

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILE 8672
1437 SCOMM 52: JOINT SPEC. COMMITTEE ON LOCAL OPTION LAWS 1985-86

E. Use of Additional Sentencing Conditions

Table 13 presents a breakdown of additional sentencing conditions by alcohol use at offense and community. There is a strong relationship between alcohol-related offenses and presence of additional conditions. 76.3% of the defendants who did not use alcohol at offense also did not receive additional conditions; 66.9% of the defendants who used alcohol also received additional conditions as a part of sentencing.

For misdemeanants who did not use alcohol and received additional conditions, the most likely condition was "other," which included forfeiture of weapons, movement restrictions or some other requirement tailored to the defendant or the offense. Each of the remaining types of additional conditions was used in less than 3% of the cases.

Defendants who did use alcohol were referred to alcohol treatment programs in 31.3% of the cases and to "educational" programs in another 10.8% of the cases. 16.3% of these cases were assigned "other" conditions, and an additional 5.3% to a combination of several conditions.

Among communities, Anchorage defendants who used alcohol were most likely to be assigned to an alcohol treatment (49.6%) or educational (13.3%) program. In Bethel (39.0%), Fairbanks (37.9%), Juneau (32.4%), Kodiak (48.6%), and Sitka (35.9%) over one third of the defendants who used alcohol at offense were assigned to an alcohol treatment or educational program. Nome defendants who used alcohol were most likely to be assigned some other condition (24.5%) or a combination of two conditions (22.5%). The majority (62.8%) of Barrow defendants who used alcohol were not assigned any additional sentencing conditions.

TABLE 12
(1981 Misdemeanors,

Breakdown by Community of Defendants
Who Served at Least 1 Day in Jail
and Were Sentenced to "Time Served"

Sentenced to Time Served	Community								Total
	Anchorage	Barrow	Bethel	Fairbanks	Juneau	Kodiak	Nome	Sitka	
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
No	301 (89.9)	15 (60.0)	86 (86.9)	159 (86.4)	51 (96.4)	51 (81.0)	68 (79.1)	37 (88.1)	770 (86.6)
Yes	34 (10.1)	10 (40.0)	13 (13.1)	25 (13.6)	2 (3.6)	12 (19.0)	18 (20.9)	5 (11.9)	119 (13.4)

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For misdemeanants who did not use alcohol and received additional conditions, the most likely condition was "other," which included forfeiture of weapons, movement restrictions or some other requirement tailored to the defendant or the offense. Each of the remaining types of additional conditions was used in less than 3% of the cases.

Defendants who did use alcohol were referred to alcohol treatment programs in 31.3% of the cases and to "educational" programs in another 10.8% of the cases. 16.3% of these cases were assigned "other" conditions, and an additional 5.3% to a combination of several conditions.

Among communities, Anchorage defendants who used alcohol were most likely to be assigned to an alcohol treatment (49.6%) or educational (13.3%) program. In Bethel (39.0%), Fairbanks (37.9%), Juneau (32.4%), Kodiak (48.6%), and Sitka (35.9%) over one third of the defendants who used alcohol at offense were assigned to an alcohol treatment or educational program. Nome defendants who used alcohol were most likely to be assigned some other condition (24.5%) or a combination of two conditions (22.5%). The majority (62.8%) of Barrow defendants who used alcohol were not assigned any additional sentencing conditions.

TABLE 13
(1981 Misdemeanors)

Breakdown of Additional Sentencing Conditions
by Alcohol Use at Offense and Community

Location	Additional Conditions									N
	None	Alc/Drug Treatment	Psych Treatment	Work	Education	Community Service	Other	Combination		
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage										
No Alc.	157 (81.3)	2 (1.0)	5 (2.6)	0	3 (1.6)	1 (0.5)	24 (12.4)	1 (0.5)	193	
Alc used	71 (29.6)	119 (49.6)	3 (1.3)	0	32 (13.3)	1 (0.4)	8 (3.3)	6 (2.5)	240	
Barrow										
No Alc.	3 (60.0)	0	2 (40.0)	0	0	0	0	0	5	
Alc used	27 (62.8)	2 (4.7)	2 (4.7)	0	1 (2.3)	0	9 (20.9)	2 (4.7)	43	
Bethel										
No Alc.	7 (58.3)	1 (8.3)	0	0	0	0	4 (33.3)	0	12	
Alc used	22 (22.0)	36 (36.0)	0	2 (2.0)	3 (3.0)	0	37 (37.0)	0	100	
Fairbanks										
No Alc	32 (58.2)	3 (5.5)	0	0	1 (1.3)	0	19 (34.5)	0	55	
Alc used	58 (32.8)	44 (24.9)	0	0	23 (13.0)	1 (0.6)	49 (27.7)	2 (1.1)	177	
Juneau										
No Alc	20 (90.9)	0	0	2 (9.1)	0	0	0	0	22	
Alc used	40 (54.1)	14 (18.9)	0	4 (5.4)	10 (13.5)	1 (1.4)	3 (4.1)	2 (2.7)	74	
Kodiak										
No Alc	19 (90.5)	0	1 (4.8)	0	0	0	1 (4.8)	0	21	
Alc used	23 (31.9)	25 (34.7)	1 (1.4)	2 (2.8)	10 (13.9)	0	10 (13.9)	1 (1.4)	72	
Nome										
No Alc	6 (46.2)	0	0	1 (7.7)	1 (7.7)	0	3 (23.1)	2 (15.4)	13	
Alc used	19 (18.6)	20 (19.6)	0	10 (9.8)	5 (4.9)	0	25 (24.5)	23 (22.5)	102	
Sitka										
No Alc	17 (81.0)	2 (9.5)	0	0		0	2 (9.5)	0	21	
Alc used	29 (45.3)	13 (20.3)	0	1 (1.6)	10 (15.6)	0	1 (1.6)	10 (15.6)	64	
Totals										
No Alc	261 (76.3)	8 (2.3)	8 (2.3)	3 (0.9)	5 (1.5)	1 (0.3)	53 (15.5)	3 (0.9)	342	
Alc used	289 (33.1)	273 (31.3)	6 (0.7)	19 (2.2)	94 (10.8)	3 (0.3)	142 (16.3)	46 (5.3)	872	

TABLE 13
(1981 Misdemeanors)

Breakdown of Additional Sentencing Conditions
by Alcohol Use at Offense and Community

Location	Additional Conditions								N
	None n (%)	Alc/Drug Treatment n (%)	Psych Treatment n (%)	Work n (%)	Education n (%)	Community Service n (%)	Other n (%)	Combination n (%)	
Anchorage									
No Alc.	157 (81.3)	2 (1.0)	5 (2.6)	0	3 (1.6)	1 (0.5)	24 (12.4)	1 (0.5)	193
Alc used	71 (29.6)	119 (49.6)	3 (1.3)	0	32 (13.3)	1 (0.4)	8 (3.3)	6 (2.5)	240
Barrow									
No Alc.	3 (60.0)	0	2 (40.0)	0	0	0	0	0	5
Alc used	27 (62.8)	2 (4.7)	2 (4.7)	0	1 (2.3)	0	9 (20.9)	2 (4.7)	43
Bethel									
No Alc.	7 (58.3)	1 (8.3)	0	0	0	0	4 (33.3)	0	12
Alc used	22 (22.0)	36 (36.0)	0	2 (2.0)	3 (3.0)	0	37 (37.0)	0	100
Fairbanks									
No Alc	32 (58.2)	3 (5.5)	0	0	1 (1.8)	0	19 (34.5)	0	55
Alc used	58 (32.8)	44 (24.9)	0	0	23 (13.0)	1 (0.6)	49 (27.7)	2 (1.1)	177
Juneau									
No Alc	20 (90.9)	0	0	2 (9.1)	0	0	0	0	22
Alc used	40 (54.1)	14 (18.9)	0	4 (5.4)	10 (13.5)	1 (1.4)	3 (4.1)	2 (2.7)	74
Kodiak									
No Alc	19 (90.5)	0	1 (4.8)	0	0	0	1 (4.8)	0	21
Alc used	23 (31.9)	25 (34.7)	1 (1.4)	2 (2.8)	10 (13.9)	0	10 (13.9)	1 (1.4)	72
Nome									
No Alc	6 (46.2)	0	0	1 (7.7)	1 (7.7)	0	3 (23.1)	2 (15.4)	13
Alc used	19 (18.6)	20 (19.6)	0	10 (9.8)	5 (4.9)	0	25 (24.5)	23 (22.5)	102
Sitka									
No Alc	17 (81.0)	2 (9.5)	0	0		0	2 (9.5)	0	21
Alc used	29 (45.3)	13 (20.3)	0	1 (1.6)	10 (15.6)	0	1 (1.6)	10 (15.6)	64
Totals									
No Alc	261 (76.3)	8 (2.3)	8 (2.3)	3 (0.9)	5 (1.5)	1 (0.3)	53 (15.5)	3 (0.9)	342
Alc used	289 (33.1)	273 (31.3)	6 (0.7)	19 (2.2)	94 (10.8)	3 (0.3)	142 (16.3)	46 (5.3)	872

III. ANALYSIS of DIFFERENT OFFENSE TYPES

A. Violent Offenses

1) Community Sentencing Patterns

Only three communities (Anchorage (47 defendants), Bethel (37) and Nome (31)) have sufficiently large sample sizes to make direct comparisons. A violent misdemeanor was the most serious charge against 9% of the defendants from Anchorage, 32% of those from Bethel and 26% of those from Nome.

Anchorage defendants (77%, 36 of 47) were convicted of assault-type offenses more often than were Bethel (51%, 19 of 37) or Nome (57%, 17 of 30) defendants. Defendants from the latter two areas had nearly equal numbers of assault- and weapon-type offenses. The mean number of counts at sentencing was 1.3 for Anchorage defendants, 1.2 for defendants from Bethel and 1.5 for those from Nome. The proportion of defendants with two or more concurrent counts was significantly greater ($P=0.001$) in Nome (48%) than Anchorage (11%) or Bethel (19%).

The varying sentencing patterns in the three areas are shown in Tables 14 and 15. In Bethel (81.1%) and Nome (80.0%) the most likely penalty was an active jail sentence. This was especially true for "weapon" offenses, where approximately 90% of the defendants in these areas spent at least one day in jail. The mean active jail sentence for defendants who were sentenced to at least one day in jail was 55.9 days in Bethel and 25.8 days in Nome. There was a low likelihood of receiving a net fine in either Bethel (16.2%) or Nome (6.7%).

In contrast, Anchorage defendants had a lower likelihood of going to jail (46.8%) and a greater chance of receiving a net fine (59.6%). The mean active jail sentence (11.8 days) for defendants sentenced to at least one day in jail was one-quarter to one-half that of a Bethel or Nome

TABLE 14
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Active Jail Sentences (Days) for Defendants Who Spent at Least 1 Day in Jail for Violent Offenses. Given are the Total Number of Defendants (N) Within Each Misdemeanor Sub-Category and the Number (n) and Proportion (% N) of Defendants who Spent at Least 1 Day in Jail.

	ASSAULT						VIOLENT (DAYS)					TOTAL				
	N	n	(% N)	Mean	SD		N	n	(% N)	Mean	SD	N	n	(% N)	Mean	SD
Anch.	36	16	(44.4)	14.3	28.1		11	6	(54.5)	5.3	5.9	47	22	(46.8)	11.8	24.3
Barrow	3	1	(33.3)	2.0	0.0		3	1	(33.3)	10.0	0.0	6	2	(33.3)	6.0	5.7
Bethel	19	14	(73.7)	42.6	69.2		18	16	(88.9)	67.4	97.8	37	30	(81.1)	55.9	85.2
Fair.	4	3	(75.0)	53.7	48.0		4	1	(25.0)	15.0	0.0	8	4	(50.0)	44.0	43.7
Juneau	6	4	(66.7)	17.0	21.3		0					6	4	(66.7)	17.0	21.3
Kodiak	4	2	(50.0)	18.5	12.0		4	1	(25.0)	22.0	0.0	8	3	(37.5)	19.7	8.7
Nome	17	12	(70.6)	32.8	50.7		13	12	(92.3)	18.8	25.0	30	24	(80.0)	25.8	39.7
Sitka	5	3	(60.0)	2.3	0.6		1	1	(100.0)	1.0	0.0	6	4	(66.7)	2.0	0.8
Total	94	55	(58.5)	27.2	47.1		54	38	(70.4)	36.4	69.4	148	93	(62.8)	31.0	57.1

TABLE 15
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Net Fines (\$) for Defendants Who Paid at Least \$1 for Violent Offenses. Given are the Total Number of Defendants (N) within Each Misdemeanor Sub-category and the Number (n) and proportion (% N) of Defendants Who Paid at Least \$1 in Fines

	VIOLENT (\$)														
	ASSAULT					WEAPONS					Total				
	N	n	(% N)	Mean	SD	N	n	(% N)	Mean	SD	N	n	(% N)	Mean	SD
Anch.	36	20	(55.6)	165.0	101.4	11	8	(72.7)	150.0	112.6	47	28	(59.6)	160.7	102.8
Barrow	3	0	(0.0)	0.0	0.0	3	0	(0.0)	0.0	0.0	6	0	(0.0)	0.0	0.0
Bethel	19	3	(15.8)	66.7	28.9	18	3	(16.7)	93.3	60.3	37	6	(16.2)	80.0	44.7
Fair.	4	4	(100.0)	167.5	154.8	4	3	(75.0)	133.3	104.1	8	7	(87.5)	164.3	128.2
Juneau	6	3	(50.0)	150.0	50.0	0	-	-	-	-	6	3	(50.0)	150.0	50.0
Kodiak	4	2	(50.0)	150.0	141.4	4	2	(50.0)	100.0	0.0	8	4	(50.0)	125.0	86.6
Nome	17	2	(11.8)	75.0	35.4	13	0	(0.0)	0.0	0.0	30	2	(6.7)	75.0	35.4
Sitka	5	2	(40.0)	400.0	141.4	1	1	(100.0)	400.0	0.0	6	3	(50.0)	400.0	100.0
Total	94	36	(38.3)	165.3	116.4	54	17	(31.5)	145.9	110.5	148	53	(35.8)	159.1	113.8

TABLE 16
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
For Violent Offenses. Given are Means And
Standard Deviations (SD) For All Penalties.

VIOLENT

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	47	25 (53.2)	17 (36.2)	3 (6.4)	0	0	2 (4.3)	5.5	17.5
Barrow	6	4 (66.7)	2 (33.3)	0	0	0	0	2.0	4.0
Bethel	37	7 (18.9)	10 (27.0)	7 (18.9)	4 (10.8)	0	9 (24.3)	45.3	79.6
Fairbanks	8	4 (50.0)	1 (12.5)	1 (12.5)	0	0	2 (25.0)	22.0	37.0
Juneau	6	2 (33.3)	2 (33.3)	1 (16.7)	0	0	1 (16.7)	11.3	18.7
Kodiak	8	5 (62.5)	1 (12.5)	0	2 (25.0)	0	0	7.4	11.2
Nome	30	6 (20.0)	13 (43.3)	3 (10.0)	3 (10.0)	1 (3.3)	4 (13.3)	20.7	36.9
Sitka	6	2 (33.3)	4 (66.7)	0	0	0	0	1.3	1.2
Total	148	55 (37.2)	50 (33.8)	15 (10.1)	9 (6.1)	1 (0.7)	18 (12.2)	19.5	47.6

TABLE 17
(1981 Misdemeanors)

Distribution of Net Fines (\$) For
Violent Offenses. Given are Means
And Standard Deviations (SD) For all Penalties.

VIOLENT

CITY	N	(\$)						Mean	SD
		0	1-100	101-200	201-300	301-400	400		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	47	19 (40.4)	12 (25.5)	10 (21.3)	5 (10.6)	0	1 (2.1)	95.7	112.1
Barrow	6	6 (100.0)	0	0	0	0	0	0.0	0.0
Bethel	37	31 (83.8)	5 (13.5)	1 (2.7)	0	0	0	13.0	34.2
Fairbanks	8	1 (12.5)	4 (50.0)	1 (12.5)	1 (12.5)	1 (12.5)	0	143.8	132.1
Juneau	6	3 (50.0)	1 (16.7)	2 (33.3)	0	0	0	75.0	88.0
Kodiak	8	4 (50.0)	3 (37.5)	0	1 (12.5)	0	0	62.5	87.6
Nome	30	28 (93.3)	2 (6.7)	0	0	0	0	4.8	19.8
Sitka	6	3 (50.0)	0	0	1 (16.7)	1 (16.7)	1 (16.7)	200.0	228.0
Total	148	95 (64.2)	27 (18.2)	14 (9.5)	8 (5.4)	2 (1.4)	2 (1.4)	56.6	101.9

TABLE 18
(1981 Misdemeanors)

Regression Coefficients and Standard Errors (SE) for
Equations Describing Variation in Active Jail Sentence
Length (Days) for Violent Offenses. Also Given are
Sample Sizes (N) and Coefficients of Determination (R²)

	Preliminary		Reduced	
	N = 100 R ² = 0.36 Coefficient	(SE)	N = 109 R ² = 0.33 Coefficient	(SE)
<u>Case Descriptor Index</u>	-2.3°	(0.84)	-2.3***	(0.60)
<u>Process</u>				
Guilty at:				
Arraignment	¶		¶	
Other hearing	14.9°	(5.55)	12.1**	(4.72)
Jury Trial	-		-	
Bench Trial	-		-	
Concurrent Counts	8.8°	(5.24)	7.1	(4.38)
<u>Offense</u>				
Charge Subcategory				
Weapons	¶		-	
Assault	0.1	(10.03)	-	
Victim Status				
No Harm	¶		-	
Harm	2.3	(9.63)	-	
Alcohol Use at Offense				
No	¶		-	
Yes	4.1	(6.36)	-	
<u>Defendant Problems</u>				
Prior Record				
None	¶		¶	
Violation(s)	-		-	
Misdemeanor(s)	-0.4	(5.73)	-0.5	(4.85)
Felony(s)	27.8°	(9.74)	22.4***	(8.51)
Drug/Alcohol Treatment				
No Problem	¶		¶	
Never Referred	-3.3	(6.25)	-0.6	(5.68)
Referred, No Attendance	-		-	
Attended, No Completion	-		-	
Current Treatment	23.0°	(9.55)	24.6***	(8.27)
Completed Treatment	-		-	
<u>Defendant Characteristics</u>				
Sex				
Male	¶		-	
Female	-7.3	(9.46)	-	
Age	0.002	(0.26)	-	
Financial Index	-1.3	(1.61)	-	
<u>Other Factors</u>				
Net Fine	-0.01	(0.024)	-	
Additional Conditions	-10.8°	(5.45)	-11.1**	(4.67)
Constant (Intercept)	-12.1	(12.06)	-5.8	(7.27)

-	Not analyzed	*	0.10 > P ≥ 0.05
¶	Reference category	**	0.05 > P ≥ 0.01
°	P ≤ 0.20	***	P < 0.01

defendant. The mean net fine for defendants paying at least \$1 was \$160.70.

The distributions of active jail sentences and net fines are displayed in Tables 16 and 17. In Anchorage and Nome, the majority of defendants who served time received a sentence between 1 and 10 days length. In Bethel, nearly equal numbers of defendants received sentences between 1 and 10 days and greater than 40 days. The majority of Anchorage defendants who were required to pay a fine paid between \$1 and \$100.

2) Factors Associated with Sentences of Violent Offenses

Results of the preliminary regression model for active jail sentences are shown in Table 18. For the 100 cases under consideration, 36% of the total variation in active sentence length could be "explained" by the full set of variables. Relatively significant ($P \leq 0.20$) factors included the case descriptor index (CDI), presence of additional sentencing conditions, the court proceeding at which disposition occurred, the defendant's prior record and prior alcohol treatment history, and the number of concurrent counts. Thus, these factors were entered into a "reduced" model.

The reduced model explained 33% of the total variation in active sentence length for 109 defendants. Defendants who had prior felony records ($P=0.01$), who were undergoing alcohol treatment ($P=0.03$) or who plead guilty or nolo at a proceeding other than arraignment ($P=0.01$) received significantly longer sentences than defendants with no prior record, no previous alcohol problem or who plead guilty or nolo at arraignment. Presence of additional sentencing conditions was related to significantly shorter ($P=0.02$) sentences. Also, defendants who scored lower (i.e., had more of the characteristics associated with rural areas) on the CDI received longer sentences ($P=0.0002$) than defendants who scored higher.

In terms of magnitude of the coefficients, or estimated effect, prior criminal record and drug/alcohol

treatment history were most significant. Defendants who had committed prior felonies received sentences an estimated 22.4 days longer than defendants with no prior record; defendants who were currently undergoing drug/alcohol treatment received sentences an estimated 24.6 days longer than defendants with no previous alcohol or drug problem noted in the court's record.

B. Property Offenses

1) Community Sentencing Patterns

Seven of the eight areas (Anchorage (105 cases), Bethel (19), Fairbanks (47), Juneau (18), Kodiak (21), Nome (24) and Sitka (22)) have sufficient numbers of property offenses for direct comparison. Property offenses were 16%-24% of the data from these areas.

The categories of property offenses were trespass, mischief, theft and fraud. Theft was the most common property offense committed by defendants from Anchorage (45.7%), Fairbanks (70.2%), Juneau (44.4%), Kodiak (47.6%) and Nome (58.3%); mischief was the most common property offense type committed by Bethel (36.8%) and Sitka (31.8%) defendants.

Juneau (2.0), Anchorage (1.5) and Kodiak (1.4) defendants were convicted on a greater mean number of counts than defendants from the other areas (1.1 counts for each area), but the proportion of defendants with greater than one count (8% to 29%) did not differ significantly ($P=0.53$) between areas. One Anchorage defendant convicted of 19 counts and one Juneau defendant convicted of 17 counts greatly affected the mean number of counts for these areas.

The use of different sentence alternatives is shown in Tables 19 and 20. In each of the communities under consideration, 50% or more of the defendants convicted of a property offense spent at least 1 day in jail. The likelihood of receiving a jail sentence was greatest for defendants convicted of a theft offense (69.5%). The mean active jail

TABLE 19
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Active Jail Sentences for Defendants Who Spent at Least 1 Day in Jail for Property Offenses. Given are the Total Number of Defendants (N) Within Each Misdemeanor Sub-Category and the Number (n) and Proportion (% N) of Defendants who Spent at Least 1 Day in Jail.

	TRESPASS					MISCHIEF					FRAUD					THEFT					TOTAL				
	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD
Anch.	27	8	(29.6)	11.6	15.0	22	12	(54.5)	10.4	13.1	8	6	(75.0)	3.3	1.9	48	34	(70.8)	16.8	35.3	105	60	(57.1)	13.5	27.8
Bar.	1	0	(0.0)	0.0	0.0	4	1	(25.0)	2.0	0.0	0	-	-	-	-	3	0	(0.0)	0.0	0.0	8	1	(12.5)	2.0	0.0
Bet.	5	3	(60.0)	30.0	39.1	7	7	(100.0)	30.9	53.4	1	1	(100.0)	5.0	0.0	6	2	(33.3)	2.5	0.7	19	13	(68.4)	24.3	42.7
Fair.	9	5	(55.6)	16.6	11.8	5	2	(40.0)	3.0	2.8	0	-	-	-	-	33	26	(78.8)	19.0	26.3	47	33	(70.2)	17.7	23.9
Jun.	5	2	(40.0)	3.5	2.1	3	3	(100.0)	11.7	2.9	2	1	(50.0)	15.0	0.0	8	6	(75.0)	8.2	11.7	18	12	(66.7)	8.8	8.7
Kod.	6	3	(50.0)	37.3	39.5	5	2	(40.0)	12.5	3.5	0	-	-	-	-	10	6	(60.0)	29.2	37.0	21	11	(52.4)	28.4	32.8
Nome	4	1	(25.0)	7.0	0.0	6	3	(50.0)	3.0	1.7	0	-	-	-	-	14	11	(78.6)	38.0	107.1	24	15	(62.5)	28.9	91.9
Sit.	6	3	(50.0)	11.0	14.7	7	4	(57.1)	2.5	1.7	3	0	(0.0)	0.0	0.0	6	4	(66.7)	8.5	13.0	22	11	(50.0)	7.0	10.4
Total	63	25	(39.7)	17.0	21.7	59	34	(57.6)	12.6	26.1	14	8	(57.1)	5.0	4.4	128	89	(69.5)	19.6	46.2	264	156	(59.1)	16.9	38.0

TABLE 20
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Net Fines (\$) for Defendants Who Paid at Least \$1 for Property Offenses. Given are the Total Number of Defendants (N) within Each Misdemeanor Sub-category and the Number (n) and proportion (% N) of Defendants who Paid at Least \$1 in Fines

	TRESPASS					MISCHIEF					FRAUD					THEFT					TOTAL				
	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD	N	n	(% N)	MEAN	SD
Anch.	27	19	(70.4)	58.2	56.6	22	13	(59.1)	188.5	119.3	8	3	(37.5)	3266.7	5398.5	48	24	(50.0)	105.2	56.6	105	59	(56.2)	269.5	1225.5
Barrow	1	0	(0.0)	0.0	0.0	4	0	(0.0)	0	0.0	0	-	-	-	-	3	0	(0.0)	0.0	0.0	8	0	(0.0)	0.0	0.0
Bethel	5	1	(20.0)	75.0	0.0	7	2	(28.6)	75.0	35.4	1	0	(0.0)	0.0	0.0	6	0	(0.0)	0.0	0.0	19	3	(15.8)	75.0	25.0
Fair.	9	5	(55.6)	95.0	75.8	5	2	(40.0)	75.0	35.4	0	-	-	-	-	33	16	(48.5)	182.8	153.5	47	23	(48.9)	154.3	138.3
Juneau	5	1	(20.0)	100.0	0.0	3	0	(0.0)	0.0	0.0	2	2	(100.0)	1270.0	1088.9	8	7	(87.5)	63.6	27.2	18	10	(55.6)	308.5	623.8
Kodiak	6	1	(16.7)	50.0	0.0	5	1	(20.0)	50.0	0.0	0	-	-	-	-	10	6	(60.0)	50.0	15.8	21	8	(38.1)	50.0	13.4
Nome	4	0	(0.0)	0.0	0.0	6	0	(0.0)	0.0	0.0	0	-	-	-	-	14	0	(0.0)	0.0	0.0	24	0	(0.0)	0.0	0.0
Sitka	6	2	(33.3)	75.0	35.4	7	2	(28.6)	225.0	106.1	3	2	(66.7)	80.0	99.0	6	5	(83.3)	175.0	182.0	22	11	(50.0)	148.6	137.9
Total	63	29	(46.0)	68.1	56.3	59	20	(33.9)	162.5	113.4	14	7	(50.0)	1785.7	3474.0	128	58	(45.3)	121.9	110.8	264	114	(43.2)	217.5	901.8

TABLE 21
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
For Property Offenses. Given are Means and
Standard Deviations (SD) For All Penalties.

PROPERTY

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	105	45 (42.9)	46 (43.8)	4 (3.8)	4 (3.8)	2 (1.9)	4 (3.8)	7.7	22.0
Barrow	8	7 (87.5)	1 (12.5)	0	0	0	0	0.3	0.7
Bethel	19	6 (31.6)	9 (47.4)	1 (5.3)	1 (5.3)	0	2 (10.5)	16.6	36.8
Fairbanks	47	14 (29.8)	21 (44.7)	5 (10.6)	1 (2.1)	1 (2.1)	5 (10.6)	12.4	21.6
Juneau	18	6 (33.3)	8 (44.4)	3 (16.7)	1 (5.6)	0	0	5.9	8.2
Kodiak	21	10 (47.6)	5 (23.8)	2 (9.5)	1 (4.8)	0	3 (14.3)	14.9	27.3
Nome	24	9 (37.5)	13 (54.2)	0	1 (4.2)	0	1 (4.2)	18.1	73.0
Sitka	22	11 (50.0)	9 (40.9)	2 (9.1)	0	0	0	3.5	8.0
Total	264	108 (40.9)	112 (42.4)	15 (5.7)	11 (4.2)	3 (1.1)	15 (5.7)	10.0	30.3

TABLE 22
(1981 Misdemeanors)

Distribution of Net Fines (\$) For
Property Offenses. Given are Means
And Standard Deviations (SD) For all Penalties.

PROPERTY
(\$)

CITY	N	0		1-100		101-200		201-300		301-400		400		Mean	SD
		n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)		
Anchorage	105	46	(43.8)	43	(41.0)	9	(8.6)	5	(4.8)	0		2	(1.9)	151.4	925.0
Barrow	8	8	(100.0)	0		0		0		0		0		0.0	0.0
Bethel	19	16	(84.2)	3	(15.8)	0		0		0		0		11.8	29.3
Fairbanks	47	24	(51.1)	12	(25.5)	9	(19.1)	0		0		2	(4.3)	75.5	123.4
Juneau	18	8	(44.4)	8	(44.4)	0		0		0		2	(11.1)	171.4	480.5
Kodiak	21	13	(61.9)	8	(38.1)	0		0		0		0		19.0	26.1
Nome	24	24	(100.0)	0		0		0		0		0		0.0	0.0
Sitka	22	11	(50.0)	7	(31.8)	2	(9.1)	1	(4.5)	0		1	(4.5)	74.3	121.8
Total	264	150	(56.8)	81	(30.7)	20	(7.6)	6	(2.3)	0		7	(2.7)	93.9	600.9

sentence for defendants who were in jail at least 1 day ranged from 7.0 (Sitka) to 28.9 (Nome) days; the overall mean was 16.9 days.

Approximately 50% of the convicted defendants were required to pay a fine in Anchorage (56.2%), Fairbanks (48.9%), Juneau (55.6%) and Sitka (50.0%) (Table 17). None of the 24 Nome defendants were required to pay a fine. For those communities where at least 10 defendants were required to pay a fine, the mean fines ranged between \$148.60 (Sitka) and \$308.50 (Juneau); the overall mean was \$217.50. The largest fines were associated with fraud offenses, which were committed by defendants who generally were convicted of more than one charge.

Tables 18 and 19 display distributions of active jail sentences and net fines for defendants convicted of property offenses. The majority of defendants who were required to spend at least 1 day in jail, were sentenced to terms of 1 to 10 days; the majority of defendants who were required to pay a fine, paid between \$1 and \$100.

2) Factors Associated with Sentences of Property Offenses

Results of the preliminary regression model for active jail sentences are shown in Table 23. For the 161 cases under consideration, only 23% of the total variation in active jail sentence length could be "explained" by the full set of variables. Relatively significant ($P \leq 0.20$) factors included the CDI and financial indices, the defendant's prior record and prior alcohol treatment history, and the number of concurrent counts. Thus, these factors were entered into a "reduced" model.

The reduced model explained the same proportion (23%) of variability in active jail sentence for a larger data set ($n=177$). Only prior criminal record and alcohol/drug treatment were relevant to the jail term imposed. Defendants who had committed prior felonies received significantly longer (58.7 days, $P=0.000$) jail sentences than defendants with no prior record; defendants with an alcohol/drug problem who previously

TABLE 23
(1981 Misdemeanors)

Regression Coefficients and Standard Errors (SE) for
Equations Describing Variation in Active Jail Sentence
Length (Days) for Property Offenses. Also Given are
Sample Sizes (N) and Coefficients of Determination (R²)

	Preliminary		Reduced	
	N = 161 R ² = 0.23 Coefficient	(SE)	N = 177 R ² = 0.23 Coefficient	(SE)
<u>Case Descriptor Index</u>	0.8°	(0.56)	-0.4	(0.74)
<u>Process</u>				
Guilty at:				
Arraignment	¶		-	
Other hearing	2.4	(3.56)	-	
Jury Trial	-		-	
Bench Trial	-		-	
Concurrent Counts	2.4°	(1.49)	0.7	(1.18)
<u>Offense</u>				
Charge Subcategory				
Trespass	¶		-	
Mischief	-2.1	(4.76)	-	
Fraud	-2.1	(8.13)	-	
Theft	5.2	(4.32)	-	
Victim Status				
No Harm	-		-	
Harm	-		-	
Alcohol Use at Offense				
No	¶		-	
Yes	2.8	(4.00)	-	
<u>Defendant Problems</u>				
Prior Record	-		-	
None	¶		¶	
Violation(s)	-		-	
Misdemeanor(s)	0.6	(4.25)	1.7	(6.15)
Felony(s)	18.2°	(8.08)	58.7***	(11.27)
Drug/Alcohol Treatment				
No Problem	¶		¶	
Never Referred	4.3	(5.91)	21.3**	(8.37)
Referred, No Attendance	12.1°	(5.87)	5.8	(8.14)
Attended, No Completion	-		-	
Current Treatment	6.0	(7.50)	6.7	(10.38)
Completed Treatment	-		-	
<u>Defendant Characteristics</u>				
Sex				
Male	¶		-	
Female	-4.9	(4.33)	-	
Age	-0.1	(0.15)	-	
Financial Index	2.1°	(1.18)	-0.05	(1.61)
<u>Other Factors</u>				
Net Fine	-0.004	(0.0036)	-	
Additional Conditions	0.4	(3.43)	-	
Constant (Intercept)	-1.4	(5.50)	1.00	(3.59)

- Not analyzed
¶ Reference category
° $P \leq 0.20$

* $0.10 > P \geq 0.05$
** $0.05 > P \geq 0.01$
*** $P < 0.01$

were never referred or treated for the problem, received significantly longer (21.3 days, $P=0.01$) sentences than defendants with no previous alcohol problem.

C. Vehicular Offenses

1) Community Sentencing Patterns

Vehicular is the most frequent offense category from each community. The proportion of defendants with vehicular offenses range from about 30% (Nome) to 65% (Fairbanks). Each of the communities (Anchorage (302 defendants), Barrow (25), Bethel (40), Fairbanks (169), Juneau (51), Kodiak (44), Nome (35) and Sitka (50)) have sufficiently large samples to make direct comparisons.

The mean number of counts per defendant was 1.2 in Anchorage, Bethel and Nome, 1.1 in Fairbanks, Juneau, Kodiak and Sitka, and 1.0 in Barrow. The proportion (15.1%) of defendants with two or more concurrent counts did not differ significantly ($P=0.39$) between communities. Most defendants (84.9%) in this misdemeanor category had only one charge against them.

Except for Barrow, DWI was the most common offense subcategory in each of the areas (Tables 24 and 25). 55.4% of all vehicular misdemeanors were DWI offenses. There were nearly equal numbers of license (122 offenses, 17.0%) (e.g., driving with license suspended) and reckless driving (136 offenses, 19.0%) convictions.

Over 70% of the defendants who committed a vehicular offense served at least 1 day in jail (Table 21). Defendants who were convicted of DWI offenses had the highest likelihood (99.2%) of going to jail*. However, the mean active sentence

* Note that the offense subcategory "DWI" contains other than DWI offenses (Table 2). If only DWI/OMVI offenses are considered, 100% of those defendants served at least 3 days in jail.

TABLE 25
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Net Fines (\$) for Defendants Who Paid at Least \$1 for Vehicular Offenses. Given are the Total Number of Defendants (N) within Each Misdemeanor Sub-category and the Number (n) and proportion (% N) of Defendants Who Paid at Least \$1 in Fines

VEHICULAR																													
LICENSE						OPERATOR						(\$) RECKLESS						DWI						TOTAL					
N	n	(% N)	MEAN	SD		N	n	(% N)	MEAN	SD		N	n	(% N)	MEAN	SD		N	n	(% N)	MEAN	SD		N	n	(% N)	MEAN	SD	
Anch.	84	46	(54.8)	149.0	97.0	44	33	(75.0)	203.0	165.4		38	37	(97.4)	253.4	137.5		136	119	(87.5)	288.0	158.1		302	235	(77.8)	241.9	154.8	
Barrow	0					1	0	(0.0)	0.0	0.0		13	4	(30.8)	43.8	37.5		11	8	(72.7)	256.3	17.7		25	12	(48.0)	185.4	107.4	
Bethel	3	1	(33.3)	50.0	0.0	0						2	2	(100.0)	62.5	53.0		35	32	(91.4)	173.4	95.0		40	35	(87.5)	113.6	96.9	
Fair.	19	10	(52.6)	220.0	135.8	8	4	(50.0)	212.5	131.5		29	28	(96.6)	210.7	113.9		113	109	(96.5)	348.2	198.7		169	151	(89.3)	310.6	189.5	
Juneau	13	11	(84.6)	62.3	32.6	2	2	(100.0)	300.0	70.7		13	12	(92.3)	180.0	94.4		23	23	(100.0)	337.2	122.9		51	48	(94.1)	233.3	150.1	
Kodiak	3	1	(33.3)	30.0	0.0	3	2	(66.7)	75.0	35.4		7	7	(100.0)	171.4	119.4		31	29	(93.5)	432.8	180.9		44	39	(88.6)	357.2	210.1	
Nome	0					0						7	7	(100.0)	142.9	102.8		28	23	(82.1)	247.8	120.8		35	30	(85.7)	223.3	123.7	
Sitka	0					3	3	(100.0)	258.3	166.5		27	26	(96.3)	167.7	84.4		20	17	(85.0)	367.6	82.8		50	46	(92.0)	247.5	129.5	
Total	122	69	(56.6)	143.3	105.3	61	44	(72.1)	206.3	156.3		136	123	(90.4)	197.5	120.3		397	360	(90.7)	310.4	172.1		716	596	(83.2)	259.9	167.4	

TABLE 26
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
for Vehicular Offenses. Given are Means and
Standard Deviations (SD) for all Penalties.

VEHICULAR

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	302	78 (25.8)	171 (56.6)	35 (11.6)	8 (2.6)	2 (0.7)	8 (2.6)	9.9	29.0
Barrow	25	11 (44.0)	12 (48.0)	1 (4.0)	0	0	1 (4.0)	6.0	18.4
Betnel	40	1 (2.5)	33 (82.5)	4 (10.0)	0	0	2 (5.0)	8.8	13.4
Fairbanks	169	38 (22.5)	100 (59.2)	14 (8.3)	6 (3.6)	3 (1.8)	8 (4.7)	10.7	22.8
Juneau	51	22 (43.1)	23 (45.1)	5 (9.8)	0	0	1 (2.0)	11.0	50.1
Kodiak	44	10 (22.7)	29 (65.9)	4 (9.1)	0	0	1 (2.3)	5.6	7.7
Nome	35	6 (17.1)	28 (80.0)	0	1 (2.9)	0	0	4.3	4.6
Sitka	50	28 (56.0)	18 (36.0)	1 (2.0)	1 (2.0)	0	2 (4.0)	6.1	19.7
Total	716	194 (27.1)	414 (57.8)	64 (8.9)	16 (2.2)	5 (0.7)	23 (3.2)	9.2	26.6

TABLE 27
(1981 Misdemeanors)

Distribution of Net Fines (\$) For
Vehicular Offenses. Given are Means And
Standard Deviations (SD) For All Penalties.

VEHICULAR

CITY	N	(\$)						Mean	SD
		0	1-100	101-200	201-300	301-400	400		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	302	67 (22.2)	52 (17.2)	62 (20.5)	91 (30.1)	7 (2.3)	23 (7.6)	188.3	169.6
Barrow	25	13 (52.0)	4 (16.0)	0	8 (32.0)	0	0	89.0	119.3
Bethel	40	5 (12.5)	12 (30.0)	18 (45.0)	3 (7.5)	0	2 (5.0)	143.1	105.8
Fairbanks	169	18 (10.7)	18 (10.7)	35 (20.7)	54 (32.0)	11 (6.5)	33 (19.5)	277.5	203.2
Juneau	51	3 (5.9)	16 (31.4)	3 (5.9)	18 (35.3)	7 (13.7)	4 (7.8)	219.6	155.7
Kodiak	44	5 (11.4)	6 (13.6)	2 (4.5)	3 (6.8)	19 (43.2)	9 (20.5)	316.6	228.3
Nome	35	5 (14.3)	8 (22.9)	7 (20.0)	10 (28.6)	2 (5.7)	3 (8.6)	191.4	139.1
Sitka	50	4 (8.0)	11 (22.0)	13 (26.0)	7 (14.0)	14 (28.0)	1 (2.0)	227.7	141.4
Total	716	120 (16.8)	127 (17.7)	140 (19.6)	194 (27.1)	60 (8.4)	75 (10.5)	216.4	181.0

TABLE 28
(1981 Misdemeanors)

Regression Coefficients and Standard Errors (SE) for Equations Describing Variation in Active Jail Sentence Length (Days) for Vehicular Offenses. Also Given are Sample Sizes (N) and Coefficients of Determination (R²)

	Preliminary		Reduced	
	N = 537 R ² = 0.32 Coefficient	(SE)	N = 544 R ² = 0.31 Coefficient	(SE)
<u>Case Descriptor Index</u>	0.87°	(0.398)	0.9**	(0.39)
<u>Process</u>				
Guilty at:				
Arraignment	¶		¶	
Other hearing	-1.5	(2.59)	-1.7	(2.50)
Jury Trial	12.6°	(4.07)	13.2***	(3.95)
Bench Trial	3.9	(6.56)	4.2	(6.44)
Concurrent Counts	15.3°	(2.09)	15.5***	(2.04)
<u>Offense</u>				
Charge Subcategory				
Operator	¶		¶	
License	6.6°	(4.19)	6.7	(4.07)
Reckless	4.3	(4.07)	4.5	(3.96)
DWI	9.7°	(4.30)	10.8***	(3.66)
Victim Status				
No Harm	¶		-	
Harm	-0.7	(3.82)	-	
Alcohol Use at Offense				
No	-		-	
Yes	-		-	
<u>Defendant Problems</u>				
Prior Record				
None	¶		-	
Violation(s)	0.2	(3.15)	-	
Misdemeanor(s)	2.3	(2.49)	-	
Felony(s)	4.7	(4.89)	-	
Drug/Alcohol Treatment				
No Problem	-		-	
Never Referred	-0.2	(3.38)	0.6	(3.18)
Referred, No Attendance	8.6°	(3.16)	10.0***	(2.77)
Attended, No Completion	46.9°	(6.56)	49.0***	(6.27)
Current Treatment	19.6°	(4.14)	20.4***	(3.92)
Completed Treatment	0.3	(5.15)	2.1	(4.88)
<u>Defendant Characteristics</u>				
Sex				
Male	¶		-	
Female	-3.3	(2.85)	-	
Age	-0.01	(0.086)	-	
Financial Index	1.2°	(0.57)	1.3**	(0.55)
<u>Other Factors</u>				
Net Fine	-0.01°	(0.0059)	-0.01*	(0.0057)
Additional Conditions	1.9	(2.79)	-	
Constant (Intercept)	-19.0°	(5.14)	-18.9***	(4.49)

- Not analyzed
¶ Reference category
° P ≤ 0.20

* 0.10 > P ≥ 0.05
** 0.05 > P ≥ 0.01
*** P < 0.01

(11.9 days) for defendants convicted of a DWI offense and who served at least 1 day in jail was less than that for defendants convicted of license (14.7 days) or reckless driving (18.0 days) offenses.

For license and reckless driving offenses the likelihood of receiving an active jail sentence varied among communities. Comparing communities that had at least 10 convictions, Anchorage (65.5%) and Fairbanks (78.9%) defendants convicted of license offense were more likely to go to jail than Juneau defendants (38.5%); Anchorage (44.7%) defendants who committed reckless driving offenses were more likely to go to jail than either Barrow (23.1%), Fairbanks (10.3%), Juneau (7.7%) or Sitka (11.1%) defendants.

Over 83% of the defendants committing a vehicular offense paid a fine (Table 22). Fines were less likely in Barrow (48.0%) than the other communities (77.8% to 94.1%). The likelihood of receiving a fine was highest for reckless driving (90.4%) and DWI (90.7%) offenses. However, the mean fine for a DWI offense (\$310.40) was over \$100 greater than a reckless driving conviction (\$197.50).

The distributions of active jail sentences and net fines are displayed in Tables 26 and 27. The majority of defendants who served time received a sentence between 1 and 10 days; the majority of defendants who paid a fine, paid between \$201 and \$300.

2) Factors Associated with Sentences of Vehicular Offenses

Results of the preliminary regression model for active jail sentences are shown in Table 28. Alcohol use at offense was not included in the model as it was directly related to one of the offense subcategories (DWI). For the 537 cases under consideration, 32% of the total variation in active jail sentence length could be explained by the full set of variables. Relatively significant ($P \leq 0.20$) factors included the

CDI and financial indices, the court proceeding at which disposition occurred, the specific charge subcategory, the defendant's drug/alcohol treatment history, the number of pending counts and the net fine paid by the defendant.

The reduced regression model was able to explain 31% of the variation in active sentence length for 544 defendants.

The most significant ($P \leq 0.01$) factors included the specific offense subcategory, the number of concurrent counts, the court proceeding at which disposition occurred and the drug/alcohol treatment history of the defendant. Defendants charged with a DWI violation received longer (10.8 days) jail sentences than defendants with "operator action" (e.g., failure to report an accident) violations, once other factors had been accounted for. License offenders also received marginally longer (6.7 days, $P=0.10$) sentences than operator action convictions. Defendants who were charged and convicted on multiple counts received an estimated 15.5 days for each additional count.

Defendants who were convicted after jury trials received significantly longer (13.2 days) sentences than defendants who plead guilty or nolo at arraignment. Defendants who received dispositions at a proceeding other than arraignment or who had a bench trial did not receive sentences significantly different from defendants who plead guilty or nolo at arraignment.

The drug/alcohol treatment history of the defendant was also significantly related to the jail term imposed. Defendants who were previously referred, but did not attend (10.0 days extra), who attended, but did not complete (49.0 days) or who were currently undergoing treatment (20.4 days) received significantly longer sentences than defendants with no prior problem. Defendants who had a prior alcohol problem, but were never referred to, or who completed an alcohol/drug program were not sentenced differently from defendants without an alcohol problem.

Other factors that were less significant statistically ($0.05 > P \geq 0.01$) included the CDI and financial indices. Defendants who scored higher on these indices received longer (0.9 days per index point on the CDI index; 1.3 days per index point on the financial index) sentences than defendants who scored lower.

Of marginal significance ($0.10 > P \geq 0.05$) in determining active jail sentence was the net fine. Larger net fines are associated with lower jail terms (-0.01 days per dollar net fine).

D. Disorderly Conduct Offenses

1) Community Sentencing Patterns

Disorderly conduct was the most serious offense committed by 9.1% of the defendants in the study. The proportion of defendants committing these offenses in each of the communities were Anchorage 5.6%, Barrow 17.0%, Bethel 12.8%, Fairbanks 7.3%, Juneau 16.7%, Kodiak 8.9%, Nome 10.0% and Sitka 13.0%.

Distributions of active jail sentences and net fines are shown in Tables 29 - 32. Statewide, 55.6% of the defendants were sentenced to at least one day in jail. Over two thirds of the defendants in Barrow (77.8%), Bethel (80.0%) and Nome (75.0%) received an active jail sentence; under 50% of the defendants in Juneau (26.3%), Kodiak (44.4%) and Sitka (33.3%) were likewise sentenced. The average active jail sentence for defendants sentenced to at least one day was 5.8 days. The range of mean jail sentences was between 1.3 days (Sitka) and 11.0 days (Fairbanks). The majority of sentences were between 1 and 10 days duration.

The use of net fines in the various communities is the converse of the use of active jail sentences. Barrow (22.2%), Bethel (46.7%) and Nome (8.3%) defendants received net fines in less than 50% of the cases. Defendants in Fairbanks (73.7%),

TABLE 29
(1981 Misdemeanors)

Means and Standard Deviations (SD)
of Active Jail Sentences (Days) for Defendants
Who Spent at Least 1 Day in Jail for "Disorderly
Conduct" Offenses. Given are the Total Number
of Defendants (N) and the Number (n) and Proportion
(% N) of Defendants Who Spent at Least 1 Day in Jail.

DISORDERLY CONDUCT
(DAYS)

CITY	N	n	(%N)	Mean	SD
Anchorage	29	17	(58.6)	6.1	10.0
Barrow	9	7	(77.8)	10.1	15.6
Bethel	15	12	(80.0)	3.3	2.4
Fairbanks	19	11	(57.9)	11.0	17.0
Juneau	19	5	(26.3)	5.8	3.8
Kodiak	9	4	(44.4)	3.3	2.1
Nome	12	9	(75.0)	2.1	1.3
Sitka	12	4	(33.3)	1.3	0.5
Total	124	69	(55.6)	5.8	10.0

TABLE 30
(1981 Misdemeanors)

Means and Standard Deviations (SD)
of Net Fines (\$) for Defendants Who Paid
at Least \$1 for "Disorderly Conduct" Offenses.
Given are the Total Number of Defendants (N)
and the Number (n) and Proportion (% N) of
Defendants Who Paid at Least \$1 in Fines

DISORDERLY CONDUCT (\$)					
CITY	N	n	(%N)	Mean	SD
Anchorage	29	17	(58.6)	82.4	55.7
Barrow	9	2	(22.2)	35.0	21.2
Bethel	15	7	(46.7)	42.9	27.8
Fairbanks	19	14	(73.7)	155.4	153.2
Juneau	19	12	(63.2)	100.0	67.4
Kodiak	9	6	(66.7)	66.7	37.6
Nome	12	1	(8.3)	50.0	0.0
Sitka	12	10	(83.3)	132.5	83.4
Total	124	69	(55.6)	100.3	92.3

TABLE 31
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
for "Disorderly Conduct" Offenses. Given are Means
and Standard Deviations (SD) for all Penalties.

DISORDERLY CONDUCT

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	29	12 (41.4)	16 (55.2)	0	0	0	1 (3.4)	3.6	8.1
Barrow	9	2 (22.2)	6 (66.7)	0	0	0	1 (11.1)	7.9	14.3
Bethel	15	3 (20.0)	12 (80.0)	0	0	0	0	2.6	2.5
Fairbanks	19	8 (42.1)	9 (47.4)	0	0	0	2 (10.5)	6.4	13.9
Juneau	19	14 (73.7)	5 (26.3)	0	0	0	0	1.5	3.2
Kodiak	9	5 (55.6)	4 (44.4)	0	0	0	0	1.4	2.1
None	12	3 (25.0)	9 (75.0)	0	0	0	0	1.6	1.4
Sitka	12	8 (66.7)	4 (33.3)	0	0	0	0	0.4	0.7
Total	124	55 (44.4)	64 (51.6)	0	0	0	4 (3.2)	3.2	8.0

TABLE 31
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
for "Disorderly Conduct" Offenses. Given are Means
and Standard Deviations (SD) for all Penalties.

DISORDERLY CONDUCT

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	29	12 (41.4)	16 (55.2)	0	0	0	1 (3.4)	3.6	8.1
Barrow	9	2 (22.2)	6 (66.7)	0	0	0	1 (11.1)	7.9	14.3
Bethel	15	3 (20.0)	12 (80.0)	0	0	0	0	2.6	2.5
Fairbanks	19	8 (42.1)	9 (47.4)	0	0	0	2 (10.5)	6.4	13.9
Juneau	19	14 (73.7)	5 (26.3)	0	0	0	0	1.5	3.2
Kodiak	9	5 (55.6)	4 (44.4)	0	0	0	0	1.4	2.1
Nome	12	3 (25.0)	9 (75.0)	0	0	0	0	1.6	1.4
Sitka	12	8 (66.7)	4 (33.3)	0	0	0	0	0.4	0.7
Total	124	55 (44.4)	64 (51.6)	0	0	0	4 (3.2)	3.2	8.0

TABLE 32
(1981 Misdemeanors)

Distribution of Net Fines (\$) For
"Disorderly Conduct" Offenses. Given are
Means And Standard Deviations (SD) For all Penalties.

DISORDERLY CONDUCT

CITY	N	(\$)						Mean	SD
		0	1-100	101-200	201-300	301-400	400		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	29	12 (41.4)	15 (51.7)	1 (3.4)	1 (3.4)	0	0	48.3	59.0
Barrow	9	7 (77.8)	2 (22.2)	0	0	0	0	7.8	17.1
Bethel	15	8 (53.3)	7 (46.7)	0	0	0	0	20.0	28.7
Fairbanks	19	5 (26.3)	10 (52.7)	0	2 (10.5)	1 (5.3)	1 (5.3)	114.5	148.0
Juneau	19	7 (36.8)	11 (57.9)	0	1 (5.3)	0	0	63.2	72.3
Kodiak	9	3 (33.3)	6 (66.7)	0	0	0	0	44.4	44.7
Nome	12	11 (91.7)	1 (8.3)	0	0	0	0	4.2	14.4
Sitka	12	2 (16.7)	6 (50.0)	2 (16.7)	2 (16.7)	0	0	110.4	91.4
Total	124	55 (44.4)	58 (46.8)	3 (2.4)	6 (4.8)	1 (0.8)	1 (0.8)	55.8	84.9

TABLE 33
(1981 Misdemeanors)

Regression Coefficients and Standard Errors (SE) for
Equations Describing Variation in Active Jail Sentence
Length (Days) for Disorderly Conduct Offenses. Also Given are
Sample Sizes (N) and Coefficients of Determination (R²)

	Preliminary		Reduced	
	N = 72 R ² = 0.31 Coefficient	(SE)	N = 81 R ² = 0.25 Coefficient	(SE)
<u>Case Descriptor Index</u>	-0.05	(0.37)	-	
<u>Process</u>				
Guilty at:				
Arraignment	¶		-	
Other hearing	-1.54	(2.17)	-	
Jury Trial	-		-	
Bench Trial	-		-	
Concurrent Counts	-5.7°	(4.62)	-5.1	(4.11)
<u>Offense</u>				
Charge Subcategory				
Victim Status				
No Harm	¶		-	
Harm	0.6	(2.1)	-	
Alcohol Use at Offense				
No	¶		-	
Yes	-0.44	(2.63)	-	
<u>Defendant Problems</u>				
Prior Record				
None	¶		-	
Violation(s)	-		-	
Misdemeanor(s)	4.0°	(2.55)	3.2*	(1.74)
Felony(s)	-		-	
Drug/Alcohol Treatment				
No Problem	-		-	
Never Referred	-1.0	(3.57)	-	
Referred, No Attendance	-2.14	(3.09)	-	
Attended, No Completion	-		-	
Current Treatment	-		-	
Completed Treatment	-		-	
<u>Defendant Characteristics</u>				
Sex				
Male	¶		-	
Female	2.1	(3.24)	-	
Age	-0.09	(0.14)	-	
Financial Index	1.84°	(0.74)	1.6***	(0.57)
<u>Other Factors</u>				
Net Fine	0.05°	(0.013)	0.04***	(0.010)
Additional Conditions	0.1	(2.29)	-	
Constant (Intercept)	8.24°	(6.15)	4.4	(4.31)

- Not analyzed
¶ Reference category
° P ≤ 0.20

* 0.10 > P ≥ 0.05
** 0.05 > P ≥ 0.01
*** P < 0.01

Juneau (63.2%), Kodiak (66.7%) and Sitka (83.3%) were more likely to receive a fine. Highest mean fines (for defendants receiving a net fine) were levied in Fairbanks (\$155.40), Juneau (\$100.00) and Sitka (\$132.50); lowest mean fines were in Barrow (\$35.00), Bethel (\$42.90) and Nome (\$50.00). The majority of fines were between \$1 and \$100.

2) Factors Associated with Sentences of Disorderly Conduct Offenses

Results of the preliminary regression model are shown in Table 33. For the 72 cases under consideration, 31% of the variation in active jail sentence length could be explained by the full model. Relatively ($P > 0.20$) significant factors included the financial index, the number of concurrent counts, the defendant's prior record and the net fine received.

The reduced model with 81 cases explains 25% of the variation of active sentence length. In this model only net fine and the financial index were related to active jail sentence at the 0.05 level of significance. For each additional dollar of net fine, there was an estimated 0.04 day increase in active jail sentence length. Defendants who scored higher on the index served longer sentences (1.6 days per index point) than defendants who scored lower. There is some indication ($0.10 > P \geq 0.05$) that defendants with a prior misdemeanor record received longer (3.2 days) sentences than defendants with no prior record.

E. Alcohol/Drug Law Offenses

1) Community Sentencing Patterns

Alcohol/drug law violations (such as possession of drugs or consumption of alcohol by a minor) were the most serious offenses committed by 5.5% of the defendants in this study. The proportion of defendants committing these offenses in each of the communities were Anchorage 0.8%, Barrow 9.4%, Bethel 5.1%, Fairbanks 3.1%, Juneau 16.7%, Kodiak 14.9%, Nome 14.2% and Sitka 1.1%. Only three communities (Juneau (19

cases), Kodiak (15), Nome (17)) have a sufficient number of convictions to make direct comparisons.

The distributions of active jail sentences and net fines are shown in Tables 34 - 37. Kodiak (66.7%) and Nome (52.9%) defendants were more likely to receive a jail sentence of at least one day than their Juneau counterparts (26.3%). However, the mean active jail term for defendants who spent at least one day in jail was 16.3 days in Kodiak, compared to 4.2 days in Juneau and 2.2 days in Nome. The majority of defendants who went to jail were sentenced for terms of 1 to 10 days.

Conversely, Juneau defendants (52.6%) were more likely to receive a net fine than defendants from Kodiak (20.0%) or Nome (17.6%). The mean net fines for defendants did not differ significantly in Juneau (\$43.50), Kodiak (\$33.30) or Nome (\$75.00). The majority of fines were between \$1 and \$100.

2) Factors Associated with Sentences for Alcohol/Drug Offenses

Results of the multiple regression models are shown in Table 38. In the preliminary model, 53% of the variation in active jail sentence length could be explained by all variables under consideration for the 51 cases. Relatively significant factors included the CDI, alcohol/drug treatment history, net fine and age of the defendants.

The reduced model was able to explain 41% of the variation in sentences for 55 defendants. Highly significant ($P < 0.01$) factors included the defendants's alcohol/drug treatment history and net fine received. Defendants who were previously referred for an alcohol treatment program, but did not attend, were assigned 7.0 days more than defendants with no previous alcohol problem. In addition, there was a positive relationship between the net fine levied and active jail sentence (i.e., for each additional \$1 net fine, there was an increase of 0.03 days in active jail sentence).

TABLE 34
(1981 Misdemeanors)

Means and Standard Deviations (SD)
of Active Jail Sentences (Days) for Defendants
Who Spent at Least 1 Day in Jail for Alcohol/Drug
Offenses. Given are the Total Number of Defendants
(N) and the Number (n) and Proportion (% N) of
Defendants who Spent at Least 1 Day in Jail.

ALCOHOL/DRUG VIOLATION
(DAYS)

CITY	N	n	(%N)	Mean	SD
Anchorage	4	1	(25.0)	3.0	0
Barrow	5	1	(20.0)	2.0	0
Bethel	6	5	(83.3)	19.8	18.5
Fairbanks	8	2	(25.0)	7.5	3.5
Juneau	19	5	(26.3)	4.2	2.6
Kodiak	15	10	(66.7)	16.3	28.4
Nome	17	9	(52.9)	2.2	1.9
Sitka	1	1	(100.0)	2.0	0
Total	75	34	(45.3)	9.6	17.8

TABLE 35
(1981 Misdemeanors)

Means and Standard Deviations (SD) of Net Fines (\$) for Defendants who Paid at Least \$1 for Alcohol/Drug Offenses. Given are the Total Number of Defendants (N) and the Number (n) and Proportion (% N) of Defendants who Paid at Least \$1 in Fines

ALCOHOL/DRUG (\$)					
CITY	N	n	(%N)	Mean	SD
Anchorage	4	3	(75.0)	91.7	62.9
Barrow	5	2	(40.0)	510.0	693.0
Bethel	6	3	(50.0)	193.3	115.5
Fairbanks	8	6	(75.0)	162.5	168.6
Juneau	19	10	(52.6)	43.5	25.9
Kodiak	15	3	(20.0)	33.3	14.4
Nome	17	3	(17.6)	75.0	66.1
Sitka	1	1	(100.0)	200.0	0.0
Total	75	31	(41.3)	121.9	191.1

TABLE 36
(1981 Misdemeanors)

Distribution of Active Jail Sentences (Days)
For Alcohol/Drug Offenses. Given are Means And
Standard Deviations (SD) For All Penalties.

ALCOHOL/DRUG VIOLATIONS

CITY	N	(DAYS)						Mean	SD
		0	1-10	11-20	21-30	31-40	40		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	4	3 (75.0)	1 (25.0)	0	0	0	0	0.8	1.5
Barrow	5	4 (80.0)	1 (20.0)	0	0	0	0	0.4	0.9
Bethel	6	1 (16.7)	2 (33.3)	1 (16.7)	1 (16.7)	0	1 (16.7)	16.5	18.4
Fairbanks	8	6 (75.0)	2 (25.0)	0	0	0	0	1.9	3.7
Juneau	19	14 (73.7)	5 (26.3)	0	0	0	0	1.1	2.3
Kodiak	15	5 (33.3)	7 (46.7)	0	2 (13.3)	0	1 (6.7)	10.9	24.1
Nome	17	8 (47.1)	9 (52.9)	0	0	0	0	1.2	1.8
Sitka	1	0	1 (100.0)	0	0	0	0	2.0	0.0
Total	75	41 (54.7)	28 (37.3)	1 (1.3)	3 (4.0)	0	2 (2.7)	4.3	12.8

TABLE 37
(1981 Misdemeanors)

Distribution of Net Fines (\$) For
Alcohol/Drug Offenses. Given are Means
And Standard Deviations (SD) For all Penalties.

ALCOHOL/DRUG VIOLATIONS

CITY	N	(\$)						Mean	SD
		0	1-100	101-200	201-300	301-400	400		
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Anchorage	4	1 (25.0)	2 (50.0)	1 (25.0)	0	0	0	68.8	68.8
Barrow	5	3 (60.0)	1 (20.0)	0	0	0	1 (20.0)	204.0	445.1
Bethel	6	3 (50.0)	1 (16.7)	0	2 (33.3)	0	0	91.7	124.2
Fairbanks	8	2 (25.0)	4 (50.0)	1 (12.5)	0	0	1 (12.5)	121.9	161.2
Juneau	19	9 (47.4)	10 (52.6)	0	0	0	0	22.9	28.9
Kodiak	15	12 (80.0)	3 (20.0)	0	0	0	0	6.7	14.8
Nome	17	14 (82.4)	2 (11.8)	1 (5.9)	0	0	0	13.2	37.6
Sitka	1	0	0	1 (100.0)	0	0	0	200.0	0.0
Total	75	44 (58.7)	23 (30.7)	4 (5.3)	2 (2.7)	0	2 (2.7)	50.4	135.8

TABLE 38
(1981 Misdemeanors)

Regression Coefficients and Standard Errors (SE) for
Equations Describing Variation in Active Jail Sentence
Length (Days) for Alcohol/Drug Offenses. Also Given are
Sample Sizes (N) and Coefficients of Determination (R²)

	Preliminary		Reduced	
	N = 51 R ² = 0.53 Coefficient	(SE)	N = 55 R ² = 0.41 Coefficient	(SE)
<u>Case Descriptor Index</u>	-0.5°	(0.35)	-0.5*	(0.28)
<u>Process</u>				
Guilty at:				
Arraignment	¶		-	
Other hearing	-1.0	(1.82)	-	
Jury Trial	-		-	
Bench Trial	-		-	
Concurrent Counts	2.7	(2.88)	-	
<u>Offense</u>				
Charge Subcategory				
Victim Status				
No Harm	-		-	
Harm	-		-	
Alcohol Use at Offense				
No	¶		-	
Yes	-3.2	(3.02)	-	
<u>Defendant Problems</u>				
Prior Record				
None	¶		-	
Violation(s)	-		-	
Misdemeanor(s)	1.2	(2.80)	-	
Felony(s)	-		-	
Drug/Alcohol Treatment				
No Problem	¶		-	
Never Referred	1.3	(2.67)	1.7	(1.91)
Referred, No Attendance	6.0°	(3.53)	7.0***	(1.88)
Attended, No Completion	-		-	
Current	-		-	
Completed	-		-	
<u>Defendant Characteristics</u>				
Sex				
Male	¶		-	
Female	-0.6	(2.06)	-	
Age	0.2°	(0.11)	0.1*	(0.07)
Financial Index	-0.2	(0.89)	-	
<u>Other Factors</u>				
Net Fine	0.02°	(0.012)	0.03***	(0.0083)
Additional Conditions	1.6	(1.6)	-	
Constant (Intercept)	-5.8	(5.49)	-3.8*	(2.00)

- Not analyzed

¶ Reference category

° P ≤ 0.20

* 0.10 > P ≥ 0.05

** 0.05 > P ≥ 0.01

*** P < 0.01

There were marginally significant relationships ($0.107 P \geq 0.05$) between active jail sentence and the CDI or the defendant's age. Defendants who scored higher on the index tended to get shorter sentences (0.5 days per index point); older defendants tended to get longer sentences (0.1 days per year difference) than younger defendants.

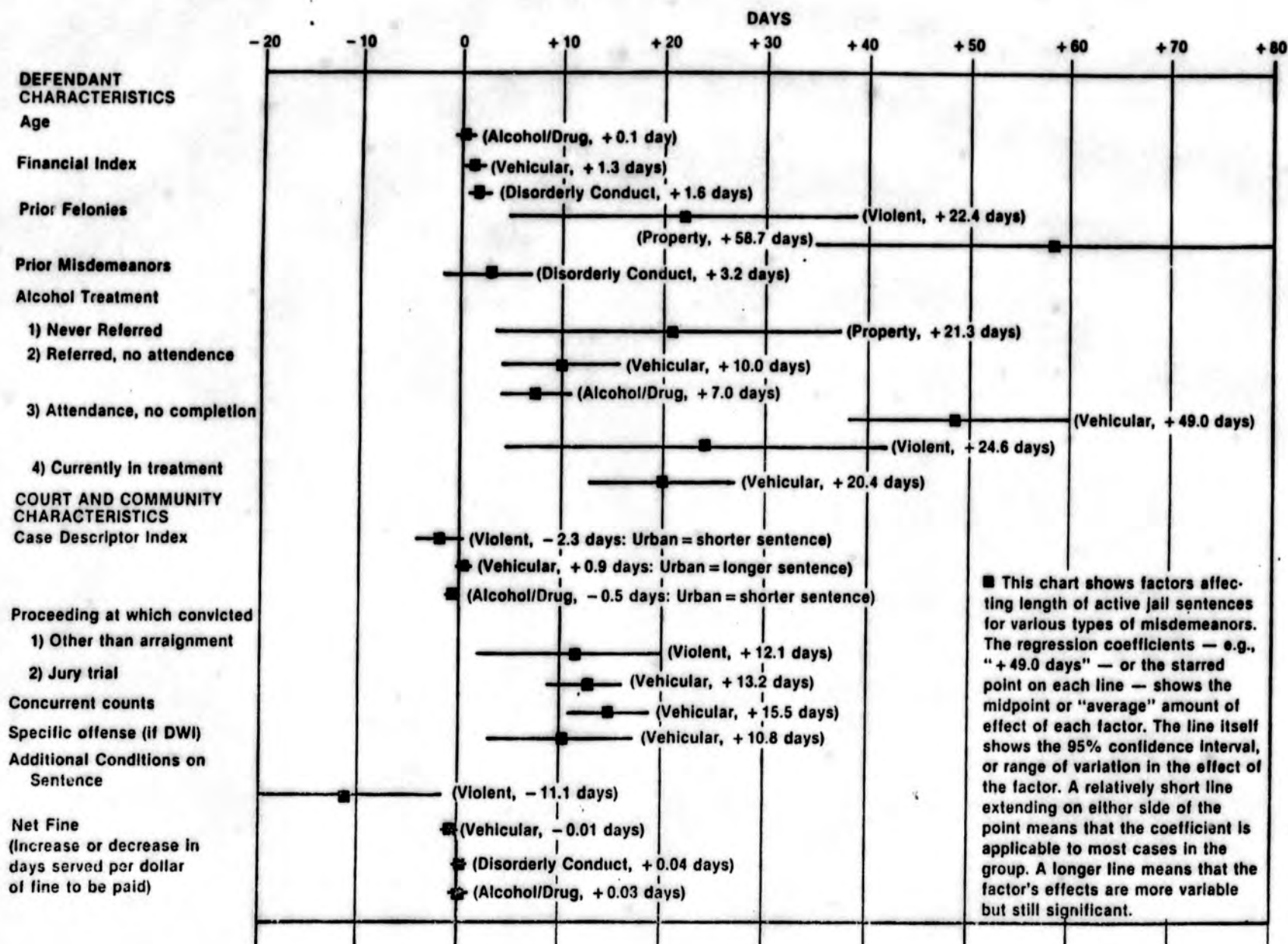
F. Miscellaneous Offenses

38 offenses were classified as "miscellaneous" (Tables 2 and 4). Major offense types within this category included prostitution-related offenses (15 cases), public indecency (6 cases) and gambling activities (6 cases). Due to the small number and varied nature of these offenses, no further meaningful statistical analysis was possible.

IV. SUMMARY OF FACTORS ASSOCIATED WITH SENTENCES

Multiple regression was used to simultaneously account for various factors that may have affected active jail sentence length and to estimate the independent contribution of each factor. It should be noted, however, that even when all potential "causal" variables were entered into a regression model, generally only 30% to 40% of the variation of active jail sentence length could be explained. However, it may be useful to identify those factors which seem relevant to several types of misdemeanors and to analyze the consistency with which they appeared (Graph 13).

Case Descriptor Index. One of the study's main purposes was to find whether racial disparities existed in misdemeanor sentencings. When race of the defendant was used as a separate variable in the multiple regression models, no significant disparities appeared. However, the models showed that several other variables were very closely associated with race. When this phenomenon, known as multi-collinearity, occurs,



(1981 Misdemeanor Sentences)
MULTIPLE REGRESSION FACTORS

GRAPH 13

other statistical techniques must be called into play. For this study, a "case descriptor index" (CDI) was constructed.

The CDI was an attempt to capture the underlying variability of a number of factors that distinguish urban and rural defendants. Recall that higher scores on the urban-rural index indicate a defendant classified as urban (Anchorage, Fairbanks and Juneau cases), who was caucasian or black, who entered a negotiated plea, who committed a municipal offense or who was tried by a district court judge. Lower index scores indicate a defendant classified as rural (Barrow, Bethel, Nome, Kodiak and Sitka cases), who was native, who did not enter a negotiated plea, who was charged with a state offense or who was tried by a magistrate or superior court judge.

The CDI "worked" well in the new multiple regression models; that is, it continued to be significantly associated with active jail sentence length. This indicated that the index accurately summarizes the varied information which has been incorporated into it.

For two of the regression models (violent and alcohol/drug offenses), there was a significant negative relationship (i.e., defendants with lower index scores received longer sentences) between a defendant's CDI score and active jail sentence. Both of these relationships can be explained on a community basis. For violent offenses, both the likelihood of receiving an active jail sentence and the mean sentence imposed (if an active term was indeed imposed) was significantly greater in Bethel and Nome cases (which make up the majority of "rural" defendants for violent offenses) than Anchorage cases (which are predominately "urban" defendants). For alcohol/drug offenses, the mean sentences did not differ significantly between areas. However, several of the areas classified as rural (Barrow, Bethel, Nome) had high likelihoods (greater than 67%) of sending defendants to jail for at least one day. The urban areas (Anchorage (55%), Fairbanks (47.4%) and Juneau (26.3%)) were less likely to sentence defendants to an active jail term.

For vehicular offenses, there was a significant positive relation (i.e., higher scores received longer sentences). This may also be explained by community differences in sentencing. Anchorage (13.4 days), Fairbanks (13.8 days) and Juneau (19.3 days) had three of the four highest mean active jail sentences for all communities.

The CDI was not significantly related to active jail sentence for property or disorderly conduct offenses.

The finding that sentences vary by geographic area for most type of offenses (except property and disorderly conduct offenses) is consistent with findings from earlier felony studies, which also show strikingly different sentencing patterns between urban and rural areas. All of the findings provide statistical support for the frequent observation by Bush leaders and others that Alaska's criminal justice system operates differently in its urban and rural areas.

To provide more background for these differences among areas, interviews with judges and attorneys were conducted in Bethel and Nome. Those interviewed believed that community condemnation, especially of violent offenses, may be either greater or more apparent than in urban areas. Furthermore, judges and other criminal justice personnel are much more likely to be acquainted with the defendant and victim, as well as the context in which the offense was committed. Yet another factor noted by the interviewees was the difference in criminal justice resources available in smaller communities. Fewer jail facilities, fewer treatment or community-service programs, and the difficulties of supervising a defendant living in a remote village all limit the choices for the judge or magistrate imposing sentence on a rural defendant.

These interactions among cultural values of communities and public resources available to deal with criminal behavior structure decisions made prior to sentencing as well. The judges and attorneys interviewed noted that

village police may characterize the charge against a defendant differently than would a state trooper. Bail decisions may result in a higher proportion of rural defendants faced with a monetary bond requirement because of the difficulty of assuring that a defendant from an outlying village will appear for trial. But, because of subsistence economies and higher unemployment, many of these defendants may be unable to post the bail, and may stay in jail prior to conviction. Or, there may be no satisfactory way to provide for own-recognizance release in a small village. Again, the combination of all of these factors results in a very different criminal justice "environment" than that found in more urban areas of the state.

Finally, the persons interviewed noted that a number of important changes have occurred in the two years between the convictions studied (1981) and this report (1983). Villages in western Alaska that had only one telephone at that time may now have 30 to 50 telephones, making communication much simpler. Increased court resources in areas such as Barrow, and attempts by communities to ban the sale or importation of alcohol may have significantly affected sentencing patterns. Changes have also occurred in urban areas, including a new community-service program for Anchorage misdemeanants, and stiffer penalties for drunk driving offenses statewide. However, it is likely that different patterns for urban and rural sentencings may continue, based on the differing values and resources in each community.

Financial Index. The financial index was an attempt to measure the financial well being of the defendant. Recall that lower scores on the index are related to defendants who were employed, who were represented by a private attorney and who were released on monetary bail at the time of sentencing; higher scores are related to defendants who were unemployed, represented by the public defender or who were in jail at the time of sentencing.

The index was positively related (i.e., a defendant who scored higher on the index received a longer sentence than a defendant who scored lower) to active jail sentence for vehicular and disorderly conduct offenses. No relationship was found between the index and sentence length for violent, property or alcohol/drug offenses.

Alcohol/Drug Treatment History. In four of the misdemeanor categories (violent, property, vehicular and alcohol/drug offenses) longer sentences were generally related to defendants who were either referred to, but did not attend, or who attended, but did not complete previously required alcohol/drug treatment.

Prior Record. For violent and property offenses, defendants with prior felony convictions received longer sentences than defendants with no prior criminal record. Defendants with misdemeanor records did not receive significantly different sentences. For vehicular, disorderly conduct and alcohol/drug offenses, prior record was not related to sentence severity. It should be noted, however, that drug/alcohol treatment history was related to length of jail sentence (above), and that prior reference or entrance into a treatment program may have been mandated by a previous offense. If this was the case, there is joint information within these two variables that may determine sentence severity.

Court Proceeding. The proceeding at which disposition took place was significantly related to active jail sentence length for violent and vehicular misdemeanors. For violent misdemeanors, defendants who had dispositions that occurred at a proceeding other than arraignment received longer (12.1 days) sentences than defendants who plead guilty or nolo at arraignment. For vehicular offenses, defendants who were found guilty by a jury received sentences an estimated 13.2 days longer than defendants who plead guilty or nolo at arraignment. A significant number of jury trials occurred only for defendants who had committed vehicular offenses.

Concurrent Counts. The number of concurrent counts was found related to active jail sentence length only for vehicular violations. For these offenses, each count in addition to the most serious offense accounted for an added 15.5 days in active jail sentence length. This may be due to the use of consecutive jail sentences for vehicular offenses and the use of concurrent penalties in other offense categories.

Other Factors. The use of additional sentencing conditions was related to less severe (-11.1 days) sentences for violent misdemeanors. Additional conditions were not significantly related to sentence length for any other offense category.

For disorderly conduct and alcohol/drug violations there was a positive relationship (i.e., defendants with longer jail terms also received higher fines) between the net fine imposed and active jail sentence. However, for vehicular offenses there is a trade-off between the two penalties: defendants who received larger fines served less time (-0.01 days per dollar fine).

Factors that were generally unrelated to active jail sentence included the status of the victim and the age or sex of the defendant.

ALASKA MISDEMEANOR SENTENCES: 1981

APPENDIX A

Misdemeanor Sentencing Information Sheet

. CASE NUMBER: _____

. DEFENDANT'S RACE:

☐ White ☐ Indian/Native ☐ Black ☐ Other Minority ☐ Unknown

. PRIOR CRIMINAL RECORD:

a) ☐ Felonies ☐ Misdemeanors ☐ Unknown

b) Severity: ☐ None ☐ Slight ☐ Moderate ☐ Severe ☐ Record of Similar Offenses

c) Prior Record

☐ Aggravates sentence ☐ Mitigates sentence ☐ N/A to sentence

. ALCOHOL OR DRUG USE AT THE TIME OF OFFENSE:

☐ Yes ☐ No ☐ N/A ☐ Unknown

If "YES": ☐ Aggravates sentence ☐ Mitigates sentence ☐ N/A to sentence

. DEFENDANT HAS HISTORY OF DRUG OR ALCOHOL PROBLEMS:

☐ Yes ☐ No ☐ N/A ☐ Unknown

If "YES": ☐ Light ☐ Moderate ☐ Severe

. DEFENDANT'S TREATMENT FOR DRUG/ALCOHOL PROBLEM:

☐ Yes, has been treated previously (or is presently in treatment)

☐ No problem or problem never treated

☐ N/A

☐ Unknown

NOTE ANY FACTORS STATED BY THE JUDGE AT THE TIME OF SENTENCING IN SUPPORT OF THE PARTICULAR SENTENCE:

a) Aggravating Mitigating Other

_____	_____	_____
_____	_____	_____
_____	_____	_____

b) This crime is similar to others of its type, and sentence imposed is similar (no aggravating or mitigating factors).

INSTRUCTIONS FOR MISDEMEANOR INFORMATION

At the time of sentencing either the judge or the in-court clerk shall complete the misdemeanor sentencing information form as follows:

1. Case Number: Write in the case number.
2. Race: The in-court clerk will check the appropriate box after the sentencing is completed.
3. a) Number of Prior Offenses: Fill in the number of prior felonies and misdemeanors.
b) Prior Criminal History Comments: Record all other comments about the defendant's criminal history, including the number of same or similar offenses, probation or parole status, and other factors which are mentioned by the judge or other parties.
4. Drug/Alcohol Use at time of Offense: Record the known or reported use of alcohol and/or drugs at the time of the offense.
5. Drug/Alcohol History: Record the known or reported history of drug or alcohol problems of the defendant.
6. Drug/Alcohol Treatment: Record the known or stated treatment the defendant has received for drug or alcohol use.
7. Factors Stated by Judge: Record any particular factors explicitly stated by the judge regarding the sentence imposed in the case. These may include: employment information, harm to victim, provocation by the victim, prior offenses, or any other aggravating and/or mitigating factor specifically articulated by the judge in support of the sentence.

ALASKA COURT SYSTEM

OFFICE OF THE ADMINISTRATIVE DIRECTOR

ADMINISTRATIVE BULLETIN

No. 81-3

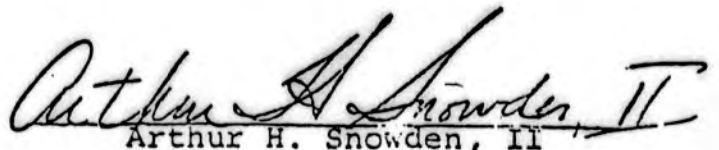
May 20, 1981

TO: All Presiding Judges
All Area Court Administrators

SUBJECT: Misdemeanor Sentencing Information Sheet

All judges and magistrates imposing sentence for conviction of a misdemeanor offense in specified court locations shall complete a Misdemeanor Sentencing Information Sheet at the time of sentencing. The judge or magistrate may delegate this duty to the in-court clerk, but shall be responsible for making the required information available to the clerk. The sheet shall be completed according to the instructions attached to it, and is to be kept in the court case file until collected by a representative of the Alaska Judicial Council. The court locations included in this directive are Anchorage, Fairbanks, Bethel, Nome, Kodiak, Juneau, Sitka and Barrow. The directive does not apply to fish and game or vehicle license violations (including driving with a suspended, revoked or without a valid license). Forms will be sent under separate cover.

The directive will be effective from June 1, 1981 through December 31, 1981.


Arthur H. Snowden, II

:smh

cc: Chief Justice Jay A. Rabinowitz
All Judges and Magistrates
at designated locations

ALASKA MISDEMEANOR SENTENCES: 1981

APPENDIX B

Defendant and Charge Coding Forms

Coder's Initials: _____
Checker's Initials: _____

DEFENDANT FORM

CASE NUMBER(S): _____

LOCATION: AN BA BE FA JU KO NO SI

NAME: _____
 LAST, FIRST, M.I.

1. 1 2 Location
2. 3 4 5 6 Defendant I.D. Number (Coders leave blank)
3. 7 8 - 9 10 - 11 12 Date of Birth (9s = unknown)
 Month Day Year
4. 13 Age: 1 = 18-21 years 4 = 31-45 years
 2 = 22-25 years 5 = Over 45 years
 3 = 26-30 years 9 = Unknown
- *5. 14 Defendant's Race:
 1 = Black 4 = Other minority (_____)
 2 = Native/Indian 9 = Unknown
 3 = Caucasian
6. 15 Sex of Offender:
 1 = Male
 2 = Female
 9 = Unknown
- *7. 16 Is defendant employed?
 1 = No
 2 = Yes
 9 = Unknown
- *8. 17 Does defendant have a prior record?
 1 = No, known to have no priors
 2 = Yes
 9 = Unknown
- *9. 18 Is anything further mentioned about the prior record?
 1 = No, known to have no priors
 2 = Yes, felonies
 3 = Yes, misdemeanors
 4 = Yes, prior juvenile offenses
 5 = Yes, violations, traffic tickets, or failures to
 satisfy judgments or fines
 9 = Unknown

* Check police report for information

10. 19 Defendant's custodial status at time of sentencing
1 = Own recognizance (OR) or third party custody
2 = Monetary bail release
3 = Jailed (never made bail, violated bail conditions, jailed for another charge, etc.)
9 = Unknown (check with supervisor before using)
11. 20 Type of attorney at sentencing
1 = None (pro per or pro se)
2 = Public Defender
3 = Court-appointed private attorney
4 = Private attorney
- *12. 21 Drug and/or alcohol use at time of offense
1 = No evidence of either
2 = Alcohol used
3 = Drugs used
4 = Both used
5 = Alcohol or drug use, not specified
9 = Information not available
13. 22 Past drug and/or alcohol use
1 = No evidence of either
2 = Alcohol "problem" or addiction
3 = Drug addiction or methadone treatment
4 = "Heavy" drug use
5 = Both used
6 = Alcohol or drug use, not specified
9 = Information not available
14. 23 Past or current alcohol and/or drug treatment
1 = No evidence of drug or alcohol problem
2 = Referred to alcohol or drug treatment, no record of attendance
3 = Attended drug or alcohol treatment; did not complete programs
4 = Completed alcohol or drug treatments in the past
5 = Never referred to programs or received treatment
6 = Currently receiving treatment
9 = Information not available

* Check police report for information

Coder's Initials: _____
Checker's Initials: _____

CHARGE FORM

Name of _____
Offense/Cite: _____

Count Number: _____

Location of Court: AN BA BE FA JU KO NO SI

Defendant's Name: _____
Last, First, M.I.

1. _____ Defendant ID Number (coders leave blank)
1 2 3 4

2. _____ Court Case File Number
5 6 - 7 8 9 10

3. _____ Original Offense Code
11 12 13 14 (coders leave blank)

4. _____ Offense of conviction
15 16 17 18 (coders leave blank)

5. _____ Date of Offense
19 20 - 21 22 - 23 24
Month Day Year

6. _____ How did case come to court?
25 1 = Citation
2 = Complaint
3 = Information

7. _____ Is offense state or municipal?
26 1 = State
2 = Municipal

8. _____ Type of disposition
27 1 = Guilty or nolo at arraignment
2 = Guilty or nolo at any other proceeding
3 = Jury trial
4 = Bench trial (non-jury trial)

9. _____ Is negotiated plea (plea bargain) noted on the record?
28 1 = No
2 = Yes, state
3 = Yes, municipal

10. _____ Judge's or magistrate's initials (see list of
29 30 31 abbreviations in coding manual)
xxx = Unknown

11. 32 Type of sentence
 1 = Active imprisonment (even if part suspended)
 2 = Suspended imposition with active time
 3 = Suspended imprisonment (no active time; may include probation)
 4 = Suspended imposition with no active time
 5 = Fine (includes court costs, restitution or restitution and fine)
12. 33 34 35 36 Total length of jail sentence.
 Months Days 0000 = No jail sentence
 9999 = Unknown (see supervisor)
13. 37 38 39 40 Amount of total suspended
 Months Days
14. 41 42 43 44 Amount of time to serve.
 Months Days
15. 45 Was defendant sentenced to "time served"?
 1 = No
 2 = Yes
16. \$ 46 47 48 49 Total amount of fine
 \$0000 = No fine
 \$9997 = Maximum amount
 \$9999 = Unknown (see supervisor)
17. \$ 50 51 52 53 Amount of fine suspended
18. \$ 54 55 56 57 Amount of fine to be paid
19. 58 Was bail forfeited for part or all of the fine?
 1 = No
 2 = Yes, entire fine
 3 = Yes, partial fine
 8 = Not applicable, no bail or fine
 9 = Unknown (see supervisor)
20. \$ 59 60 61 62 Total amount of restitution (see coding for fines)
21. \$ 63 64 65 66 Amount suspended
22. \$ 67 68 69 70 Amount of restitution to be paid
23. 71 Was driver's license revoked or suspended?
 1 = No
 2 = Yes, revoked wholly
 3 = Yes, limited revocation
 4 = Yes, suspended wholly
 5 = Yes, limited suspension
 8 = Not applicable, non-vehicular
 9 = Unknown

24. 72 Were other warrants or court actions outstanding against defendant at time of sentencing?
(Do not include prior convictions. See prior record variables on defendant form for recording these). Choose the most serious.
- 1 - Probation or parole violations
 - 2 = Felonies
 - 3 = Misdemeanors
 - 4 = "Failure to satisfy" warrants
 - 5 = Traffic violations
 - 6 = Other violations
 - 7 = Yes, charge unknown
 - 8 = None
 - 9 = Unknown

25. 73 As additional condition of sentence, judge required:
- 1 = No special conditions
 - 2 = Drug or alcohol treatment
 - 3 = Psychological Treatment
 - 4 = Work
 - 5 = Education
 - 6 = Community service
 - 7 = Other (specify: _____)
 - 8 = Combination of two or more above choices
(specify combination: _____)

OTHER CHARGE INFORMATION FROM POLICE REPORTS:

Police Report Number: _____

26. 74 Did breathalyzer or blood test exceed legal limit?
- 1 = No test, offense is alcohol-related
 - 2 = Yes, breathalyzer
 - 3 = Yes, blood test
 - 4 = Breathalyzer done; below legal limit
 - 5 = Blood test done; below legal limit
 - 6 = Defendant refused testing
 - 8 = Not applicable, offense is not alcohol-related
 - 9 = Unknown
27. 75 Amount of property involved (stolen, damaged, etc.)
- 1 = \$0 - \$100
 - 2 = \$101 - \$500
 - 3 = \$501 - \$1,000
 - 4 = \$1,001 - \$10,000
 - 5 = Over \$10,000
 - 8 = Not applicable, no property involved
 - 9 = Property involved, value unknown
28. 76 Type of custodial arrangement at booking
- 1 = OR (own recognizance), summons, defendant not booked)
 - 2 = Release to third party, no monetary bail
 - 3 = Monetary bail required
 - 4 = Other (describe: _____)
 - 9 = Unknown. no information available

29.

77

Was any victim physically harmed?

- 1 = No victim physically harmed (includes property damage without personal injury)
- 2 = Victim(s) harmed physically
- 8 = Not applicable, no victim (e.g. assassination, CCW, etc.)
- 9 = Unknown

**Economic Costs to
State of Alaska for Alcohol,
Drug Abuse and Mental Illness
1983 - 1984**

**Prepared By
California Health Research Foundation**



A CHRF Publication

TABLE 1-1

COSTS TO THE STATE OF ALASKA
FOR
ALCOHOL ABUSE, DRUG ABUSE AND MENTAL ILLNESS 1984

	<u>Alcohol Abuse</u>	<u>Drug Abuse</u>	<u>Mental Illness</u>	<u>Total</u>
CORE COSTS	<u>169,600,000</u>	<u>20,000,000</u>	<u>146,800,000</u>	<u>336,400,000</u>
Direct	<u>25,400,000</u>	<u>5,000,000</u>	<u>67,500,000</u>	<u>97,900,000</u>
Treatment	22,300,000	4,200,000	58,700,000	85,200,000
Support	3,100,000	800,000	8,800,000	12,700,000
Indirect	<u>144,200,000</u>	<u>15,000,000</u>	<u>79,300,000</u>	<u>238,500,000</u>
Mortality	41,800,000	3,200,000	22,200,000	67,200,000
Morbidity	102,400,000	11,800,000	57,100,000	171,300,000
Reduced Productivity	92,100,000	11,000,000	6,300,000	109,400,000
Lost Employment	10,300,000	800,000	50,800,000	61,900,000
OTHER RELATED COSTS	<u>25,400,000</u>	<u>42,400,000</u>	<u>1,400,000</u>	<u>69,200,000</u>
Direct	<u>18,000,000</u>	<u>18,200,000</u>	<u>1,400,000</u>	<u>37,600,000</u>
Motor Vehicle Crashes	7,200,000	*	*	7,200,000
Crime	6,800,000	17,000,000	*	23,800,000
Public	6,100,000	12,700,000	*	18,800,000
Private	600,000	4,000,000	*	4,600,000
Property Loss/Damage	100,000	300,000	*	400,000
Social Welfare Program	500,000	200,000	1,400,000	2,100,000
Other	3,500,000	1,000,000	*	4,500,000
Indirect	<u>7,400,000</u>	<u>24,200,000</u>	<u>*</u>	<u>31,600,000</u>
TOTAL	<u>195,500,000</u>	<u>62,400,000</u>	<u>148,200,000</u>	<u>405,600,000***</u>

*Although costs are hypothesized to occur in this category, sufficient data are not available to develop reliable estimates.

***This equals approximately 5.2% Alaska's gross state product of 7.8 billion dollars.

2/27 → Jim Gorman

FY
1984

net cost \$170,425,628.00

public assistance \$5.8
(AFDC, Aid to Disabled, ^{Aid to Adult} Medicaid, etc.)

Medicaid \$5.6

\$8.7

DPVS + Homemakers

Motor Vehicle \$31.9

Crim Jus. System \$78.6

Inf ~~AST~~ 400

A cost \$5.5

Correc. 32.1 \$15.1

SOADA

Health - Med. Care 19.5

Extra Costs

Lost Production Costs \$19.8

Assault on

Accidents at work

Selected computations
\$ low estimate
absolute minimum
(API not included.
e.g. and that
probably ought
to be at least \$5 mil)

185,294,061

14,868,433 income
from alcohol
taxes

170,425,628



CALIFORNIA HEALTH RESEARCH FOUNDATION

**ECONOMIC COSTS TO STATE OF ALASKA FOR
ALCOHOL, DRUG ABUSE AND MENTAL ILLNESS**

1983-84

by

CALIFORNIA HEALTH RESEARCH FOUNDATION

ECONOMIC IMPACT STUDY

EXECUTIVE SUMMARY

Major social issues, by their nature, tend to become inextricably tied to the human, social, and political climate of their time. As an issue captures the attention and concern of the public, and as the public struggles to respond, the issue becomes a focal point against which every other human need is assessed. It is during such a period that objectives become most easily confused and the temptations of a readily available expedient are most compelling. These are truly the times which demand the very best from our social institutions.

Of our current social issues, few have as many different and competing perspectives as the issue of alcoholism, drug abuse and mental illness and how we deal with them.

We know the impairment of human potential due to alcohol and drug abuse and mental disorders constitutes a serious social problem in contemporary U.S. society. The scope of this problem can be measured in several dimensions--pain and suffering to the impaired individual and his or her family and social behavior; lower productivity and lost work time; and direct expenditure for prevention, treatment, and rehabilitation. Although it is difficult to express some of these dimensions in quantitative terms, others may be expressed in terms of measurable economic costs to society. While not totally precise, the current state of the art in this area is sufficiently well advanced that some fairly reliable estimates can be developed.

The resulting estimates of economic costs to society of these alcohol and drug abuse and mental illness (ADM) problems may be used to indicate the relative seriousness of each of these social phenomena and to provide a rough guide to policymakers to be used in conjunction with other information in allocating resources to address these problems and hence to reduce their costs.

The Research Triangle Institute (RTI) conducted an expensive national study to determine the economic costs to society resulting from alcoholism, drug abuse and mental illness. This excellent study has provided us with scientifically sound data documenting the enormous costs to the economy from these problems.

While this study provides national figures, there has been a desire to gain more specificity by determining actual costs to an individual state or county. In response to this and realizing the enormous costs involved in replicating this study at a state or county level, the California Health Research Foundation used an inexpensive extrapolative design strategy that approximates the national figures to a state or county.

Many persons have suggested that you can merely take the percentage the State population represents of the U.S. population and then calculate that percentage of the national economic costs findings and you'll get a rough approximation. However, because the RTI study was predicated on economic indicators (e.g. GNP), we knew it would be more accurate to aggregate local or state economic figures and then calculate approximations from the percentages RTI developed for each category.

This approach resulted in a finding of 195.5 million dollars loss annually to Alaska's economy resulting from alcoholism. If we used a simple population calculation, it would have been approximately 160 million. This difference occurs because Alaska's economy is far larger proportionately. Because the RTI study is predicated on economic indicators and actual costs to the economy, our use of state economic figures renders a more accurate approximation of actual costs to the economy from alcoholism, drug abuse and mental illness.

We were fortunate to have had assistance from the Alaska Department of Commerce in establishing accurate state economic figures. From this information, we established the Gross State Product for Alaska in 1984 at 7.8 billion dollars.

From this we calculated the percentage from the RTI national figures for each cost category and derived the figures represented in Table 1-1.

As summarized in the following chapters, the cost estimates presented in the RTI report were developed through a variety of procedures from a number of data sources. In many cases reliable knowledge and/or data were not available for making these estimates. In order to avoid over-stating the economic costs to society of ADM problems, RTI deliberately selected conservative data and/or assumptions where no data or assumptions were available and a choice could be made. In other cases where no data or assumptions were available, RTI omitted estimates for the specific cost elements entirely.

CHRF used the RTI study to develop cost estimates for the State of Alaska. Again, given the enormous (prohibitive) costs involved in replicating this type of study for a state analysis, CHRF used an extrapolative strategy that approximates the national figures to a state.

CHRF has calculated the percentage of each cost included in Chart 1-1 against the National GNP for 1981. CHRF then worked with Alaska's state economic figures to calculate a "State Gross Product in 1984" (most recent available). While time consuming, this is the only legitimate design to develop extrapolative approximations. The base

line percentages were then used with the "State Gross Product" to calculate the State impact costs.

This methodology was reviewed and considered an excellent low cost extrapolative cost approximation strategy. More important, this approach leverages the benefits of a major national study to counties and states that could not otherwise afford to replicate the national study. Finally, this study documents the enormous costs to Alaska resulting from alcoholism, drug abuse and mental illness.

Chapter I

Introduction and Summary

The impairment of human potential due to alcohol and drug abuse and mental disorders constitutes a serious social problem in contemporary U.S. society. The scope of this problem can be measured in several dimensions--pain and suffering to the impaired individual and his or her family and friends; family and community instability; crime and other forms of anti-social behavior; lower productivity and lost work time; and direct expenditure for prevention, treatment, and rehabilitation. Although it is difficult to express some of these dimensions in quantitative terms, others may be expressed in terms of measurable economic costs to society. While not totally precise, the current state of the art in this area is sufficiently well advanced that some fairly reliable estimates can be developed.

The resulting estimates of economic costs to society of these alcohol and drug abuse and mental illness (ADM) problems may be used to indicate the relative seriousness of each of these social phenomena and to provide a rough guide to policymakers to be used in conjunction with other information in allocating resources to address these problems and hence to reduce their costs.

I. SUMMARY RESULTS

In order to develop estimates of the economic costs to society of alcohol and drug abuse and mental illness, a framework or method of organizing these costs was developed using the Research Triangle Institute results in developing their national estimates. The rigorous scientific approach to this analysis has provided a conservative estimate of the economic cost nationally attributed to alcohol and drug abuse and mental illness. The California Health Research Foundation used this national study to develop state estimates of these costs. Because the enormous resources are not available to fund an expensive sophisticated type of project at a local level and usually not even a state level, CHRF used an extrapolative design aimed at achieving a local costs approximation. While the specific nuances of certain costs for a community may not be ferreted out in the "local costs estimates," our collection of "key economic indicators" from the local or state level do insure reasonable approximations and reliability for general accuracy within these parameters. We also feel that the development of some costs estimates at the local level is crucial to support advocacy for not only continued funding, but appropriate levels of financial support. In this economic atmosphere, hard data of this type is critical to publicly funded programs' efforts to document the need for not only maintaining existing services but justifying the need for continued acceptable levels of funding, thus enabling programs to treat clients humanely and effectively and to begin impacting on the terrible human and economic toll that alcoholism, drug abuse, and mental illness represent.

The framework used by RTI in their national study is consistent with that suggested in the PHS Guidelines document for cost of illness studies (Hodgson and Meiner 1979).^{*} This framework was also used for the critical review of the ADM literature conducted in the first phase of this study. This framework defines categories of costs and types of expenditures as well as elements within each category. The framework makes a principal distinction between core and other related costs. Core costs are those costs to society that are most directly related to the ADM problem in question and which are borne by some component of the nation's health system. Core costs are divided into direct and indirect costs. Direct costs include the cost of health care treatment for individuals with ADM problems as well as the support services required to maintain the treatment network. Indirect costs represent losses in productivity resulting from reduced productive time due to both morbidity and premature mortality.

Other related costs refer to the non-health consequences of ADM problems. This category also included direct and indirect costs. Other related direct costs represent expenditures on non-health goods and services used as a result of the ADM disorder. A major portion of these are the costs of the nation's criminal justice system that are incurred due to crime that is caused by an ADM problem. Other related indirect costs represent the costs of reduced productivity arising from the non-health consequences of ADM problems. For example, one experiences a loss of productivity time while incarcerated. Another source of this category of costs is time spent in criminal activities as a result of drug abuse.

Table 1-1 presents a summary of the economic costs to the State of Alaska for alcohol and drug abuse and mental illness for 1984. As shown in the table, these costs range from 62.4 million for drug abuse to 195.5 million for alcohol abuse. The economic costs of mental illness were estimated to be 148.2 million. As noted in the table, total estimated costs to society cannot be compared across the three ADM problems because of the differing levels of data availability for specific costs categories. In addition, Table 1-1 indicates that the nature of the specific ADM problem may have a significant effect on the composition of the resulting cost to society. For example, core costs constitute 99 percent of the total costs to society that could be calculated for drug abuse. In addition, indirect costs are a substantially higher portion of the total in the case of alcohol abuse than for the other two ADM problems.

It is worth noting here that the estimated costs to society of alcohol

^{*}Hereinafter the Hodgson and Meiners (1978) report will be referred to in the text as the Guidelines.

and drug abuse reflect only the abuse of those substances and are in no way an indictment of legitimately produced alcohol and drugs. Properly used, these substances provide economic benefits to society. However, to our knowledge these benefits have never been precisely measured in dollars.

In addition, it must be emphasized that these figures are, in the last analysis, only estimates. To the extent that the study has had to rely on correlation rather than causality, these estimates will be high. To the extent that complete data were unavailable, these estimates will be low. In general, whenever there was uncertainty, this study has tended to make assumptions that would yield conservative estimates.

TABLE 1-1
COSTS TO THE STATE OF ALASKA
FOR
ALCOHOL ABUSE, DRUG ABUSE AND MENTAL ILLNESS 1984

	<u>Alcohol Abuse</u>	<u>Drug Abuse</u>	<u>Mental Illness</u>	<u>Total</u>
CORE COSTS	<u>169,600,000</u>	<u>20,000,000</u>	<u>146,800,000</u>	<u>336,400,000</u>
Direct	<u>25,400,000</u>	<u>5,000,000</u>	<u>67,500,000</u>	<u>97,900,000</u>
Treatment	22,300,000	4,200,000	58,700,000	85,200,000
Support	3,100,000	800,000	8,800,000	12,700,000
Indirect	<u>144,200,000</u>	<u>15,000,000</u>	<u>79,300,000</u>	<u>238,500,000</u>
Mortality	41,800,000	3,200,000	22,200,000	67,200,000
Morbidity	102,400,000	11,800,000	57,100,000	171,300,000
Reduced Productivity	92,100,000	11,000,000	6,300,000	109,400,000
Lost Employment	10,300,000	800,000	50,800,000	61,900,000
OTHER RELATED COSTS	<u>25,400,000</u>	<u>42,400,000</u>	<u>1,400,000</u>	<u>69,200,000</u>
Direct	<u>18,000,000</u>	<u>18,200,000</u>	<u>1,400,000</u>	<u>37,600,000</u>
Motor Vehicle Crashes	7,200,000	*	*	7,200,000
Crime	6,800,000	17,000,000	*	23,800,000
Public	6,100,000	12,700,000	*	18,880,000
Private	600,000	4,000,000	*	4,600,000
Property Loss/Damage	100,000	300,000	*	400,000
Social Welfare Program	500,000	200,000	1,400,000	2,100,000
Other	3,500,000	1,000,000	*	4,500,000
Indirect	<u>7,400,000</u>	<u>24,200,000</u>	<u>*</u>	<u>31,600,000</u>
TOTAL	<u>195,500,000</u>	<u>62,400,000</u>	<u>148,200,000</u>	<u>405,600,000***</u>

*Although costs are hypothesized to occur in this category, sufficient data are not available to develop reliable estimates.

***This equals approximately 5.2% Alaska's gross state product of 7.8 billion dollars.

CHAPTER 2

Conceptual and Methodological Issues

I. INTRODUCTION

A number of conceptual and methodological issues must be addressed in developing estimates of the economic costs to society of alcohol and drug abuse and mental illness. Conceptual issues are those which must be addressed regardless of the specific procedures used to develop cost estimates. Methodological issues, on the other hand, refer to specific procedures that are implemented to develop estimates of the costs of society of ADM problems. This chapter addresses both sets of issues.

Because the California Health Research Foundation applied an extrapolative approximation design using the RTI national study, it is important to review how the original RTI data was secured. The methodology used by CHRF in developing local costs estimates is then summarized in Chapter 8. The California Health Research Foundation wishes to acknowledge the excellent work done by RTI in their national study.

Conceptual issues are discussed in two separate sections. The first outlines an overall conceptual framework for developing cost-of-illness estimates, moving from general principles of cost and cost-of-illness measurement of the application of these principles to ADM problems. The second section discusses five specific conceptual issues that must be addressed in estimating the economic costs to society of ADM problems.

Methodological issues are addressed in the final section of this chapter. Two separate and distinct methodologies may be used for estimating the costs to society of ADM problems. The outline provided of these two approaches serves as an appropriate framework for the review of previous literature on the costs to society of ADM problems summarized in Chapter 3.

II. CONCEPTUAL FRAMEWORK

A. General Principles

The first step in developing an overall framework for measuring the costs of ADM disorders is to select the basic theories and concepts for measuring these costs. In the RTI study, these underlying theories and concepts are provided by the discipline of economics. All economic costs result from the fact of scarcity and occur as basic choices are made to allocate results in more of certain goods and services and less of other goods and services being produced since the resources used for one good or service cannot also be used for another. Hence, the economic cost of any good or service is measured in terms of the foregone opportunity of using resources that could have been used to produce something else. These costs are referred to as opportunity costs.

Economic transfers, as the name implies, are shifts in control over the use of resources. They do not represent a consumption of resources per se but only the transfer of resources from one segment of society to

another. As such they are distinct from economic costs. Therefore, it is not appropriate to include transfers in an estimate of the economic cost to society of an illness.

An application of this conceptual issue occurs in estimating the costs of property crime due to drug abuse. Although reliable estimates of the value of property stolen due to drug abuse are difficult to obtain, previous estimates have ranged as high as 56.2 billion per year. Although these losses are legitimate costs to the individuals from whom the property is stolen, from society's perspective there is not cost of stolen property as this property is merely transferred from one individual to another. However, this does not imply that there are no social costs associated with property crime. Resources are used to administer property insurance programs, costs are incurred as drug abusers fence the stolen property, and resources are required to replace lost or damaged property. Procedures for estimating these real costs are detailed in appropriate chapters of this report.

Economic or opportunity costs may be measured from various perspectives. From an individual's perspective, costs are incurred in choosing to seek treatment for an ADM disorder. A businessman incurs costs as choices are made to provide treatment for employees with ADM or other health problems at company expense or as production is lost due to factors such as lowered productivity or absenteeism. Costs are borne by an entire society as current resources are used for prevention, treatment, and rehabilitation and as potential resources are lost due to lower productivity, absenteeism, or withdrawal from the workforce because of death or disability. Since the primary purpose of this study is to provide information for policymaking and resource allocation decisions within local and other government agencies, costs from the perspective of our entire society are the most relevant and will be explored in this study.

Costs may also be distinguished as being either direct or indirect. A direct or explicit cost is one in which resources are consumed and a formal payment is made in cash or in kind (i.e., through the direct provision of some commodity or service). When resources are used to treat an ill person, the labor is paid for in wages, the materials used are paid for as direct purchases, and the capital used is paid for in principal and interest payments. On the other hand, an indirect or implicit cost occurs whenever resources are used for which no formal payment is made. For example, when individuals are treated for an illness in a hospital, their time is being used without any formal payment for its use. In order to place a value on this implicit cost, one estimates the value of what the individuals gave up or the opportunity cost of their time. The implicit cost of their time is the value of the goods and services they would have produced during their treatment period. In addition, we must include among the indirect costs the value of foregone production of household goods and services by housewives who must be away from home for treatment of illness. This foregone production represents a cost since alternative resources (e.g., hiring outside help)

would have to be used if the individual was not available to supply the household services to family members.

In assessing the value of indirect costs, one frequently runs into the situation in which these costs are incurred over a period of time. The principal example of this situation is that in which a number of years of production are foregone due to an individual's premature death. In this situation it is essential that the lost stream of future earnings be counted as a cost in the year the death occurs. The appropriate technique for making this conversion is termed discounting. This technique reduces or discounts the value of a dollar in a future time period into an appropriate value for the current time period. Discounting is the mathematical inverse of compounding, a situation in which a dollar is worth more in the future because it can be invested now at a positive return. The technique and appropriate mathematical formulas for discounting are well known and have been applied to a variety of situations requiring a present value of a flow of income over time. The major decision in the use of this procedure is the choice of an appropriate interest or discount rate, a topic that is reviewed in greater detail in later sections of this report.

The costs summarized in the preceding sections may be measured in terms of a monetary measure (i.e., dollars) and are frequently referred to as economic costs. However, illness and disease are frequently responsible for a wide variety of psychosocial deteriorations. These deteriorations cannot be measured. Examples include loss of a body part or speech, disfigurement, impending death, pain and grief. In addition, the environment created by an illness induces anxiety, reduced self-esteem and feeling of well-being, resentment and emotional problems that often require psychotherapy. Problems of living may develop, leading to family conflict, antisocial behavior, or suicide. The quality of life, measured in terms of these social costs, may be reduced beyond the restorative capability of rehabilitation efforts. Although this is an important component of the total burden of an illness, efforts to develop appropriate measures of these social costs are not as well developed as those for estimating the economic costs of the illness. Therefore, the RTI study focused on estimating those costs which can be readily quantified in dollars. Since these economic costs will be measured from the perspective of our entire society, they will be referred to as economic costs to society throughout the remainder of this report.

RTI emphasizes how conservative an approach their study took. If the social costs referred to above could be measured in monetary terms, they would total many billions of dollars. For example, the White House Conference on Families cited the findings of a recent Gallup survey which asked people to name what they considered to be the three things most harmful to family life (1980). Sixty percent of the people surveyed named alcohol abuse, 59 percent cited drug abuse, and 23 percent mentioned overuse of prescription drugs. George Gallup (1979) also cited another of his surveys as finding that in 1978 24 percent of those interviewed said that liquor has been a cause of trouble in their families - double

the 12 percent found just four years earlier. Among those divorced or separated, as many as one-third of those surveyed indicated that an alcohol-related problem had adversely affected their family lives. As can be easily deduced from figures such as these, the adverse impact of alcoholism and drug abuse just on family cohesiveness alone must be very costly.

B. Principles of Cost-Of-Illness Studies

In applying the above general principles to the estimation of the cost of an illness, it becomes apparent that a variety of costs are present that are associated with different sectors of our society. In particular, most of the costs are associated with the health sector of our society, while the remaining costs are associated with various other sectors. For this reason, the costs of an illness or disease may be divided into two major categories, each of which contains both direct and indirect costs. These categories are termed "core" costs, which represent primarily those costs occurring in the health sector, and "other related" costs, which represent the costs occurring in all other sectors of society.

As outlined in the PHS guidelines document on cost-of-illness studies (Hodgson and Meiners 1979), the direct core costs represent the costs of diagnosis, treatment, continuing care, rehabilitation, and terminal care for illness and trauma. These include expenditures for hospitalization; outpatient clinical care; nursing home care; home health care; services of primary physicians and specialists, dentists, and other professionals; drugs and drug sundries; rehabilitation counseling; and other rehabilitation costs to overcome illness-related impairments.

Indirect core costs result from losses in output as time is lost from paid work or provision of household services because of treatment, injuries, premature mortality, or other reasons. As indicated above, the measure of output loss is foregone earnings or the imputed market value of underformed housekeeping services. In addition to extended time lost from work, in direct core costs may also be incurred when an illness adversely affects productivity. These affects may occur from either a lessening of productivity by persons on the job or by excessive absenteeism.

Other related costs may also occur for a variety of reasons. Examples of the nonhealth sector direct costs borne by patients and other individuals include costs of transportation to health providers, additional household expenditures such as hiring household help for cleaning, laundering, cooking, and babysitting; special diets; items for rehabilitation and comfort; and vocational, social, and family counseling services. These direct costs may also include the value of damaged or destroyed property due to vehicular accidents or criminal activity caused by drug or alcohol abuse.

Examples of other related indirect costs include the opportunity cost of time spent in prison or pursuing a criminal career and of time spent by family members and friends in visiting hospitalized persons, their physicians, or other health professionals.

C. Application of Cost Concepts to ADM Problems

The cost concepts summarized above may be readily incorporated into a conceptual framework to estimate the costs of ADM. Direct core costs include primarily the costs of treatment for the various ADM problems. In the case of mental illness, these costs are incurred as a direct consequence of the illness as individuals seek treatment in public and private mental health treatment facilities. Although difficult to measure precisely, mental illness can also lead to higher utilization of health care services due to associated medical disorders (e.g., psychosomatic symptoms) as well as to an inappropriate search for medical solutions to psychological problems. In the case of alcohol abuse and drug abuse, these costs are incurred as individuals seek treatment for the direct consequences of their substance abuse and the associated medical problems. In addition, the direct core costs include costs for such supportive activities as prevention and the variety of research, training, and administrative functions that are carried out by both public and private agencies to support ADM treatment activities.

Indirect core costs for ADM problems arise primarily from morbidity or premature mortality. As indicated above, these costs are measured in terms of both foregone earnings and the imputed market value of lost work or household production due to outpatient or inpatient treatment or from lowered productivity for those with ADM problems who continue to work or perform household activities.

Other related direct costs for ADM problems are quite diverse. The two largest categories of these costs stem from ADM-induced crimes and from property destruction (e.g., due to vehicular accidents or crime). In addition, other related direct costs include an appropriate share of the administrative costs of various social welfare programs providing services to individuals with ADM problems. Categories for other related indirect costs for ADM problems are the same as those listed above in section B.

A summary listing of the specific cost elements suggested for use in cost-of-illness studies is provided in exhibit 2-1.

Exhibit 2-1

Cost Elements for Cost-Of-Illness Studies

I. CORE COSTS

A. Direct

1. Hospitalization
2. Outpatient clinical care
3. Nursing home care
4. Home health care
5. Services of primary physicians, specialists, and other professionals
6. Drugs and drug sundries
7. Rehabilitation counseling
8. Rehabilitation aids

B. Direct

Lost productivity due to:

1. Mortality
2. Morbidity (lost productivity)
 - a. Reduced productivity
 - b. Lost productive time

II. OTHER RELATED COSTS

A. Direct

1. Transportation
2. Household expenditures and help for the household
3. Special equipment or alteration of property for rehabilitation or comfort
4. Counseling, retraining, and reeducation
5. Property losses (destruction, for instance, from vehicular accidents or criminal activity)
6. Criminal justice system
7. Welfare system administration (not the transfers themselves)

B. Indirect

1. Loss productivity of family and friends
2. Lost productivity resulting from incarceration due to ADM problem
3. Lost productivity from full-time pursuit of a crime career in order to support a drug habit
4. Lost productivity of persons other than crash victims due to ADM-caused motor vehicle accidents

Source: Derived from Hodgson and Meiners (1979).

III. SPECIFIC ITEMS

A. Definition

The first task that must be addressed in this effort is to develop a careful definition of each ADM problem for which societal costs are being estimated. In particular, the definitions selected must distinguish between chronic and acute alcohol and drug abuse and must provide a careful specification of the conditions associated with mental illness.

B. Incidence and Prevalence

In estimating these costs to society, the distinction between incidence and prevalence of the ADM conditions must be carefully made. Strictly speaking, incidence of an ADM problem is defined as the number of new cases of a problem that occur in a given period of time. Prevalence refers to the total number of cases that are present at a point in time or over a given period of time.

C. Association and Causality

Previous efforts have pointed out the necessity of distinguishing between the association of ADM problems with subsequent behavior states and the degree to which ADM problems cause these behavior states. In addition, the literature review conducted for the RTI study indicated the difficulty inherent in establishing valid measures of causality. Despite these problems, the RTI study attempted to estimate costs to society by using measures of causality rather than correlation or association. Wherever possible, the results of previous studies that have used appropriate designs and analytic techniques to develop estimates of the degree of causality were incorporated into the estimation procedure.

D. Foregone Earnings

As indicated earlier, a critical input to estimating the indirect costs of ADM is the value of foregone earnings of individuals with ADM problems who experience premature mortality or other reasons for lost productivity. In order to develop a consistent approach to estimating the value of this cost component across the three ADM problem areas, a single set of earnings profiles for members of the general population is required. These earnings profiles should be available for separate population subgroups (e.g., classified by age, sex, race, educational attainment, etc.). Given these demographic characteristics, the profiles can then be adjusted to reflect the separate demographic characteristics of the populations with each of the three ADM problems. Issues that must be addressed include adjustments for expected labor force participation and unemployment for populations with ADM problems, possible adjustments for less than full employment national economy, the choice of an appropriate rate with which to discount future earnings values, and an assumption about the expected rate of labor productivity growth in the future. Additional issues that must be addressed include the conceptual

bases for estimating the costs of lowered on-the-job-productivity due to ADM problems, the costs of foregone household production by individuals not in the officially defined labor force, and the value of foregone production that occurs when individuals volunteer for work in the ADM treatment/prevention system.

As explained in more detail in later chapters, recently developed unpublished data on the present values of age/sex-earnings profiles prepared by the staff of the National Center for Health Statistics provide an appropriate data source for estimating many of these indirect costs. The assumptions underlying the development of these profiles have been carefully reviewed, and the resulting profiles have been found to be appropriate for use in the RTI study.

E. Double Counting

The final conceptual issue that must be addressed is that of adjusting for potential double counting in estimates of specific ADM cost elements. Double counting is defined as a situation in which the costs of a given condition are included more than once in developing the total cost of ADM problems. An example of this situation is that of counting foregone earnings for traffic fatalities twice in developing estimates of the costs to society of alcohol abuse--once in the general estimate of premature mortality from alcohol abuse and again in specific estimates of mortality from traffic accidents.

Another example occurs in situations in which an individual with an ADM problem is treated in a specialty setting that is not organized primarily to treat the problem, e.g., an alcoholic being treated in a Community Mental Health Center. It is easy to count this person's costs twice in estimating the costs to society of ADM problems--once as an alcohol abuse cost and again as a mental illness cost. Such situations should be identified and the double counting eliminated in developing a composite estimate of the costs to society of ADM. One possible approach would be to specifically identify the various specialty settings in which treatment for multiple ADM problems occurs and the proportions of treatment resources used to treat the separate ADM problems in each of these specialty settings. This procedure would enable us to develop estimates of both the treatment costs for each ADM problem and estimates of the treatment costs for each type of specialized ADM facility.

A third example occurs in situations where it is difficult to specify to which of the three ADM problems a particular cost element should be assigned. This difficulty is present when an individual with more than one ADM problem is being treated or when one includes the expenditures for administrative staff concerned with more than one ADM problem. In these situations, these costs might be reported as an unallocated total not included in cost estimates of the separate ADM problems or they might be assigned to either a single or multiple problem according to an appropriate approximation procedure. For example, in situations where a person is being treated for more than one ADM problem, the costs could be assigned to the cost component with the primary diagnosis. Expenditures by

administrative staff could be allocated to the three separate ADM components in proportion to other direct costs.

IV. ALTERNATIVE ESTIMATION METHODOLOGIES

Two general approaches or methodologies have been applied to various ways in previous ADM cost-of-living studies. None of these studies used one or the other of these methodologies exclusively. Instead, the two approaches were mixed within the studies, with one methodology used to estimate some cost elements, the other to estimate others, and both to estimate yet others.

These two methodologies can be identified as being: ADM population-specific (methodology A) or ADM illness (or event)-specific (methodology B). The differences between the two approaches are primarily in terms of the unit of observation for which cost data are collected and analyzed and the types of data available with which to estimate the costs. A general outline of the steps included in each of the two approaches is presented in exhibit 2-2.

The ADM population-specific methodology uses the individuals in the prevalence population as the primary unit of observation. The objective is to collect data concerning such cost-related factors as health care utilizations, morbidity, average productivity, and mortality of individuals in the population at risk (the prevalence pool) and on similar individuals in the non-ADM population (a comparison group). The operational hypothesis is that the population at risk will be inferior on a per capita basis to the non-ADM population with respect to the above cost-related factors.

If the risk population has higher per capita costs for a given societal cost element, then the additional costs are attributed to the illness or problem which is being studied. This attribution is based on the expectation that the risk population's experience would be the same as that of the nonrisk comparison group except for the illness or problem in question.

Constructing valid comparison groups is the crucial step in this methodology. The comparison is based on the assumption that the two groups are the same in all respects which might affect the cost element except for the illness or disorder in question. However, sociodemographic and contextual or environmental factors may also affect the cost element and should be taken into account in developing comparison groups. For example, when an illness or problem is concentrated in a segment of the population which has generally poorer health, the development of comparison groups needs to take this factor into consideration, or else an overestimate of costs to society may result.

In cost-of-illness studies for ADM it is likely that this methodology will overestimate the costs of the ADM problems. This is because the ADM risk population is likely to be characterized by other factors which may

also be involved in poor health. In fact, some researchers have hypothesized that poor health may in some cases lead to ADM problems. As indicated above, the choice of an appropriate comparison group is the most important factor in avoiding this upward bias in cost estimates.

The second methodology uses ADM problems and related illnesses or events as the primary units of observation. Under this approach, the first step is to identify specific ADM illness or events (e.g., treatment, unemployment, premature death, criminal activity, traffic accidents) that are associated with each ADM problem. The next step is to estimate the proportions of these illnesses or events that are caused by the ADM problems. The third step is to estimate the direct and indirect costs to society of each of the illnesses or events that are caused by the ADM problems. The third step is to estimate the direct and indirect costs to society of each of the illnesses or events. These cost estimates are then multiplied by the proportions of the economic costs to society. It should be noted that a key operational assumption underlying this methodology is that the ADM illness occurred in addition to normally expected illnesses. It should also be noted that this methodology will only count the costs associated with specific episodes of ADM problems or other illnesses and events known to be caused by ADM problems.

The key steps in this methodology are to identify the specific ADM illnesses or events such as criminal behavior and the proportions of these ADM-related illnesses/events that are caused by the ADM problems. Various data sources can be used to estimate the number of episodes of each illness or event, the value of health care resources used to treat the illness, the amount of productive time lost due to the illness, the mortality associated with the illness, and the nonhealth care value of system resources used to address other events caused by ADM.

In practice this methodology may underestimate the costs to society of ADM and related problems. This is because it may be difficult both to identify all ADM episodes and to quantify the extent to which ADM problems can cause, contribute to, or exacerbate other illnesses or behaviors. In addition, insofar as ADM disorders can lead to generally lower health status, the costs of this lower health status will be missed by using this methodology.

The process of identifying ADM and related illnesses or events in the second methodology is equivalent to that of creating comparison groups in the first methodology. With sufficient data and analysis the two methods should yield estimates of the economic costs to society. However, available data and the state of the art of cost-of-living illness studies have not yet advanced to this stage. With currently available data, applying the two methodologies to the same ADM problem will lead to different estimates. The first methodology will likely overestimate ADM costs to society, while the second methodology will tend to underestimate these costs.

After developing this background framework, the next task of the RTI study was to conduct a thorough literature review of previous studies of the costs to society of ADM problems, the results of which are summarized in the following chapter of this report. This literature review was a useful means for reviewing the potential applicability of each of the two methodological approaches, for assessing the validity and reliability of the data available for implementing each, and for developing recommendations for which approach to use the RTI study.

Exhibit 2-2

Estimation Methodologies for ADM
Cost-Of-Illness Studies

METHODOLOGY A: ADM Population-Specific

1. Identify the ADM population.
2. Estimate the utilization of health care resources of the ADM population on a per capita basis.
3. Estimate the same factors for the non-ADM population.
4. Subtract the per capita utilization values of the non-ADM population from those of the ADM population, attributing the additional utilization to ADM problems.
5. Project the per capita estimate of additional utilization to the entire ADM population by multiplying by the number of persons with ADM problems.
6. Assign cost values to the additional utilization estimates of step 5.
7. Estimate other appropriate conditions (e.g., mortality and morbidity).
8. Implement procedures similar to those in steps 4-6 to develop estimates of the remaining elements of the costs to society of ADM problems.

METHODOLOGY B: ADM Illness (or Event)-Specific

1. Define specific illnesses or events (e.g., treatment, unemployment, premature death, criminal activity, traffic accidents) associated with each ADM problem.
2. Estimate the proportions of these illnesses or events caused by the ADM problems.
3. Estimate the direct and indirect costs to society of each of the illnesses and events identified in step 1.
4. For each of the illnesses and events, multiply the cost estimates developed in step 3 by the causal factors specified in step 2 to develop estimates of the costs to society of ADM problems.