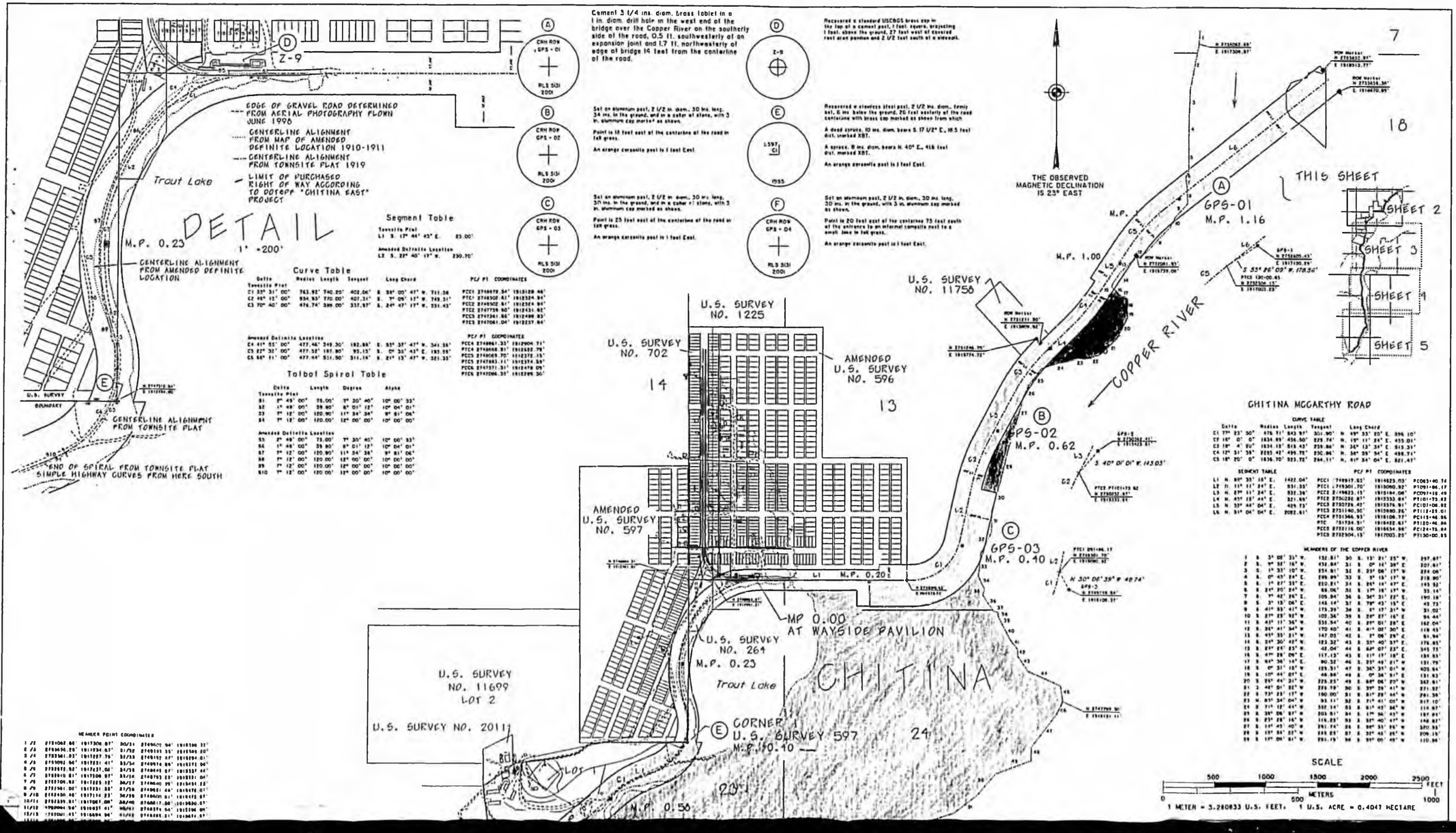
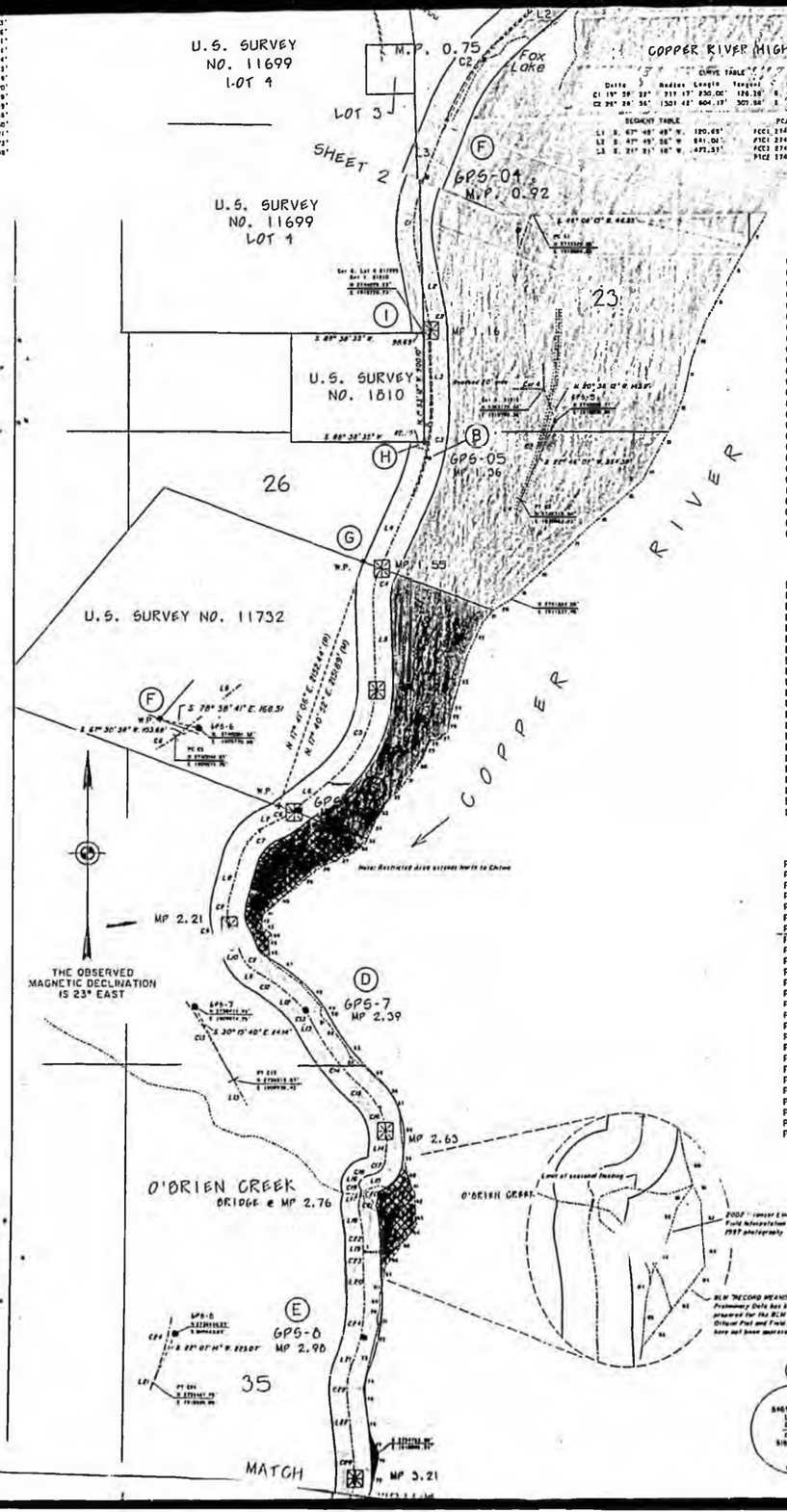

DETAIL
1" =200'
M.P. 0.23
EDGE OF GRAVEL ROAD DETERMINED FROM AERIAL PHOTOGRAPHY FLOWN JUNE 1990
CENTERLINE ALIGNMENT FROM MAP OF AMENDED DEFINITE LOCATION 1910-1911
CENTERLINE ALIGNMENT FROM TOWNSITE PLAT 1919
LIMIT OF PURCHASED RIGHT OF WAY ACCORDING TO DOTPF "CHITINA EAST" PROJECT
CENTERLINE ALIGNMENT FROM AMENDED DEFINITE LOCATION
CENTERLINE ALIGNMENT FROM TOWNSITE PLAT
END OF SPIRAL FROM TOWNSITE PLAT SIMPLE HIGHWAY CURVES FROM HERE SOUTH
Trout Lake
BOUNDARY
U.S. SURVEY
Z-9
CRH ROW GPS - 01
CRH ROW GPS - 02
CRH ROW GPS - 03
CRH ROW GPS - 04
RLS 5131 2001
Segment Table
Curve Table
Talbot Spiral Table
Cement 3 1/4 ins. diam. brass tablet in a 1 in. diam. drill hole in the west end of the bridge over the Copper River on the southerly side of the road, 0.5 ft. southwesterly of an expansion joint and 1.7 ft. northwesterly of edge of bridge 14 feet from the centerline of the road.
Set on aluminum post, 2 1/2 in. diam., 30 ins. long, 24 ins. in the ground, and in a cairn of stone, with 3 in. aluminum cap marked as shown.
Point is 18 feet east of the centerline of the road in tall grass.
An orange carsonite post is 1 foot East.
Set on aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn +/- stone, with 3 in. aluminum cap marked as shown.
Point is 25 feet east of the centerline of the road in tall grass.
An orange carsonite post is 1 foot East.
Recovered a standard USCB&S brass cap in the top of a cement post, 1 foot, square, projecting 1 foot, above the ground, 27 feet west of covered foot alum pontoon and 2 1/2 feet south of a sidewalk.
Recovered a stainless steel post, 2 1/2 ins. diam., firmly set, 6 ins. below the ground, 26 feet easterly of the road centerline with brass cap marked as shown from which
A dead spruce, 10 ins. diam. bears S. 17 1/2° E., 18.5 feet dist. marked XBT.
A spruce, 8 ins. diam. bears N. 40° E., 41.6 feet dist. marked XBT.
An orange carsonite post is 1 foot East.
Set on aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, with 3 in. aluminum cap marked as shown.
Point is 20 feet east of the centerline 75 feet south of the entrance to an informal campsite next to a small lane in tall grass.
An orange carsonite post is 1 foot East.
THE OBSERVED MAGNETIC DECLINATION IS 23° EAST
U.S. SURVEY NO. 11758
U.S. SURVEY NO. 1225
U.S. SURVEY NO. 702
AMENDED U.S. SURVEY NO. 596
AMENDED U.S. SURVEY NO. 597
U.S. SURVEY NO. 11699 LOT 2
U.S. SURVEY NO. 20111
U.S. SURVEY NO. 264
M.P. 0.23
MP 0.00 AT WAYSIDE PAVILION
M.P. 0.20
M.P. 0.56
CORNER 1 U.S. SURVEY 597 M.P. 0.10
COPPER RIVER
GPS-01 M.P. 1.16
GPS-02 M.P. 0.62
GPS-03 M.P. 0.10
M.P. 1.00
CHITINA
THIS SHEET
SHEET 1
SHEET 2
SHEET 3
SHEET 5
7
18
13
14
24
20
CHITINA MCCARTHY ROAD
Curve Table
Segment Table
PC/ PI COORDINATES
MEANDER POINT COORDINATES
SCALE
500 1000 1500 2000 2500 FEET
0 500 METERS 1000
1 METER = 3.280833 U.S. FEET. 1 U.S. ACRE = 0.4047 HECTARE

14/15	2751796.91'	1916320.06'	45/44	2748019.87'	1915780.03'		
15/16	2751756.82'	1916502.71'	44/45	2747930.84'	1916100.86'		
16/17	2751678.44'	1916589.02'	43/46	2747790.30'	1916131.11'		
17/18	2751645.00'	1916661.38'	46/47	2747680.69'	1916013.76'		
18/19	2751519.69'	1916660.44'	47/48	2747356.85'	1915835.44'		
19/20	2751471.86'	1916669.81'	48/49	2747324.93'	1915834.63'		
20/21	2751270.71'	1916760.15'	49/50	2747089.64'	1915987.95'		
21/22	2751113.85'	1916405.65'	50/51	2746860.82'	1915324.70'		
22/23	2751071.07'	1916261.91'	51/52	2746703.44'	1916104.49'		
23/24	2751081.50'	1916189.38'	52/53	2746542.93'	1916163.55'		
24/25	2750958.09'	1915936.01'	53/54	2746488.68'	1914915.38'		
25/26	2750903.86'	1915918.09'	54/55	2746300.47'	1914951.80'		
26/27	2750897.05'	1915689.75'	55/56	2746210.21'	1914939.91'		
27/28	2750824.61'	1915597.97'	56/57	2746048.59'	1914839.73'		
28/29	2750778.74'	1915518.41'	57/58	2745867.10'	1915948.48'		
29/30	2745890.13'	1915843.21'					



CURVE TABLE

	Delta	Radius	Length	Tangent		Long Chord	
C1	33° 58' 57"	1038.80'	616.12'	317.42'	S. 4° 21' 50" W.	607.13'	
C2	9° 32' 46"	1276.95'	212.76'	106.63'	S. 7° 51' 16" E.	212.51'	
C3	26° 6' 43"	1779.79'	811.12'	412.73'	S. 9° 58' 30" W.	804.12'	
C4	26° 19' 34"	575.17'	264.28'	134.51'	S. 9° 52' 03" W.	261.96'	
C5	53° 44' 14"	1045.01'	980.86'	529.05'	S. 23° 34' 24" W.	945.31'	
C6	13° 46' 2"	407.65'	97.95'	49.21'	S. 57° 19' 32" W.	97.72'	
C7	50° 22' 47"	470.83'	414.00'	221.46'	S. 39° 01' 10" W.	400.79'	
C8	16° 5' 0"	628.97'	176.56'	88.86'	S. 5° 47' 16" W.	175.98'	
C9	30° 19' 22"	327.93'	173.55'	88.86'	S. 17° 24' 56" E.	171.54'	
C10	11° 18' 42"	446.66'	88.18'	44.23'	S. 26° 55' 16" E.	88.04'	
C11	40° 47' 34"	293.30'	208.88'	109.09'	S. 41° 39' 42" E.	204.50'	
C12	12° 59' 5"	1427.04'	323.41'	162.40'	S. 55° 33' 57" E.	322.72'	
C13	18° 20' 36"	812.81'	260.22'	131.23'	S. 39° 54' 06" E.	259.11'	
C14	19° 23' 37"	1920.01'	649.89'	328.08'	S. 40° 25' 36" E.	646.79'	
C15	4° 33' 33"	715.39'	56.93'	28.48'	S. 47° 50' 38" E.	56.91'	
C16	49° 14' 25"	561.03'	482.15'	257.10'	S. 20° 56' 36" E.	467.45'	
C17	76° 32' 59"	139.29'	186.10'	109.91'	S. 41° 57' 01" W.	172.57'	
C18	43° 12' 57"	111.82'	84.34'	44.29'	S. 58° 37' 06" W.	82.36'	
C19	81° 20' 42"	33.72'	47.95'	29.04'	S. 3° 43' 45" E.	44.01'	
C20	55° 24' 15"	46.86'	45.31'	24.61'	S. 16° 45' 55" E.	43.57'	
C21	22° 34' 2"	180.88'	71.24'	36.09'	S. 0° 20' 51" E.	70.78'	
C22	11° 30' 8"	977.25'	196.19'	98.43'	S. 5° 52' 40" E.	195.86'	
C23	3° 46' 59"	1986.71'	131.19'	65.62'	S. 2° 01' 14" E.	131.16'	
C24	23° 28' 40"	1420.97'	582.26'	295.28'	S. 7° 49' 36" W.	578.20'	
C25	27° 11' 57"	583.15'	276.83'	141.00'	S. 5° 57' 57" W.	274.24'	
C26	39° 57' 12"	1491.90'	104. 33'	542.32'	S. 12° 20' 25" W.	1019.38'	

SEGMENT TABLE

L1	S. 21° 21' 18" W.	477.57'	
L2	S. 12° 37' 39" E.	461.06'	
L3	S. 3° 04' 51" E.	553.98'	
L4	S. 23° 01' 50" W.	677.80'	
L5	S. 3° 17' 44" E.	647.78'	
L6	S. 30° 26' 32" W.	436.51'	
L7	S. 64° 12' 31" W.	58.01'	
L8	S. 13° 49' 45" W.	309.92'	
L9	S. 32° 34' 38" E.	16.12'	
L10	S. 21° 15' 57" E.	43.15'	
L11	S. 62° 03' 34" E.	41.17'	
L12	S. 49° 04' 18" E.	21.38'	
L13	S. 30° 43' 47" E.	58.94'	
L14	S. 3° 40' 36" W.	115.04'	
L15	S. 80° 13' 32" W.	14.08'	
L16	S. 37° 00' 38" W.	23.44'	
L17	S. 10° 56' 10" W.	74.41'	
L18	S. 11° 37' 53" E.	119.82'	
L19	S. 0° 07' 39" E.	9.47'	
L20	S. 3° 54' 43" E.	248.85'	
L21	S. 19° 33' 57" W.	26.57'	
L22	S. 7° 38' 03" E.	467.72'	

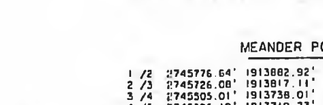
LEGEND

- National Geodetic Survey Control Marker
- GPS Control Mark
- Milepost
- AKDOTPF Concrete R.O.W. Marker
- BLM Monument
- Centerline
- Copper River Meander Line
- Turnout
- Restricted Area
- Right of Way Limit

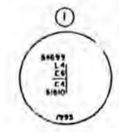
5	S. 16° 17' 21" W.	157.18'	45	S. 39° 24' 59" W.	45.94'		
6	S. 14° 00' 12" W.	198.31'	46	S. 6° 41' 47" E.	152.55'		
7	S. 31° 22' 37" W.	294.86'	47	S. 55° 27' 29" E.	317.60'		
8	S. 28° 41' 10" W.	299.24'	48	S. 43° 22' 18" E.	268.19'		
9	S. 27° 43' 32" W.	361.09'	49	S. 19° 26' 22" W.	42.33'		
10	S. 18° 32' 28" W.	321.14'	50	S. 26° 41' 12" E.	56.22'		
11	S. 10° 56' 15" W.	291.86'	51	S. 71° 01' 05" E.	18.43'		
12	S. 19° 37' 54" W.	275.44'	52	S. 38° 32' 22" E.	286.64'		
13	S. 27° 15' 13" W.	346.43'	53	S. 26° 08' 05" E.	95.53'		
14	S. 27° 37' 22" W.	189.62'	54	S. 55° 51' 53" E.	135.29'		
15	S. 46° 58' 44" W.	328.98'	55	S. 49° 15' 36" E.	280.22'		
16	S. 50° 05' 52" W.	278.04'	56	S. 42° 42' 51" E.	86.31'		
17	S. 45° 57' 36" W.	370.84'	57	S. 21° 09' 12" E.	134.09'		
18	S. 45° 32' 22" W.	341.68'	58	S. 6° 55' 00" E.	314.99'		
19	S. 47° 53' 21" W.	177.24'	59	S. 11° 26' 03" E.	165.87'		
20	S. 58° 46' 38" W.	168.68'	60	S. 17° 01' 26" E.	141.72'		
21	S. 42° 54' 14" W.	145.20'	61	S. 28° 26' 39" E.	74.56'		
22	S. 24° 00' 16" W.	305.57'	62	S. 4° 01' 00" E.	149.16'		
23	S. 15° 30' 19" W.	433.61'	63	S. 6° 40' 21" E.	120.44'		
24	S. 19° 53' 20" W.	60.72'	64	S. 34° 41' 46" W.	122.98'		
25	S. 11° 45' 20" W.	72.60'	65	S. 36° 20' 49" W.	143.65'		
26	S. 9° 50' 20" W.	93.72'	66	S. 37° 01' 13" W.	164.26'		
27	S. 49° 40' 21" W.	113.52'	67	S. 6° 35' 41" W.	129.86'		
28	S. 87° 58' 23" W.	64.02'	68	S. 13° 56' 49" W.	134.93'		
29	S. 19° 28' 24" W.	162.36'	69	S. 10° 48' 51" E.	61.55'		
30	S. 36° 08' 25" W.	127.38'	70	S. 9° 39' 47" W.	134.11'		
31	S. 34° 59' 27" W.	197.34'	71	S. 17° 18' 44" E.	50.36'		
32	S. 50° 51' 29" W.	116.16'	72	S. 12° 47' 51" W.	104.40'		
33	S. 30° 00' 31" W.	209.22'	73	S. 13° 03' 47" W.	224.09'		
34	S. 22° 59' 30" W.	162.36'	74	S. 10° 59' 29" W.	135.72'		
35	S. 23° 26' 20" W.	52.25'	75	S. 10° 07' 10" E.	209.76'		
36	S. 48° 55' 34" W.	127.59'	76	S. 13° 47' 11" E.	204.95'		
37	S. 65° 21' 43" W.	211.58'	77	S. 22° 38' 17" E.	147.25'		
38	S. 62° 51' 50" W.	128.39'	78	S. 2° 20' 11" W.	118.77'		
39	S. 48° 19' 40" W.	261.19'	79	S. 11° 18' 33" W.	216.54'		
40	S. 49° 09' 16" W.	233.69'	80	S. 7° 20' 04" W.	247.60'		
81	S. 33° 13' 06" W.	116.57'					
82	S. 15° 04' 46" W.	130.69'					
83	S. 24° 19' 31" W.	140.51'					
84	S. 11° 56' 24" W.	120.57'					
85	S. 3° 17' 24" W.	204.74'					

MEANDER POINT COORDINATES

1 /2	2745776.64'	1913882.92'	41/42	2739204.83'	1909426.94'
2 /3	2745726.08'	1913817.11'	42/43	2739101.26'	1909486.87'
3 /4	2745505.01'	1913738.01'	43/44	2739047.68'	1909569.74'
4 /5	2745305.19'	1913719.73'	44/45	2739005.66'	1909576.14'
5 /6	2745244.33'	1913675.64'	45/46	2738970.18'	1909546.97'
6 /7	2745063.17'	1913594.97'	46/47	2738818.67'	1909564.76'
7 /8	2744811.45'	1913441.46'	47/48	2738638.58'	1909826.37'
8 /9	2744548.94'	1913297.82'	48/49	2738443.63'	1910010.54'
9 /10	2744229.30'	1913129.83'	49/50	2738403.25'	1909997.86'
10/11	2743924.83'	1913027.71'	50/51	2738353.01'	1910023.11'
11/12	2743638.27'	1912972.33'	51/52	2738347.02'	1910040.53'
12/13	2743378.84'	1912879.79'	52/53	2738122.82'	1910219.12'
13/14	2743070.87'	1912721.15'	53/54	2738037.06'	1910261.20'
14/15	2742902.87'	1912633.24'	54/55	2737961.14'	1910373.18'
15/16	2742678.41'	1912392.72'	55/56	2737778.26'	1910585.50'
16/17	2742500.06'	1912179.42'	56/57	2737714.85'	1910644.04'
17/18	2742242.26'	1911912.84'	57/58	2737509.80'	1910692.43'
18/19	2742002.54'	1911668.97'	58/59	2737277.09'	1910730.36'
19/20	2741884.09'	1911537.48'	59/60	2737114.51'	1910763.25'
20/21	2741796.65'	1911393.24'	60/61	2736979.01'	1910804.74'
21/22	2741690.30'	1911294.39'	61/62	2736913.46'	1910840.24'
22/23	2741411.15'	1911170.08'	62/63	2736764.65'	1910850.60'
23/24	2740993.32'	1911054.16'	63/64	2736645.03'	1910864.69'
24/25	2740533.90'	1911041.65'	64/65	2736543.92'	1910794.68'
25/26	2740862.82'	1911026.86'	65/66	2736428.22'	1910709.55'
26/27	2740770.48'	1911010.85'	66/67	2736297.07'	1910610.65'
27/28	2740697.02'	1910924.31'	67/68	2736168.07'	1910595.73'
28/29	2740694.76'	1910860.33'	68/69	2736037.12'	1910563.21'
29/30	2740541.69'	1910806.20'	69/70	2735976.66'	1910574.76'
30/31	2740438.82'	1910731.00'	70/71	2735844.46'	1910552.25'
31/32	2740277.15'	1910617.92'	71/72	2735796.38'	1910567.24'
32/33	2740203.83'	1910527.83'	72/73	2735616.55'	1910526.39'
33/34	2740022.66'	1910423.19'	73/74	2735398.27'	1910475.74'
34/35	2739873.19'	1910359.78'	74/75	2735265.04'	1910449.86'
35/36	2739825.25'	1910338.99'	75/76	2735058.54'	1910486.72'
36/37	2739741.42'	1910242.81'	76/77	2734859.50'	1910535.56'
37/38	2739655.22'	1910050.49'	77/78	2734723.60'	1910592.24'
38/39	2739594.66'	1909936.24'	78/79	2734604.93'	1910507.39'
39/40	2739421.00'	1909741.14'	79/80	2734392.59'	1910544.93'
40/41	2739268.16'	1909564.36'			
80/81	2736979.01'	1910804.74'			
81/82	2736881.49'	1910740.88'			
82/83	2736755.30'	1910706.88'			
83/84	2736627.26'	1910649.00'			
84/85	2736501.47'	1910622.40'			
85/67	2736297.07'	1910610.65'			



Monument a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 1 inch above the ground, with brass cap marked as shown

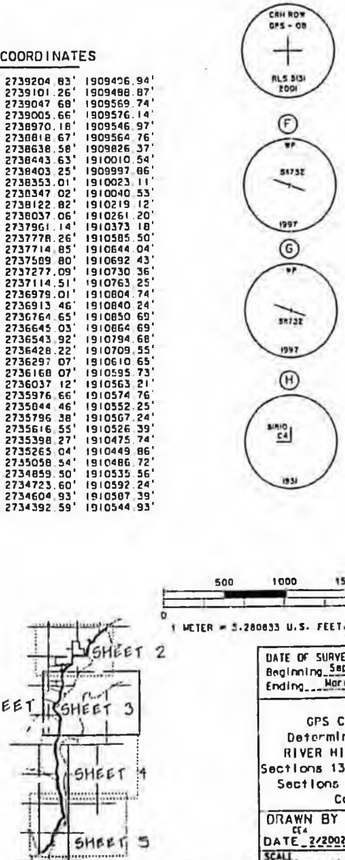


Recovered a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 1 inch above the ground, with brass cap marked as shown from which

A spruce, 8 ins. diam. bears N 71 3/4° E., 8.2 feet dist. marked XBT

A spruce, 8 ins. diam. bears N 7° W., 22.8 feet dist. marked XBT

An orange carsonite post is 1 foot East



Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn of stone with 3 in aluminum cap marked as shown

Point is 15 feet east of the centerline of the north edge of a small turnout

An orange carsonite post is 1 foot East.

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn of stone with 3 in aluminum cap marked as shown

Point is 30 feet east of the centerline of the south end of a large turnout 330 feet south of a dumpster.

An orange carsonite post is 1 foot East.

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn of stone with 3 in aluminum cap marked as shown

Point is 25 feet east of the centerline at the top of a road cut 15 feet high.

An orange carsonite post is 1 foot East.

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn of stone with 3 in aluminum cap marked as shown

Point is 15 feet east of the centerline of the north edge of a small turnout.

An orange carsonite post is 1 foot East.

Recovered a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 1 inch above the ground, with brass cap marked as shown from which

A spruce, 8 ins. diam. bears N 36 1/4° W., 23.8 feet dist. marked XBT.

An orange carsonite post is 1 foot East.

Recovered an iron post, 2 1/2 ins. diam., firmly set, projecting 1 inch above the ground, with brass cap marked as shown

SCALE

0 500 1000 1500 2000 2500 FEET

0 500 1000 METERS

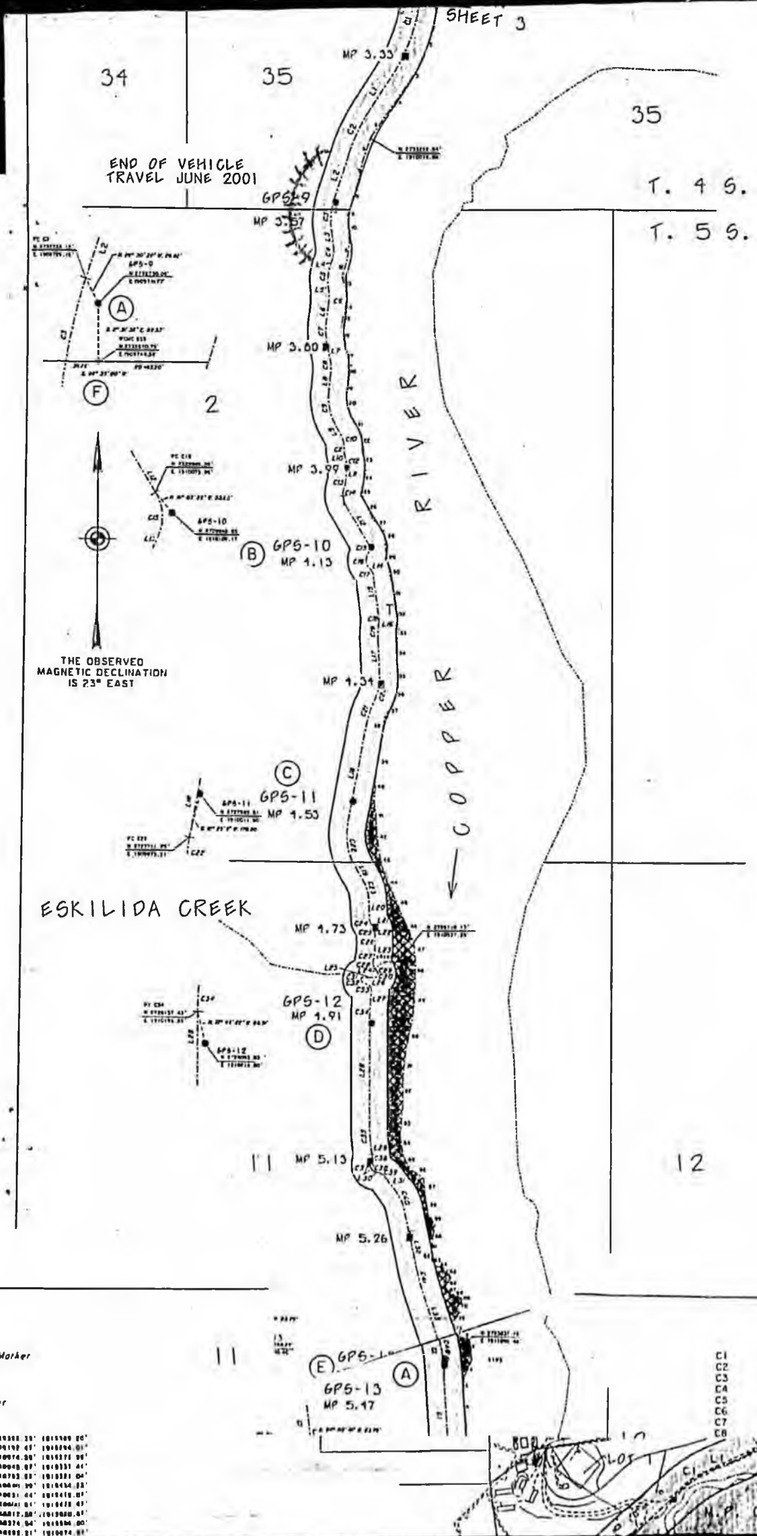
1 METER = 3.280833 U.S. FEET. 1 U.S. ACRE = 0.4047 HECTARE

DATE OF SURVEY Beginning Sept. 1, 2001 Ending March 20, 2002	NAME OF SURVEYOR Crazy Mountains Joint Venture 2000 E. Dowling Road, Suite 6 Anchorage, AK 99507

RECORD OF SURVEY

GPS Control Network and Right of Way Determination for a portion of The COPPER RIVER HIGHWAY Near CHITINA, ALASKA Within Sections 13,14,23,26 and 35, T. 4 S., R. 5 E. & Sections 2,11,14,22 and 23 ,T. 5 S., R. 5 E. Copper River Meridan, Alaska

DRAWN BY CEA DATE 2/2002	SHEET 3 OF 5 SHEETS	
SCALE 1" = 400'	CHECKED KJL	FILE NO.



CURVE TABLE

	Delta	Radius	Length	Tangent	Long Chord		
C1	39° 57' 12"	1491.90'	1040.33'	542.32'	S. 12° 20' 35" W.	1019.38'	
C2	15° 9' 38"	1479.18'	331.40'	196.85'	S. 24° 44' 22" W.	390.26'	
C3	26° 27' 10"	558.36'	257.79'	131.23'	S. 3° 55' 57" W.	255.50'	
C4	25° 11' 15"	271.67'	119.43'	60.70'	S. 3° 18' 00" W.	118.47'	
C5	23° 25' 19"	327.26'	145.21'	73.82'	S. 3° 10' 58" W.	144.02'	
C6	15° 43' 28"	463.30'	127.15'	63.98'	S. 1° 39' 58" E.	126.75'	
C7	19° 57' 48"	596.52'	207.84'	104.99'	S. 3° 47' 06" E.	206.80'	
C8	18° 20' 17"	437.01'	139.87'	70.54'	S. 4° 35' 55" E.	139.27'	
C9	35° 28' 51"	471.74'	292.13'	150.92'	S. 13° 10' 12" E.	287.48'	
C10	32° 5' 24"	205.34'	115.01'	59.06'	S. 14° 51' 56" E.	113.50'	
C11	19° 35' 44"	201.10'	68.78'	34.73'	S. 8° 37' 05" E.	68.44'	
C12	19° 21' 3"	140.47'	47.44'	23.95'	S. 8° 44' 25" E.	47.22'	
C13	17° 47' 26"	267.26'	82.99'	41.83'	S. 9° 49' 50" W.	82.65'	
C14	51° 28' 0"	165.11'	148.31'	79.58'	S. 7° 00' 40" E.	143.38'	
C15	56° 13' 32"	96.72'	94.92'	51.67'	S. 4° 37' 40" E.	91.15'	
C16	57° 20' 50"	83.71'	98.40'	55.77'	S. 10° 11' 11" E.	92.83'	
C17	34° 46' 23"	89.06'	54.05'	27.89'	S. 26° 28' 33" E.	53.23'	
C18	15° 11' 2"	73.85'	19.57'	9.84'	S. 1° 29' 50" E.	19.51'	
C19	10° 11' 37"	772.45'	137.43'	68.90'	S. 0° 59' 52" W.	137.25'	
C20	29° 15' 37"	417.08'	213.00'	108.88'	S. 10° 31' 52" W.	210.69'	
C21	15° 57' 25"	776.82'	216.34'	108.88'	S. 17° 10' 56" W.	215.65'	
C22	41° 39' 9"	517.50'	376.21'	196.85'	S. 11° 37' 19" E.	367.98'	
C23	28° 19' 5"	364.13'	179.97'	91.86'	S. 18° 17' 20" E.	178.15'	
C24	44° 6' 10"	68.85'	52.99'	27.89'	S. 26° 10' 53" E.	51.69'	
C25	43° 39' 6"	43.01'	32.77'	17.22'	S. 26° 24' 24" E.	31.98'	
C26	5° 40' 23"	993.20'	98.34'	49.21'	S. 1° 44' 39" E.	98.30'	
C27	12° 56' 25"	294.50'	66.51'	33.40'	S. 7° 33' 45" W.	66.37'	
C28	53° 0' 18"	80.21'	74.20'	39.99'	S. 12° 28' 56" E.	71.58'	
C29	60° 42' 19"	28.97'	30.69'	16.96'	S. 8° 37' 11" E.	29.27'	
C30	57° 57' 9"	25.16'	29.84'	16.96'	S. 55° 42' 33" W.	28.13'	
C31	97° 11' 3"	17.08'	28.97'	19.37'	S. 41° 05' 37" W.	25.52'	
C32	63° 29' 41"	31.30'	34.69'	37'	S. 39° 14' 45" E.	32.94'	
C33	73° 53' 55"	55.61'	71.73'	41.83'	S. 34° 02' 37" E.	66.86'	
C34	4° 37' 29"	649.95'	52.46'	26.25'	S. 0° 35' 36" W.	52.45'	
C35	7° 24' 57"	987.16'	127.77'	63.98'	S. 5° 25' 38" E.	127.68'	
C36	37° 9' 49"	85.56'	55.50'	28.76'	S. 9° 26' 47" W.	54.53'	
C37	58° 57' 10"	50.89'	52.36'	28.76'	S. 1° 26' 54" E.	50.08'	
C38	51° 30' 56"	58.98'	53.02'	28.46'	S. 56° 40' 57" E.	51.26'	
C39	43° 42' 16"	120.26'	91.73'	48.23'	S. 60° 35' 16" E.	89.53'	
C40	25° 13' 52"	333.49'	146.86'	74.64'	S. 25° 07' 12" E.	145.67'	
C41	6° 5' 27"	1572.43'	167.16'	83.66'	S. 16° 33' 00" E.	167.09'	
C42	13° 53' 51"	740.28'	179.56'	90.22'	S. 12° 38' 48" E.	179.12'	

PC/ PT COORDINATES

PT C1	2733730.57'	1910165.90'	PC C23	2727262.66'	1910103.41'
PC C2	2733475.30'	1910004.40'	PT C23	2727093.52'	1910159.31'
PT C2	2733120.86'	1909841.08'	PC C24	2726931.43'	1910171.02'
PC C3	2732755.12'	1909728.16'	PT C24	2726885.04'	1910193.03'
PT C3	2732500.22'	1909710.63'	PC C25	2726878.66'	1910200.97'
PC C4	2732383.01'	1909729.81'	PT C25	2726850.02'	1910216.19'
PT C4	2732264.79'	1909722.99'	PC C26	2726800.39'	1910219.17'
PC C5	2732196.58'	1909705.56'	PT C26	2726702.13'	1910222.16'
PT C5	2732052.78'	1909695.57'	PC C27	2726670.49'	1910221.56'
PC C6	2732033.10'	1909698.86'	PT C27	2726604.69'	1910212.82'
PT C6	2731906.48'	1909702.54'	PC C28	2726604.66'	1910212.81'
PC C7	2731772.78'	1909688.03'	PT C28	2726534.80'	1910228.28'
PT C7	2731566.44'	1909701.68'	PC C29	2726509.33'	1910248.88'
PC C8	2731477.27'	1909723.41'	PT C29	2726480.39'	1910253.27'
PT C8	2731338.94'	1909734.57'	PC C30	2726480.39'	1910253.27'
PC C9	2731199.54'	1909723.43'	PT C30	2726464.54'	1910230.03'
PT C9	2730919.62'	1909788.93'	PC C31	2726464.01'	1910134.00'
PC C10	2730848.81'	1909831.33'	PT C31	2726444.70'	1910117.16'
PT C10	2730739.10'	1909860.45'	PC C32	2726444.70'	1910117.16'
PC C11	2730739.08'	1909860.45'	PT C32	2726419.19'	1910138.00'
PT C11	2730671.44'	1909870.70'	PC C33	2726409.45'	1910166.28'
PC C12	2730653.61'	1909876.64'	PT C33	2726354.05'	1910203.71'
PT C12	2730606.94'	1909883.81'	PC C34	2726209.87'	1910196.39'
PC C13	2730506.17'	1909882.17'	PT C34	2726157.43'	1910195.85'
PT C13	2730424.73'	1909868.05'	PC C35	2725241.00'	1910223.36'
PC C14	2730424.71'	1909868.05'	PT C35	2725113.89'	1910235.43'
PT C14	2730282.42'	1909865.55'	PC C36	2725021.18'	1910250.34'
PC C15	2729989.39'	1910073.96'	PT C36	2724967.40'	1910241.39'
PT C15	2729898.54'	1910081.32'	PC C37	2724967.40'	1910241.39'
PC C16	2729876.98'	1910071.95'	PT C37	2724917.33'	1910242.65'
PT C16	2729785.62'	1910088.37'	PC C38	2724917.33'	1910242.65'
PC C17	2729760.19'	1910105.11'	PT C38	2724809.18'	1910285.49'
PT C17	2729720.55'	1910128.84'	PC C39	2724889.21'	1910292.79'
PC C18	2729365.46'	1910185.65'	PT C39	2724844.24'	1910370.77'
PT C18	2729345.96'	1910186.16'	PC C40	2724728.17'	1910463.89'
PC C19	2729329.86'	1910184.44'	PT C40	2724597.37'	1910528.02'
PT C19	2729192.63'	1910182.05'	PC C41	2724105.60'	1910646.12'
PC C20	2728908.26'	1910202.43'	PT C41	2723945.43'	1910693.72'
PT C20	2728701.12'	1910163.92'	PC C42	2723529.05'	1910841.55'
PC C21	2728701.12'	1910163.92'	PT C42	2723354.28'	1910881.17'
PT C21	2728495.10'	1910100.22'			
PC C22	2727711.29'	1909973.21'			
PT C22	2727350.86'	1910047.34'			

MEANDERS OF THE COPPER RIVER

1	S.	7° 20' 04"	W.	247.60'	40	S.	2° 41' 19"	W.	218.24'
2	S.	18° 33' 43"	W.	274.93'	41	S.	5° 37' 52"	E.	266.94'
3	S.	31° 29' 08"	W.	243.83'	42	S.	8° 56' 13"	E.	180.53'
4	S.	33° 17' 21"	W.	291.34'	43	S.	15° 14' 59"	E.	193.19'
5	S.	33° 47' 41"	W.	219.11'	44	S.	27° 23' 28"	E.	185.91'
6	S.	17° 54' 20"	W.	188.86'	45	S.	24° 31' 40"	E.	175.35'
7	S.	12° 28' 01"	W.	194.90'	46	S.	24° 18' 04"	E.	215.37'
8	S.	15° 39' 16"	W.	217.41'	47	S.	7° 30' 55"	E.	167.50'
9	S.	21° 01' 06"	W.	51.69'	48	S.	0° 05' 10"	E.	171.80'
10	S.	6° 43' 46"	E.	216.79'	49	S.	2° 04' 02"	W.	269.19'
11	S.	7° 20' 09"	W.	139.08'	50	S.	9° 29' 50"	W.	282.05'
12	S.	15° 00' 46"	W.	143.98'	51	S.	4° 05' 10"	W.	216.83'
13	S.	16° 54' 12"	E.	168.86'	52	S.	1° 44' 20"	E.	223.78'
14	S.	10° 38' 55"	W.	140.02'	53	S.	3° 37' 21"	W.	244.56'
15	S.	1° 51' 07"	W.	80.59'	54	S.	11° 26' 33"	E.	176.63'
16	S.	8° 55' 08"	E.	200.89'	55	S.	30° 40' 15"	E.	115.80'
17	S.	24° 10' 02"	E.	141.21'	56	S.	56° 25' 07"	E.	123.50'
18	S.	4° 52' 42"	W.	133.54'	57	S.	8° 24' 28"	E.	183.67'
19	S.	15° 16' 12"	W.	125.81'	58	S.	11° 11' 55"	E.	115.19'
20	S.	18° 47' 02"	E.	218.27'	59	S.	35° 41' 53"	E.	100.21'
21	S.	33° 44' 45"	E.	127.24'	60	S.	7° 39' 07"	W.	121.46'
22	S.	9° 43' 48"	E.	129.24'	61	S.	6° 26' 17"	W.	91.26'
23	S.	8° 23' 18"	E.	168.72'	62	S.	7° 01' 27"	E.	85.25'
24	S.	13° 17' 18"	W.	132.10'	63	S.	41° 25' 30"	E.	51.67'
25	S.	6° 07' 22"	E.	96.67'	64	S.	76° 39' 31"	E.	82.95'
26	S.	26° 20' 08"	E.	178.37'	65	S.	33° 36' 54"	E.	85.93'
27	S.	44° 53' 07"	E.	142.06'	66	S.	33° 08' 56"	W.	96.56'
28	S.	6° 04' 47"	E.	166.33'	67	S.	51° 44' 16"	E.	104.98'
29	S.	10° 16' 15"	E.	115.84'	68	S.	72° 17' 03"	E.	56.40'
30	S.	3° 46' 27"	E.	149.00'	69	S.	30° 34' 58"	E.	27.37'
31	S.	12° 32' 51"	E.	199.26'	70	S.	39° 54' 55"	W.	67.38'
32	S.	10° 12' 41"	E.	136.60'	71	S.	41° 43' 46"	E.	41.74'
33	S.	3° 09' 17"	W.	147.60'	72	S.	28° 56' 36"	W.	103.93'
34	S.	0° 53' 51"	E.	214.40'	73	S.	11° 14' 49"	E.	121.13'
35	S.	4° 09' 30"	E.	140.68'	74	S.	65° 48' 14"	E.	46.38'
36	S.	12° 24' 33"	W.	145.30'	75	S.	79° 33' 39"	E.	63.76'
37	S.	33° 53' 32"	W.	120.38'	76	S.	10° 33' 21"	E.	168.58'
38	S.	9° 50' 01"	W.	176.63'	77	S.	22° 19' 12"	W.	149.47'
39	S.	6° 49' 17"	W.	285.69'					

MEANDER POINT COORDINATES

1	/2	2734147.02'	1910513.32'	40 /41	2727909.37'	1910185.34'
2	/3	2733886.39'	1910425.80'	41 /42	2727643.72'	1910211.84'
3	/4	2733678.46'	1910298.46'	42 /43	2727465.39'	1910239.56'
4	/5	2733434.93'	1910138.55'	43 /44	2727279.00'	1910290.39'
5	/6	2733252.84'	1910016.68'	44 /45	2727113.94'	1910375.93'
6	/7	2733073.12'	1909958.61'	45 /46	2726954.41'	1910448.72'
7	/8	2732802.82'	1909916.54'	46 /47	2726758.13'	1910537.35'
8	/9	2732673.47'	1909857.07'	47 /48	2726592.07'	1910559.26'
9	/10	2732625.03'	1909839.26'	48 /49	2726420.27'	1910559.51'
10	/11	2732409.74'	1909864.66'	49 /50	2726151.26'	1910540.86'
11	/12	2732271.80'	1909846.90'	50 /51	2725873.07'	1910503.27'
12	/13	2732132.74'	1909809.61'	51 /52	2725656.79'	1910487.81'
13	/14	2731971.17'	1909858.71'	52 /53	2725433.12'	1910494.61'
14	/15	2731833.56'	1909832.83'	53 /54	2725189.05'	1910479.15'
15	/16	2731754.29'	1909816.20'	54 /55	2725015.93'	1910514.19'
16	/17	2731555.82'	1909847.34'	55 /56	2724916.33'	1910573.26'
17	/18	2731426.99'	1909905.15'	56 /57	2724848.02'	1910676.15'
18	/19	2731293.93'	1909893.80'	57 /58	2724666.32'	1910703.01'
19	/20	2731172.56'	1909860.66'	58 /59	2724553.32'	1910725.38'
20	/21	2731065.91'	1909930.94'	59 /60	2724471.94'	1910783.65'
21	/22	2730960.11'	1910001.63'	60 /61	2724351.56'	1910767.60'
22	/23	2730732.73'	1910023.47'	61 /62	2724260.08'	1910757.45'
23	/24	2730565.82'	1910048.08'	62 /63	2724176.27'	1910767.87'
24	/25	2730437.25'	1910017.72'	63 /64	2724137.52'	1910802.06'
25	/26	2730341.55'	1910031.38'	64 /65	2724118.38'	1910882.77'
26	/27	2730181.70'	1910110.51'	65 /66	2724046.90'	1910930.29'
27	/28	2730081.04'	1910210.76'	66 /67	2723966.06'	1910877.49'
28	/29	2729915.65'	1910228.37'	67 /68	2723931.04'	1910959.92'
29	/30	2729801.66'	1910249.03'	68 /69	2723883.88'	1911013.64'
30	/31	2729657.92'	1910284.27'	69 /70	2723860.32'	1911027.57'
31	/32	2729463.41'	1910327.56'	70 /71	2723808.64'	1910984.33'
32	/33	2729328.97'	1910351.78'	71 /72	2723777.49'	1911012.12'
33	/34	2729181.60'	1910343.65'	72 /73	2723686.54'	1910961.82'
34	/35	2728967.16'	1910347.01'	73 /74	2723567.74'	1910985.45'
35	/36	2728826.91'	1910356.03'	74 /75	2723548.73'	11027.75'
36	/37	2728685.00'	1910326.01'	75 /76	2723537.10'	411090.45'
37	/38	2728585.08'	1910259.68'	76 /77	2723371.45'	1911121.33'
38	/39	2728411.04'	1910229.51'	77 /78	2723233.18'	1911064.57'
39	/40	2728127.37'	1910195.58'			

SEGMENT TABLE

L1	S.	32° 19' 12"	W.	302.07'
L2	S.	17° 09' 32"	W.	382.78'
L3	S.	9° 17' 38"	E.	118.71'
L4	S.	15° 53' 39"	W.	70.92'
L5	S.	9° 31' 45"	E.	19.87'
L6	S.	6° 11' 46"	W.	134.40'
L7	S.	13° 46' 04"	E.	91.28'
L8	S.	4° 34' 15"	W.	139.84'
L9	S.	30° 54' 39"	E.	82.53'
L10	S.	18° 24' 57"	E.	18.78'
L11	S.	0° 56' 07"	W.	100.78'
L12	S.	32° 44' 26"	E.	348.37'
L13	S.	23° 29' 09"	W.	23.49'
L14	S.	43° 31' 45"	E.	24.16'
L15	S.	9° 05' 21"	E.	359.60'
L16	S.	6° 05' 41"	W.	16.10'
L17	S.	4° 05' 56"	E.	285.09'
L18	S.	9° 12' 16"	W.	794.02'
L19	S.	32° 26' 53"	E.	104.51'
L20	S.	17° 10' 58"	W.	215.64'
L21	S.	11° 37' 19"	E.	367.97'
L20	S.	4° 07' 48"	E.	162.50'
L21	S.	10° 14' 01"	E.	9.57'

(A) CRH ROW GPS - 09 — RLS 5131 2001

Drive an aluminum rod, 3/4 in. diam., 8 ft. long, 6.3 ft. in the ground, end in a cutter at stone, with 3 1/4 x x. diam. aluminum cap marked as shown.

Point is 15 feet east of the centerline, 25 feet north of the berm which closes the remainder of the Copper River Highway to vehicle traffic due to chaos in the spring of 2001.

An orange ceramite post is 1 feet East.

(B) CRH ROW GPS - 10 — RLS 5131 2001

Drive an aluminum rod, 3/4 in. diam., 6 ft. long, 6.1 ft. in the ground, and in a cutter at stone, with 3 1/4 ins. diam. aluminum cap marked as shown.

Point is 15 feet west of the centerline, 40 feet north of and old trestle (20 feet below road grade) at the southerly end of a small turnout.

An orange ceramite post is 1 feet East.

(C) CRH ROW GPS - 11 — RLS 5131 2001

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cutter at stone with 3 in. aluminum cap marked as shown.

Point is 15 feet west of the centerline 180 feet north of the south end at an 800 foot tangent.

An orange ceramite post is 1 feet East.

(D) CRH ROW GPS - 12 — RLS 5131 2001

Set an aluminum post, 2 1/2 in diam., 30 ins. long, 30 ins in the ground, and in a cutter at stone with 3 in. aluminum cap marked as shown.

Point is 15 feet west of the centerline 50 feet south of the north end at a 800 foot tangent.

An orange ceramite post is 1 feet East.

(E) CRH ROW GPS - 13 — RLS 5131 2001

Cement an aluminum rod, 18 ins. long, 3/4 in. diam., 12 ins. in a 1" diam. drill hole in the center of a 4 x 4 x 2 ft. rock on the top of an outcrop formed by the road cut, with an aluminum cap 3 1/4 ins. diam. attached to the top and marked as shown. An orange ceramite post is 3 ft. N. The point is 15 feet East of the centerline of the road and 15 feet above the road.

(F) PC 145 852 835 MC — 1978

Recovered an iron post, 2 1/2 ins. diam., firmly set, projecting 6 inch above the ground, with brass cap marked as shown

No evidence of the original bearing tree remains

LEGEND

- National Geodetic Survey Control Marker
- GPS Control Mark
- Milepost
- AKDOT&PF Concrete R.O.W. Marker
- BLM Monument
- Centerline
- Copper River Meander Line
- Turnout
- Restricted Area
- Right of Way Limit

SCALE

500 1000 1500 2000 2500 FEET

0 500 1000 METERS

1 METER = 3.280833 U.S. FEET. 1 U.S. ACRE = 0.4047 HECTARE

DATE OF SURVEY
Beginning Sept. 1, 2001
Ending March 20, 2002

NAME OF SURVEYOR
Crazy Mountains Joint Venture
2040 E. Dowling Road, Suite 6
Anchorage, AK 99507

RECORD OF SURVEY
GPS Control Network and Right of Way
ertion of The COPPER
LINA, ALASKA Within
5, T. 4 S., R. 5 E. &
23, T. 5 S., R. 5 E.
ldan, Alaska

OF 5 SHEETS

SHEET NO.

LEGEND

- National Geodetic Survey Control Marker
- GPS Control Mark
- Milepost
- AKDOT&PF Concrete R.O.W. Marker
- BLM Monument
- Centerline

CURVE TABLE

	Delta	Radius	Length	Tangent	Long Chord		
C1	13° 53' 51"		740.28'	178.56'	90.22'	S. 12° 38' 48" E.	179.12'
C2	9° 4' 37"		433.99'	68.75'	34.45'	S. 10° 14' 12" E.	68.68'
C3	19° 47' 55"		601.59'	207.88'	104.99'	S. 4° 52' 32" E.	206.85'
C4	25° 58' 32"		129.12'	58.54'	29.78'	S. 7° 57' 51" E.	58.04'
C5	1° 3' 47"		211.06'	59.17'	29.78'	S. 28° 59' 02" E.	58.98'
C6	21° 59' 31"		160.40'	61.57'	31.17'	S. 26° 01' 09" E.	61.19'
C7	10° 98' 6"		307.54'	58.87'	29.53'	S. 9° 32' 20" E.	58.78'
C8	24° 15' 5"		305.67'	129.27'	63.52'	S. 8° 03' 20" W.	128.41'

PC/ PT COORDINATES

PC C1	2723529.05'	1910841.95'			
PT C1	2723354.28'	1910881.17'			
PC C2	2722462.88'	1910970.11'			
PT C2	2722395.26'	1910982.32'			
PC C3	2721091.64'	1911088.77'			
PT C3	2721785.64'	1911106.35'			
PC C4	2721600.98'	1911090.13'			
PT C4	2721543.50'	1911098.17'			
PC C5	2721843.50'	1911098.17'			

(A) CRH ROW GPS - 13 — RLS 5131

Cement an aluminum rod, 18 ins. long, 3/4 in. diam., 12 ins. in a 1" diam. drill hole in the center of a 4 x 4 x 2 ft. rock on the top of an outcrop formed by the road cut, with an aluminum cap 3 1/4 ins. diam. attached to the top and marked as shown. An orange ceramite post is 3 ft. N. The point is 15 feet East of the centerline of the road and 15 feet above the road

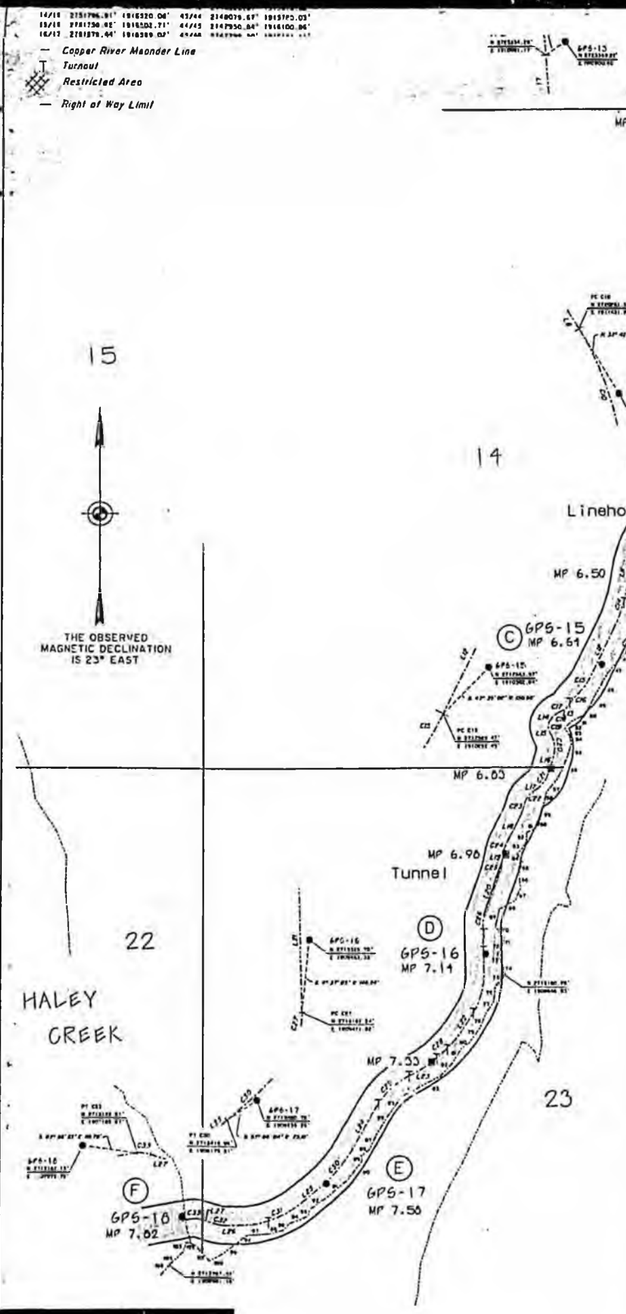
500 1000 1500 2000 2500 FEET

0 500 1000 METERS

1 METER = 3.280833 U.S. FEET. 1 U.S. ACRE = 0.4047 HECTARE

14/15 2751796.81' 1916320.06' 43/44 2748079.67' 1915703.03'
15/16 2751750.92' 1916502.71' 44/45 2747950.84' 1916100.96'
16/17 2751879.44' 1916599.03' 45/46 2747866.94' 1916001.41'

— Copper River Meander Line
Turnout
Restricted Area
— Right of Way Limit



C9	52° 59' 58"	427.72'	395.65'	213.25'	S. 6° 19' 24" E.	331.70'
C10	37° 10' 0"	645.90'	418.99'	217.16'	S. 14° 14' 23" E.	411.68'
C11	43° 38' 25"	542.39'	413.12'	217.16'	S. 26° 09' 50" W.	403.21'
C12	17° 7' 40"	925.92'	276.79'	139.44'	S. 39° 25' 13" W.	275.76'
C13	22° 14' 27"	834.54'	323.95'	164.04'	S. 19° 44' 09" W.	321.92'
C14	16° 44' 20"	1337.98'	390.90'	196.85'	S. 16° 59' 05" W.	389.51'
C15	20° 37' 35"	543.62'	195.70'	98.92'	S. 35° 40' 04" W.	194.64'
C16	16° 33' 9"	298.54'	86.25'	43.43'	S. 37° 42' 18" W.	85.95'
C17	35° 22' 41"	136.16'	84.03'	43.43'	S. 47° 07' 04" W.	82.75'
C18	27° 43' 38"	186.11'	90.06'	45.93'	S. 50° 56' 35" W.	89.19'
C19	68° 35' 43"	84.17'	100.77'	57.41'	S. 2° 46' 53" W.	94.86'
C20	47° 7' 55"	225.65'	185.62'	98.43'	S. 7° 57' 02" E.	180.43'
C21	36° 25' 37"	256.75'	163.23'	84.48'	S. 33° 43' 44" W.	160.50'
C22	40° 5' 4"	162.18'	113.47'	59.17'	S. 32° 00' 00" W.	111.17'
C23	14° 13' 14"	474.32'	117.72'	59.17'	S. 19° 04' 05" W.	117.42'
C24	16° 14' 45"	344.80'	97.76'	49.21'	S. 18° 03' 20" W.	97.44'
C25	8° 16' 38"	453.40'	65.50'	32.81'	S. 14° 04' 17" W.	65.44'
C26	20° 49' 49"	178.49'	64.89'	32.81'	S. 7° 47' 41" W.	64.54'
C27	32° 51' 38"	592.43'	339.78'	174.70'	S. 13° 48' 36" W.	335.14'
C28	30° 16' 14"	1046.18'	552.72'	282.97'	S. 45° 22' 33" W.	546.31'
C29	31° 59' 1"	661.11'	369.04'	189.47'	S. 44° 31' 10" W.	364.27'
C30	20° 55' 13"	1155.09'	421.76'	213.25'	S. 30° 59' 16" W.	419.42'
C31	39° 51' 49"	814.27'	566.53'	295.28'	S. 69° 22' 48" W.	555.18'
C32	16° 6' 3"	231.96'	65.18'	32.81'	N. 82° 38' 15" W.	64.97'
C33	25° 4' 21"	63.08'	27.61'	14.03'	N. 85° 47' 15" W.	27.40'

SEGMENT TABLE

L1	S. 5° 41' 53" E.	895.05'
L2	S. 14° 46' 30" E.	417.42'
L3	S. 5° 01' 25" W.	185.28'
L4	S. 37° 00' 56" E.	43.34'
L5	S. 15° 01' 23" E.	86.73'
L6	S. 4° 03' 16" E.	73.52'
L7	S. 20° 10' 36" W.	84.24'
L8	S. 32° 49' 24" E.	405.13'
L9	S. 47° 59' 03" W.	384.61'
L10	S. 30° 51' 22" W.	355.47'
L11	S. 8° 36' 55" W.	95.40'
L12	S. 25° 21' 15" W.	426.38'
L13	S. 64° 48' 21" W.	14.65'
L14	S. 37° 04' 48" W.	18.60'
L15	S. 31° 31' 02" E.	20.12'
L16	S. 15° 36' 55" W.	124.87'
L17	S. 52° 02' 31" W.	61.21'
L18	S. 26° 10' 42" W.	216.64'
L19	S. 8° 55' 56" W.	82.29'
L20	S. 18° 12' 36" W.	371.90'
L21	S. 2° 37' 13" E.	392.02'
L22	S. 30° 14' 24" W.	114.30'
L23	S. 60° 30' 37" W.	82.32'
L24	S. 28° 31' 39" W.	374.53'
L25	S. 49° 26' 52" W.	180.91'
L26	S. 89° 18' 44" W.	112.47'
L27	N. 74° 43' 41" W.	132.85'

MEANDER POINT COORDINATES

1	/2	2723548.73'	1911027.75'	54	/55	2717022.56'	1910143.47'
2	/3	2723537.18'	1911090.45'	55	/56	2716909.63'	1910113.44'
3	/4	2723371.45'	1911121.33'	56	/57	2716755.13'	1910046.45'
4	/5	2723233.18'	1911064.57'	57	/58	2716632.57'	1909950.21'
5	/6	2723083.43'	1911060.21'	58	/59	2716533.44'	1909933.25'
6	/7	2722828.60'	1911097.69'	59	/60	2716403.60'	1909902.69'
7	/8	2722546.30'	1911115.70'	60	/61	2716353.13'	1909884.54'
8	/9	2722258.63'	1911176.21'	61	/62	2716305.21'	1909795.90'
9	/10	2722001.95'	1911218.05'	62	/63	2716227.20'	1909794.84'
10	/11	2721737.69'	1911245.82'	63	/64	2716128.80'	1909721.31'
11	/12	2721523.12'	1911259.35'	64	/65	2716073.95'	1909765.33'
12	/13	2721390.46'	1911323.76'	65	/66	2715965.84'	1909742.36'
13	/14	2721180.12'	1911372.66'	66	/67	2715856.48'	1909755.29'
14	/15	2720989.31'	1911321.57'	67	/68	2715762.70'	1909716.15'
15	/16	2720825.17'	1911277.08'	68	/69	2715690.03'	1909588.11'
16	/17	2720700.55'	1911315.82'	69	/70	2715547.41'	1909557.88'
17	/18	2720515.65'	1911417.19'	70	/71	2715454.81'	1909634.17'
18	/19	2720442.68'	1911521.47'	71	/72	2715407.82'	1909625.19'
19	/20	2720241.25'	1911586.47'	72	/73	2715325.05'	1909575.42'
20	/21	2720086.28'	1911654.58'	73	/74	2715253.51'	1909619.71'
21	/22	2719887.09'	1911656.09'	74	/75	2715160.78'	1909646.83'
22	/23	2719599.59'	1911667.30'	75	/76	2715067.52'	1909567.43'
23	/24	2719596.23'	1911647.30'	76	/77	2714947.54'	1909557.92'
24	/25	2719576.04'	1911690.60'	77	/78	2714846.16'	1909492.71'
25	/26	2719477.11'	1911645.32'	78	/79	2714736.54'	1909451.32'
26	/27	2719393.09'	1911633.83'	79	/80	2714609.03'	1909360.90'
27	/28	2719349.66'	1911703.66'	80	/81	2714566.20'	1909301.30'
28	/29	2719254.75'	1911691.12'	81	/82	2714453.14'	1909233.91'
29	/30	2719189.11'	1911677.32'	82	/83	2714340.62'	1909137.42'
30	/31	2719183.54'	1911710.06'	83	/84	2714260.37'	1908981.20'
31	/32	2719068.37'	1911699.89'	84	/85	2714167.44'	1908822.00'
32	/33	2718947.53'	1911632.37'	85	/86	2713994.93'	1908707.75'
33	/34	2718696.13'	1911605.30'	86	/87	2713861.08'	1908629.21'
34	/35	2713616.80'	1911495.27'	87	/88	2713744.86'	1908578.98'
35	/36	2718517.02'	1911403.47'	88	/89	2713688.69'	1908509.35'
36	/37	2718503.95'	1911251.01'	89	/90	2713648.56'	1908517.93'
37	/38	2718421.10'	1911132.93'	90	/91	2713486.47'	1908397.60'
38	/39	2718538.10'	1910992.28'	91	/92	2713353.09'	1908245.27'
39	/40	2718243.26'	1910923.31'	92	/93	2713248.49'	1908105.81'
40	/41	2718166.51'	1910827.68'	93	/94	2713196.20'	1908091.16'
41	/42	2718087.91'	1910803.65'	94	/95	2713128.70'	1907940.54'
42	/43	2717989.50'	1910754.67'	95	/96	2713076.03'	1907891.67'
43	/44	2717920.80'	1910650.98'	96	/97	2713046.14'	1907779.96'
44	/45	2717839.03'	1910549.21'	97	/98	2713029.50'	1907601.89'
45	/46	2717771.84'	1910512.77'	98	/99	2712930.50'	1907490.74'
46	/47	2717677.33'	1910500.30'	99	/100	2712861.61'	1907389.76'
47	/48	2717593.97'	1910431.19'	100	/101	2712814.56'	1907302.97'
48	/49	2717418.09'	1910331.66'	101	/102	2712939.24'	1907185.88'
49	/50	2717312.35'	1910279.45'	102	/103	2712957.25'	1907117.31'
50	/51	2717253.55'	1910238.13'	103	/104	2712879.84'	1907093.02'
51	/52	2717200.42'	1910137.94'	104	/105	2712767.44'	1906981.15'
52	/53	2717143.33'	1910090.09'				
53	/54	2717088.56'	1910129.81'				

MEANDERS OF THE COPPER RIVER

1	S. 65° 48' 14" E.	46.38'	54	S. 11° 41' 36" E.	67.40'
2	S. 79° 33' 39" E.	63.76'	55	S. 14° 53' 37" W.	116.85'
3	S. 10° 33' 21" E.	168.58'	56	S. 23° 26' 32" W.	168.40'
4	S. 22° 19' 12" W.	149.47'	57	S. 30° 08' 19" W.	155.82'
5	S. 1° 40' 05" W.	149.82'	58	S. 9° 42' 41" W.	100.58'
6	S. 8° 22' 01" E.	257.57'	59	S. 13° 15' 13" W.	133.30'
7	S. 3° 40' 34" E.	240.88'	60	S. 19° 45' 01" W.	53.72'
8	S. 11° 47' 58" E.	295.93'	61	S. 61° 36' 25" W.	100.76'
9	S. 9° 15' 26" E.	260.06'	62	S. 0° 46' 39" W.	78.02'
10	S. 6° 00' 02" E.	265.73'	63	S. 36° 46' 01" W.	122.84'
11	S. 3° 36' 23" E.	214.99'	64	S. 38° 45' 01" E.	70.33'
12	S. 25° 53' 53" E.	147.47'	65	S. 11° 59' 46" W.	110.52'
13	S. 13° 05' 14" E.	215.96'	66	S. 6° 44' 39" E.	110.13'
14	S. 14° 59' 24" W.	197.53'	67	S. 22° 39' 11" W.	104.63'
15	S. 15° 09' 55" W.	170.07'	68	S. 60° 35' 33" W.	147.22'
16	S. 17° 16' 09" E.	130.49'	69	S. 11° 58' 05" W.	145.79'
17	S. 41° 25' 07" E.	153.24'	70	S. 39° 29' 05" E.	119.98'
18	S. 36° 06' 15" E.	176.95'	71	S. 10° 48' 57" W.	47.84'
19	S. 17° 53' 06" E.	211.67'	72	S. 31° 01' 09" W.	96.58'
20	S. 23° 43' 29" E.	169.27'	73	S. 31° 45' 21" E.	84.14'
21	S. 0° 26' 05" E.	199.19'	74	S. 16° 18' 14" E.	96.62'
22	S. 2° 49' 18" E.	227.78'	75	S. 40° 24' 44" W.	122.48'
23	S. 17° 31' 08" W.	66.44'	76	S. 4° 31' 50" W.	120.36'
24	S. 64° 59' 27" E.	47.78'	77	S. 32° 45' 08" W.	120.54'
25	S. 24° 35' 33" W.	108.80'	78	S. 20° 40' 57" W.	117.17'
26	S. 7° 47' 06" W.	84.80'	79	S. 35° 20' 33" W.	156.32'
27	S. 58° 07' 10" E.	82.23'	80	S. 54° 17' 47" W.	73.38'
28	S. 7° 31' 43" W.	95.73'	81	S. 30° 47' 53" W.	131.61'
29	S. 13° 55' 34" W.	57.32'	82	S. 40° 36' 51" W.	148.23'
30	S. 64° 33' 10" E.	36.25'	83	S. 62° 48' 39" W.	175.63'
31	S. 5° 02' 43" W.	115.62'	84	S. 59° 43' 40" W.	184.33'
32	S. 29° 11' 40" W.	138.43'	85	S. 33° 30' 52" W.	206.92'
33	S. 6° 08' 44" W.	252.85'	86	S. 30° 24' 20" W.	155.19'
34	S. 54° 12' 29" W.	135.64'	87	S. 23° 22' 23" W.	126.61'
35	S. 42° 36' 54" W.	135.59'	88	S. 51° 12' 35" W.	89.34'
36	S. 85° 06' 10" W.	153.02'	89	S. 12° 00' 35" E.	41.23'
37	S. 54° 57' 06" W.	144.23'	90	S. 36° 35' 13" W.	201.87'
38	S. 59° 26' 49" W.	163.33'	91	S. 48° 47' 41" W.	202.47'
39	S. 36° 01' 37" W.	117.27'	92	S. 53° 07' 39" W.	174.33'
40	S. 51° 15' 02" W.	122.63'	93	S. 15° 40' 44" W.	54.22'
41	S. 16° 59' 47" W.	82.20'	94	S. 65° 50' 05" W.	165.08'
42	S. 26° 27' 33" W.	109.92'	95	S. 42° 55' 09" W.	71.92'
43	S. 60° 56' 59" W.	141.49'	96	S. 75° 00' 18" W.	115.54'
44	S. 45° 00' 07" W.	115.64'	97	S. 84° 41' 12" W.	178.84'
45	S. 32° 57' 17" E.	80.07'	98	S. 50° 40' 05" W.	143.70'
46	S. 44° 22' 30" W.	132.22'	99	S. 52° 42' 53" W.	126.92'
47	S. 39° 59' 36" W.	108.28'	100	S. 61° 32' 05" W.	98.73'
48	S. 29° 30' 19" W.	202.10'	101	N. 43° 12' 00" W.	171.04'
49	S. 26° 16' 48" W.	117.92'	102	N. 75° 16' 46" W.	70.90'
50	S. 35° 05' 35" W.	71.87'	103	S. 17° 25' 11" W.	81.14'
51	S. 62° 03' 53" W.	113.42'	104	S. 44° 52' 01" W.	158.56'
52	S. 39° 58' 12" W.	74.49'	105	S. 36° 33' 01" W.	103.52'
53	S. 49° 57' 05" E.	57.57'			

LEGEND

PC C6	2721457.30'	1911152.83'
PT C6	2721402.31'	1911179.68'
PC C7	2721318.55'	1911202.16'
PT C7	2721260.57'	1911211.90'
PC C8	2721187.24'	1911217.10'
PT C8	2721060.20'	1911199.11'
PC C9	2720981.13'	1911170.05'
PT C9	2720601.76'	1911212.09'
PC C10	2720261.31'	1911431.69'
PT C10	2719862.28'	1911532.96'
PC C11	2719862.20'	1911532.96'
PT C11	2719500.38'	1911355.17'
PC C12	2719242.81'	1911060.27'
PT C12	2719029.79'	1910894.16'
PC C13	2718724.63'	1910711.65'
PT C13	2718421.62'	1910603.14'
PC C14	2718327.30'	1910508.85'
PT C14	2717954.70'	1910475.07'
PC C15	2717369.47'	1910292.49'
PT C15	2717411.34'	1910178.99'
PC C16	2717411.34'	1910178.99'
PT C16	2717343.34'	1910126.43'
PC C17	2717343.34'	1910126.43'
PT C17	2717287.03'	1910065.79'
PC C18	2717260.79'	1910052.54'
PT C18	2717224.60'	1909985.29'
PC C19	2717209.76'	1909972.07'
PT C19	2717115.01'	1909967.47'
PC C20	2717097.85'	1909877.99'
PT C20	2716918.15'	1910002.94'
PC C21	2716798.09'	1909969.33'
PT C21	2716665.56'	1909879.98'
PC C22	2716627.92'	1909831.72'
PT C22	2716533.64'	1909772.81'
PC C23	2716533.64'	1909772.81'
PT C23	2716422.66'	1909734.45'
PC C24	2716228.24'	1909636.87'
PT C24	2716135.60'	1909608.67'
PC C25	2716054.55'	1909594.48'
PT C25	2715991.07'	1909578.57'
PC C26	2715637.79'	1909462.35'
PT C26	2715573.65'	1909453.60'
PC C27	2715182.24'	1909471.52'
PT C27	2714856.79'	1909391.52'
PC C28	2714758.04'	1909353.95'
PT C28	2714374.28'	1908945.12'
PC C29	2714333.75'	1908873.47'
PT C29	2714074.02'	1908618.06'
PC C30	2713744.97'	1908439.19'
PT C30	2713418.96'	1908175.31'
PC C31	2713301.34'	1908037.85'
PT C31	2713105.83'	1907518.25'
PC C32	2713104.48'	1907405.78'
PT C32	2713112.80'	1907341.35'
PC C33	2713147.80'	1907213.19'
PT C33	2713149.61'	1907185.87'

Revisions Sept. 1, 2001 | Crazy Mountains Joint Venture

B — CRH ROW GPS - 18 — RLS 5131 2001

Cement a 3 1/4 ins. diam. brass tablet in an 1 in. diam. drill hole in the center of a 7 x 6 x 2 ft. rock 15 feet east of the centerline of the road with tablet marked as shown.

An orange carsonite post is 3 ft. East.

C — CRH ROW GPS - 15 — RLS 5131 2001

Drive an aluminum rod, 3/4 in. diam., 6 ft. long, 5.5 ft. in the ground, and in a cairn of stone, with 3 1/4 ins. diam. aluminum cap marked as shown.

Point is 11 feet east of the centerline. An orange carsonite post is 1 foot East.

D — CRH ROW GPS - 16 — RLS 5131 2001

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn at start with 3 in. aluminum cap marked as shown.

Point is 15 feet East of the centerline of the road, at the southerly end of a small turnout approximately 300 feet south of the southerly entrance to a tunnel.

An orange carsonite post is 1 foot East.

E — CRH ROW GPS - 17 — RLS 5131 2001

Set an aluminum post, 2 1/2 in. diam., 30 ins. long, 30 ins. in the ground, and in a cairn of stone with 3 in. aluminum cap marked as shown.

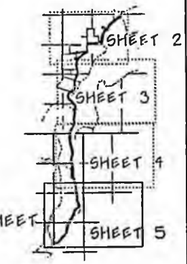
Point is 15 feet East of the centerline of the road, at the southerly end of a small turnout.

An orange carsonite post is 1 foot East.

F — CRH ROW GPS - 18 — RLS 5131 2001

Cement an aluminum rod, 18 ins. long, 3/4 in. diam., 12 ins. in a 1" diam. drill hole in the center of a prominent rock outcrop along the south side of Haley Creek, with an aluminum cap 3 1/4 ins. diam. attached to the top and marked as shown.

The point is 30 feet north of the centerline of the road and 10 feet above the level of the road at the Haley Creek road



SCALE

500 1000 1500 2000 2500 FEET
0 500 1000 METERS

1 METER = 3.280833 U.S. FEET. 1 U.S. ACRE = 0.4047 HECTARE

DATE OF SURVEY Beginning Sept. 1, 2001 Ending March 20, 2002	NAME OF SURVEYOR Crazy Mountains Joint Venture 2000 E. Dowling Road, Suite 6 Anchorage, AK 99507

RECORD OF SURVEY

GPS Control Network and Right of Way Determination for a portion of The COPPER RIVER HIGHWAY Near CHITINA, ALASKA Within Sections 13,14,23,26 and 35, T. 4 S., R. 5 E. & Sections 2,11,14,22 and 23, T. 5 S., R. 5 E. Copper River Meridan, Alaska

DRAWN BY CEA DATE 2/2002	SHEET 5 OF 5 SHEETS
SCALE	CHECKED FILE NO.

HB

211

HOUSE COMMITTEE REPORT

(11)

Date Referred to Committee: April 11, 2003 **FURTHER REFERRALS:**

Date of Committee Action: 5/14/03

The FINANCE Committee considered: **HB 211**

HOUSE BILL NO. 211 **NURSE EDUC LOAN REPAYMENT PROGRAM**

"An Act relating to a student loan repayment program for nurses, and amending the duties of the Board of Nursing that relate to this program; and providing for an effective date."

Recommends it be replaced with [ ] HCS *or* [✓] CS *for* HES ( )
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR [✓] **Same Title [ ] New Title**

[ ] attach amendments
[ ] add new referral to _____Committee
[ ] Letter of Intent_____Committee

List of Abbrev for Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
HSS
LEG
LAW
LWF
MVA
DNR
DPS
REV
DOT
UA

NEW **FISCAL NOTES** *Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero
EED		✓		

PREVIOUS **FISCAL NOTES**				
List by Dept(s):	FN#	Fiscal	Indet.	Zero
CED	1			✓

Signing with recommendations	**Printed Last Name**	**DP**	**DNP**	**NR**	**AM**
K Meyer	Meyer	✓			
Mike	Hawkins	✓			
[illegible]	Berkowitz		/	✓	
[illegible]	Whitaker	/			
Pat E. Moses	MOSES			✓	
[illegible]	FOSTER	X			
Beth Kerttula	Kerttula	✓			
Chair:					
Chair: K Meyer					

Vice

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSHB 211(HES)
(H) Publish Date: 4/11/03

Revision Date/Time (Note if correction):
Dept. Affected: DCED
Title: Nurse Educ. Loan Repayment Program
BRU: Occupational Licensing (117)
Component: Occupational Licensing
Sponsor: Representative Wilson
Requester: House Health Education & Social Services
Component No.: 2360

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)						
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current y . FY2003) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

HB 211 requires the Alaska Board of Nursing to establish standards and eligibility criteria for the Alaska nurse recruitment loan repayment program. New funds are not required to implement this bill.

Prepared by: Jennifer Strickler, Administrative Manager
Phone (907) 465-2144
Division: Occupational Licensing
Date/Time 4/10/03 1:22 PM
Approved by: Edgar Blatchford, Commissioner
Date 4/10/2003
Agency: Department of Community & Economic Development

(Revised 9/2002 OMB)

...ITTEE COPY

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number:
Bill Version: CSHB211(HES)
() Publish Date:

Revision Date/Time (Note if correction): **April 30, 2003/4:00 p.m.**
Dept. Affected: Education
Title: An Act relating to student loan repayment program for nurses, and amending the duties of the Board of Nurses that...
BRU: ACPE
Component: Student Loan Program
Sponsor: Rep. Peggy Wilson
Requester: (H)Fin
Component No.: 213

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services	11	11	12	12	12	12
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous	918.0	1,874.0	2,920.0	3,984.0	5,050.0	5,198.0
TOTAL OPERATING	929.0	1,885.0	2,932.0	3,996.0	5,062.0	5,210.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	918.0	1,874.0	2,920.0	3,984.0	5,050.0	5,198.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other 1106 P-Sec Rcpt	11	11	12	12	12	12
TOTAL	929.0	1,885.0	2,932.0	3,996.0	5,062.0	5,210.0

Estimate of any current year (FY2003) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time							
Part-time		1	1	1	1	1	1
Temporary							

ANALYSIS: *(Attach a separate page if necessary)*

This legislation establishes the Alaska Nurse Recruitment Loan Repayment Program as an incentive tool to attract and retain nurses to work in the state. Eligibility criteria will be set by the Alaska Board of Nursing and administrative criteria will be set by the Alaska Commission on Postsecondary Education. The Executive Director of the Commission is the designated program administrator. A program Fund is established within the General Fund. While Section 6 comtemplates that the Legislature may make appropriation to the Fund from the Alaska Student Loan Corporation's annual dividend to the state, that appropriation is not mandated. Therefore, this fiscal note reflects the fund source as GF. Individual benefits may be paid to program participants of up to $10,000 in exchange for five years of employment in the state as a nurse.

Prepared by: Sheila King, Finance Officer — Phone 465-6757
Division: Finance — Date/Time 4/30/2003 4:00 p.m.
Approved by: Diane Barrans, Executive Officer — Date 4/30/2003
Agency: Alaska Commission on Postsecondary Education

(Revised 9/2002 OMB)

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number: 2
Bill Version: CSHB 211(HES)
(H) Publish Date: 4/11/03

Revision Date/Time (Note if correction): **10-Apr-03**
Dept. Affected: Education
Title: An Act relating to student loan repayment program for nurses, and amending the duties of the Board of Nurses that...
BRU: ACPE
Component: Student Loan Program
Sponsor: Rep. Peggy Wilson
Requester: (H)HESS
Component No.: 213

:penditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services	11	11	12	12	12	12
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous	918.0	1,874.0	2,920.0	3,984.0	5,050.0	5,198.0
TOTAL OPERATING	929.0	1,885.0	2,932.0	3,996.0	5,062.0	5,210.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)						
1002 Federal Receipts						
1003 GF Match						
1004 GF	918.0	1,874.0	2,920.0	3,984.0	5,050.0	5,198.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other 1106 P-Sec Rcpt	11	11	12	12	12	12
TOTAL	929.0	1,885.0	2,932.0	3,996.0	5,062.0	5,210.0

Estimate of any current year (FY2003) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time							
Part-time		1	1	1	1	1	1
Temporary							

ANALYSIS: *(Attach a separate page if necessary)*

This legislation establishes the Alaska Nurse Recruitment Loan Repayment Program as an incentive tool to attract and retain nurses to work in the state. Eligibility criteria will be set by the Alaska Board of Nursing and administrative criteria will be set by the Alaska Commission on Postsecondary Education. The Executive Director of the Commission is the designated program administrator. A program Fund is established within the General Fund. While Section 6 comtemplates that the Legislature may make appropriation to the Fund from the Alaska Student Loan Corporation's annual dividend to the state, that appropriation is not mandated. Therefore, this fiscal note reflects the fund source as GF. Individual benefits may be paid to program participants of up to $10,000 in exchange for five years of employment in the state as a nurse.

Prepared by: Sheila King, Finance Officer — Phone 465-6757
Division: Finance — Date/Time 4/10/03 11:49 AM
Approved by: Diane Barrans, Executive Officer — Date 4/10/2003
Agency: Alaska Commission on Postsecondary Education

(Revised 9/2002 OMB)

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STATE OF ALASKA
2003 LEGISLATIVE SESSION

BILL NO. CSHB 211(HES)

ANALYSIS CONTINUATION

The chart below provides additional details relating to the cost estimates in this fiscal note. Staff has assumed an average individual education loan debt burden of $16,000 based on average borrowing in this field from the Alaska state education loan programs. A combination of data from the April 2003 issue of *Alaska Economic Trends* (published by the Alaska Department of Labor and Workforce Development) and from a recent state health workforce report were are the basis for the expected numbers of participants in each of the first six years of program operations.

Growth/Cost Projection Estimates for Alaska Nurse Recruitment Loan Repayment Program
(Dollar Amounts Shown in Thousands)

Year	# of New Nurses	2004	2005	2006	2007	2008	2009
2003	459	$ 918	$ 918	$ 918	$ 918	$ 918	
2004	478		$ 956	$ 956	$ 956	$ 956	$ 956
2005	523			$1,046	$1,046	$1,046	$1,046
2006	532				$1,064	$1,046	$1,046
2007	533					$1,065	$1,065
	~~1,075~~ 2,525	$ 918	$1,874	$2,920	$3,984	$5,050	$5,198

Alaska State Legislature

Representative Peggy Wilson
Putting Alaska's Families First

SPONSOR STATEMENT – CSHB 211 (HESS)
Alaska Nurse Recruitment Loan Repayment Program

Alaska and the nation are experiencing a severe shortage of nurses. HB 211, which establishes the Alaska Nurse Recruitment Loan Repayment Program, could help to change that. The program would offer up to $2,000 per year, not to exceed $10,000 total for nurses to repay nursing loans. Hopefully this incentive will attract new nurses to the state and encourage Alaskans to pursue their nursing vocations here in Alaska.

In 2002, the Alaska Colleagues in Caring, in collaboration with the Alaska Hospital and Nursing Home Association, surveyed facilities in Alaska regarding nursing workforce needs. Results showed that vacancy rates for RNs had increased from 5.7% in 2000 to 11.5% in 2002, with increasing vacancy rates projected into the future. Facilities in western and northern Alaska reported a vacancy rate of over 20% and, according to information from other sources; the vacancy rate in some remote areas of Alaska is as high as 35 percent.

To qualify for loan reimbursement, an individual must be hired as a nurse in Alaska on or after July 1, 2003, be licensed to practice as a nurse in Alaska, work as a nurse in the state throughout the loan repayment period, and have outstanding educational loans from a recognized lending institution.

Additional eligibility criteria and guidelines for the loan program will be set in regulations adopted by the Board of Nursing, in consultation with the Alaska Commission on Postsecondary Education. These may include guidelines on establishing priorities for participation in the loan repayment program if funding for the program is not adequate to meet need. The guidelines may include determinations based on areas of the state and nursing specialties affected by shortages.

Funding for the program may be appropriated from the Student Loan Corporation dividend (the return of contributed capital authorized in AS 14.42.295(a)) or alternate state, federal, or other sources. The executive director of the Alaska Commission on Postsecondary Education will administer the program.

Representative Peggy Wilson
April 4, 2003

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Petersburg LIO: *ph*: (907) 772-3829 • *fax*: (907) 772-3779
Sitka LIO: *ph*: (907) 747-4665 • *fax*: (907) 747-5807
Representative_Peggy_Wilson@Legis.state.ak.us • http://www.akrepublicans.org • 1-800-686-3824

Testimony of
Camille Soleil
Executive Director
Alaska Nurses Association

In Front of the House Finance Committee
April 25, 2003
In support of HB 211

Mr. Chairman,

I would like to take this opportunity to express the Alaska Nurses Association's support for HB211.

This bill is one of several critical steps that need to be taken to address the current and expanding nursing shortage. Our population is aging and the average age of nurses is about 47. As the need for nurses grows, the majority of our nurses will be retiring from the profession.

To answer that dynamic, Alaska must find ways to recruit new nurses as well as retain the practicing nurses within the profession and the State. HB 211 is a strong step in recruiting new nurses to practice in the State and stay for multiple years. The design of the bill is flexible enough to allow prioritizing areas in critical need of nurses if the funding is limited, a strength that will make it highly effective in addressing the shortage.

The Alaska Nurses Association would like to express our appreciation of Representative Wilson and Senator French for their work on this critical issue, and we thank the Committee for the opportunity to speak in support of this bill.

Good afternoon,

~~For the record~~ I am Linda Fink, Assistant Director of the Alaska State Hospital and Nursing Home Association. The Association strongly supports ~~this legislation.~~ the loan repayment for nurse bill. Workforce development has been a priority of the association for the last several years. ASHNHA has worked closely with the University to double the number of nurses graduating by 2006 ~~to 200~~. However it is estimated ~~that by 2008 the need will be for 400 new nurses each year.~~ ~~[illegible]~~ will not fully meet the expected need. ASHNHA has also worked to ~~[illegible]~~ develop distance delivery programs to several communities in the state for certified nurse aides as well as other training programs. ~~The Association has~~ and we have a person working full time to develop advanced training programs ~~and~~ education the schools work with job centers to further interest and opportunity to train people in the health care field. ~~As you are aware, there is a tremendous shortage of nurses currently and~~ we would sincerely appreciate your support of this legislation.

K-12 on health care careers

45th nurse Wisee this is another avenue to recruit + retain ~~[illegible]~~ nurses

House Finance Committee April 23, 2003
RE: HB 211 "student loan repayment program for nurses"
to be heard in House Finance on April 25, 2003

Dear Representative Bill Williams fax: 907-465-3793

I am writing in support of CSHB 211. This legislation is a valuable step in addressing the nursing shortage affecting Alaska. The average age of Alaska's RNs is 45.1 years (2000). We need to educate more nurses and the University of Alaska is working to expand its programs. But until then, we must rely on recruitment of nurses from the Lower 48 to fill the need now.

Nursing education is rigorous and expensive. Pay and working conditions have not kept up with the increased mental and physical demands of the job. Loan repayment strategies are being used in other states to address the nursing recruitment issue. Examples are Florida (HB 519/SB 1618), South Dakota (HB 1258) and Virginia (HB 1079). Loan repayment offers may provide the incentive needed to prompt a person to choose a career in nursing.

The nursing shortage is affecting all Alaskans, not just those who are hospitalized. Clinics and provider offices are unable to fill office nurse positions with LPNs or RNs. Instead they are filling the positions with Unlicensed Assistive Personnel, commonly Medical Assistants (MA). MA training is less than a year in length and, while trained to take vital signs and administer some medications, these staff people do not have the education base that a nurse has. They lack the education to make judgments about acuity of illness or, in some cases, to administer medications safely.

We must find solutions to the nursing workforce shortage. HB 211 is a start. The bill provides a safeguard that addresses insufficient funds, so that I don't believe this is the creation of another entitlement program. I would be my sincere hope that the projected recruitment of 533 nurses by 2007 would be nurses educated in our state, so that the funds would be remaining in Alaska, rather than funding education institutions Outside.

Please support CSHB 211 by passing it out of House Finance on April 25.

Thank you for your service to Alaska as a legislator.

Respectfully,

Cathy Giessel, MSN, FNP-CS
12701 Ridgewood Rd
Anchorage, AK 99516
907 345 5470

Alaska State Legislature

Representative Peggy Wilson
Putting Alaska's Families First

SECTIONAL ANALYSIS – CSHB 211 (HESS)

ALASKA NURSE RECRUITMENT LOAN REPAYMENT PROGRAM

Section 1: Findings and purpose.

Section 2: Adds responsibility for establishing standards and eligibility criteria for the Alaska Nurse Recruitment Loan Repayment Program, including the adoption of necessary regulations and determination of areas of the state and specialties that have a shortage of nurses, to the Alaska Board of Nursing, in consultation with the Alaska Commission on Postsecondary Education.

Section 3: Adds responsibility to perform duties relating to the Alaska Nurse Recruitment Loan Repayment Program to the list of responsibilities of the Alaska Commission on Postsecondary Education (ACPE).

Section 4: Directs the executive director of ACPE to administer the Alaska Nurse Recruitment Loan Repayment Program.

Section 5: Establishes that the money made available to the state from the dividend of the Student Loan Corporation may be appropriated for the Alaska Nurse Recruitment Loan Repayment Program.

Section 6: Establishes the Alaska Nurse Recruitment Loan Repayment Program.

Sec. 14.43.530 – Establishes the loan repayment program to provide financial incentives for qualified registered nurses to work in the state through the repayment of education loans.

Sec. 14.43.540 – Establishes the Alaska Nurse Recruitment Loan Repayment Program account in the general fund. The account shall be used to provide financial awards for the repayment of education loans and to pay for the costs of administering the program. The account includes money appropriated by the legislature from the dividend paid to the state by the Alaska Student Loan Corporation or other sources.

Sec. 14.43.550 –Establishes that the Alaska Nurse Recruitment Loan

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Petersburg LIO: *ph*: (907) 772-3829 • *fax*: (907) 772-3779
Sitka LIO: *ph*: (907) 747-4655 • *fax*: (907) 747-5807
Representative_Peggy_Wilson@Legis.state.ak.us • http://www.akrepublicans.org • 1-800-686-3824

Repayment Program shall be administered by the executive director of the ACPE using standards and eligibility criteria established by the Board of Nursing and financial management standards established by the commission. Gives the commission authority to adopt regulations to carry out the duties involved with administering the program, after consultation with the Board of Nursing.

Sec. 14.43.560 – Establishes these eligibility criteria:

- Applicant was hired as a nurse in Alaska on or after July 1, 2003.
- Applicant is employed as a nurse in Alaska during the loan repayment period.
- Applicant is licensed to practice as a nurse in Alaska.
- Applicant must agree to fulfill any requirement of the program.
- Applicant must have outstanding education loans from a recognized lending institution..

Sec. 14.43.570 – Establishes conditions and limitations on loan payments. The total repayment amount to any individual is limited to $10,000. An annual loan repayment to an individual may be the lesser of $2,000 or 20 percent of the total loan and interest owed by the person.

Financial awards under the program will be conditioned on the availability of funds. If adequate funds are not available to meet all needs, the executive director of ACPE may prorate available funds and suspend the acceptance of new applications or award funds available for new or pending applicants according to criteria approved by the Board of Nursing.

A loan is not eligible for repayment under the program if it is eligible for repayment or forgiveness under any other program

Sec. 14.43.590 – Definitions of terms.

Section 7: Allows the Board of Nursing and ACPE to adopt necessary regulations immediately upon passage of the Act.

Section 8: Establishes an immediate effective date for Section 7.

Section 9: Establishes an effective date of July 1, 2003, for the remainder of the Act.

AkNA
Alaska
Nurses
Association

APR - 4 2003

April 2, 2003

Honorable Peggy Wilson
State Capitol
Juneau, AK 99801-1182

Dear Representative Wilson;

On behalf of Alaska's 6,000 RNs I would like to thank you for taking the leadership in drafting HB 211, "An Act relating relating to a student loan repayment program for nurses."

Alaska is already facing a nursing shortage with health care facilities reporting average vacancy rates of 11%, with some rural facilities reporting vacancies as high as 35%. This shortage is only going to get worse over the next five years since the average age of nurses in the state is 47, and many hospital nurses retire in their mid-fifties.

The nursing shortage is contributing to the rise in health care costs because it is forcing health care institutions to staff with traveling and agency nurses who are more expensive to institutions than their regular staff. It is also leading to an increase in overtime, which is expensive to institutions and has be shown to contribute to nursing errors and injury.

The University of Alaska is responding to this shortage by doubling the number of nursing students they teach each year by the year 2006. SB 154 is an excellent companion to this effort by the University. It will provide an incentive for Alaskans to enter the profession, and remain in the state to practice.

With the armed conflict in the middle east, the threat of bioterrorism, and the emergence of fatal illnesses such as West Nile virus and SARS, now more than ever we need to take action to insure we have an adequate number of nurses to serve Alaskans in the coming years.

Sincerely,

Patricia K. Senner, MS, RN, ANP
President

2207 East Tudor, Suite 34, Anchorage, AK 99507-1069
907/274-0827 ▪ Fax 907/272-0292 ▪ www.aknurse.org

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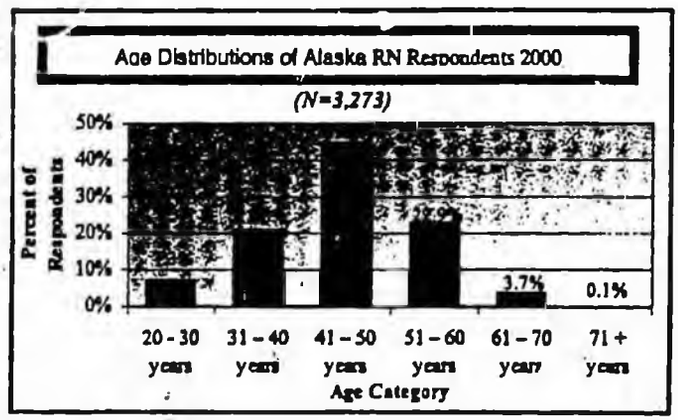
Alaska Nurses Association

Background On the Nursing Shortage in Alaska

There are currently about 5,200 RNs living in Alaska. Since the late 1990's there has been an increasing shortage of Registered Nurses in Alaska and the US as a whole. This has led to an 11.5% vacancy rate for nursing positions in the State. Contributing factors for this shortage include:

- The aging of the workforce. In 2000 the average age of a RN in Alaska 45.1 years compared to 43.3 years nationally. 72% of the RNs in Alaska are over the age of 40 years old. Data from the 2002 license renewal is currently being evaluated, but it is expected that the average age ha only increased.[i]



- Hospital and nursing home nursing is very physically demanding. Because of this most nurses working in these settings retire in their 50s. Nationally it is projected that half the nursing workforce will retire in the next five years.

- Fewer young people have gone into the profession. This is graphically illustrated by the above figure.[ii] Formerly, the two primary occupations available to women were teaching and nursing. Now there are a larger number of options available. Many women who previously would have become nurses are now becoming doctors.

- Increased complexity of patient care. In order to reduce health care costs more procedures are being done on an outpatient basis, and hospital stays have been shortened. This means that the patients in hospitals are much sicker than 15 years ago, requiring more skilled care.

- In order to reduce costs, hospitals in the 90's increased the number of patients nurses were required to care for at the same time that the patients became sicker. This lead many nurses to leave the workforce because of concern about patient and nurse safety.

- A decrease in job satisfaction, as inadequate staffing is preventing RNs from providing high quality care to patients. One of the single most important factors in nurses being satisfied with their working conditions is the RN having ample time to provide quality care to their patients. This is usually directly tied the number and the acuity of the patients they are required to care for.

- Increased work-acquired injury and illness. This is addressed in detail elsewhere, but between the increased number of HIV and hepatitis infected patients and the increased weight of the population, many nurses have suffered career ending injuries or illnesses. It is not unusual for nurses to be asked to care for 300-500 lb patients.

Importance of RNs to Patient Health and Safety

The nursing shortage effects patient care in two main ways. Studies tie RNs to positive patient outcomes and poor staffing causes experienced RNs to leave the profession due to job dissatisfaction.

- A 2000 study[iii] looked at hospital and Medicare data from hospitals in nine states in five categories of adverse outcomes: length of hospital stay, pneumonia contracted in the hospital, postoperative infection, bed sores, and urinary tract infections contracted while in the hospital. All five measures are markedly decreased with higher levels of RN involvement in patient care.

- A study published in the October 2002 Journal of the American Medical Association[iv], found the risk of patient mortality increased by 7% for every additional patient in the average nurse's workload in the hospital;

- The study suggests that RNs contribute importantly to surveillance, early detection, and timely interventions that save lives;

- The benefits of improved RN staffing also extend to larger numbers of hospitalized patients who are not at risk for mortality but nevertheless are vulnerable to a wide range of unfavorable outcomes;

- Higher emotional exhaustion and greater job dissatisfaction in nurses were strongly and significantly associated with patient-to-nurse ratios;

- Improving nurse staffing levels may reduce alarming turnover rates in hospitals by reducing burnout and job dissatisfaction, major precursors of job resignation;

- Improving staffing may not only save patient lives and decrease nurse turnover but also reduce hospital costs, if recently published estimates of the costs of replacing a hospital medical and surgical general unit and a specialty nurse ($42,000 to $64,000) are correct.

Health and Safety Issues Related to the Nursing Shortage

Health care is rapidly becoming the most hazardous industry in America, as well as Alaska. RNs report that health and safety concerns play a major role in their decisions to remain in the profession. Nurses and other health care workers are exposed to the following hazards:

- Biological hazards: HIV, hepatitis B and C and more than 20 other infectious agents have caused infections in nurses caring for patients with these infections.
- Ergonomic Injuries – Ergonomics hazards of manual lifting and transfer of patients cause back injuries to over 1/3 of all nurses. Nurses are more prone to back injuries than construction laborer, truck loader, or warehouse worker.[v] Nurses accounted for more than 10% of the total for all occupations combined for neck, back and muscle injuries.[vi]
- Chemical hazards: latex allergy and disinfectants cause occupational asthma, and laser smoke, exposure to carcinogenic chemotherapeutic agents result in illness.

The Shortage Will Grow

Alaska Department of Labor and Workforce Development[vii] provided the below statistics related to the current and growing nursing shortage.

- Employment demand for RNs is projected to grow nearly 40% between 1998 – 2008, faster than the all-occupational average (16.6%)
- The number of RNs needed to fill the new jobs resulting from industry growth will increase by nearly 1,600.
- If 2008 projections hold true, RNs will be the largest single healthcare occupation and the seventh largest occupation in the state.
- Nursing shortage is nationwide and Alaska must compete for RNs, or grow more of our own, to keep up with demand caused by the aging of society, as well as the aging of the RNs.

Alaska Nursing Employer Survey Results[viii]

In 2002, the Alaska Colleagues in Caring, in collaboration with the Alaska Hospital and Nursing Home Association, surveyed facilities in Alaska regarding their nursing workforce needs.

- Vacancy rates for RNs increased on average from 5.7% in 2000 to 11.5% in 2002 with the West and North respondents reporting a 20.8% vacancy rate in 2002.

- Rate of Turnover reported for RNs in 2002 was 24% indicating difficulties with retaining RNs

- Employers identified the most successful retention incentives included
  - Decreased workload and greater scheduling choices
  - Educational Options
  - Management education and involvement
  - Positive work environment

- The percentage of facilities that actively recruit RNs from other states increased from 47.6% of facilities in 2000 to 83.3% of facilities in 2002.

- Employers identified the following anticipated changes in demand for nurses in the next two years
  1. Aging population/increased number of nurses retiring
  2. Increase in medical services used and number of patients
  3. Increased need for nurses, especially RNs
  4. Possible closure of facilities
  5. New facilities built/facility expansion
  6. An increased difficulty in recruiting and retaining nurses

Current Nursing Education in Alaska

The University of Alaska is the primary educator of nurses in the state. Weber State has had a small LPN program in the state for many years, but they will soon be leaving the state. Nursing education is very expensive to provide due to the cost of labs and clinical rotations. This cost is why there are not more providers of nursing education, and why nationally there has been a decrease in nursing education programs.

Current RN Programs Provided by UAA (110 RN graduates per year)

- 2 year RN – Anchorage 32 students admitted per year; Fairbanks16 students, Kodiak 9 students (every 2 years)
- 4 year RN – Anchorage 80 students admitted per year, with an additional 40 being added this summer
- 1 year LPN – Anchorage 16 students admitted per year, Bethel 7, Fairbanks 8(rotates), Ketchikan 6 (rotates)

Projected Locations and Numbers of Nursing Students 2006 (220 RN graduates per year)

- 2 year RN – Anchorage 32 students admitted per year, Fairbanks 16, and about 40 students admitted per year in Juneau, Bethel, Kodiak, Kenai, Ketchikan, or Sitka on a rotating basis. Other sites are also being investigated.
- 4 year RN – Anchorage 120 students admitted per year.

Articulation Programs
The University already has an RN to BSN program in place that can be completed through distance learning. UAA is in the process of refining the LPN to RN program to make mobility within the profession easier.

Current Demand for Nursing Education Exceeds Slots
The UAA four-year BSN program has only a minimal waiting list, which should be eliminated with this year's planned expansion. This year the 2-year (AAS) RN program had 2 applicants for every position. Initial interest meetings in expansion sites such as Kenai have shown a tremendous interest from persons in the community.

SOLUTIONS

The Alaska Nurses Association suggests the following solutions to the Alaska nursing shortage, which come under three main categories:

- Recruitment and education of new RNs
- Retention of experienced RNs
- Adapting the work environment to prolong the careers of aging RNs

RECRUITMENT AND EDUCATION

- State funding support of UAA and Industry Consortium's effort to double the number of RN graduates by 2006. This requires the State to match the industries commitment of 2.4 million over the next three years.

- Continue Federal funding of the Recruitment and Retention of Alaska Natives into Nursing (RRANN Program) at UAA.

- Support legislation for tuition loan reimbursement of nurses who work in Alaska. Currently several legislators are working to draft such legislation.

- Support an increase to competitive salaries for nursing professors. RNs can currently make more practicing in a hospital than teaching at the University, making the recruitment of qualified instructors very difficult.

- The Alaska Nurses Association is working to develop a recruitment program aimed at grade school children to show them the variety of careers available in the nursing profession.

- The Alaska Nurses Association, hopefully with the support of the Alaska Department of Labor and the University, is planning to work with high schools in developing a pre-nursing preparation program to ensure a successful foundation is created in math and science, especially for rural and non-traditional students.

- With the help of industry, identify and develop training for post-graduate RNs in high-need specialty areas, such as OR and ICU.

- Encourage employers to provide financial incentives for nurses working in facilities to mentor nursing students and new graduates.

RETENTION OF EXPERIENCED RNS

Workplace Conditions

- Support creation and adoption of legislation and/or standards for an appropriate nurse to patient acuity system that creates a safe and satisfying work environment. Several states have passed or are considering similar legislation.

- Create financial incentives for facilities to apply for Nursing Magnet Status with American Nurses Credentialing Center. Magnet status ensures RN participation in workplace design, and promotes quality patient care, highly increasing job satisfaction.

- Encourage employers to make nursing attractive as a long-term career by increasing retirement and medical benefits.

- Encourage Employers to be responsive to RN needs, such as providing daycare that is available during the hours that nurses work and providing flexible scheduling options.

- Create legislation to prohibit mandatory overtime as a staffing solution to the nursing shortage. Other states have successfully passed such legislation.

Health and Safety Solutions

- Provide legislative or administrative incentives for facilities to purchasing latex free products in order to limit latex injuries to RNs and patients, as well as decrease related costs.

- Support the revision and passage of Alaska's existing Needlestick Legislation[ix] to meet federal standards, to protect patients and healthcare workers from HIV, Hepatitis, and other infectious diseases.

- Department of Labor's development of Regulations aimed at reducing injuries, and related costs, acquired from lifting and transferring patients in facilities, such as lift teams and assistive devices. Alaska Native Medical Center has had significant success in this area.

ADAPTING THE WORK ENVIRONMENT TO PROLONG THE CAREERS OF AGING RNS

- Encourage institutions to be flexible about working hours and patient loads to allow aging nurses to physically prolong their careers. Many facilities demand 12-hour shifts, which are physically demanding and difficult for aging RNs.

- Fund a study to explore what measures need to be adopted to keep RNs who are over 50 in the workforce.

➢ Find creative ways to utilize experienced nurses to educate, mentor and recruit new nurses into the profession.

---

[i] "Alaska Colleagues in Caring, Alaska Re-Licensure Survey for RNs, 1996, 1998, and 2000", October 2001
[ii] Id.
[iii] ANA's Nurse Staffing and Patient Outcomes in the Inpatient Hospital Setting released in May of 2000.
[iv] "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction," by Linda Aiken, PhD, RN, et. al., is in the October 23/30, 2002, issue of JAMA. The study looked at 232,342 patients between the ages of 20 and 85 who underwent general surgical, orthopedic, or vascular procedures in 168 Pennsylvania hospitals from April 1, 1998 to November 30, 1999.
[v] Labor Department's Bureau of Labor Statistics, in 1998.
[vi] Id.
[vii] Alaska Department of Labor and Workforce Development, Research and Analysis Section (April 9, 2002)
[viii] Alaska Colleagues in Caring Nursing Employer Survey, 1998, 200, & 2002.
[ix] Sec. 18.60.880. Needlestick and sharps injury protections for health care workers.

LEGISLATIVE AFFAIRS AGENCY
LEGISLATIVE INFORMATION OFFICE
210 LAKE STREET, SITKA, AK 99835
Phone: 747-6276 Fax: 747-5807
Email: sitka_lio@legis.state.ak.us

DATE: 5-12-03

TO: Rep. Peggy Wilson, House Finance Comm.

FAX: 465-3175 **1 # pages, including cover sheet**

RE: HB 211

FROM: George Paul 747-0673

MESSAGE: Thank you Peggy for HB 211. There are a group of 9 of us here in Sitka starting a Nursing Program on Aug 25. It is being run by Weber St. in conjunction with U.A.S.-Sitka Campus. All of us are struggling with finances so if there is a way to help we would all appreciate it. ONCE again Thank You and you can tell I support this bill.

George Paul
Past Camp # 1 A.N.B. President
and now "student"

To:
Senate Finance Committee Members
House Finance Committee Members
Senator Gary Stevens
Representative Dan Ogg

We appreciate all of your hard work on this bill and the exemption for Medical services. It is a tough job, we appreciate you doing it but unfortunately, we have to strongly disagree with your conclusions.

I (Pat) have been a conservative voter since I turned voting age in North Pole in 1960. While you profess to following a conservative philosophy it seems that you are not listening to the comments raised in objection to the sales tax and it impacts. After watching the teleconferences and listening to the few questions by asked by the membership, it seemed that you had already planned to press this issue through. Why not have an advisory vote on the Issue?

Our family still feels that this bill is unacceptable. It will cause undue hardships for smaller communities that already have a sales tax. It also disproportionately takes a larger portion of the income from folks that are retired or have low incomes. In your teleconferences you have heard opposition to this concept from most of the smaller municipalities in Alaska including our home of Kodiak as well as the Mayor Beigich of Anchorage.

If there is no option except for a sales tax then exempt communities of less than 25,000!

We believe that the graduated income tax is a much better option for raising money for State operations and it should have never been dropped! Boomers coming to Alaska and taking their money home should be taxed. A second but less desirable option is tapping the unencumbered earnings of the permanent fund.

Sincerely:

Patrick, Patricia, and Aaron Holmes

HB

211

SFIN

FILE

HB 211

was referred to the Senate Finance Committee

No hearing was held on this bill

HB

213

HOUSE COMMITTEE REPORT

(11)

Date Referred to Committee: February 16, 2004 **FURTHER REFERRALS:**

Date of Committee Action: 2/26/04

The FINANCE Committee considered: **HB 213**

HOUSE BILL NO. 213 **PROVISIONAL DRIVER'S LICENSE**

"An Act relating to a provisional driver's license and to issuance of a driver's license; and providing for an effective date."

Recommends it be replaced with [ ] HCS *or* [✓] CS *for* HB 213 (FIN)
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR_____ [✓] Same Title [ ] New Title

[ ] attach amendments
[ ] add new referral to _____Committee
[ ] Letter of Intent_____Committee

List of Abbrev for Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
HSS
LEG
LAW
LWF
MVA
DNR
DPS
REV
DOT
UA

NEW **FISCAL NOTES** *Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero

PREVIOUS **FISCAL NOTES**				
List by Dept(s):	FN#	Fiscal	Indet.	Zero
ADM	#1	✓		

Signing with recommendations	Printed Last Name	DP	DNP	NR	AM
	Meyer	✓			
	Howell	✓			
	STOLTZE			✓	
	Foulke	✓			
	CROTOT	✓			
	FOSTER	X			
Chair:					
Chair: W.K. Williams	Williams	X			

FISCAL NOTE

STATE OF ALASKA
2004 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSHB 213(TRA)
(H) Publish Date: 2/9/04

Revision Date/Time (Note if correction):
Dept. Affected: Administration
Title: Provisional Driver's License issuance
RDU: Division of Motor Vehicles
Component: Motor Vehicles
Sponsor: Rep. Weyhrauch
Requester: House Transportation
Component No.: 2348

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services						
Travel						
Contractual						
Supplies	13.6	13.6	13.6	13.6	13.6	13.6
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	13.6	13.6	13.6	13.6	13.6	13.6
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )	102.3	102.3	102.3	102.3	102.3	102.3

FUND SOURCE (Thousands of Dollars)						
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
1156 Receipt Supported Services	13.6	13.6	13.6	13.6	13.6	13.6
TOTAL	13.6	13.6	13.6	13.6	13.6	13.6

Estimate of any current year (FY2004) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

POSITIONS						
Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

HB 213 will require the issuance of a Provisional Driver's License to 16 & 17 year old drivers. In 2003 there were 13644 DL's issued to this age group. We project 50% of those drivers will return to DMV to request new licenses without the Provisional restriction. Cost of of materials to produce these duplicates = $2.00 x 6822. Revenue gained from issuing duplicate = $15.00 x 6822.

Prepared by: Duane Bannock
Phone 269 5008
Division: Motor Vehicles
Date/Time 1/20/04 9:19 AM
Approved by: Mike Miller, Commissionor
Date 1/20/2004
Agency: Department of Administration

FISCAL NOTE

STATE OF ALASKA
2004 LEGISLATIVE SESSION

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Grants & Claims						
Miscellaneous						
TOTAL OPERATING	13.6	13.6	13.6	13.6	13.6	13.6
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )	102.3	102.3	102.3	102.3	102.3	102.3

FUND SOURCE (Thousands of Dollars)						
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1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
1156 Receipt Supported Services	13.6	13.6	13.6	13.6	13.6	13.6
TOTAL	13.6	13.6	13.6	13.6	13.6	13.6

Estimate of any current year (FY2004) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

POSITIONS						
Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

HB 213 will require the issuance of a Provisional Driver's License to 16 & 17 year old drivers. In 2003 there were 13644 DL's issued to this age group. We project 50% of those drivers will return to DMV to request new licenses without the Provisional restriction. Cost of of materials to produce these duplicates = $2.00 x 6822. Revenue gained from issuing duplicate = $15.00 x 6822.

Prepared by: Duane Bannock
Phone 269 5008
Division: Motor Vehicles
Date/Time 1/20/04 9:19 AM
Approved by: Mike Miller, Commissionor
Date 1/20/2004
Agency: Department of Administration

23-LS0786\Z
Luckhaupt
2/26/04

adopted 2/26/04

CS FOR HOUSE BILL NO. 213( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-THIRD LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES WEYHRAUCH, Crawford

A BILL

FOR AN ACT ENTITLED

"An Act relating to a provisional driver's license and to issuance of a driver's license; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*** Section 1.** AS 28.15.055 is amended to read:

Sec. 28.15.055. Provisional driver's license. Upon application, the department may issue a provisional driver's license to a person who is at least 16 years of age but not yet 18 years of age if the

(1) person has been licensed under an instruction permit issued under AS 28.15.051 or under the law of another state with substantially similar requirements for at least six months;

(2) person's parent, legal guardian, or employer provides proof satisfactory to the department that the applicant has at least 40 hours of driving experience, including at least 10 hours of driving in progressively challenging circumstances, such as driving in inclement weather and nighttime driving; and

(3) person has not been convicted of a violation of a traffic law within the six months before the application is filed; in this paragraph, "traffic law" has the meaning given to "traffic laws" in AS 28.15.261.

* Sec. 2. AS 28.15.057 is amended to read:

Sec. 28.15.057. Restrictions on driver's license issued to a person under 18. Except as provided under AS 28.15.051, a person who is at least 16 years of age but not yet 18 years of age may not be issued a driver's license unless the person has

(1) been licensed under an instruction permit issued under AS 28.15.051 or under the law of another state with substantially similar requirements for at least six months;

(2) [AND HAS] held a valid provisional driver's license issued under AS 28.15.055 for at least six months; and

(3) not been convicted of violating a traffic law, or been convicted of violating AS 04.16.050(c), during the six months before applying for a driver's license; in this paragraph, "traffic law" has the meaning given to "traffic laws" in AS 28.15.261 [ONE YEAR].

* Sec. 3. AS 28.15.057 is amended by adding new subsections to read:

(b) A person authorized to drive a motor vehicle under a provisional driver's license issued under AS 28.15.055 may not

(1) for the first six months after receiving a provisional driver's license, operate a motor vehicle that is carrying any passengers

(A) except a passenger who is a parent, legal guardian, sibling, or a person at least 21 years of age; or

(B) unless at least one of the passengers is a parent, legal guardian, or person at least 21 years of age; or

(2) operate a motor vehicle between the hours of 1:00 a.m. and 5:00 a.m., except when the person is

(A) accompanied by a parent, legal guardian, or a person at least 21 years of age who is licensed to drive the type or class of vehicle being used; or

(B) driving to or from the person's place of employment or

within the scope of the person's employment and the driving is along the most direct available route.

(c) This section does not apply to restricted licenses issued to persons to operate motor vehicles in areas of the state off the road system when operating motor vehicles in those areas.

(d) A person who violates this section is guilty of an infraction.

* **Sec. 4.** This Act takes effect January 1, 2005.

ALASKA STATE LEGISLATURE

Representative Bruce Weyhrauch

HOUSE DISTRICT 4

ALASKA
STATE CAPITOL
JUNEAU, ALASKA
99801-1182

(907) 465-3744
FAX (907) 465-2273

Sponsor Statement

Graduated Driver's License for Teen Drivers

HB 213 (TRA)

Car crashes are the leading cause of death for teenagers in Alaska. While there isn't a silver bullet cure to this utter tragedy, recent studies prove that the Graduated Driver's License system (GDL) is a giant step forward.

HB 213 implements GDL by creating a three-tiered system whereby young drivers pursue their full, unrestricted driver's license. Currently, Alaska only requires a driver under 18 to obtain and hold a learner's permit for 6-months before testing for a driver's license.* Under HB 213, graduated licensing adds several important protections for the novice driver that relate to when they can drive, where they can drive, with whom and how.

I. At age 16, a person may be eligible for a Provisional License when:

- The youth has held a learner's permit for 6 months,
- Their parent certifies that the youth of at least 40 hours of driving experience, including 10 of driving under progressively challenging conditions such as nighttime or inclement weather conditions, and
- The youth has not been convicted for violating a traffic law for at least 6 months before applying.

Once the youth holds a Provisional License, they are subject to several limitations for their first **six months** of driving:

- Driving between 1 am and 5 am is prohibited;
- No passengers except a parent, a person 21 yrs or older, or two siblings of the novice driver.

III. 6 months after the issuance of a Provisional License, the youth may apply to the department for an unrestricted license,

- *as long they have not been convicted of a traffic offence for at least six months preceding their application.*

~ More ~

Representative _Bruce_Weyhrauch@legis.state.ak.us
www.akrepublicans.org/weyhrauch/

Two important *exceptions* to the Provisional License law:

- A driver with a Provisional License may be eligible for a work permit so that they can drive to or from work or drive during the scope of their employment.
- Driver's issued permits or licenses under the DMV's hardship or off-systems licensing programs are in no way affected by the GDL licensing provisions.

The Graduated Driver's License is a means for the young driver to gain experience on the road while minimizing risks. As the driver gains experience, the provisions are gradually lifted and the youth is eligible for an unrestricted driver's license.

Since the National Transportation Safety Board adopted its graduated driver licensing recommendations in 1993, states have dramatically modified their driver licensing practices. Since 1993, the 38 states have adopted comprehensive GDL licensing system have reported significant reductions in fatality rates of teen drivers and passengers. In California, teen passenger deaths and injuries when 16-year olds are behind the wheel dropped 21 % statewide in 1998 and 1999. These results come two years after passage of California's GDL. Florida, which adopted GDL in 1997, saw a drop of 21 % in the rate teens are involved in accidents.

Research published in October 2001 from Michigan and North Carolina, two states with comprehensive laws that include both an extended learners' permit phase and a nighttime driving restriction reaffirms the effectiveness of graduated licensing. In Michigan, research shows that 16-year olds were 25% less likely to get into a crash; in North Carolina, the risk of a crash dropped by 23 %. Further, in North Carolina, nighttime crashes involving 16 year olds declined by 43% and fatal crashes dropped by 57 %.

~ Give them the time to learn to drive ~

The goal is to limit teen exposure to risky driving situations during their first few months of licensure, a time when their crash rates are extremely high. Parents indicate strong support for GDL and for the specific restrictions. Graduated licensing will save young lives in Alaska, guaranteed!

---

* In 1997, with passage of HB 11, Alaska adopted a mandatory 6-month learner's permit for drivers under 18 yrs old.

Contact: Linda Sylvester
465-4963

Updated: January 28, 2004

Instant Survey Results

Rep. Bruce Weyhrauch

Thanks for taking my survey.

Your answers have been tallied

Thank you for taking the time to answer this questionnaire. Your responses will help my fellow legislators and I serve you better. If you have any questions about this survey, please contact me at the link here. Send E-Mail.

Residence?

in District 4		41 42.71
outside District 4	15 15.62	
Outside Juneau area		40 41.67

Total Answers = 96

Are you a licensed driver?

Yes	95 97.94
No 2 2.06	

Total Answers = 97

Gender?

Male	30 31.25	
Female		66 68.75

Total Answers = 96

Age?

under 18	5 5.21
19 - 25	1 1.04

26 - 30	8	8.33
over 30	82	85.42

Total Answers = 96

Do you believe new drivers get better with driving experience?

Yes	92	96.84
No	2	2.11
Not Sure	1	1.05

Total Answers = 95

Do you believe teenage passenagers are safer if their teenage driver has at least a minimum amount of driving experience?

Yes	89	92.71
No	5	5.21
Not Sure	2	2.08

Total Answers = 96

Do you believe a teenager is safer driver if no other teenage passengers are in the vehicle?

Yes	85	87.63
No	7	7.22
Not Sure	5	5.15

Total Answers = 97

Do you believe inexperienced teenage drivers should be restricted from driving between 1:00 a.m. and 5:00 a.m.?

Yes	85	87.63
No	7	7.22
Not Sure	5	5.15

Total Answers = 97

Would a provisional drivers license help parents reinforce safe driving habits and limitations on driving for teenage drivers?

Yes	83	86.46
No	4	4.17
Not Sure	9	9.38

Total Answers = 96

If a provisional license law was written to allow exceptions to work related driving between 1:00 a.m. and 5:00 a.m. and allowed carrying minor passengers who were siblings, would you support the general restrictions on newly licensed teen drivers while they gain driving experience?

Yes	84	86.60
No	7	7.22
Not Sure	6	6.19

Total Answers = 97

Even though it might place additional training responsibility on parents, would you support the provisional drivers license concept if it would substantially reduce the number of teenage auto accidents, injuries, and deaths as it has done in other states?

Yes	91	93.81
No	2	2.06
Not Sure	4	12

Total Answers = 97

Free form text entrys are recorded, but not displayed.

Statutory & Regulatory Basis for the Hardship and "Off-System" License.

I. Division of Motor Vehicles issues a "hardship license" under the authority of AS 28.15.051(e)

Sec. 28.15.051. Instruction permit, temporary driver's license and special driver's permit.

(e) Notwithstanding other provisions of this chapter, the department may issue a special driver's license to a person who is under the age of 16 years because of the circumstances of hardship. Special licenses to be issued because of hardship shall be determined on an individual basis by the commissioner.

Regulations that implement AS 28.15.051(e)

13 AAC 08.355. Special driver's license (hardship license)
Statute text
(a) Because of death, incapacitating illness or injury or other unique conditions in the immediate family, a special driver's license will, in the department's discretion, be issued to a person between 14 and 16 years of age who must drive a motor vehicle to
(1) prevent financial hardship for the person's family; or
(2) transport an ill or disabled family member.
(b) A special license issued under this provision will expire on the licensee's date of birth as provided in AS 28.15.101(a), or sooner if the reasons for issuing the special license are not longer sufficient.
(c) A letter requesting a special license must be signed by the applicant's parent or guardian, specify the conditions of hardship, and indicate for what period of time the special license is necessary.
(d) An applicant for a special license must meet all requirements for a regular driver's license, with the exception of age.

II. The "off-system" license is issued under the authority of AS 28.15.121

Sec. 28.15.121. Restricted driver's license.
(a) The department, upon issuing a driver's license, may for good cause impose restrictions suitable to the licensee's driving ability with respect to special mechanical control devices required on a motor vehicle that the licensee drives. The department may impose other restrictions applicable to the licensee that it determines to be appropriate to assure the safe operation of a motor vehicle by the licensee.
(b) The department may issue a special restricted license or may set out restrictions on the usual license form.
. 28.05.011. Duty of commissioners to adopt regulations.

State of Alaska Division of Motor Vehicles Standard Operating Procedures	SOP No. D-76	Page No. 1 of 2
	Effective November 13, 2003	
Subject:	Supersedes	Dated 1/1/03
OFF SYSTEMS RESTRICTION	Approved	
Statute: AS 28.15.121 Regulation: 13 AAC 08.330	Form No.	

An Alaska license can be issued to a person who has met the requirements for a license, with the exception of the performance (road) test. The license is restricted with either a "6" for a non-commercial license or a "7" for a CDL. (C-150) The license is commonly referred to as an "Off Systems License", although it is not actually a type of license but rather a restriction on a valid license. A driver with an off-systems restriction may only operate the class of vehicle shown on the license in areas of the state that are not connected to:

- the land highway or vehicular way to the land-connected State highway system or
- a highway with an average daily traffic volume greater than 499.

The residence address should be the physical address where the person is actually living. The "off-systems" status is indicated by the restriction code regardless of where a person lives.

Tests: Knowledge and Vision tests

Fee: Normal fee for that class of license (D-43)

Requirements: The individual must meet the requirements for the class of license to be issued, except for the performance (road) test.

Procedures: Licenses with a restriction code of 6 are normally issued by Juneau Driver Licensing (JDL). See Appendix D for address information.

Applicants will be given information stating how the license with this type of restriction can be used and what is needed to remove the restriction. (See example below)

NOTE: Upon request a license with an "Off System" restriction with a photo may be issued in place of a valid without photo license. The applicant must apply in person, pass a vision test, surrender the license without the photo and pay the duplicate license fee. (D-43)

********NOTICE********NOTICE********

RESTRICTION: OFF SYSTEM LICENSE ONLY
THIS LICENSE IS VALID ONLY IN AREAS NOT CONNECTED TO THE LAND HIGHWAY SYSTEM OR TO A HIGHWAY WITH AN AVERAGE DAILY TRAFFIC VOLUME GREATER THAN 499. YOU MUST SUCCESSFULLY PASS A ROAD TEST TO REMOVE THE RESTRICTION.

State of Alaska Division of Motor Vehicles Standard Operating Procedures	SOP No. D-76	Page No. 2 of 2
	Effective November 13, 2003	
Subject: OFF SYSTEMS RESTRICTION	Supersedes	Dated 1/1/03
	Approved	
Statute: AS 28.15.121 Regulation: 13 AAC 08.330	Form No.	

REMOVING AN OFF-SYSTEMS RESTRICTION:

When a person with an off-systems restriction wishes to drive in an area of the state not covered by the off-systems license, they must do one of the following:

1) Obtain a permit. (D-70) A knowledge test is not required, as they met this requirement prior to issuance of the license with the off-systems restriction.

2) To remove the restriction the applicant must satisfactorily complete the performance (road) test for that class of license. They will then be photographed and the "6" will be removed from the license. Use the function for a duplicate license and charge the current fee. The expiration date remains the same.

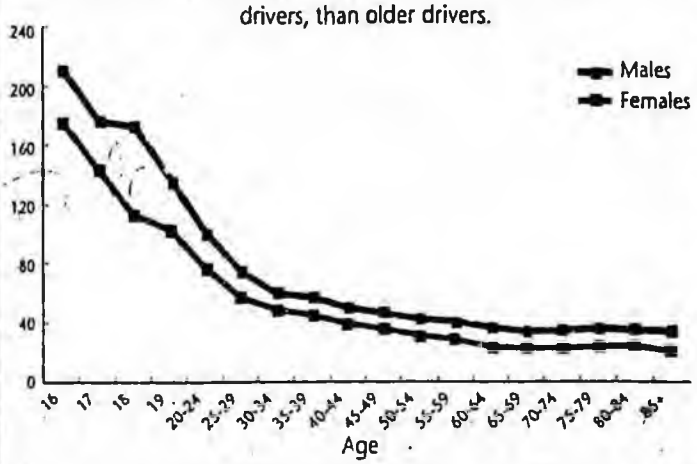
Cross Reference:

Appendix D DMV Addresses
D-43 License Fees
D-70 Class IP & IE – Instruction Permits for Vehicles
C-150 CDL Off-Systems

THE
FOLLOWING
DOCUMENT(S)
ARE
POOR
ORIGINAL
COPIES

ACCIDENTS PER 1,000 LICENSED DRIVERS, 2000

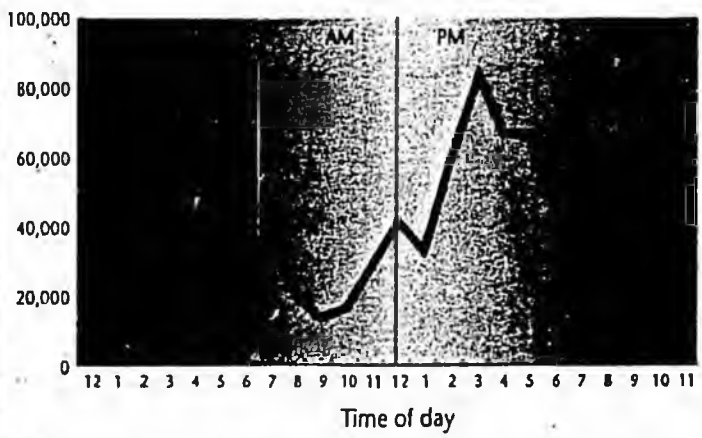
Teenagers, 16 to 18, are involved in more crashes per 1,000 licensed drivers, than older drivers.



Source: Journal of Safety Research, Vol. 34, No.1, National Safety Council, 2003.

WHEN CAR ACCIDENTS ARE LIKELY TO HAPPEN TO TEENS

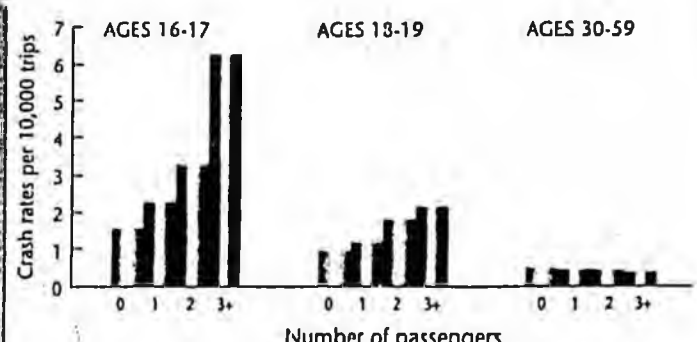
Sixteen- to 17-year-olds are involved in more crashes between the hours of midnight and 5 a.m. than during daytime hours.



Source: Journal of Safety Research, Vol. 34, No.1, National Safety Council, 2003.

TEEN DRIVING WITH PASSENGERS

For teen drivers, the presence of passengers results in higher crash rates per 10,000 trips. As the number of passengers increase, so does the accident rate.



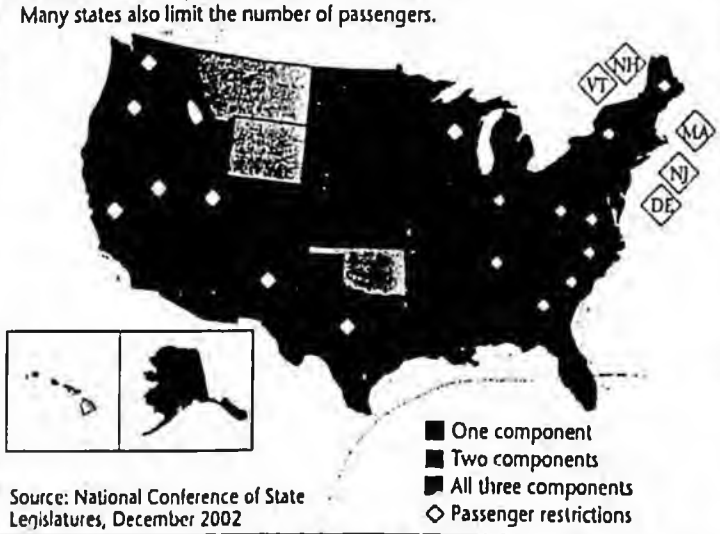
Source: Journal of Safety Research, Vol. 34, No.1, National Safety Council, 2003.

GRADUATED DRIVER LICENSING LAWS

States have been passing laws that ease teens into driving. The three important components of these GDL laws are:

1. A learner permit for at least six months.
2. A required amount of supervised driving.
3. An intermediate permit restricting night driving.

Many states also limit the number of passengers.



Source: National Conference of State Legislatures, December 2002

National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

JAN 27 2004

Honorable Bruce Weyhrauch
Representative
Alaska House of Representatives
State Capitol, Room 102
Juneau, Alaska 99801-1182

Dear Representative Weyhrauch:

I understand that you have introduced House Bill 213, legislation to implement a comprehensive graduated driver licensing system for young novice drivers in Alaska. This measure provides the opportunity for Alaska to prevent the needless loss of many of its young citizens.

Motor vehicle crashes, which account for 40 percent of all teenage deaths, are the leading cause of death for our teenagers. Novice teenage drivers have a very high crash risk. Young drivers, ages 15 to 20, constitute less than 7 percent of all drivers nationwide, yet they are involved in more than 22 percent of all highway fatalities. In Alaska, young drivers constitute a little more than 7 percent of Alaska's licensed drivers, but they are involved in more than 23 percent of the fatalities that occur on Alaska's roads.

There are several similarities in fatal crashes involving young novice drivers. The drivers and passengers frequently are not belted, the cars are loaded with the drivers' peers, and often there is a deadly combination of inexperience and immaturity. When night driving is added to the equation, crash risk increases dramatically.

Young drivers do only 20 percent of their driving at night, but over 50 percent of their crash fatalities occur during nighttime hours. Among young novice drivers, 41 percent of motor vehicle deaths occur between 9:00 p.m. and 6:00 a.m. Nighttime outings tend to be recreational, and even teens who usually follow all the rules can be easily distracted.

Research indicates that nighttime restrictions can reduce young novice driver crashes during restricted hours by up to 70 percent. New York achieved a 69 percent reduction in crashes involving teenage drivers during the hours that the nighttime driving restriction was in effect. Other States have also seen reductions in young novice driver crashes during restricted hours.

Young drivers also pose a greater risk when carrying passengers, especially teen passengers. A study of Kentucky drivers found that young drivers have an increased propensity for causing single-vehicle crashes when traveling with peers and that the propensity for single-vehicle crashes

increases with the number of people in the vehicle. A separate study estimated that a nationwide adoption of passenger restrictions for all 16- and one-third of 17-year-old drivers would result in 60 to 350 fewer deaths per year.

These crashes are preventable, and legislative measures have been successful in other States to reduce both crashes and fatalities. The Safety Board recommended in 1993 that Alaska and other States implement a comprehensive graduated driver licensing system, including a nighttime driving restriction during the driver's first year. In 2002, the Board added a recommendation that young passengers be prohibited from carrying more than one passenger under age 20 unless accompanied by a supervising driver who is at least 21 years old. For additional information about the Board's position on graduated driver licensing and the evidence that supports our recommendations, please see the enclosed fact sheet.

The Safety Board believes an effective combination of tough, fair laws, vigorous enforcement, and intensive, targeted educational campaigns is needed. We are so convinced of the lifesaving benefit of these actions that we have included graduated licensing recommendations on our list of "Most Wanted" safety improvements. Graduated licensing, including a nighttime driving restriction, is one of the most effective actions that the Alaska Legislature can take to save both young lives and the lives of others involved in crashes with young drivers.

I hope that the Alaska legislature will act promptly on House Bill 213 to provide the best possible protection for people when they are riding in a motor vehicle. The Safety Board is available to support your efforts on this and other highway safety initiatives by testifying on legislation or meeting with legislators or advocacy groups. Please contact Mr. Kevin Quinlan, Safety Advocacy Division Chief, at (202) 314-6175, if we can be of assistance to you. For your information, Mr. Quinlan will be in Juneau on February 12, 2004, and would be available to meet with you about your legislation.

Sincerely,

Ellen Engleman Conners
Chairman

Enclosure

cc: Ms. Cindy Cashen, Executive Director
MADD Juneau Chapter

S A V I N G T E E N A G E L I V E S

Appendix C

Teen Crash Statistics

- Motor vehicle crashes are the leading cause of death for American teenagers.
- In 1997, 5,477 young people (passengers and drivers age 15-20) died in motor vehicle crashes. Twenty-one percent of the young drivers involved in fatal crashes had been drinking.
- Young people age 15-20 make up 6.7 percent of the total driving population in this country but are involved in 14 percent of all fatal crashes.
- In 1997, over 60 percent of youth (16-20) who died in passenger vehicle crashes were not wearing seat belts.
- In 1997, almost one quarter (22 percent) of those who died in speed-related crashes were youth (15-20).
- In the last decade, over 68,000 teens have died in car crashes.
- Sixty-five percent of teen passenger deaths occur when another teenager is driving.
- Nearly half of the fatal crashes involving 16-year-old drivers were single vehicle crashes.
- Forty-one percent of fatal crashes involving teenagers occur at nighttime (between 9:00 p.m. and 6:00 a.m.).
- One quarter of fatally injured teen drivers (16-20 years old) in 1995 had a BAC (blood alcohol concentration) at or above .10 percent, even though all were under the minimum legal drinking age and are not legally permitted to purchase alcohol.
- Two out of three teenagers killed in motor vehicle crashes are males.

SAVING TEENAGE LIVES

Section I

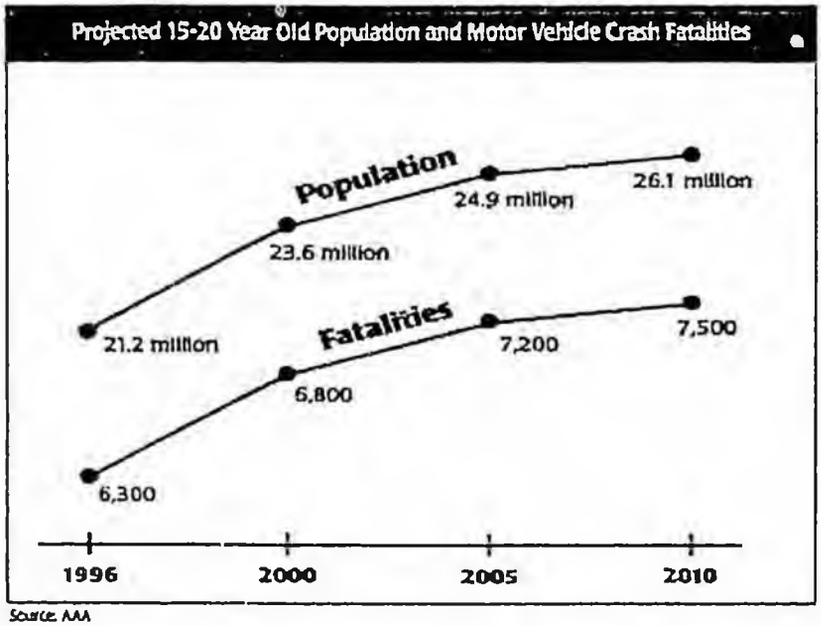
Introduction: The Need for Graduated Driver Licensing

In 1996, 6,319 young people age 15-20 died in motor vehicle crashes. Even though this age group makes up only seven percent of the driving population, they are involved in 14 percent of all traffic fatalities.

The Teen Driving Problem

It has been said many times that children are our most precious resource. While parents throughout time have loved their children enormously, today's parents have taken this saying to heart in more visible ways than previous generations. From the "CautionBaby on Board" window decals of the early 1980s to the ubiquitous "My child is an honor student at" bumper stickers of today, modern parents use the family car as a billboard to showcase their parental pride and their children's accomplishments.

But the same motor vehicle that goes from school to soccer to piano- in which Mom, Dad and the kids seem to livemay also be the vehicle in which our teenagers die. Motor vehicle crashes are the leading cause of death for young people 15 to 20 years of age, causing roughly one-third of all fatalities in this age group. In 1996, 6,319 young people age 15-20 died in motor vehicle crashes. Even though this age group makes up only seven percent of the driving population, they are involved in 14 percent of all traffic fatalities. In 1996, teens were involved in more than two million non-fatal traffic crashes. Based on population projections, these numbers will go up unless we intervene. (See chart below.)



Source: AAA

On the basis of miles driven, teenagers are involved in three times as many fatal crashes as are all drivers. Why do young drivers have such poor driving performance? Three factors work together to make the teen years so deadly for young drivers:

- Inexperience
- Risk-taking behavior and immaturity
- Greater risk exposure

Inexperience: All young drivers start out with very little knowledge or understanding of the complexities of driving a motor vehicle. Like any other skill, learning to drive well takes a lot of time. Technical ability, good judgment and experience all are needed to properly make the many continuous decisions, small and large, that add up to safe driving. By making it so easy to get a driver licenseby literally handing teenagers the car keys without requiring an extended period of supervised practice-driving timewe are setting them up for the risk of making a fatal mistake.

Risk-taking behavior and immaturity: Adolescent impulsiveness is a natural behavior, but it results in poor driving judgment and participation in high-risk behaviors such as speeding, inattention, drinking and driving, and not using a seat belt. Peer pressure also often encourages risk taking.

Greater risk exposure: Teens often drive at night with other teens in the vehicle, factors that increase crash risk.

Teen drivers are different from other drivers, and their crash experience is different. Compared to other drivers, a higher proportion of teenagers are responsible for their fatal crashes because of their own driving errors:

- A larger percentage of fatal crashes involving teenage drivers are single-vehicle crashes compared to those involving other drivers. In this type of fatal crash, the vehicle usually leaves the road and overturns or hits a roadside object such as a tree or a pole.
- In general, a smaller percentage of teens wear their seat belts compared to other drivers.
- A larger proportion of teen fatal crashes involve speeding, or going too fast for road conditions, compared to other drivers.
- More teen fatal crashes occur when passengersusually other teenagers are in the car than do crashes involving other drivers. Two out of three teens who die as passengers are in vehicles driven by other teenagers.

Crash Involvement Rates by Driver Age

Age	All Crashes Per Million Miles	Fatal Crashes Per 100 Million Miles	All Crashes Per 1,000 Population	Fatal Crashes Per 100,000 Population
16	43	17	84	33
17	30	13	107	47
18	16	8	103	52
19	14	7	95	48
16-19	20	9	96	44
20-24	10	5	81	41
25-29	6	3	64	33
30-34	5	2	51	26
35-39	4	2	47	23
40-44	4	2	42	20
45-49	4	2	39	18
50-54	4	2	34	16
55-59	4	2	31	16
60-64	4	3	27	16
65-69	7	4	27	16
70-74	8	5	25	17
75+	12	12	18	17

Source: Insurance Institute for Highway Safety (Transportation Research Board Circular #458 - April 1996)

Effective remedies exist for controlling these risk factors and reducing traffic crash fatalities among young drivers without seriously encroaching on their need to get around. Graduated driver licensing combines a number of measures proven to be effective in fostering safer driving behavior in young drivers. In Ontario, Canada, and in New Zealandwhere graduated driver licensing is in effectcrash deaths and injuries for teenage drivers have been reduced. Maryland, which has a nighttime driving restriction, and California have shown reductions in both fatal crashes and traffic violations among young drivers.

With graduated driver licensing, new drivers typically go through a three-stage process that involves their gradual introduction to full driving privileges. By restricting when teenagers may drive, and with whom, graduated driver licensing allows new drivers to gain much-needed on-the-road experience in controlled, lower-risk settings. It also means that a teenager will be a little older and more mature when he or she gains a full, unrestricted license. After the

young driver demonstrates responsible driving behavior, restrictions are systematically lifted until the driver "graduates" to full driving privileges.

This manual explains what graduated driver licensing is and why it is so important for every jurisdiction to take steps towards its implementation.

State Graduated Driver Licensing Laws

(As of October 2003)

State	Learner Stage		Intermediate Stage			Full/ Unrestricted	Certified Driving
	Minimum Age	Holding Period (Months)	Minimum Age	Nighttime Driving Restriction[1]	Passenger Restriction	Minimum Age	Number of Hours (night time hours)
Alabama	15	6[2]	16	Midnight to 6:00 a.m.	None	17 and 6 months	30 Waived for students enrolled in Driver Education.
Alaska	14	6	No intermediate stage.				
Arizona	15 and 7 months	5	No intermediate stage.				25 (5)
Arkansas	14	6	Intermediate state has no night or passenger restrictions.[4]				
California	15	6	16	Midnight to 5 a.m.	First 6 months no passengers younger than 20 unless supervised by a 25-year-old driver. Second 6 months no passengers between midnight-5 a.m., unless supervised by 25-year-old driver (family members exempt).	17	50 (10)

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Colorado	15	6	16	Midnight to 5 a.m.	None[6]	17	50 (10)
Connecticut	16	4 w/ Driver Ed 6 w/o Driver Ed	16 and 4 months	None	First 3 months no passengers. Second 3 months no passengers (family members exempt)	17	
Delaware	15 and 10 months	6	16 and 4 months	9 p. . to 6 a.m.	No more than 2 teen passengers	16 and 10 months	
District of Columbia	16	6	16 and 6 months	Sept. - June 11 p.m. to 6 a.m. on weeknights and midnight to 6 a.m. on weekends. July - Aug. midnight to 6 a.m.	First 6 months no passengers unless supervised by 21-year-old driver (family members exempt). Thereafter, no more than 2 passengers under 21 (family members exempt).	18	50 (10)
Florida	15	12	16	11 p.m. to 6 a.m. (16) 1 a.m. to 5 a.m. (17)	None	18	50 (10)

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Georgia	15	12	16	Midnight to 6 a.m.	First 6 months no passengers (family members exempt). Thereafter, no more than 3 passengers younger than 21 (family members exempt).	18	40 (6) (20,6 at night with Driver Education)
Hawaii	15 and 6 months	3	No intermediate license stage.				
Idaho	14 and 6	4	15	sunset to sunrise	None	16	50 (10)
Illinois	15	3	16	11 p.m. to 6 a.m. (Sun. - Thu.) Midnight to 6 a.m. (Fri. and Sat.)	First 6 months no more than 1 passenger younger than 20 (family members exempt).	17	25
Indiana	15	2	16 and 1 month	1 a.m. - 5 a.m. (Fri. and Sat.) after 11 p.m. (Sun. - Thu.)	First 3 months no passengers unless supervised by 21-year-old driver.	18	
Iowa	14	6	16	(Sun. - Thu.) 12:30 a.m. - 5 a.m.	None	17	30 (4)
Kansas	14	6	No intermediate license stage.			14 and 6 months	50 (10)
Kentucky	16	6	No intermediate license stage.			16 and 6 months	

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Louisiana	15	3	16	11 p.m. to 5 a.m.	No passenger restriction from 5 a.m. to 11 p.m.[14]	17	
Maine	15	6	16[15]	Midnight to 5 a.m.	First 180 days no passengers unless supervised by 20-year-old driver (family members exempt).	16 and 6 months	35 (5)
Maryland	15 and 9 months	4	16 and 1 month	Midnight to 5 a.m.	None	17 and 7 months	40
Massachusetts	16	6	16 and 6 months	Midnight to 5 a.m.	Fist 6 months no passengers younger than 18 unless supervised by 21-year-old driver (family members exempt).	18	12
Michigan	14 and 9 months	6	16	Midnight to 5 a.m.	None	17	50 (10)
Minnesota	15	6	16		None[6]	17	40 (10)
Mississippi	15	6	15 and 6 months	10 p.m. to 6 a.m.	None	16	
Missouri	15	6	16	1 a.m. to 5 a.m.	None[6]	18	20
Nebraska	15		16	Midnight to 6 a.m.	None	17	50 in lieu of Driver Education

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New York	15 and 6 months	90 days	15 and 9 months	None	If younger than 16, the first 90 days no passengers under 18. If between 16 and 17, the first 60 days no passengers younger than 18. If between 17 and 18, the first 30 days no passengers under 18 (family members exempt).	16	
New Hampshire	15 and 6 months	3	16 and 3 months	1 a.m. to 5 a.m.	First 6 months no more than 1 passenger younger than 25 unless supervised by a 15-year-old driver (family members exempt).	18	20
New Jersey	16	6	17	Midnight to 5 a.m.	No more than 1 passenger. Unless supervised by driver at least 21 (family members exempt).	18	
New Mexico	15	6	15 and 6 months	Midnight to 5 a.m.	No more than 1 passenger under 21 (family members exempt).	16 and 6 months	50 (10)

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New York	16	Up to 6 months	16 and 6 months	9 p.m. to 5 a.m.	No more than 2 passengers younger than 21 unless supervised by 21-year-old driver (family members exempt).	18 (17 w/ Driver Education)	20
North Carolina	15 and 6 months	12	16	9 p.m. to 5 a.m.	No more than one passenger younger than 21 (family members exempt). If a family member younger than 21 is already a passenger then no other passengers younger than 21 who are not family members.	16 and 6 months	
North Dakota	14 and 3 months	6	No intermediate license stage.			14 and 9 months	
Ohio	15 and 6 months	6	16	1 a.m. to 5 a.m.	None	17	50 (10)

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Oklahoma	• Age 15, student may drive but only with a driver ed. instructor in front seat accompanying the student. No student license required. • Age 15 and 1/2, a driver ed (D-E) student may drive but only with another driver at least 21 years of age in front seat with student. • Age 16, D-E student may apply for full, unrestricted license, if there have been no tickets issued nor crashes recorded. • Age 16, NON D-E student may apply for restricted license which allows him or her to drive during daylight hours and at night but only to and from work, school and church-related functions. May have one passenger and famly members. If one or both parents are in vehicle too, may have more than 1 non-family passenger. • Age 16 and 1/2, NON D-E student may apply for full unrestricted license if there have been no tickets issued nor crashes recorded. • Age 17, students may apply for unrestricted license regardless of past licensure.						
Oregon	15	6	16	Midnight to 5 a.m.	First 6 months no passengers under 20. Second 6 months no more than 3 passengers under 20 (family members exempt).	17	50 (100 w/o Driver Education)
Pennsylvania	16	6	16 and 6 months	11 p.m. to 5 a.m.	None	17 (18 w/o Driver Education)	50 (10)
Rhode Island	16	6	16 and 6 months	1 a.m. to 5 a.m.	None	17 and 6 months	50 (10)

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South Carolina	15	6	15 and 6 months	6 p.m. to 6 a.m. EST 8 p.m. to 6 a.m. EDT	No more than 2 passengers unless supervised by driver at least 21 (family members and students to and from school exempt).	16 and 6 months	40 (10)
South Dakota	14	6 (3 w/ Driver Education)	14 and 6 months (14 and 3 months w/ Driver Education)	8 p.m. to 6 a.m.	None	14 and 9 months	40
Tennessee	15	6	16	11 p.m. to 6 a.m.	No more than 1 passenger unless supervised by 21-year-old driver (Family members exempt).	17	50 (10)
Texas	15	6	16	Midnight to 5 a.m.	No more than 1 passenger under 21 (family members exempt).	16 and 6 months	None
Utah	15 and 9 months	None	16	Midnight to 5 a.m.	First 6 months no passengers under 21 (family members exempt).	16 and 6 months	30 (10)

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Vermont	15	12	16	None	First 3 months no passengers unless supervised by driver at least 25. Second 3 months same as first 3 months (family members exempt).	16 and 6 months	40 (10)
Virginia	15 and 6 months	9	16 and 3 months	Midnight to 4 a.m.	First 12 months no more than 1 passenger under 18. Until age 18 no more than 3 passengers under 18 (family members exempt).	16	40 (10)
Washington	15	6	16	1 a.m. to 5 a.m.	First 6 months no passengers under 20 (family members exempt). Second 6 months no more than 3 passengers under 20.	17	50 (10)
West Virginia	15	6	16	11 p.m. to 5 a.m.	No more than 3 passengers younger than 19.	17	30 None if a driver education course is completed.
Wisconsin	15 and 6 months	6	16	First 9 months or until 18 midnight to 9 a.m.	First 9 months or until 19 no more than 1 passenger (family members exempt).	19	30 (10)

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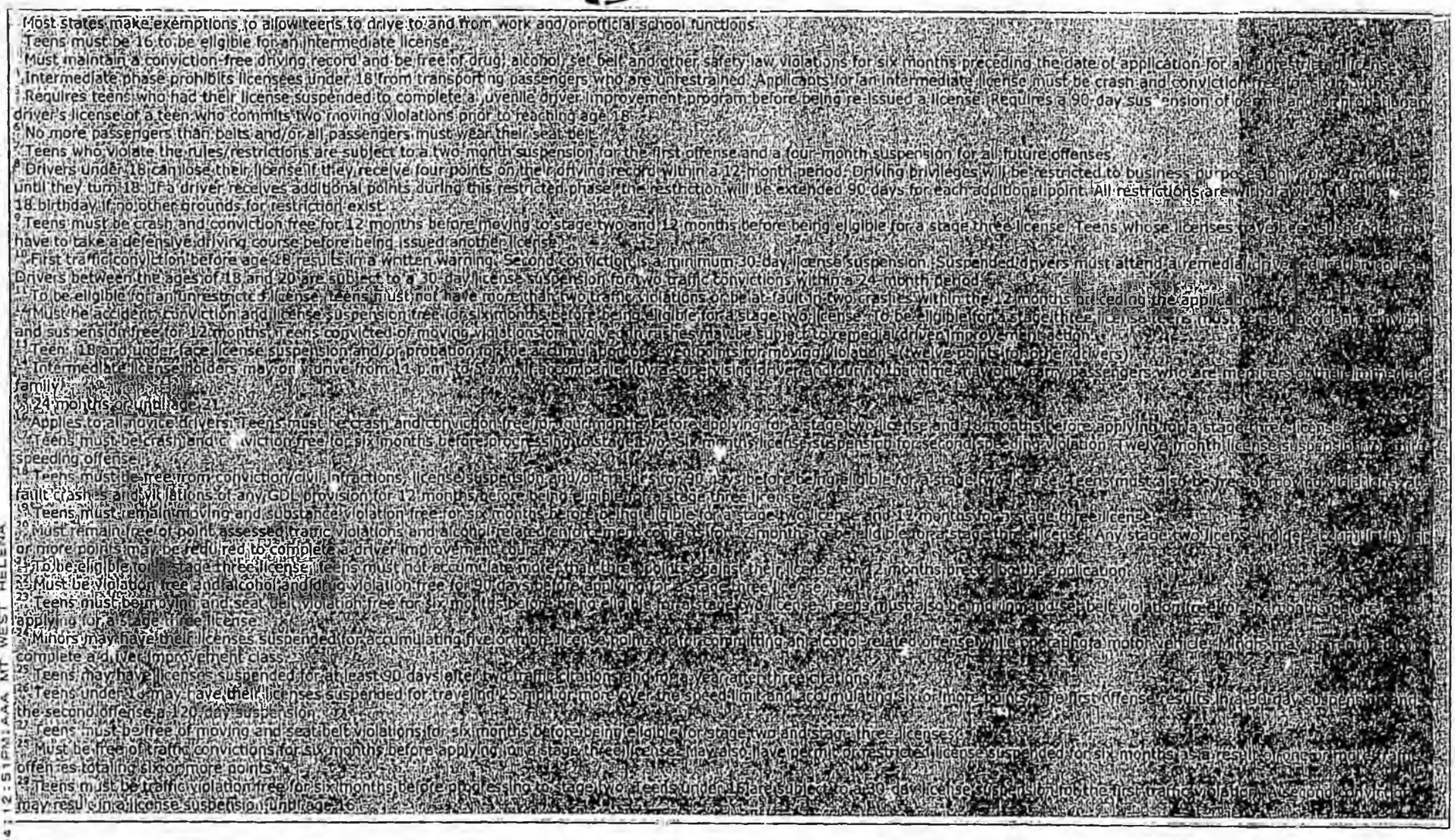

Most states make exemptions to allow teens to drive to and from work and/or official school functions.
Teens must be 16 to be eligible for an intermediate license.
Must maintain a conviction-free driving record and be free of drug, alcohol, seat belt and other safety law violations for six months preceding the date of application for a unrestricted license.
Intermediate phase prohibits licensees under 18 from transporting passengers who are unrestrained. Applicants for an intermediate license must be crash and conviction free for six mon
Requires teens who had their license suspended to complete a juvenile driver improvement program before being re-issued a license. Requires a 90-day sus ension of o an learn and or intermediary driver's license of a teen who commits two moving violations prior to reaching age 18.
No more passengers than belts and/or all passengers must wear their seat belt.
Teens who violate the rules/restrictions are subject to a two-month suspension for the first offense and a four-month suspension for all future offenses.
Drivers under 18 can lose their license if they receive four points on their driving record within a 12-month period. Driving privileges will be restricted to business purposes only for 12 months until they turn 18. If a driver receives additional points during this restricted phase, the restriction will be extended 90 days for each additional point. All restrictions are withdrawn on the driver's 18 birthday if no other grounds for restriction exist.
Teens must be crash and conviction free for 12 months before moving to stage two and 12 months before being eligible for a stage three license. Teens whose licenses have been suspended have to take a defensive driving course before being issued another license.
First traffic conviction before age 18 results in a written warning. Second conviction is a minimum 30-day license suspension. Suspended drivers must attend a remedial driver education school. Drivers between the ages of 18 and 20 are subject to a 30-day license suspension for two traffic convictions within a 24-month period.
To be eligible for an unrestricted license, teens must not have more than two traffic violations or be at fault in two crashes within the 12 months preceding the application.
Must be accident, conviction and license suspension free for six months before being eligible for a stage two license. To be eligible for a stage three license, teens must be accident, conviction and suspension free for 12 months. Teens convicted of moving violations or involved in crashes may be subject to remedial driver improvement action.
Teen, 18 and under, face license suspension and/or probation for the accumulation of seven points for moving violations (twelve points for other drivers).
Intermediate license holders may not drive from 11 p.m. to 5 a.m. if accompanied by a supervising driver and during that time may only carry passengers who are members of their immediate family.
24 months or until age 21.
Applies to all novice drivers. Teens must be crash and conviction free for four months before applying for a stage two license and 18 months before applying for a stage three license.
Teens must be crash and conviction free for six months before progressing to stage two. Six months license suspension for second speeding violation. Twelve month license suspension for third speeding offense.
Teens must be free from conviction/civil infractions, license suspension and/or crashes for 90 days before being eligible for a stage two license. Teens must also be free of moving violations and fault crashes and violations of any GDL provision for 12 months before being eligible for a stage three license.
Teens must remain moving and substance violation free for six months before being eligible for a stage two license and 12 months for a stage three license.
Must remain free of point assessed traffic violations and alcohol-related enforcement contacts for 12 months to be eligible for a stage three license. Any stage two license holder accumulating six or more points may be required to complete a driver improvement course.
To be eligible for a stage three license, teens must not accumulate more than three points against their license for 12 months prior to the application.
Must be violation free and alcohol and drug violation free for 90 days before applying for a stage three license.
Teens must be moving and seat belt violation free for six months before being eligible for a stage two license. Teens must also be driving violation free for six months before applying for a stage three license.
Minors may have their licenses suspended for accumulating five or more license points after committing an alcohol-related offense while operating a motor vehicle. Minors may also be required to complete a driver improvement class.
Teens may have licenses suspended for at least 90 days after two traffic violations and for a year after three citations.
Teens under 18 may have their licenses suspended for traveling 25 mph or more over the speed limit and accumulating six or more points. The first offense results in a 30-day suspension and the second offense a 120-day suspension.
Teens must be free of moving and seat belt violations for six months before being eligible for stage two and stage three licenses.
Must be free of traffic convictions for six months before applying for a stage three license. May also have permit or restricted license suspended for six months as a result of one or more traffic offenses totaling six or more points.
Teens must be traffic violation free for six months before progressing to stage two. Teens under 18 are subject to a 30-day license suspension for the first traffic violation. Second conviction may result in a license suspension until age 21.

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SAVING TEENAGE LIVES

Section II

Traditional Driver Licensing vs. Graduated Driver Licensing

The Traditional Driver Licensing Process

Driver licensing is a function of state government. Each state has different rules and regulations, but the essential steps are similar. An individual applies to the Department of Motor Vehicles or other licensing agency for a driver license. He or she usually must pass a written knowledge test and a vision test before scheduling a road test with the driver license examiner. New drivers must demonstrate basic driving skills in a road test.

In 35 states, a learner's permit is required for novice drivers. Teens under 18 must have parental permission to apply for a learner's permit. Learner's permits automatically expire in all states except Virginia. The expiration ranges from 60 days to six years. Most states place only minimal limitations on driving with a learner's permit. For instance, only 19 have any limits on nighttime driving.1

A comprehensive evaluation of state driver licen-sing codes by the Insurance Institute for Highway Safety concluded that current driver licensing practices "allow a quick and easy route through the learning phase" and place too little emphasis on supervised practice and training.1 Most highway safety experts agree that it is too easy to get a driver license in this country. Driving a motor vehicle is dangerous, yet the requirements and testing are minimal. It is entirely conceivable that an inexperienced young driver could pass a road test and receive a full, unrestricted driver license with almost no "real world" driving experience. A graduated driver licensing system addresses this problem by controlling the circumstances under which

beginning teenage drivers may get behind the wheel.

The Graduated Driver Licensing Process

A graduated driver licensing system allows young drivers to acquire safe driving practices and attitudes as they progress through a three-stage process of licensure.

This system has several distinct advantages over the traditional driver licensing system. Graduated driver licensing gives young, novice drivers:

- Practice in developing driving skills over an extended period of time, leading to greater experience, maturity and judgment;
- Increased time in supervised behind-the-wheel training during daylight and nighttime hours;
- Education in basic and advanced driving skills and safety knowledge; and
- Motivation to practice safe driving skills and behavior by requiring a crash-free/conviction-free driving performance prior to full licensure.

The Three Stages of Graduated Licensing

Learner's permit:

Supervision is required at all times, and other restrictions also apply. This period includes basic driver education and requires that no crashes or convictions occur before the learner advances. There are restrictions on carrying teenage passengers, there can be no violations for failing to wear a seat belt and there is zero alcohol tolerance.

Intermediate license (or provisional license or junior license):

Fewer restrictions are imposed; for example, unsupervised driving is permitted during daylight hours. This period may include advanced driver education and continues to require zero alcohol tolerance and no at-fault crashes or convictions before advancing the driver to the final stage.

Full license (or unrestricted license):

All driving restrictions are removed (except for applicable laws, such as zero alcohol tolerance for drivers under 21).

Core and Recommended Components

All graduated driver licensing systems contain certain core components in order to be effective. Other components are

recommended and should be considered for any new or expanded program.

Stage 1 - Learner's Permit

This stage allows the young novice driver the opportunity to practice basic driving skills and safe driving practices under totally supervised conditions.

Minimum eligibility requirements:

- Meet the minimum age required by the state (currently varies from age 14 to age 17; no younger than age 16 is recommended);
- Pass vision and knowledge tests, including rules of the road, signs and signals.

Core components:

- All driving must be supervised by a licensed parent, guardian or adult at least 21 years old;
- Permit holder must complete basic driver education including behind-the-wheel/vehicle skills training;
- All vehicle occupants must wear seat belts;
- Zero alcohol tolerance for those under age 21;
- Permit is cancelled if applicant is convicted of any alcohol-related offense;
- Applicant must remain free of at-fault crashes and convictions for at least six consecutive months in order to move to the next stage; and
- Minimum holding period of six months;
- Permit is visually distinctive from other driver licenses.

Recommended components:

- Parental participation in the driving process (for instance, certifying that the novice driver has had a minimum number of supervised hours of driving);
- Youth-oriented and more rapid driver improvement actions are taken in the event of violations or at-fault crashes;
- Limitations on speed and types of roads where driving is allowed; and
- Limitations on carrying teenage passengers.

Stage 2 - Intermediate License

This stage gives the young driver behind-the-wheel practice under less restrictive circumstances and exposes the driver to more demanding driving situations. It provides an opportunity forthe new driver to use newly acquired driving and decision-making skills by

allowing unsupervised driving during daylight hours.

Minimum eligibility requirements:

- Successfully complete the learner's permit stage;
- Meet the minimum age required by the state; and
- Pass on-road driving test.

Core components:

- Restricted nighttime hours of driving unless supervised by a licensed parent, guardian or adult at least 21 years old (for instance, only supervised driving from 10:00 p.m. to 5:00 a.m.);
- All vehicle occupants must wear seat belts;
- Zero alcohol tolerance for those under age 21;
- Successfully complete driver education;
- License revocation for any alcohol-related offense;
- Youth-oriented and more rapid driver improvement actions are taken in the event of violations or at-fault crashes; and
- Applicant must remain free of at-fault crashes and convictions for at least twelve consecutive months in order to move to the next stage.
- License is visually distinctive from other driver licenses.

Recommended components:

- Parental participation in the driving process (for instance, certifying that the novice driver has had a minimum number of supervised hours of driving);
- Limitations on speed and types of roads where driving is allowed; and
- Limitations on carrying teenage passengers.

Stage 3 - Full License

This stage allows unlimited driving privileges.

Minimum eligibility requirements:

- Successfully complete the intermediate license stage;
- Meet the minimum age required by the state; and
- Zero alcohol tolerance for those under age 21.

Recommended components:

- Downgrade to a provisional license for drivers whose licenses have been suspended or revoked, and require a crash-free/violation-free period of time prior to re-obtaining

full license until age 21;
- Pass second level knowledge test and on-road driving test; and
- Successfully complete advanced driver education.

Refer to Appendix B for a chart of states that have one or more of the core components of a model graduated licensing law, as developed by the National Committee on Uniform Traffic Laws and Ordinances (Appendix A).

SAVING TEENAGE LIVES

Section III

How Graduated Driver Licensing is Effective

Addressing the Problems

Young novice drivers are a highway safety problem for many reasons, primarily a combination of immaturity, inexperience and high-risk driving exposure. This is true for teenagers everywhere, but it is a particular problem in the United States, where more teenagers have cars or have access to a family car than in any other nation. Teenagers are also more likely to drive older and smaller cars, are less likely to wear seat belts, and are more likely to have multiple teenage passengers.

Traditional approaches-high school driver education, a learner's permit and perhaps stepped up penalties for infractions-have not had as great an impact on reducing the incidence of teen crashes and convictions as anticipated. In fact, there is some evidence that early driver education classes may encourage younger licensure, thereby increasing risk exposure.

On the other hand, graduated driver licensing has been shown to be effective by:

- Expanding the learning process;
- Reducing risk exposure;
- Improving driving proficiency; and
- Enhancing motivation for safe driving.

Let's look at each of these four benefits.

Expanding the learning process

Graduated driver licensing

Graduated driver licensing lengthens the learning process. The longer the period of time that elapses between issuance of the first permit to the full, unrestricted license, the more maturity and experience the novice driver will accumulate and the better his or her driving

has been shown to be effective by

Expanding the learning process;

Reducing risk exposure;

Improving driving proficiency; and

Enhancing motivation for safe driving.

performance will be. The learning experience for driving cannot be rushed. As with any complex task, it takes time to assimilate the skills and information needed to perform the job adequately.

Reducing risk exposure

Graduated driver licensing allows young drivers to gain much-needed driving experience in controlled, lower risk circumstances, such as nighttime driving restrictions, passenger limitations, required restraint use for all occupants, and license sanctions that kick in at a lower threshold (e.g., first conviction for a serious violation).

These exposure-reducing components work in two ways. First, they catch young drivers early when they make mistakes or errors in judgment and allow correction. Second, they serve as a motivating factor for teens to study for tests, drive safely and avoid risks in the first place.

Percentage of Fatal Crashes With Various Characteristics, by Driver Age, 1993

	Driver Age		
	16	17-19	20-49
Single Vehicle	44	37	29
Driver Error	82	74	62
Speeding	37	33	62
3+ Occupants	33	27	18
0.10+ Percent BAC*	5	28	48
Female Driver	34	27	29

*BAC=Blood Alcohol Concentration. In most states, 0.10 percent is the legal BAC threshold.

Source: Insurance Institute for Highway Safety (Status Report - December 17, 1994)

Improving driving proficiency

Placing limits on teen mobility may reduce driving exposure, but driving proficiency can be improved through measures that emphasize getting teens behind the wheel to practice. These components encourage the intermediate licensee to make safe driving decisions while driving to reduce risk. They include: multi-level instruction coupled with multi-level testing (giving inexperienced drivers the opportunity to first learn then practice the basics before moving on to learning and practicing more advanced skills); parental guidance; driver improvement courses; and delayed re-testing after failure.

Enhancing motivation for safe driving