youth was not included in the cost component standardization and was given an automatic standardized cost score of -3.

4. **Add the z-scores together** with a factor of 2/3 for the recidivism component and 1/3 for the cost (Inverse cost, or cost minimization, is used to allow lower cost to contribute positively to the index).

$$\text{PAM Index} = 2/3 \times Z_{\text{success}} + 1/3 \times (-Z_{\text{cost}}) = .58 + .21 = .79$$

5. **Standardize sum of component z-scores.** For standardization, the average value for the data is set at 0 and the standard deviation is set at 1.

$$Z = (.79 + .01) / .73 = 1.1 \quad \left\{ \begin{array}{l} \text{PAM Index average: -.01} \\ \text{PAM Index standard deviation: .73} \end{array} \right.$$

6. **Translate** into a distribution with an average of 70 and a standard deviation of 10, modeled after A-F report card grades.

$$\text{PAM Score} = (1.1 \times 10) + 70 = 81 \quad \left\{ \begin{array}{l} \text{PAM Score average: 70} \\ \text{PAM Score standard deviation: 10} \end{array} \right.$$

The maximum number of points for the program effect in reducing recidivism is 67. The maximum number of points for cost minimization is 33. Note that 70 in this distribution is average and should be considered equivalent to a grade of "C".