

Alaska Alcohol Safety Action Program Cost Study Report

Alaska Safety Action Program

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Executive Summary

The Alaska Alcohol Safety Action Program (ASAP) diverts Alaskans convicted for alcohol/drug-related misdemeanors into substance abuse education or treatment as a clinically and socially preferable alternative to incarceration. The performance of the ASAP Program in reducing the adverse impact of Alaskans convicted of alcohol-related misdemeanors is periodically evaluated. This study extends this series of studies in focusing on the cost of delivering ASAP services to clients with specific identified characteristics.

The purpose of this cost study of selected Alcohol Safety Action Program sites is to:

1. Develop a statewide estimate of the actual costs of ASAP services in selected Alaska sites;
2. Estimate the average cost per client by survival time, drinker classification, charge class, treatment status, and re-offender status;
3. Calculate the actual cost of ASAP services in selected sites, adjusted for central administrative costs; and
4. Determine the cost distribution of costs by the typical functions performed in the management of ASAP clients.

This Alaska Alcohol Safety Action Program Cost Analysis includes Anchorage, Mat-Su, Juneau, and Fairbanks as the study sites.

Cost data for the Anchorage ASAP site for 1994-1999 were obtained from the Division of Alcoholism and Drug Abuse. Costs reflect actual expense data contained in the Alaska State Accounting System (AKSAS). Budget information for Mat-Su, Juneau, and Fairbanks were extracted from 1994-1999 audits conducted as a state financial accounting requirement.

The unit cost calculations in this section are based on estimates prepared by ASAP clinical staff on the time allocation for various basic functions and the difference in resources required by the specific clinical groups. The results of the Alaska Alcohol Safety Action Program ICHS Efficacy Study Report (July 1999) was used to determine the average cost of survival time per client. The number of new cases added for 1996 was used for the client count.

Findings

- The average cost of service to an ASAP client ranges from \$120 to \$200.
- The ASAP Program appears to be a reasonable use of public funds.
- There may be predictable gains by realigning program activities to focus on those who are at risk of re-offense.

- Dedicating additional resources or reallocating resources to ensure treatment completion may be a sound public investment in helping keep alcohol-impaired drivers off Alaska roadways.
- The ASAP Program appears to be gaining some efficiencies.
- There appear to be some economies of scale in service provision.
- While non-problem drinkers appear more expensive to deal with than problem drinkers, this may be attributable to the larger number of clients leading to lower unit costs.
- DWI cases cost far less than non-DWIs.

Additional research in finding ways of reconfiguring the ASAP case management and tracking system to give high-risk clients additional monitoring and administrative time, and to reduce the time spent on clients with low risk of re-offense, may reduce the number of re-offenders. This would allow the ASAP Program to better meet the social goal of reducing the impact of alcohol on the community.

ASAP clients who re-offend can generate extensive additional costs to the criminal justice, court, and addiction treatment systems. A detailed estimate of the systems costs of re-offenders can provide valuable benchmark data for measuring the effectiveness of systems re-engineering and the accompanying systems cost savings.

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I. Introduction

The purpose of the Alaska Alcohol Safety Action Program (ASAP) is to divert Alaskans convicted for alcohol/drug-related misdemeanors into substance abuse education or treatment as a clinically and socially preferable alternative to incarceration. There are many ASAP offices located throughout Alaska. Statewide administration of the Alaska ASAP program is collocated in the Anchorage ASAP Offices. The Anchorage ASAP is housed in space donated by the Alaska Court System.

The purpose of this cost study of selected Alcohol Safety Action Program sites is to:

1. Develop a statewide estimate of the actual costs of ASAP services in selected Alaska sites;
2. Estimate the average cost per client by survival time, drinker classification, charge class, treatment status, and re-offender status;
3. Calculate the actual cost of ASAP services in selected sites, adjusted for central administrative costs; and
4. Determine the cost distribution of costs by the typical functions performed in the management of ASAP clients.

This Alaska Alcohol Safety Action Program Cost Analysis includes Anchorage, Mat-Su, Juneau, and Fairbanks as the study sites.

II. Methods

Actual costs for the Anchorage ASAP site for 1994-1999 were obtained from the Division of Alcoholism and Drug Abuse. Costs reflect actual expense data contained in the Alaska State Accounting System (AKSAS). Budget information for Mat-Su, Juneau, and Fairbanks were extracted from 1994-1999 audits conducted as a state financial accounting requirement.

Expense budgets used in these calculations include direct expenses as reported in the audits. Adjusted expense budgets which reallocate central administrative expenses included in the Anchorage ASAP office were not used because of inconsistencies in labor cost distributions and possible misinterpretation of administrative cost allocation procedures.

The unit cost calculations in this section are based on estimates prepared by ASAP clinical staff on the time allocation for various basic functions and the difference in resources required by the specific clinical groups. The results of the Alaska Alcohol Safety Action Program ICHS Efficacy Study Report (July 1999) were used to determine the average cost of survival time per client. The number of new cases added for 1996 was used for the client count.

The central administrative office located in Anchorage provided percentages of major task areas for Anchorage, Mat-Su, Juneau, and Fairbanks. Data elements provided included client intake, drinker classification, client referral, client tracking/monitoring, and administration.

III. Results

A. Average Cost per Client

Figure 1 shows the average cost per client served by the four study ASAP programs from 1994 to 1996. Calculations are shown in Table 1. The audited program expenditures for the four participating programs were divided by the number of new clients during the budget period. The number of new clients was used as the unit measure because it allows some measure of service requirement. The number of clients on the caseload is a less appealing measure because it may not reflect program activity on an annual basis.

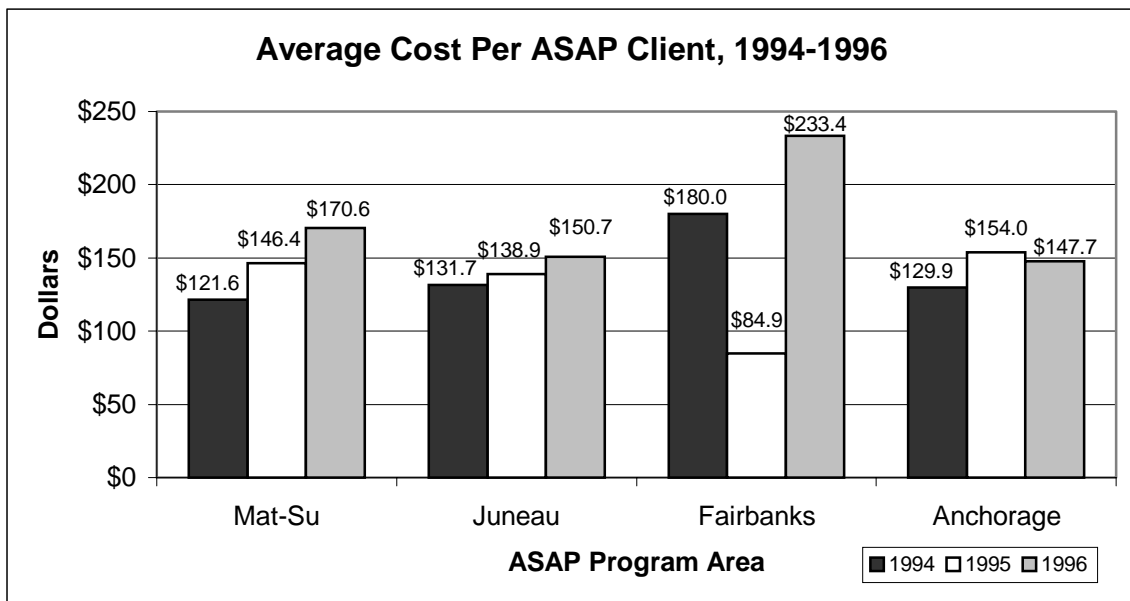


Figure 1

Anchorage had the lowest average cost per client (\$147.72) admitted into the program in 1996. Mat-Su and Juneau had an average cost per client of \$170.57 and \$150.71, respectively. Fairbanks had the highest average cost per client: \$233.42. Juneau and Anchorage had a mean client cost of \$140.43 and \$143.88 for the years 1994 through 1996. Fairbanks had average costs per client of \$179.98 (1994), \$84.94 (1995), and \$233.42 (1996).

The variation in client costs among programs was attributed by ASAP staff to having twice the number of new cases added in 1995 (1,036) as in 1994 (510). In 1996, Fairbanks had 377 new cases. This resulted in an increase of \$148.48 to the average cost per client. This dramatic cost increase changes when 1995 and 1996 client and cost data are averaged. The unit cost is reduced to \$124.55 per client, a reduction of \$35.45 per client from 1994.

Table 1. Cost and Client Data, 1994-1996

1994				
	Mat-Su	Juneau	Fairbanks	Anchorage
Expenses	\$121,838	\$96,000	\$91,788	\$557,400
New Cases Added	1002	729	510	4291
Cost per Client	\$121.59	\$131.69	\$179.98	\$129.90

1995				
	Mat-Su	Juneau	Fairbanks	Anchorage
Expenses	\$129,434	\$85,000	\$88,000	\$596,200
New Cases Added	884	612	1036	3871
Cost per Client	\$146.42	\$138.89	\$84.94	\$154.02

1996				
	Mat-Su	Juneau	Fairbanks	Anchorage
Expenses	\$124,513	\$85,000	\$88,000	\$548,200
New Cases Added	730	564	377	3711
Cost per Client	\$170.57	\$150.71	\$233.42	\$147.72

B. Survival Costs or the Cost Per Year of No Re-Offenses

Consistent with the basic goals of the ASAP Program, it is important to calculate the cost of the length of time individuals with alcohol-related arrests remain off the police blotter by comparing survival time to the total budget of the program site. "Survival time" is defined as the time elapsed between the offense that led to the ASAP referral and any re-offense. Higher survival costs per client suggest that the program is more successful in preventing someone who has been convicted of an alcohol-related offense from re-offending. Therefore, higher unit costs are better because they are a direct measure of the length of time a client is not committing alcohol-related offenses. These cost estimates are shown in Figures 2 and 3 and Table 2.

Juneau had the least expensive "cost per client survival time" for all years, and for all four sites in 1994, with an average cost per client of \$836.23 during an average survival time of 2.77 years. Fairbanks average cost per client by survival time in 1996 of \$2501.05 was the most expensive. This amount was based on Fairbanks having an average survival time of 3.24 years.

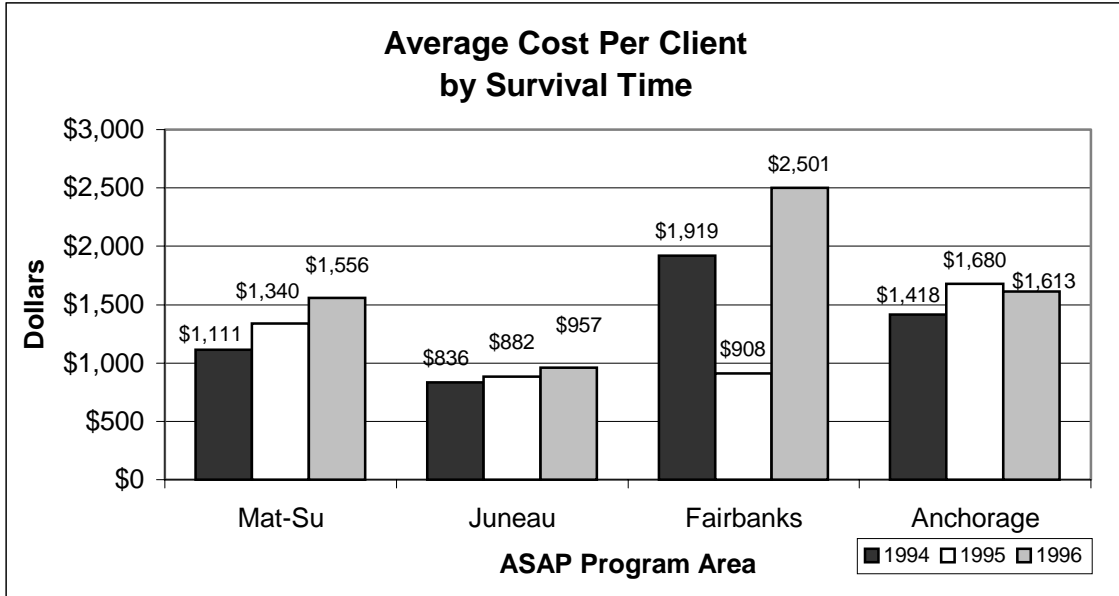


Figure 2

Juneau also had the lowest costs per client survival time per day, with \$0.83, \$0.87, and \$0.95 in 1994 -1996. Fairbanks had the highest cost per client survival time per day in 1996 (\$2.11).

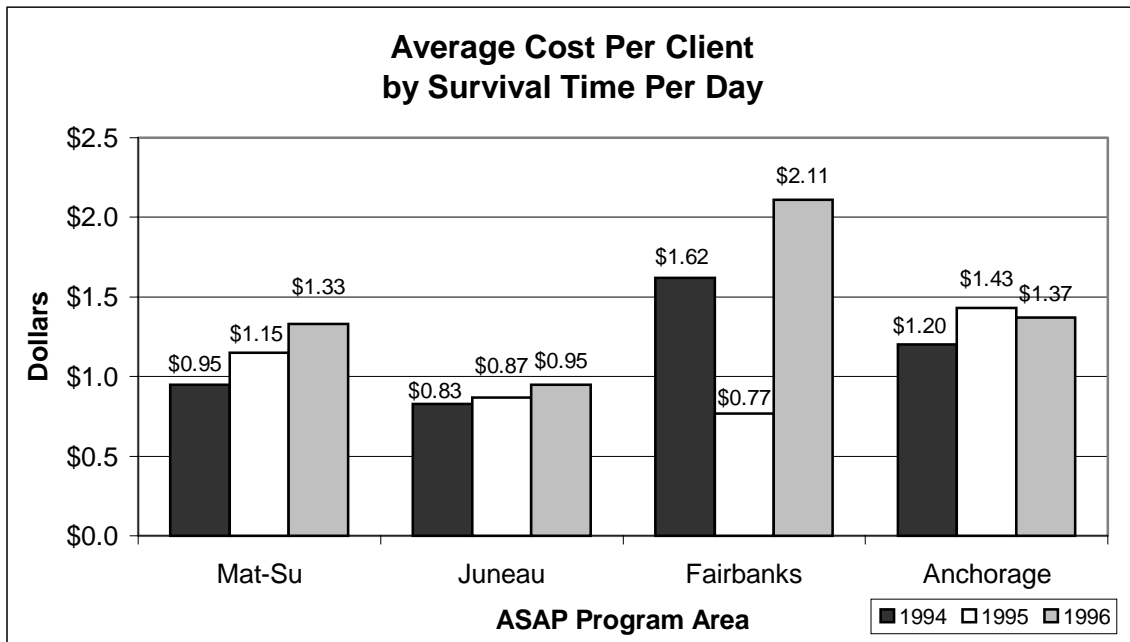


Figure 3

Table 2. Survival Time Cost Data*, 1994-1996

	1994				1995				1996			
	Mat-Su	Juneau	Fairbanks	Anchorage	Mat-Su	Juneau	Fairbanks	Anchorage	Mat-Su	Juneau	Fairbanks	Anchorage
Expenses	\$121,838	\$96,000	\$91,788	\$557,400	\$129,434	\$85,000	\$88,000	\$596,200	\$124,513	\$85,000	\$88,000	\$548,200
Survival Times in Years*	3.20	2.77	3.24	3.23	3.20	2.77	3.24	3.23	3.20	2.77	3.24	3.23
Survival Times in Days	1168	1011	1183	1179	1168	1011	1183	1179	1168	1011	1183	1179
Number of Re-offenders	351	318	155	1270	309	267	314	1146	256	246	114	1098
Average Cost of Survival Time per Client	\$1,110.77	\$836.23	\$1,918.67	\$1,417.64	\$1,340.42	\$881.84	\$908.03	\$1,680.39	\$1,556.41	\$957.11	\$2,501.05	\$1,612.65
Average Cost per Day	\$0.95	\$0.83	\$1.62	\$1.20	\$1.15	\$0.87	\$0.77	\$1.43	\$1.33	\$0.95	\$2.11	\$1.37

*From Alaska Alcohol Safety Action Program Efficacy Study Report, ICHS, July 1999, Table 18, p. 56. All years use aggregate classification data for a random selection of study subjects admitted to ASAP in 1994.

C. Costs by Client Classification

One central tenet in health services is that the severity of the client's problems drives the intensity of the service provided. In this study, it was initially assumed that people with more severe alcohol or drug problems would have the highest case management costs. This basic hypothesis was confirmed in this study.

The analysis clearly shows that the intensity and resulting costs of service are driven largely by the severity of illness and the circumstances surrounding the alcohol-related offense. The varying complexity of ASAP cases causes some individuals to have substantially more service requirements than others. This section uses estimates of the difference in time requirements for clients "with versus without alcohol problems," "DWI's versus non-DWI's," "treatment completion versus non-completion," and "re-offense versus non-re-offense."

1. Categories of Resource Use

ASAP clinicians report substantial differences in the resources required to address the needs of ASAP clients with different clinical configurations. Specifically, differences were hypothesized between:

- Problem drinkers and non-problem drinkers,
- DWI and non-DWI,
- People that complete treatment and those who do not, and
- People who re-offend and those who do not.

The unit cost calculations in this section are based on estimates prepared by ASAP clinical staff on the time allocation for various basic functions, and the difference in resources required by the specific clinical groups mentioned above. The total FY 1999 ASAP budgets for the programs in Mat-Su, Anchorage, Fairbanks, and Juneau were distributed using average function costs. Costs within each function were further distributed using clinical estimates. Finally, these cost distributions were summed and divided by the estimated number of ASAP clients within each category for a total unit cost.

Basic measures of clinical time allocations were needed in order to estimate the time requirements of providing services to clients with these characteristics. (This is based on the assumption that administrative costs would be similarly distributed). ASAP programs typically divide their work into 4 basic therapeutic functions:

1. Intake
2. Classification
3. Referral
4. Tracking/Monitoring

Section D addresses administrative costs per function.

ASAP clinicians were asked to estimate the time required to serve clients in basic categories. Their narrative responses, submitted in hours and minutes and converted to minutes, are summarized in Table 3.

Table 3. Service Time Requirements for Selected Client Characteristics (in minutes)

Classification	Intake	Classification	Referral	Tracking and Monitoring
Problem	20	15	20	120
Non-Problem	20	60	10	20
DWI	20	60	15	30
Non DWI	20	15	20	120
Completer	0	0	30	30
Non-Completer	0	0	180	180
Re-offender	45	0	180	180
Non-re-offender	20	0	30	30

Source: ASAP Client Time per Function Estimation, November 30, 2001.

All costs were distributed to these four functions based on the functional service allocation schedule in the ASAP study of November 30, 2001.

2. Estimates of Cost Per Client Service

The final step in the process was to sum the total function costs for each of the various categories of service provided, and divide that sum by the number of clients who received that type of service. It must be remembered that the categories overlap with most clients receiving many, if not all, of the services included in the final distribution. For example, all clients are classified as either problem drinkers or non-problem drinkers, and then, are either DWI or non-DWI, and can be coded as either completing treatment or not completing treatment. Finally, some clients commit criminal offenses after discharge from the program and are considered re-offenders.

Information on the distribution of clients within each of these major categories was taken from the 1999 ASAP survival analysis and applied to 1996 program data. 1996 cost data for the four major ASAP programs (Anchorage, Mat-Su, Fairbanks, and Juneau) were distributed to the four functional clinical areas using the average distributions shown in Section D. These dollar amounts were then distributed using the percentages of clinical time allocations shown above. The results of these calculations are shown in Table 4.

Table 4. Calculation of Unit Costs for Selected ASAP Client Characteristics

	1996 ASAP Clients	Intake			Classification			Referral			Tracking/Monitoring			Total Dollars	Unit Cost
		Time in Minutes	%	Dollars	Time in Minutes	%	Dollars	Time in Minutes	%	Dollars	Time in Minutes	%	Dollars		
Problem	3369	20	13.8	\$27,560	15	10.0	\$12,380	20	4.1	\$6,430	120	16.9	\$51,385	\$97,756	\$29.02
Non- Problem	2012	20	13.8	\$27,560	60	40.0	\$49,522	10	2.1	\$3,215	20	2.8	\$8,564	\$88,861	\$44.17
DWI	3573	20	13.8	\$27,560	60	40.0	\$49,522	15	3.1	\$4,823	30	4.2	\$12,846	\$94,751	\$26.52
Non-DWI	1080	20	13.8	\$27,560	15	10.0	\$12,380	20	4.1	\$6,430	120	16.9	\$51,385	\$97,756	\$90.51
Completer	3224	na	na	\$ na	na	na	\$ na	30	6.2	\$9,645	30	4.2	\$12,846	\$22,491	\$6.98
Non- Completer	2158	na	na	\$ na	na	na	\$ na	180	37.1	\$57,871	180	25.4	\$77,077	\$134,949	\$62.53
Re- offender	1884	45	31.0	\$62,010	na	na	\$ na	180	37.1	\$57,871	180	25.4	\$77,077	\$196,959	\$104.54
Non-Re- offender	3498	20	13.8	\$7,560	na	na	\$ na	30	6.2	\$9,645	30	4.2	\$12,846	\$50,052	\$14.31
Totals	5382	145		\$199,812	150		\$123,805	485		\$155,931	710		\$304,027	\$783,575	

3. Findings

a. Problem and Non-Problem Drinkers

The calculation of unit cost data shows that non-problem drinkers require approximately 60% more resources than problem drinkers. Differences in the allocation of activities are masked by the unit cost of serving non-problem drinkers and problem drinkers. Although the problem drinker costs are lower, costs for tracking and monitoring these clients is much higher (see Table 4). This contributes to the higher total cost of addressing the needs of problem drinkers (\$99,756 for problem drinkers versus \$88,861 for non-problem drinkers). The lower unit costs of problem drinkers, therefore, may be attributable to the higher volume of services to problem drinkers (3,369 problem drinkers versus 2,012 non-problem drinkers).

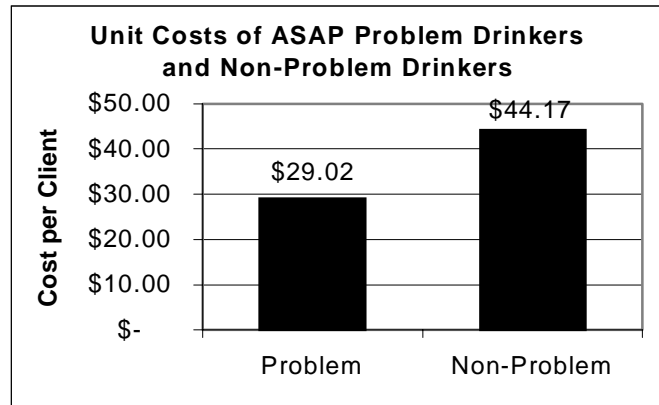


Figure 4

b. DWI and Non-DWI

Figure 5 shows that people who are referred to ASAP for non-DWI problems have almost three times the per-unit cost of those who have DWI problems. Individuals with problems that involve alcohol, but not driving while under the influence, are often burdened with a complex combination of clinical and social problems.

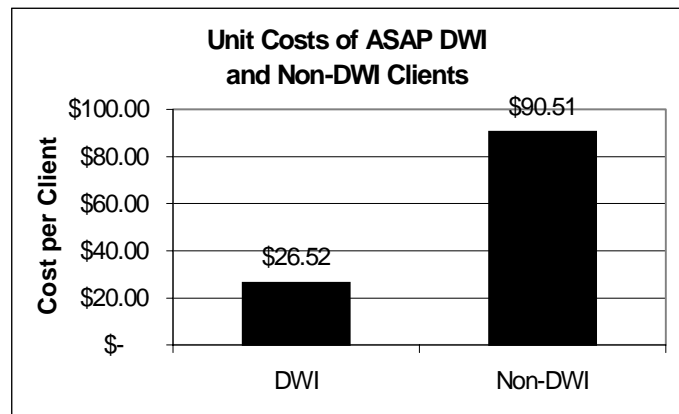


Figure 5

Tracking/monitoring costs for DWI clients were 30 minutes compared to 120 minutes for non-DWI clients, and there were over 3 times as many DWI clients as non-DWI clients associated with the total costs, resulting in lowering the calculated individual DWI client costs and raising non-DWI client costs.

c. Treatment Completion and Non-Completion

One of the more common measures of success in addiction treatment is whether a client successfully completes treatment. People who complete treatment require approximately 16% as much of the resources as those who do not complete treatment (60 minutes versus 360 minutes). This is because those who do not complete treatment require additional referral and tracking/monitoring resources. This extreme difference in unit costs strongly suggests that additional efforts by ASAP staff to carefully monitor the progress of clients through the proscribed course of treatment may result in long-term gains in program effectiveness.

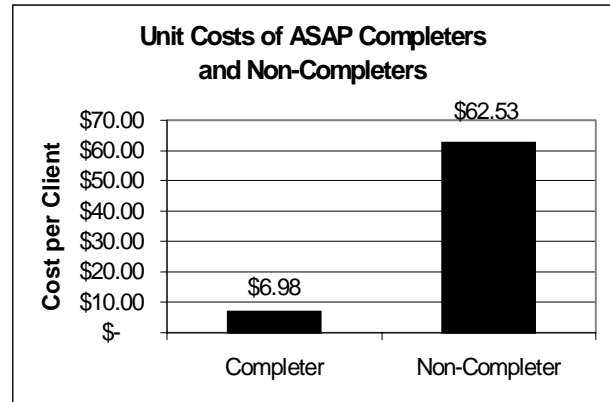


Figure 6

d. Re-offenders and Non-Re-offenders

The overall objective of the ASAP program is to get people who commit alcohol-related misdemeanors into treatment and prevent them from re-offending. This section examines the comparative costs of re-offenders. Those individuals who re-offend are eight times more expensive than those who do not. Non re-offenders do not need to be tracked through additional court proceedings and referred once again into appropriate alcohol treatment.

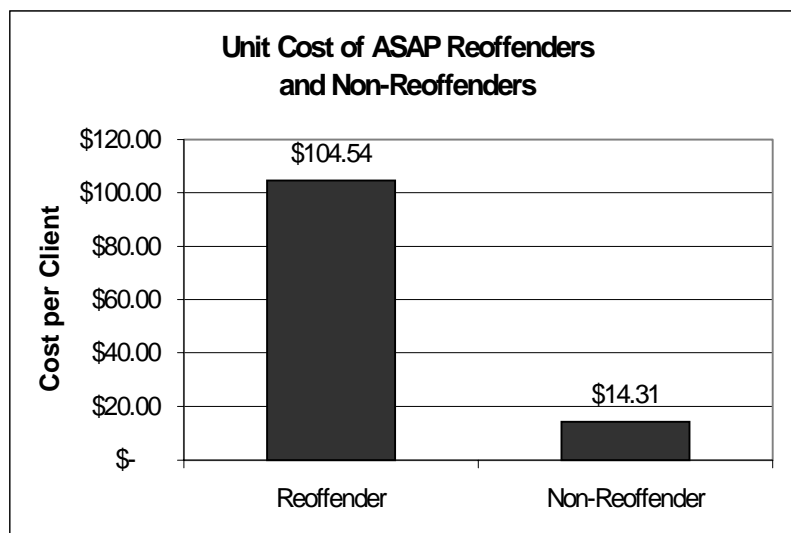


Figure 7

D. Administrative Costs

Systems administration is headquartered in Anchorage and housed within the Anchorage ASAP Program. These costs are more appropriately shown in the budgets of each individual operating ASAP Program than within the Anchorage ASAP budget alone. This section reallocates fixed overhead to operating ASAP Programs throughout the State of Alaska according to estimates provided by the ASAP Administrator. These are shown in Sections 1 & 2 and Tables 5 & 6. Table 6 allocates the Central Administrative Costs across the other sites per the percentages in Table 5 to arrive at a total site cost including Central Administrative Costs. The staff time allocation percentages were provided by each site administrator and compiled by the ASAP Administrator.

1. Allocation of Central Administrative Costs

Thirty percent of the Anchorage expenses are attributed to administration. Table 5 shows that of this \$167,220 for 1999, \$83,610 (50%) of that portion is dedicated to the administration of the Anchorage program. Five percent (\$8,361) of the administration efforts are spent in Mat-Su, Juneau, and Fairbanks programs. The remaining 35% (\$58,527) of administration's efforts is spent in the other 8 ASAP sites.

Table 5. Distribution of ASAP Systems Administration Costs, 1999

	Mat-Su	Juneau	Fairbanks	Anchorage	Other Sites	Total
% of Anchorage Administration Expenses Spent at this Site	5%	5%	5%	50%	35%	100%
Amount of Anchorage Administration Expenses Spent at this Site	\$8,361	\$8,361	\$8,361	\$83,610	\$58,527	\$167,220

Note: The estimated administrative expense by the ASAP Systems Administrator is \$167,220.

2. Adjusted costs by Program

The central ASAP Program offices are housed within the Anchorage ASAP Program. This results in the false notion that Anchorage program and administrative costs are much higher than those of other ASAP programs. Properly allocating these central administrative costs changes the unit cost allocations of ASAP programs in the four study sites. This section uses the allocations estimated above and discounts the administrative costs for each of the study years. The total budgets and unit costs are then recalculated. These calculations are shown in Table 6.

Table 6. Total ASAP Cost Distribution by Function & Including Central Administrative Costs

MAT-SU										
	Agency Budgets			Program Actual Expense					Cost of Central Administration as Percentage of Anchorage	Total Cost Including Central Administration
	Personnel	Other	Total	Client Intake	Drinker Classification	Client Referral	Client Tracking/Monitoring	Local Administration		
Percentage				15%	23%	25%	36%	1%	5%	
1994	\$78,866	\$42,972	\$121,838	\$18,276	\$28,023	\$30,460	\$43,862	\$1,218	\$8,361	\$130,199
1995	\$92,342	\$32,171	\$124,513	\$18,677	\$28,638	\$31,128	\$44,825	\$1,245	\$8,943	\$133,456
1996	\$84,202	\$45,232	\$129,434	\$19,415	\$29,770	\$32,359	\$46,596	\$1,294	\$8,223	\$137,657
1997	\$83,549	\$35,845	\$119,394	\$17,909	\$27,461	\$29,849	\$42,982	\$1,194	\$10,197	\$129,591
1998	\$105,744	\$27,217	\$132,961	\$19,944	\$30,581	\$33,240	\$47,866	\$1,330	\$7,932	\$140,893
1999	\$108,129	\$42,401	\$150,530	\$22,580	\$34,622	\$37,633	\$54,191	\$1,505	\$8,156	\$158,686
JUNEAU										
	Agency Budgets			Program Actual Expense					Cost of Central Administration as Percentage of Anchorage	Total Cost Including Central Administration
	Personnel	Other	Total	Client Intake	Drinker Classification	Client Referral	Client Tracking/Monitoring	Local Administration		
Percentage				25%	10%	20%	40%	5%	5%	
1994	\$83,859	\$12,141	\$96,000	\$24,000	\$9,600	\$19,200	\$38,400	\$4,800	\$8,361	\$104,361
1995	\$81,600	\$3,400	\$85,000	\$21,250	\$8,500	\$17,000	\$34,000	\$4,250	\$8,943	\$93,943
1996	\$74,403	\$10,597	\$85,000	\$21,250	\$8,500	\$17,000	\$34,000	\$4,250	\$8,223	\$93,223
1997	\$77,202	\$7,798	\$85,000	\$21,250	\$8,500	\$17,000	\$34,000	\$4,250	\$10,197	\$95,197
1998	\$73,673	\$11,327	\$85,000	\$21,250	\$8,500	\$17,000	\$34,000	\$4,250	\$7,932	\$92,932
1999	\$75,666	\$9,334	\$85,000	\$21,250	\$8,500	\$17,000	\$34,000	\$4,250	\$8,156	\$93,156

(Table 6. cont.)

FAIRBANKS										
	Agency Budgets			Program Actual Expense					Cost of Central Administration as Percentage of Anchorage	Total Cost Including Central Administration
	Personnel	Other	Total	Client Intake	Drinker Classification	Client Referral	Client Tracking/Monitoring	Local Administration		
Percentage				35%	20%	15%	25%	5%	5%	
1994	\$77,003	\$14,785	\$91,788	\$32,126	\$18,358	\$13,768	\$22,947	\$4,589	\$8,361	\$100,149
1995	\$69,384	\$18,616	\$88,000	\$30,800	\$17,600	\$13,200	\$22,000	\$4,400	\$8,943	\$96,943
1996	\$70,033	\$17,967	\$88,000	\$30,800	\$17,600	\$13,200	\$22,000	\$4,400	\$8,223	\$96,223
1997	\$73,376	\$14,624	\$88,000	\$30,800	\$17,600	\$13,200	\$22,000	\$4,400	\$10,197	\$98,197
1998	\$66,098	\$19,802	\$85,900	\$30,065	\$17,180	\$12,885	\$21,475	\$4,295	\$7,932	\$93,832
1999	\$65,869	\$20,031	\$85,900	\$30,065	\$17,180	\$12,885	\$21,475	\$4,295	\$8,156	\$94,056
ANCHORAGE										
	Agency Budgets			Program Actual Expense					Cost of Central Administration	Total Cost Including Central Administration
	Personnel	Other	Total	Client Intake	Drinker Classification	Client Referral	Client Tracking/Monitoring	Local Administration		
Percentage				17%	4%	12%	37%	30%	50%	
1994	\$456,900	\$100,500	\$557,400	\$94,758	\$22,296	\$66,888	\$206,238	\$167,220	\$83,610	\$473,790
1995	\$486,800	\$109,400	\$596,200	\$101,354	\$23,848	\$71,544	\$220,594	\$178,860	\$89,430	\$506,770
1996	\$451,700	\$96,500	\$548,200	\$93,194	\$21,928	\$65,784	\$202,834	\$164,460	\$82,230	\$465,970
1997	\$486,000	\$193,800	\$679,800	\$115,566	\$27,192	\$81,576	\$251,526	\$203,940	\$101,970	\$577,830
1998	\$458,600	\$70,200	\$528,800	\$89,896	\$21,152	\$63,456	\$195,656	\$158,640	\$79,320	\$449,480
1999	\$498,300	\$45,400	\$543,700	\$92,429	\$21,748	\$65,244	\$201,169	\$163,110	\$81,555	\$462,145

3. Other Administrative Cost Considerations

The Anchorage ASAP site currently receives 5,144 square feet of donated office space from the court system. If this space were billed to the Anchorage ASAP at \$2.50 per square foot per month, this would result in a rent of \$12,860 per month, or \$154,432 per year. If Anchorage ASAP decided to move Alaska ASAP administration and create additional space for Alaska ASAP, it would cost an additional \$4,000 per month or \$48,000 per year for the 1,600 square feet required.

E. Client Services by Function & Personnel Expenses

Personnel expenses are typically the largest cost of any health care service. Therefore, identifying the costs of individual services performed by ASAP staff is an important calculation. Alterations in the distribution of these costs can be realized by a change in the amount of time spent on the various clinical functions. This section analyzes the costs of clinical functions for selected ASAP sites on the basis of personnel costs. The staff time allocations were provided by each site administrator and compiled by the ASAP Administrator. These costs are shown in Figure 8 and Table 7. The Anchorage program is substantially higher than the others, thus showing higher costs.

When comparing personnel expenses among Mat-Su, Juneau, and Fairbanks for 1999, Fairbanks spent the greatest percentage (35%/ \$23,054.15) on client intake, and Juneau spent the greatest percentage (40%/ \$30,266.40) on client tracking/ monitoring. Fairbanks and Juneau both spent equal percentages (5% or \$3,293.45 and \$3,783.30, respectively) on local administration. Mat-Su spent the largest percentages on drinker classification (23%/ \$24,869.67) and client referral (25%/ \$27,032.25).

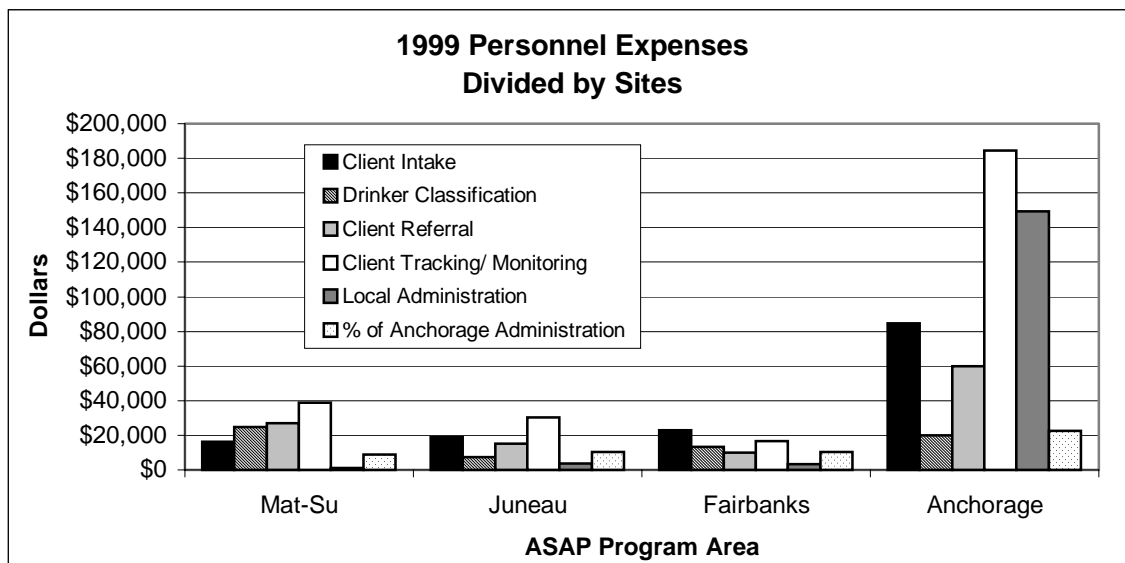


Figure 8

Table 7. Personnel Cost Distribution Across Sites (without adjustment for Central Administration)

Mat-Su							
	Personnel Expenses	Client Intake	Drinker Classification	Client Referral	Client Tracking/ Monitoring	Local Administration	Total
Percentage		15%	23%	25%	36%	1%	100%
1994	\$78,866.00	\$11,829.90	\$18,139.18	\$19,716.50	\$28,391.76	\$788.66	\$78,866.00
1995	\$92,342.00	\$13,851.30	\$21,238.66	\$23,085.50	\$33,243.12	\$923.42	\$92,342.00
1996	\$84,202.00	\$12,630.30	\$19,366.46	\$21,050.50	\$30,312.72	\$842.02	\$84,202.00
1997	\$83,549.00	\$12,532.35	\$19,216.27	\$20,887.25	\$30,077.64	\$835.49	\$83,549.00
1998	\$105,744.00	\$15,861.60	\$24,321.12	\$26,436.00	\$38,067.84	\$1,057.44	\$105,744.00
1999	\$108,129.00	\$16,219.35	\$24,869.67	\$27,032.25	\$38,926.44	\$1,081.29	\$108,129.00
Juneau							
	Personnel Expenses	Client Intake	Drinker Classification	Client Referral	Client Tracking/ Monitoring	Local Administration	Total
Percentage		25%	10%	20%	40%	5%	100%
1994	\$83,859.00	\$20,964.75	\$8,385.90	\$16,771.80	\$33,543.60	\$4,192.95	\$83,859.00
1995	\$81,600.00	\$20,400.00	\$8,160.00	\$16,320.00	\$32,640.00	\$4,080.00	\$81,600.00
1996	\$74,403.00	\$18,600.75	\$7,440.30	\$14,880.60	\$29,761.20	\$3,720.15	\$74,403.00
1997	\$77,202.00	\$19,300.50	\$7,720.20	\$15,440.40	\$30,880.80	\$3,860.10	\$77,202.00
1998	\$73,673.00	\$18,418.25	\$7,367.30	\$14,734.60	\$29,469.20	\$3,683.65	\$73,673.00
1999	\$75,666.00	\$18,916.50	\$7,566.60	\$15,133.20	\$30,266.40	\$3,783.30	\$75,666.00

(Table 7. cont.)

Fairbanks							
	Personnel Expenses	Client Intake	Drinker Classification	Client Referral	Client Tracking/ Monitoring	Local Administration	Total
Percentage		35%	20%	15%	25%	5%	100%
1994	\$77,003.00	\$26,951.05	\$15,400.60	\$11,550.45	\$19,250.75	\$3,850.15	\$77,003.00
1995	\$69,384.00	\$24,284.40	\$13,876.80	\$10,407.60	\$17,346.00	\$3,469.20	\$69,384.00
1996	\$70,033.00	\$24,511.55	\$14,006.60	\$10,504.95	\$17,508.25	\$3,501.65	\$70,033.00
1997	\$73,376.00	\$25,681.60	\$14,675.20	\$11,006.40	\$18,344.00	\$3,668.80	\$73,376.00
1998	\$66,098.00	\$23,134.30	\$13,219.60	\$9,914.70	\$16,524.50	\$3,304.90	\$66,098.00
1999	\$65,869.00	\$23,054.15	\$13,173.80	\$9,880.35	\$16,467.25	\$3,293.45	\$65,869.00

Anchorage							
	Personnel Expenses	Client Intake	Drinker Classification	Client Referral	Client Tracking/ Monitoring	Local Administration	Total
Percentage		17%	4%	12%	37%	30%	100%
1994	\$456,900.00	\$77,673.00	\$18,276.00	\$54,828.00	\$169,053.00	\$137,070.00	\$456,900.00
1995	\$486,800.00	\$82,756.00	\$19,472.00	\$58,416.00	\$180,116.00	\$146,040.00	\$486,800.00
1996	\$451,700.00	\$76,789.00	\$18,068.00	\$54,204.00	\$167,129.00	\$135,510.00	\$451,700.00
1997	\$486,000.00	\$82,620.00	\$19,440.00	\$58,320.00	\$179,820.00	\$145,800.00	\$486,000.00
1998	\$458,600.00	\$77,962.00	\$18,344.00	\$55,032.00	\$169,682.00	\$137,580.00	\$458,600.00
1999	\$498,300.00	\$84,711.00	\$19,932.00	\$59,796.00	\$184,371.00	\$149,490.00	\$498,300.00

IV. Study Limitations

As with any study, there are problems with the data and analytic procedures that limit the study's reliability and utility. This section highlights some of those limitations. It is intended to help the reader interpret the findings and conclusions with appropriate caution.

1. There is a lack of comparable data: A detailed cost study of ASAP functions appears to be unique. No other comparable data have been found for benchmarking purposes or to give a frame of reference for the data included in this report. Therefore, aggregate and unit costs can only be compared within the program, and not to some external benchmark.
2. Client resource use estimates may be weak: The information used to distribute the ASAP work effort was collected at a point in time by ASAP staff. While it is the best estimate available, the estimates may be improved through a more thorough collection of workload distributions through detailed time studies. This will increase the reliability of the unit cost calculations.
3. Historical administrative expenses are difficult to determine: The Alaska ASAP Program Manager provided estimates of statewide administrative effort for 1999. This estimate was applied to audited expense data to develop administrative cost estimates. Previous years' costs were not directly calculated, but were distributed using the 1999 estimates. In order to accurately estimate those expenses applied in prior years, an implicit price deflator was applied to the 1999 data. This assumes that the same distribution of administrative effort occurred in all prior years. This may not be the case, but there is no way of knowing.
4. There were substantial differences in personnel allocations for various functions between programs: Each agency was requested to estimate the proportion of staff time allocated to the basic functions of intake, classification, referral and tracking and monitoring and local administration. Because the laws and regulations governing the ASAP Program are fairly proscriptive, these differences may be attributable to differences in the interpretation of activity categories by program managers. The possibility of these differences suggests caution in interpreting the calculations of the costs of expenses by personnel function.

V. Conclusions

The average cost of service to an ASAP client ranges from \$120 to \$200: Costs varied slightly from program to program. The 1995 and 1996 Fairbanks data presented some significant anomalies. These were adjusted to account for changes in administrative expertise in the program. The result was a more reasonable cost trend. However, Fairbanks costs were typically higher than those for programs in the Mat-Su Valley, Anchorage, or Juneau. The reason for this difference is not known.

The ASAP Program appears to be a reasonable use of public funds: The cost of keeping an alcohol-related misdemeanor from re-offending ranges from between \$1,500 and \$2,000 per year (1996 data). In light of the extreme personal and social costs inflicted by people convicted of such crimes, keeping an offender from re-offending is an important goal. A social expenditure of between \$1,500 and \$2,000 to keep these individuals from inflicting additional trauma on the Alaska society appears to be a worthwhile expenditure.

There may be predictable gains by realigning program activities to focus on those who are at risk of re-offense: The sevenfold difference (\$104 vs. \$14) in unit costs between re-offenders and non-re-offenders strongly suggests that additional efforts by ASAP staff to carefully monitor the progress of clients through the prescribed course of treatment will result in long term gains in program effectiveness through lessened re-offense.

Dedicating additional resources or reallocating resources to ensure treatment completion may be a sound public investment in helping keep alcohol-impaired drivers off Alaska roadways: There is some evidence that those who do not complete treatment are at higher risk of re-offense. People who complete treatment are less costly than those who do not. People who complete treatment require approximately 16.67% of the resources of those who do not complete treatment. Those who do not complete treatment require additional referral and tracking/monitoring resources.

The ASAP Program appears to be gaining some efficiencies: The cost per re-offender continues to decline. This may be an indicator of streamlined administrative procedures used to reengage clients in ASAP programs or obtain authorization from the courts or other public safety officers to redirect people back into treatment.

There appear to be some economies of scale in service provision: The Anchorage program has the lowest unit costs before adjusting for administration. This suggests that, as with most industries, there are some economies of scale. As the number of clients increases, the average cost per client goes down. A recalculation of the Anchorage costs per client served would be even lower after the reduction of total costs from the administrative cost reallocation.

While non-problem drinkers appear more expensive to deal with than problem drinkers, this may be attributable to the larger number of clients leading to lower unit costs: This difference may be attributable to the complexity of problems of ASAP clients who have been referred to the program for an alcohol-related misdemeanor that is far more complex than an alcohol-related problem. Many of these people are homeless or have episodes of family violence or other complex problems. This anomaly may also be a result of “economies of scale” since there were more problem drinkers being treated for a slightly higher total cost than approximately 1/3 less non-problem drinkers were treated for.

DWI cases cost far less than non-DWIs: People who are referred to ASAP for non-DWI problems have almost three times the cost per unit of those who have DWI problems. The reason for this is similar to that of problem and non-problem drinkers. Individuals with problems that involve alcohol, but not driving while under the influence, are often burdened with a complex combination of clinical and social problems. It may also be an “economies of scale” issue. One-third as many clients were classified non-DWI as DWI, and the non-DWI client required 1/3 more resources.

VI. Suggestions for Future Research

The most compelling finding of this study is that it confirms what ASAP staff have already reported – people with DWIs are not the most costly people to treat, that completion of treatment reduces costs and that re-offenders are expensive to both the program and the community.

Additional research in finding ways of reconfiguring the ASAP case management and tracking system to give high-risk clients additional monitoring and administrative time and to reduce the time spent on clients with low risk of re-offense may reduce the number of re-offenders. This would allow the ASAP Program to better meet the social goal of reducing the impact of alcohol on the community.

An extensive analysis has already been completed which examines the factors that predict re-offense. These factors could be used to construct a case management schedule that focuses available clinical time on those clients with the highest risk of re-offense. The results of that model could be compared with clients with the standard ASAP case management protocols. Any differences could be used for further model refinements.

ASAP clients who re-offend can generate extensive additional costs to the criminal justice, court, and addiction treatment systems. A detailed estimate of the systems costs of re-offenders can provide valuable benchmark data for measuring the effectiveness of systems re-engineering and the accompanying systems cost savings.

Estimates of social costs will add an additional level of precision to our understanding of the true costs and benefits of this program. Estimates of social costs are now commonly shown in estimates of traffic injuries and fatalities. The NHTSA cost estimation protocols (BELTMENU)¹ contain a detailed list of components of costs of traffic injuries. This model could be applied to ASAP client services.

The overall goal of efficiently producing services for the social goal of reducing adverse alcohol-related impacts could be enhanced through this additional research.

¹ Saylor, B., Busch, K., Smith, S. (May 1999) Economic Consequences of Motor Vehicle Crashes in Anchorage, 1995.