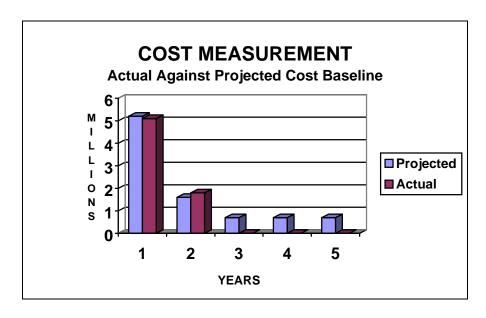
Companion Guide	Cost/Benefit Analysis Illustrated			
Chapter 4	Sample State APDU Documentation			

[Editor's Note: This chapter is an example of a cost/benefit measurement report. It is written as though reporting in the second year of the project described in Chapters 2 and 3. This clarifies the relationship between the planning stage studies and the post-implementation measurement and reporting phase.]

Annual APD Update: Section VII Cost / Benefit Measurement Report: Year 2

- **Overview:** Costs and benefits are conforming closely with those projected during the planning phase of this systems development project.
- **Costs:** Costs incurred this fiscal year were about ten percent more than projected for this fiscal year, primarily due to support services and training costs. In response, the State has initiated cost control procedures to closely regulate contractor task assignments and performance and to provide in-house training. Further, reduced expenditures will be sought in the site and facility categories, given the local recession in the commercial real estate market and the corresponding drop in market prices. Part of this year's costs were offset by last year's lower than anticipated prices, which resulted from keen competition for the system hardware contract.



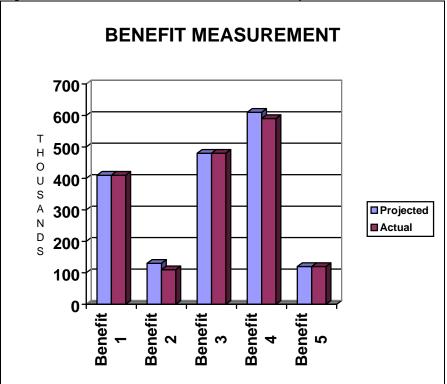
U.S. Department of Health and Human Services Administration for Children and Families August 1994 Page 4-1 Benefits

Measurement:

The graph at the top of the next page depicts the relationship of actual costs to projected costs. Details are on page 5 Benefits were lower than anticipated in only two of the six benefit categories: overtime (benefit 2) and service bureau processing costs (benefit 4).

Overtime was reduced \$111,291 - \$38,709 short of the \$150,000 target. The overtime was required early in the year, when caseworkers were adapting to the new system and had not yet achieved operational efficiency. Given the performance of the last eight months, we expect that the full reduction of \$150,000 will be met next year.

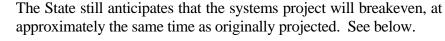
Moderate service bureau processing costs (\$21,655) were incurred this year, due to a slight slippage in full cut-over to the new system. Fully \$589,340 of the projected \$610,995 in benefits was realized. We expect that the full benefit will be realized next year.

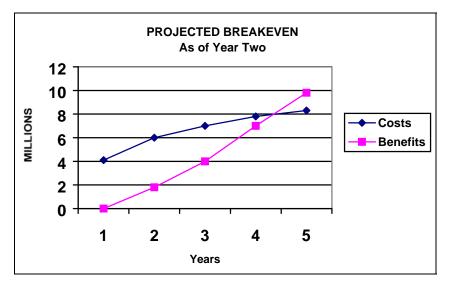


The graph at the bottom of the preceding page depicts the relationship of actual benefits to projected benefits. Details are provided on page 5.

The State's plan to reduce caseworkers' administrative duties to 10% of their time has been realized (benefit 1), proven by repeating the study originally conducted in support of the cost/benefit analysis. In addition, the objective to control staff expenditures in meeting caseload growth was realized this year (benefit 3) and is on track for future years. With the new system and reductions in administrative duties, caseworker caseload increased from the old system's average of 460 per year, to 500 (annualized) in the first six months and 550 (annualized) in the last six months. Increasing operational efficiency and minor procedural improvements (already effected) should enable the caseworkers to attain the projected 560 case workload next year. Finally, the projected cost savings resulting from eliminating the use of courier services was realized (benefit 5).

Projected Breakeven:





August 1994 Page 4-3 Performance The State has also made considerable progress toward the Baseline: performance objectives set forth in the cost/benefit analysis. The chart below shows the baseline, current average, and target average.

The current average was based on the last six months of operations, considered a more accurate representation due to increasing operational efficiency. While the goal has not been achieved in all cases, the State is implementing procedural changes to support full realization of the benefits by next year.

PERFORMANCE BASELINE AND TARGET							
Category	Baseline Current Average		Target Average				
Input processing	7 days	3 days	Same day				
Internal control checks	3 days	1 day	1 day				
Report transmission	4 days	Same day	Same day				
Acceptance of client data	3 weeks	8 days	1 week				
Delay to benefits	3 months	6 weeks	1 month				

Summary:

There were no unanticipated costs. There are preliminary indications that some unanticipated benefits may accrue. Based on information provided by the personnel office, absenteeism and employee turnover rates among caseworkers have decreased significantly. If this trend continues, the staffing plan may be further reduced for increased costavoidance benefits.

Cost/Benefit Analysis Illustrated Sample State APDU Documentation

Cost / Benefit Measurement Profile Year Two

SYSTEM LIFE COST PROFILE								
Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total		
Non-Recurring Costs*	3,580,472	0	0	0	0	3,580,472		
Recurring Costs*	1,621,868	1,782,320	0	0	0	3,404,188		
Total Costs*	5,202,340	1,782,320	0	0	0	6,984,660		
Total Projected Costs	5,321,868	1,621,868	796,145	796,145	796,145	9,332,171		
Difference	-119,528	160,452	0	0	0	40,924		
SYSTEM LIFE BENEFITS PROFILE								
Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total		
Total Benefits*	65,000	1,722,058	0	0	0	1,787,058		
Total Projected Benefits	65,000	1,782,422	3,081,271	2,755,058	3,039,414	10,723,165		
Difference	0	-60,364	0	0	0	-60,364		
CUMULATIVE BENEFIT / COST PROFILE (ACTUAL AND PROJECTED)								
Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total		
Cumulative Total Actual and Projected Benefits*	65,000	1,787,058	4,868,329	7,623,387	10,662,801	N/A		
Cumulative Total Actual and Projected Costs*	5,202,340	6,984,660	7,780,805	8,576,950	9,373,095	N/A		
COMPARISONS								
Description	Actual to Date		Current Projected		Baseline			
Total Benefits	1,787,058		10,662,801		10,723,165			
Less Total Costs	6,984,660		9,373,095		9,332,171			
Net Benefit (Cost)	-5,197,602		1,289,706		1,390,994			
Benefit/Cost Ratio	.26		1.14		1.15			
Breakeven	N	I/A 58		58				

* Actuals, years 1 and 2.