ALASKA LEGISLATURE COMMITTEE FILES 1983-1984 8072

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transported to the Materials & Research Division in Bangor.

Slides 22 and 23

The pH of the above mixtures was further adjusted to 9 - 10 by the addition of acetic acid. The wet material was then dried in the oven to yield powdered CMA which contained a certain amount of unreacted limestone and some quick lime. The powdered material had a total weight of 1180 pounds.

During December the relative slipperiness of saturated solutions of CMA, Sodium Chloride, Calcium Chloride and Urea, and also with water were composed on both asphalt and concrete surfaces. This testing was conducted using a Bristish Portable Pendulm Tester in accordance with ASTM E-303. When tested on Bituminous Pavement, Sodium Chloride, CMA and Urea all gave comparable values, being about 90% of the frictional resistance shown by plain water on the pavement surface. On concrete however, the CMA frictional value was only 76% of the value for plain water, compared with the sodium chloride value of 87%, calcium chloride value of 66% and the Urea value of 93%.

Slide 24

On December 29, 500 lb. of the material was mixed with 3 $yd.^3$ of sand.

On January 6, 1983, we had a snowy day. We spread 45 lbs. of salt on one part of the driveway (50 ft. long) in the parking lot, and 45 lbs. of CMA mixture on another side (50 ft.),

with a 30 ft. stretch at the middle, without any deicing agent. Photographs were taken, but not developed yet.

The impression we had so far is:

1) Without tracking, CMA started to deice slower than NaCl. But after about an hour, it worked fairly well.

2) CMA is more persistent. Evidence: Next day when another layer of snow fell on the pavement, we could see that CMA is still effective.

3) Bad feature of CMA - Tracking into the building. When it dried, white residue appeared. This probably was due to extra lime in the mixture.

Future Plan

1) Corrosion test on various metals.

2) Ponding test on concrete slabs with rebars inside.

3) More field test.

By Michael J. Economides, Russell D. Ostermann and Bertrand Theuveny

The Production of Calcium Acetates As Alternative

INTRODUCTION

Road and airport runway de-icing are serious problems in the north. Sodium and calcium chlorides have been used successfully for many years as de-icing agents. Adverse environmental effects and corrosion problems associated with chloride salts have prompted a search for alternative, cost-effective, de-icing agents.[1-4]

A report entitled "Alternate Highway De-Icing Chemicals" from the Bjorksten Research Laboratories, Inc. (1981), reviewed the de-icing characteristics of various compounds. Two candidates were selected which proved economical, and more important, less corrosive than NaCl.

The first, methanol, was found to be "less persistent" due to its low flash point. The second, a mixture of calcium and magnesium acetate (CMA) was found to exhibit superior de-icing characteristics at a competitive price. In contrast to NaCl, CMA is a corrosion inhibitor, is beneficial to most soils, and has no potential for harming drinking supplies. Hence, CMA does not exhibit many of the "extended costs" associated with the application of NaCl.

CMA can be produced by the simple dissolution of naturally occurring carbonates in acetic acid. These carbonates are readily available in the form of native limestones and dolomite. We have discovered that, for economic and technical reasons, the production of calcium acetate (CA) alone is preferred. This subject is dealt with later in this article.

REACTION KINETICS RESULTS

Calcium acetate is formed by the dissolution of calcium carbonate in an acetic acid solution. Water and carbon dioxide are byproducts. The stoichiometric equation is:

$$\underset{(100\ g)}{CaCO_3} + \underset{(120\ g)}{2CH_3COOH} \rightarrow \underset{(158\ g)}{Ca(CH_3COO)_2} + \underset{(18\ g)}{H_2O} + \underset{(44\ g)}{CO_2}$$

The reaction is slightly exothermic (ΔH_r = -4.6 kcal/gmol). The solubility limit of CaAc (calcium acetate) is 28% by weight. Hence, if a saturated solution of CaAc is desired, a simple material balance indicates a water requirement of 338 g H_2O/100 g $CaCO_3$.

A series of experiments was undertaken to define the process kinetics and ultimate degree of completion as functions of the reaction temperature, reactant concentrations, and particle size for calcium carbonate. Alaskan limestone, delivered from a quarry near Livengood, Alaska, and acetic acid were used as reactants.

The reaction behavior of limestone and acetic acid is reported in Figure 1. Reactions were conducted in a simple stirred tank

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ınd Magnesium De-Icing Agents

reactor. For a given residence time, as long as enough water was present to provide an unsaturated solution of calcium acetate at the conclusion of the reaction, the water to limestone ratio did not influence the reaction results. However, this minimum ratio of 4 to 1 on a mass basis proved inhibiting at high acetic acid excess. This result is to be expected since the reaction is based on the dissociation of acetic acid. An insufficient amount of water results in inadequate dissociation of acetic acid.

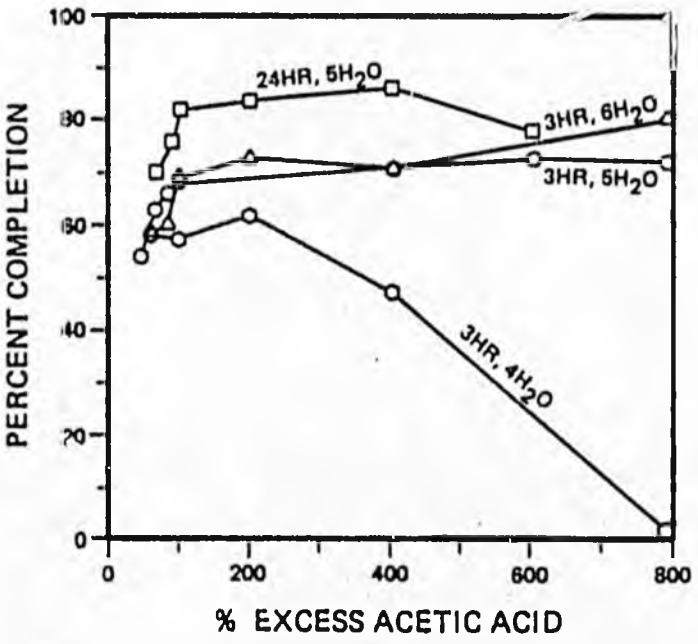

Figure 1. Reaction behavior of limestone and acetic acid: Percent completion vs. excess of acid at various residence times and with varying water content.

Since various water to limestone ratios above 5:1 did not exhibit any discernible difference in the reaction completion rate, the entire subsequent set of experiments was done at a 5:1 weight ratio of water to limestone (for brevity, not all results are plotted on Figure 1).

A significant conclusion can be drawn from the above: The acetic acid does not have to be highly refined. Industrial grade acetic acid (95% purity), which is substantially less expensive than reagent grade, can be used since it will have to be diluted to 50% in any event.

The use of 50% acetic acid may allow an additional cost savings. Liquid phase oxidation (LPO) and methanol carbonylation are common methods of acetic acid production which could be implemented in Alaska. Both of these processes produce acid at approximately a 50% concentration. One of the major factors in the cost of high-purity acetic acid is the cost of purification. Since the CMA process could make use of 50% acetic acid, the purification process and its cost could be eliminated.

Methanol carbonylation is especially attractive since several industrial concerns are contemplating methanol production in the state. The supply of carbonate for the acetate process seems assured; the state houses large deposits of limestone and dolomite.

Figures 2 through 5 present a comprehensive picture of the reaction results. The experiments were designed to gauge the effects of excess acid, reaction temperature and limestone particle sizes on the degree of completion of the reaction. The results are for batch reactions with a three hour residence time.

The amount of excess acetic acid did not augment the reaction completion significantly. Hence, acid consumption can be held at a manageable level.

Neutralization of acetic acid by NaOH can be considered. However, a further economic evaluation may point toward an

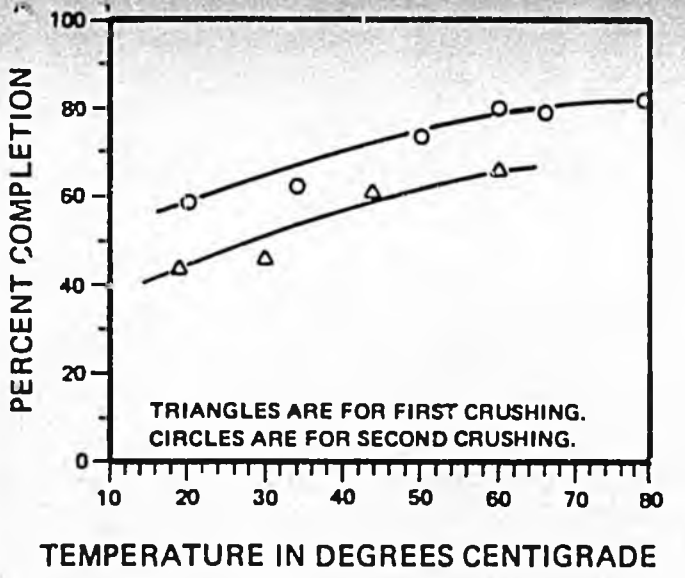

Figure 2. Reaction performance for limestone and no excess acetic acid.

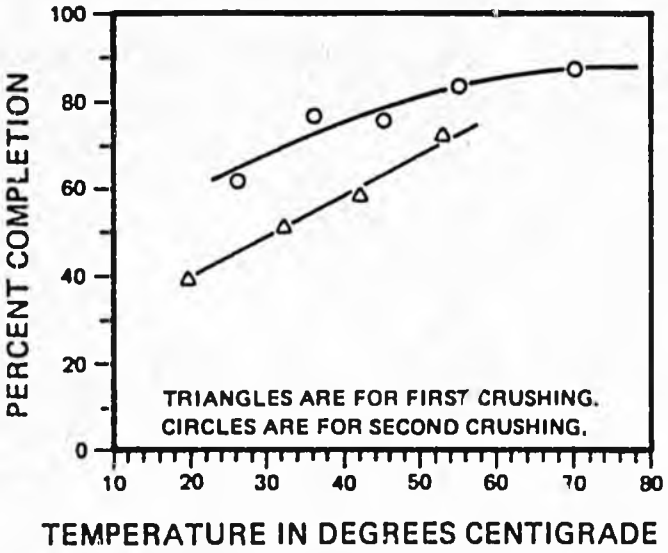

Figure 3. Reaction performance for limestone and 20% excess acetic acid.

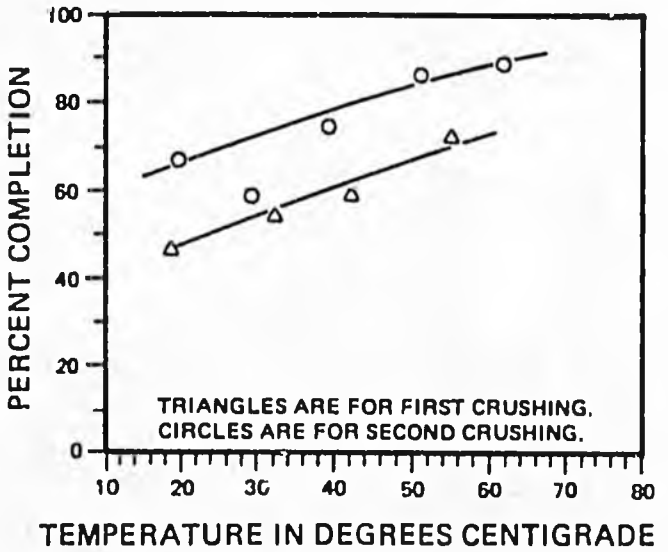

Figure 4. Reaction performance for limestone and 50% excess acetic acid.

associated acid recovery unit. An extraction step using an appropriate solvent, followed by a distillation step, would suffice.

The effect of temperature is significant. An increase in reaction temperature from 20°C to 60°C results in an increase in the completion of over 20%. A similar effect was observed with the use of more finely ground limestone. (The "first" and "second" crushing that appear in Figures 2 through 5 refer to two consecutive outputs of a commercially available rock crusher.) Both of the last two findings will have an effect on the economic optimization of the plant design. The beneficial effect on the completion must be balanced against operating and energy costs. Finally, the residence time in the reactor is significant. A 20% increase in the reaction completion was observed when a reaction time of 24 hours was used instead of three hours.

PROCESS DESIGN AND ECONOMICS

For a simple reaction process such as that producing CMA, capital costs do not contribute a large proportion of the required selling price of the product. Rather, it is the operating cost and, more specifically, the raw materials costs which are controlling. At moderate capacities any errors or omissions in the plant capital cost estimation do not alter the selling price significantly. Thus, it is possible to obtain a reasonably reliable estimate of selling price based on only a process design.

Figure 6 shows a block diagram of the preliminary process design envisioned for CMA production. Raw limestone is first crushed in two stages to particles of 1/8" to 1" diameter. The crushed limestone is then mixed with acetic acid and water in a continuously stirred tank reactor. The reactor is sized for a three-hour mean residence time and is heated to 70°C by an external steam-heating jacket. The reaction product, consisting of a mixture of unspent acetic acid, unreacted limestone and inert materials, is then passed through a filtration unit. In the

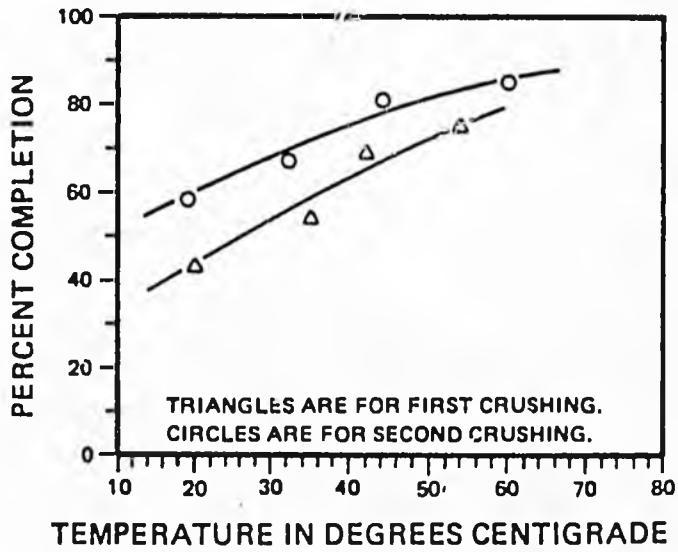

Figure 5. Reaction performance for limestone and 100% excess acetic acid.

filtration unit unreacted solids are removed and sent to a settling pond where they are neutralized by adding sodium hydroxide. The filtrate containing the product acetates is then sent to a neutralizer reactor where excess acetic acid is neutralized by the addition of sodium hydroxide. The resulting acetate solution is checked for appropriate pH value and sent to a liquid product storage tank. With an optional process addition, it would be possible to evaporate the liquid product to produce a solid calcium or magnesium acetate product.

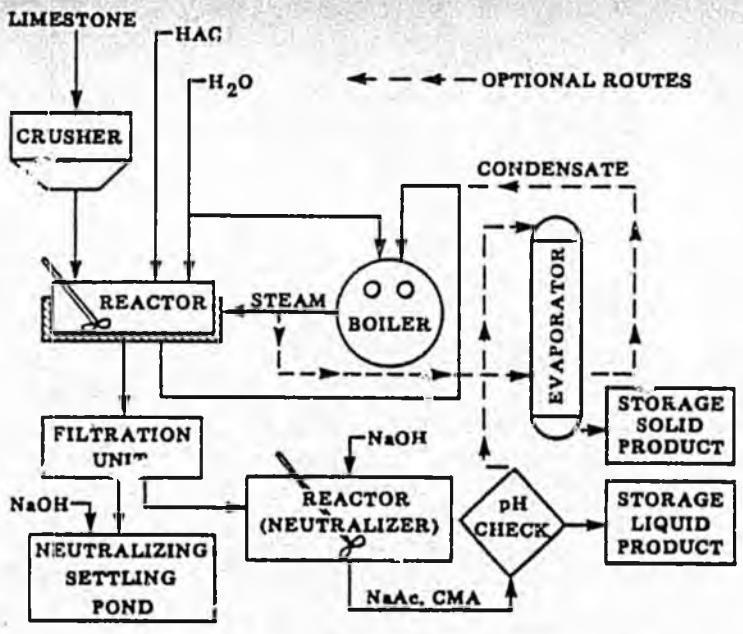

Figure 6. Block diagram of conceptual process design.

On the basis of this design, we have completed an economic analysis of the proposed CMA plant. It should be emphasized that this analysis represents a best-case scenario, with continuous plant operation and minimal storage facilities.

Figure 7 shows the required selling price as a function of acetic acid cost for a 10,000 gallon per day (GPD) plant and a 50,000 GPD plant. It is apparent that there is some economy of scale, but the final plant size will most likely be dictated by market considerations. Finally, Figure 8 presents the selling price for CMA as a function of production rate alone with a fixed cost for acetic acid (S1.25/ gallon). It is obvious that a minimum plant capacity of about 12,000 GPD is dictated by the economics. Little additional economy of scale is indicated above the production rate of 30,000 GPD. In these two figures, the price of CMA has been reported in dollars per ton of solid in solution to allow comparison with current prices of sodium chloride and calcium chloride.

Figures 7 and 8 indicate that the cost of acetic acid is the single most important factor in the selling price of CMA. If acetic acid must be shipped to Alaska from Texas, for example, at a cost of over S2.50 per gallon, the price of CMA will be more than S500 per ton of solid in solution. However, acetic acid is normally shipped and delivered in purities in excess of 90%. Since in our process acetic acid is diluted with water to roughly 50%, it does not make sense to pay an additional premium for high-purity acetic acid. In fact, one of the major costs of producing acetic acid is the purification stage taking the acid from 50% to purities of more than 90%. Hence, if a production facility for acetic acid were located in or near Alaska, it should be possible to purchase dilute acetic acid at a considerable savings, perhaps at a cost as low as S1 per gallon.

Even if imported acetic acid is used, the price of S500 per ton of solid CMA may not be excessive. CMA is not corrosive as are calcium and sodium chlorides, so there is an inherent cost advantage in using CMA as opposed to chloride salts. Therefore, while CMA may cost more in the initial stage of application, it may save a great deal in maintenance costs. In

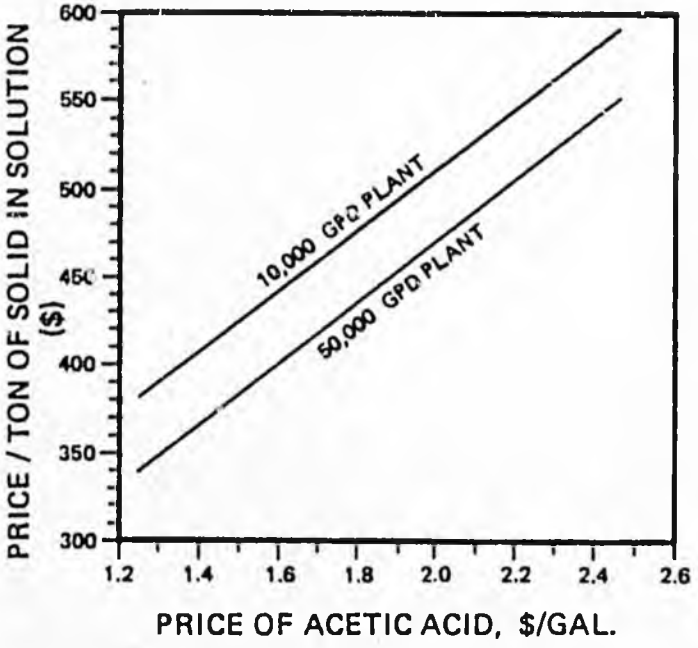

Figure 7. Required selling price of CMA for various acetic acid prices.

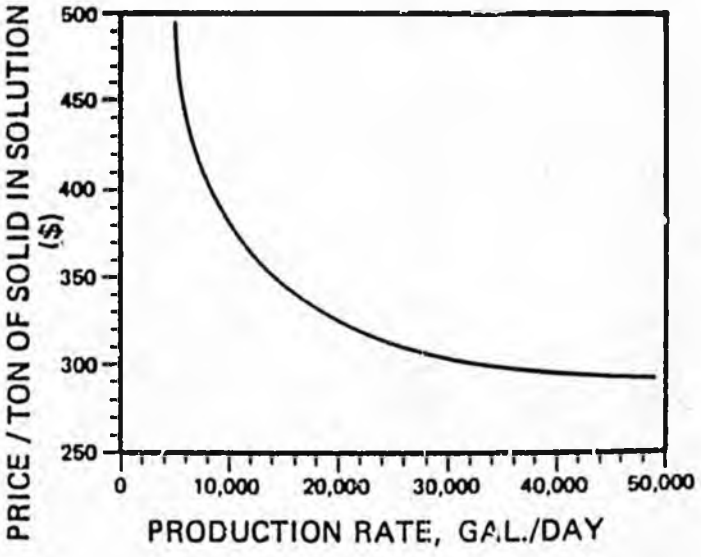

Figure 8. The effect of plant size on the CMA price (S1.25/ gallon acid).

addition, since airports cannot use chloride salts for runway de-icing, but must now rely on more expensive methanol or urea, CMA may have a particular cost advantage.

FREEZING AND EUTECTIC EXPERIMENTS

There are two objectives in this series of experiments: (1) determination of eutectic relationships for various solutions of salts; and (2) evaluation of the de-icing performance of the salts under varying atmospheric conditions.

The eutectic diagrams are the result of measurements gathered in the laboratory. A cold testing chamber was used to evaluate freezing properties over a wide range of ambient temperatures (0°C to -75°C). A comprehensive laboratory study involved the use of different de-icing salts (CaAc, MgAc, NaCl and CMA) at several concentrations. The results seen in the accompanying figures represent the average readings gathered over three test runs. The best de-icing agent is a concentrated solution (27% by weight) of MgAc. At the lowest temperature tested (-75°C), the solution gelled but did not freeze.

Figure 9 shows the eutectic behavior of sodium chloride solutions. The saturation point for NaCl is 26% by weight. Figures 10 and 11 show the eutectic characteristics of CaAc and MgAc respectively. The upper limit (saturation point) for CaAc was 28%, while that for MgAc was somewhat lower. While CaAc did not prove more effective than NaCl, MgAc was decidedly more effective, with a eutectic point depression of 75°C. Hence, a mixture of calcium-magnesium acetate (CMA) with a high concentration of MgAc should be the most effective de-icer. A 25% solution of CMA with 70–80% MgAc would be sufficient for the most severe climatic conditions, as is shown in Figure 12.

The findings of our freezing experiments, in addition to corroborating the de-icing performance of the acetate compounds, have also pointed out a major conclusion. Since the best dolomite deposits in the state contain less than 50% magnesium carbonate, the limit of the CaAc/MgAc ratio is *de facto* determined.

A re-examination of the findings shown in Figure 12 lead to the observation that a 50% MgAc/50% CaAc CMA solution is not any more effective than a pure calcium acetate solution. For example, a 20% CMA solution containing 50% MgAc has a freezing point of -29°C (Fig. 12) while a pure solution of CaAc has a freezing point of -26°C (Fig. 10).

Since the use of dolomite containing lower concentrations of magnesium carbonate results in a solution which is no more effective than calcium acetate derived from abundant limestones, and since dolomite is more expensive than limestone, it can be concluded that calcium acetate would be the most economic product for the process. To avoid confusion, we continue to use the nomenclature CMA throughout this article. However, it should be realized that we refer to a calcium acetate solution containing only small amounts of magnesium acetate.

A FUNDAMENTAL STUDY OF FREEZING POINT DEPRESSION IN AQUEOUS $Ca(O_2CCH_3)_2$ AND $Mg(O_2CCH_3)_2$ SOLUTION

The Debye-Hückel theory provides a satisfactory interpretation of freezing point depression in dilute aqueous solution. Brown and Prue[5], Christoffersen and Prue[6] and Prue *et al.*[7] have demonstrated the applicability of the Debye-Hückel theory in dilute solutions of sodium, potassium, magnesium and calcium ions with a variety of anions. While the thermodynamic properties of dilute aqueous solutions are well established, there is little in the literature for concentrated solutions. The above studies dealt with molarities of less than 0.1, far below the saturations contemplated in this work.

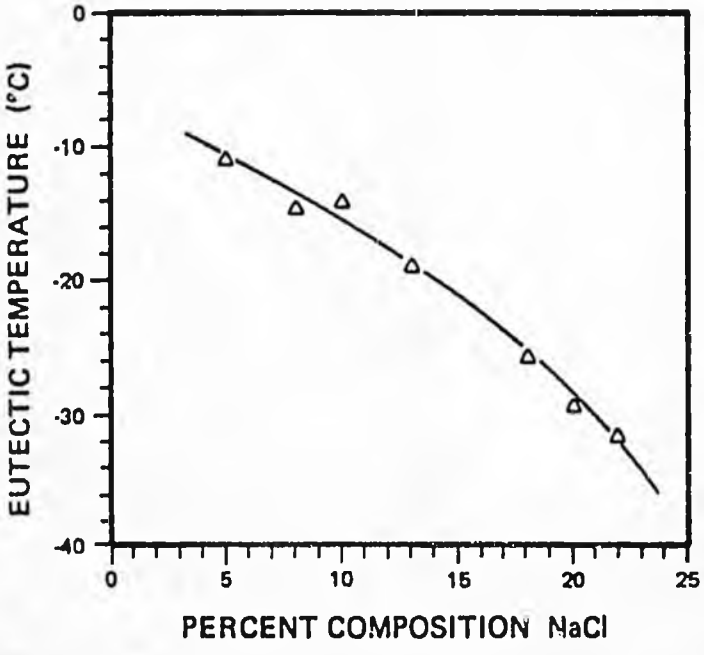

Figure 9. The freezing temperature of NaCl solutions as determined by experiment.

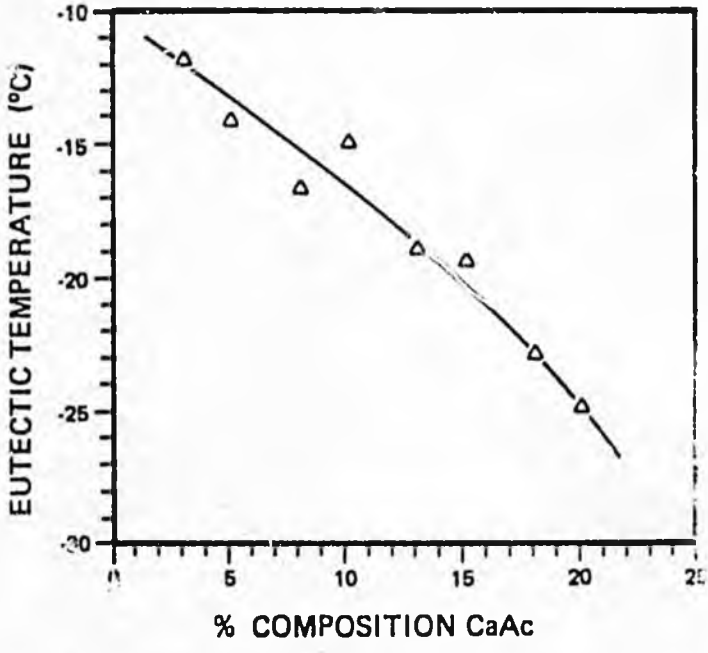

Figure 10. Eutectic diagram of CaAc solutions.

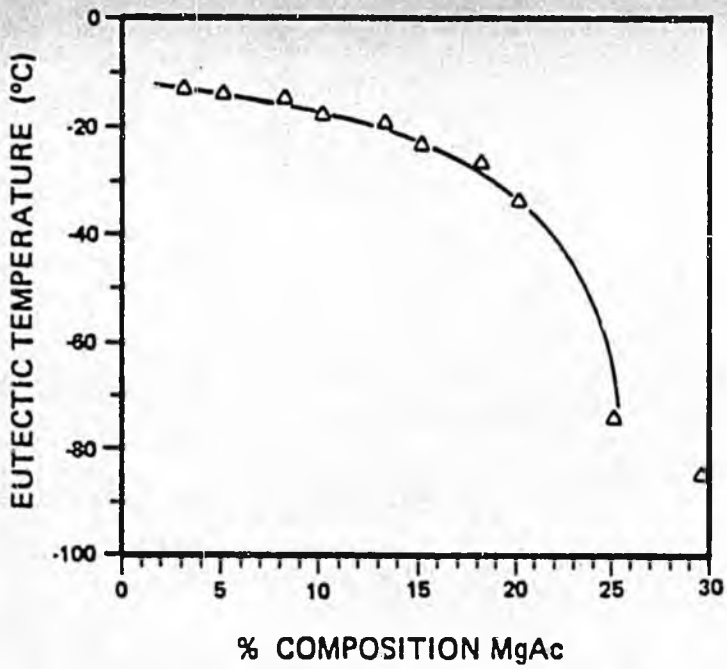

Figure 11. Eutectic diagram of MgAc solutions.

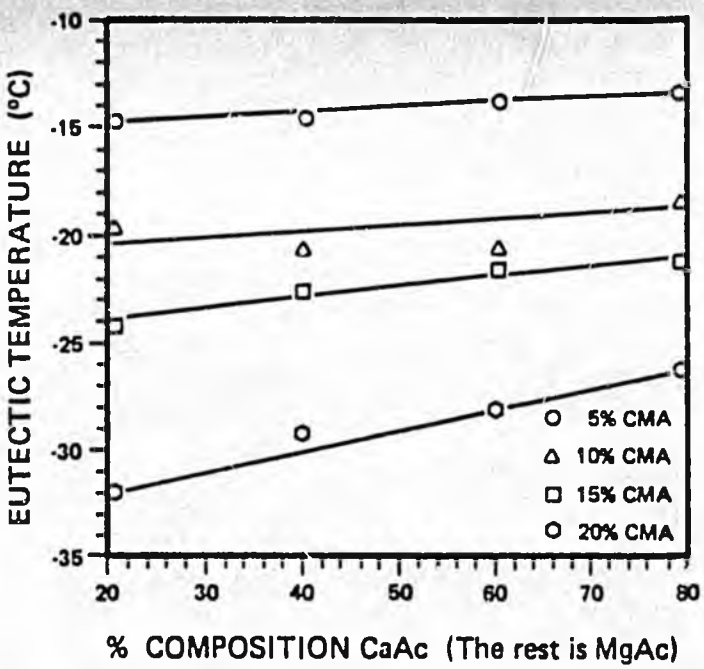

Figure 12. Eutectic characteristics of various compositions of CMA solutions.

At sufficiently high dilutions, the interactions between ions in solution are purely coulombic, and the osmotic and activity coefficients are determined by the charge type alone. At higher molalities, specific effects become marked and eventually become dominant. Various explanations of these phenomena have been offered in the context of activity coefficients.[8,9]

The freezing point depression ΔT_f can be obtained from the relationship:

$$\Delta T_f (1+b\Delta T_f) = \Sigma m\lambda\phi \qquad (1)$$

first introduced by Guggenheim and Prue,[10] where, for aqueous solutions, $b=4.8\times10^{-4}\ ^{\circ}K^{-1}$ and λ is the *cryoscopic* constant, equal to $1.860\ ^{\circ}K$/mole-kg. Σm is equal to $2m$ for symmetrical electrolytes (such as NaCl, $CuSO_4$ and NaO_2CCH_3) and $3m$ for asymmetrical electrolytes, such as $CaCl_2$, $Ca(O_2CCH_3)_2$ and $Mg(O_2CCH_3)_2$. The molality, m, is defined as the number of moles per 1000 g of solvent.

The *osmotic* coefficient, ϕ, is given by the equation:

$$\phi = 1 - \frac{1}{3}A|z_+z_-|I^{1/2}\sigma(I^{1/2}) \qquad (2)$$

where A is the Debye-Hückel constant ($1.124\ kg^{1/2}mole^{-1/2}$), z_+ and z_- are the charge numbers of the ions, I is the ionic strength, and σ is a function describing the ionic interaction within a solution. Values of the function σ can be obtained from:

$$\sigma(y) = \frac{3}{y^3}\left(1+y-\frac{1}{1+y}-2\ln(1+y)\right) \qquad (3)$$

The ionic strength I is related to the ionic activity coefficient by:

$$-\log f_i = \frac{\alpha z_i^2\sqrt{I}}{1+\beta\gamma\sqrt{I}} \qquad (4)$$

where f_i is the activity coefficient, α and β are parameters varying with temperature and the dielectric constant, and γ is the ion-size parameter, or effective ionic radius.

The ionic strength can be estimated from the summation of the product molarity times ionic charge squared for all ionic species present in the solution, i.e.:

$$I = 0.5\,(c_1z_1^2 + c_2z_2^2 + \ldots + c_iz_i^2) \qquad (5)$$

We have taken this relationship one step further. Since c is the molarity, defined as number of moles per 1000 cc of solution, a simple relationship between molality and molarity can be written:

$$m_i\rho_{solution} = c_i \qquad (6)$$

Further, for a single electrolyte, we can write:

$$m_1z_1 = m_2z_2 \qquad (7)$$

as a necessary condition of neutrality, or

$$m_2 = \frac{m_1z_1}{z_2} \qquad (8)$$

Introduction of equations (6) and (8) in (5) for a single electrolyte yields:

$$I = m_1\rho_{solution}\left(\frac{z_1^2}{2} + \frac{z_1z_2}{2}\right) \qquad (9)$$

We label the expression within the parentheses the *Ionic Strength Indicator* (ISI) which is a characteristic parameter of single-electrolyte aqueous solutions. For two monovalent ions,

the value is equal to 1, for a monovalent/bivalent combination it is 3, and for two bivalent ions the ISI is equal to 4.

Example Calculation

Calculate the freezing point depression of a 28% (by weight) aqueous solution of NaCl.

The molality, m, can be obtained by dividing the weight of sodium chloride in 1000 g of solvent by the MW of NaCl.

$$m = \left(\frac{280 \times 1000}{720}\right) / 58.5 = 6.6$$

The ionic strength, I, can be calculated using $\rho = 1.323$ g/cc (the measured density of 28% NaCl solution) and ISI = 1.

$$I = 6.6 \times 1.323 \times 1 = 8.73 \text{ and } I^{1/2} = 2.95$$

Then, $\sigma(I^{1/2}) = .179$

The osmotic coefficient may then be evaluated:

$$\phi = 1 - \frac{1}{3} \times 1.124 \times (1 \times 1) \times 2.95 \times .179 = .802$$

and finally (ignoring $b\Delta T_f$)

$$\Delta T_f = 2 \times 6.6 \times 1.860 \times .802 = 21^{\circ}K \text{ or } ^{\circ}C$$

The predicted freezing point depression for a 28% NaCl solution is 21°C below the freezing point of water.

The Debye-Huckel theory has been applied to CMA solutions. Table 1 presents the predicted results. The theoretical freezing points lag behind the experimental by approximately 10°C. Apparently, certain special activity coefficients are in effect here. However, the slight differences observed among the experimental results of the freezing points of the three compounds were observed in the fundamental prediction as well, i.e., the order of de-icing effectiveness was MgAc, NaCl and CaAc. A combination of the Debye-Huckel theory and our experimental results can be extended to other similar salts in like concentration ranges to provide a good prediction of their de-icing characteristics.

CONCLUSIONS

This work resulted in a number of original findings. A reaction scheme involving acetic acid and native limestone has resulted in a good yield of calcium acetate. While dolomites were equally effective, the calcium-magnesium acetate mixture that was produced did not exhibit a better de-icing performance than that of calcium acetate. Hence, in view of the scope of this work, only the reaction of limestone ($CaCO_3$) with acetic acid can be considered as a viable means to produce an acetate de-icing agent.

A process design and economic evaluation was presented. The price of CMA varied from $590/ton for a 10,000 gallon per day plant at $2.50 per gallon of acetic acid, to $290/ton for a 50,000 gallon per day plant at $1.25 per gallon of acetic acid. These prices are within the ranges of prices for present de-icing compounds. The immense secondary costs associated with the use of chloride salts make the acetates even more attractive.

TABLE 1
Predicted Freezing Point Depression Using the Debye-Huckel Theory

NaCl		CaAc		MgAc	
% w	ΔT_f(°C)	% w	ΔT_f(°C)	% w	ΔT_f(°C)
0	0	0	0	0	0
5	2.9	5	2.8	5	3.1
10	6.1	10	5.8	10	6.4
15	9.7	15	9.2	15	10.2
20	13.8	20	13.2	20	14.7
25	18.5	25	17.8	25	19.9

Finally, the de-icing and eutectic characteristics of the acetates have been experimentally determined and fundamentally justified using the Debye-Hückel theory.

ACKNOWLEDGMENT

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HIGH-SPEED GRAVEL ROADS

by Matthew Reckard

The Dalton Highway: not quite a high-speed gravel road — yet.

Alaskans seeking to improve the quality of their rural roads might do well to consider surfacing them with gravel instead of asphalt — especially in areas with extensive permafrost or muskeg. This ironic and seemingly backward idea results from the great difficulties which are encountered in trying to build and maintain a stable road embankment over poor foundation material. Without such stability, asphalt surfaces quickly become distorted, cracked and full of potholes. In severe cases, road crews may not be able to keep roads in a condition for safe high-speed travel, even with a great expenditure of time and money.

Gravel surfaces, of course, suffer from embankment instability too, but the resulting problems are sometimes less severe and are nearly always easier and cheaper to repair. Differential thaw settlement, for example, slowly but continuously creates humps and dips in roads. On a gravel surface, these distortions can be smoothed out as a part of the regular grading plan, sometimes with little or no extra effort. On a paved road there is no alternative but to put up with the humps and dips for as long as can be tolerated, then tear up the entire pavement, recondition the roadbed, and repave.

Technically feasible designs are possible which would provide stable roads over virtually any terrain. Permafrost areas, for example, could be spanned with continuous bridges supported on refrigerated pilings, similar to the above-ground sections of the Alyeska pipeline. Such a design might be practical for spanning small pockets of bad ground, but the cost would be astronomical if it were used for any significant

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Matthew Reckard *is a research engineer with the Alaska Department of Transportation and Public Facilities, Research Section. A version of this paper was presented at the 33rd AAAS Alaska Science Conference in September 1982.*

distance. Over long stretches of unstable ground, then, gravel-surfaced roads are likely to be the most cost-effective means of providing high-speed travel.

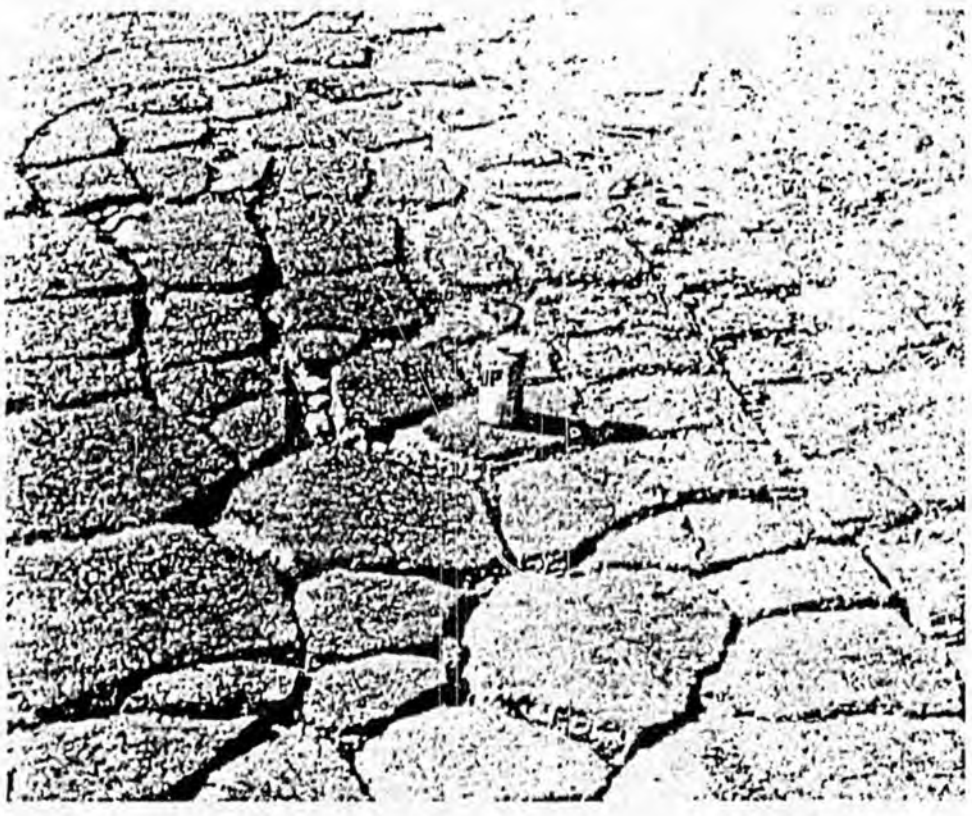
Experience has shown that gravel-surfaced roads can provide adequate performance under difficult conditions. Surface roughness measurements made on the Alaska Highway in 1980 by the Research Section of the Department of Transportation and Public Facilities showed a smoother surface on the Canadian (gravel) side of the border than on the Alaska (paved) side. These measurements were made with a Mays Ride Meter over 39 miles of paved road and 62 miles of gravel-surfaced road. Average axle movements were 13% less on the gravel portion then on the paved sections. Perhaps more significantly, the incidence of large (>1") axle movements – which indicates severe dips or potholes – was several times as great on the paved sections.

REQUIREMENTS

Many gravel roads are in poor shape, of course, and to make them safe for high-speed travel is not an inexpensive task. The basic needs for location and dimensions of the road – including alignment, width of surface, and grades – are virtually identical to those for paved roads. Many older roads are narrow, winding and steep, and upgrading these would be expensive no matter what type of surfacing they have.

Gravel-surfaced roads require a greater "crown" (transverse slope) than paved roads to ensure good drainage of water from the surface. This not only reduces muddiness and rutting during rainy weather, but also reduces formation of potholes and "washboarding." A 4% crown is usually recommended for gravel surfaces whereas 2% is typical of paved roads.[1,2] This requirement has little or no effect on costs, but is sometimes overlooked in building and maintaining gravel roads. A good gravel road also needs a surface layer of hard, crushed gravel with sufficient fine material to act as a binder.[3] Such material compacts well and "sets up" into a hard, smooth surface. Many gravel roads have been surfaced with uncrushed material (which is cheaper) and have few silt- and clay-sized particles or "fines" (which is intended to limit frost heaving). The result is loose gravel on the surface, much more dust and poorer overall surface quality.

Pavement may be no panacea. Asphalt road surfaces in the north, like the cracked one shown here, often break up quickly. (All illustrations courtesy DOTPF.)



A major cost in maintaining high quality gravel roads is periodic surface treatment with a dust palliative. This is a wide group of materials which provide a weak cementing action to the gravel, thus promoting a hard, smooth surface with fewer potholes, less washboarding and reduced dust problems. Although this treatment is expensive, it may pay for itself by reducing the need for grading and the loss of surface gravel. The reduction in dust is almost mandatory if high-speed travel is to be made safely. Examples of dust palliatives include waste oil, calcium chloride, emulsified asphalt and lignins. They have been used rarely outside of urban areas in Alaska, although calcium chloride has been used widely in the Yukon (including the Alaska Highway). Calcium magnesium acetate (CMA) might also be an effective dust palliative, since like calcium chloride it is hygroscopic, but it has not been used for this purpose.

CONSTRUCTION COSTS

The most obvious difference between the costs of building gravel and paved roads is the cost of the asphalt pavement. On recent Alaskan rural highway projects, this amounts to roughly $75,000 per mile of two-lane road, including incidentals such as paint striping and mobilization. In some cases, however, other factors could result in even greater cost differences between gravel and paved roads.

One of these is the limitation on the amount of fines allowed near the surface of the embankment. Current Alaska design policy[4] places restrictions on fines as deep as 3½ feet below a paved surface in order to reduce frost heaving of the roadway. Thaw weakening of heaved embankments causes severe and permanent damage to asphalt pavements, justifying this policy for paved roads.[5] Damage to gravel-surfaced roads from thaw weakening, however, is limited to greater muddiness and rutting at breakup – a temporary and relatively inexpensive problem. Greater amounts of fines might therefore be tolerated in gravel-surfaced roads.

"Clean" gravel (free of fines) is often expensive since good sources are rare in many areas. Restrictions of fines content, then, often leads to greater material processing, longer haul distances, and difficulties in securing necessary permits (many

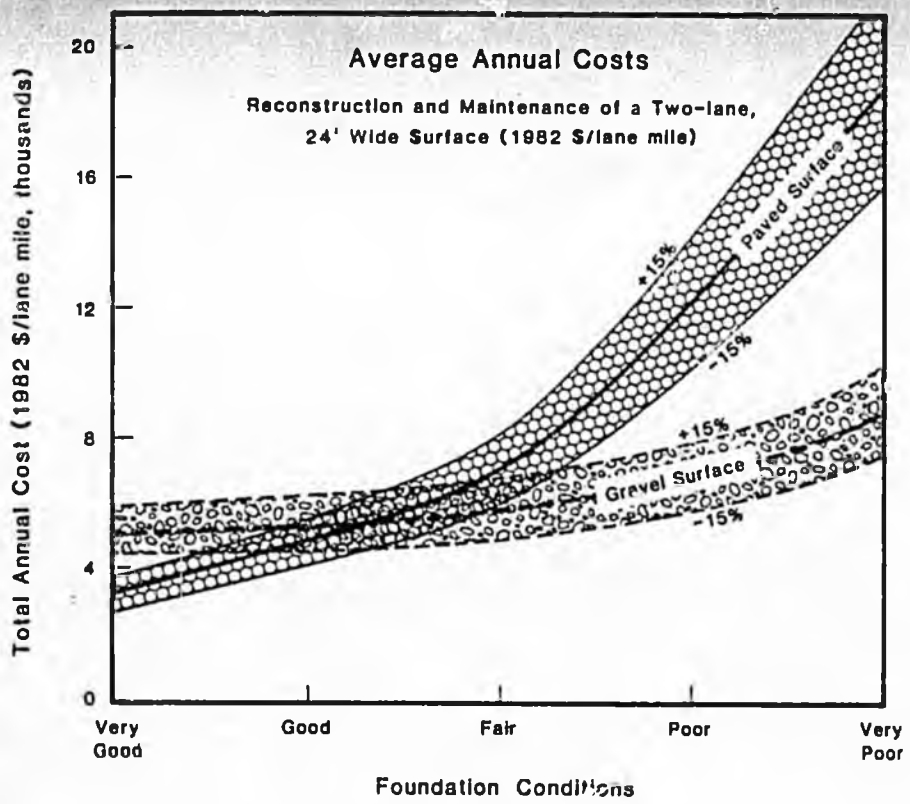


Figure 1. Estimated costs per year for well-maintained roadways.

"clean" gravels are river bottom deposits and mining them can cause environmental damage). Gravel suitable for unpaved roads may be much cheaper than that for paved roads (as much as $100,000 per mile of two-lane road, based on some recent contract unit prices).

Similar savings might result where roadways are cut through "dirty" material or even soft, degradable bedrock. For a paved road, excavations must be made to a level well below the final surface to remove these materials. This excavated material must then be replaced with clean gravel hauled from elsewhere. Much of this might be avoided if the road were unpaved, since the original material could be left in place.

Unusually thick road embankments are sometimes built in permafrost areas in order to insulate the original ground and protect it from thawing and settling. In some cases, manufactured insulation board has been placed beneath roadways. In such areas, gravel roads may be much cheaper to build than paved roadways since there is less need for these measures. This is because gravel surfaces stay cooler in summer than paved ones[6] (probably due to a combination of greater albedo and the cooling effect of greater evaporation of moisture from gravel surfaces). Since the surface stays cooler, less insulation is required to prevent thawing the underlying permafrost. The magnitude of the reduction depends upon the local climatic conditions (particularly the thawing index), but calculations utilizing the Modified Berggren Equation suggest that it is approximately equivalent to two feet of gravel in Interior Alaska and one foot on the North Slope. In Interior Alaska, this alone might result in saving $250,000 per mile for two-lane roadway.

MAINTENANCE COSTS

Maintenance of a high-quality road is not inexpensive even in the best of circumstances. Grading and treatment with dust palliatives must be performed regularly, and the cost of the latter is relatively high. In addition, the surfacing layer of gravel must be renewed every few years as grading and traffic wear it away. These expenses are higher where the foundation soils or the road embankment itself are of poor quality, but they are significant even if a road is built on bedrock.

In contrast, maintenance costs for paved roads are highly variable. If an embankment of material unsusceptible to frost is built on bedrock, it is likely that an asphalt pavement will have a long life with little need for patching or pothole filling. On poor roadbeds, the situation is drastically different. There have been numerous instances on highway construction projects over permafrost where pavement repairs have been necessary even before the entire project was completed.

Figure 1 illustrates the estimated cost of maintaining a paved road and a gravel-surfaced road in a condition adequate for high-speed (55 mph) travel as a function of the roadbed quality. The estimate assumes maintenance over the alignment for an indefinite period, and the cost of periodic repaving, regraveling and reconditioning are included in the averages. The "foundation quality" is meant to be a combination of both embankment and foundation soil conditions. Costs were estimated based on recent contract prices for various activities, on historical state maintenance costs and work levels, on current prices for asphalt, dust palliatives and other materials, and on interviews with state maintenance, design and construction personnel. Exact predictions of these costs cannot be expected, as is indicated by the range of costs shown in the graph. The estimate indicates that a paved surface is cheaper to maintain than a gravel one if the road foundation is very good and both types of surfaces are kept in good condition. As foundation quality deteriorates, however, this advantage disappears, and where foundation quality is very poor, gravel surfaces appear to be much cheaper.

Many sections of Alaska's highways, paved and unpaved, have not always been kept in a "high-speed" condition, and dust palliatives have rarely been used in rural areas. The cost estimates in Figure 1 therefore necessarily rely to some extent on theoretical instead of empirical data. The accuracy of the estimate – and in particular the exact crossover point between paved and unpaved surface costs – may thus be questioned. That such a crossover exists, however, seems clear.

It also seems clear that high quality gravel surfaces should be given serious consideration when plans for road improvements are formulated. Such surfaces might yield both better performance and lower costs in some areas, and the resulting experience would help to clarify the trade-offs between paved and unpaved roads.

A case in point which is of considerable current interest is the Dalton Highway. Much of this road passes over permafrost which provides a poor foundation. An asphalt pavement may deteriorate rapidly here, and many improvements are possible short of paving the road. Maintenance of a proper crown would by itself improve the road. The only good surfacing gravel ever placed on the road has been put there in the last year and a half; most of the road still has none. Virtually no dust palliatives have ever been used on the Dalton Highway; these could improve the surface further, reduce the need for grading, and reduce the loss of surfacing gravel as well as help to control dust problems.

A program to do all of the above would cost a considerable amount of money, but not nearly as much as a project to pave the road. It might also be more successful than an asphalt pavement on the long stretches of unstable ground the Dalton Highway crosses. On more stable parts of the road, on the other hand, paving may well be the most cost-effective means of improvement.

CONCLUSIONS

High-speed gravel roads merit serious consideration on Alaska's rural highways, particularly where poor foundation conditions – such as permafrost and muskeg – are encountered and in areas where clean gravels unsusceptible to frost are scarce. Asphalt pavements are likely to perform poorly in such areas and to have high construction and maintenance costs. Neither highway users, nor state highway personnel, nor taxpayers will be happy if, a few years after an expensive paving project, a road is as bad as or worse than it was before. Even some parts of Alaska's highways which are now paved might be improved by taking the "backward" step of giving them a high-quality gravel surface – and money could be saved in the process.

This article is adapted from the author's report "Costs and Performance of High Speed Gravel Roads." Requests for the full report should be sent to Barbara Trego, Publications Specialist, Department of Transportation and Public Facilities, Division of Planning and Programming, Research Section, 2301 Peger Road, Fairbanks, Alaska 99707.

REFERENCES

[1] Evans, J.H.T. Undated. The Use of Calcium Chloride as a Dustlayer. Yukon Territory Department of Engineering, Whitehorse, Canada. Unpublished paper.

[2] Calcium Chloride in Road Improvement. Technical Data HP1, Allied Chemical Canada, LTD.

[3] See, for example, AASHTO Specification No. M-147 in "Standard Specifications for Transportation Materials and Methods of Sampling and Testing," July 1978. American Association of State Highway and Transportation Officials, 444 N. Capitol St., N.W., Suite 225, Washington, DC 20001.

[4] Guide for Flexible Pavement: Design and Evaluation. 1982. Alaska DOTPF, Division of Standards and Technical Services, Feb.

[5] McHattie, R., B. Connor and D. Esch. 1980. Pavement Structure Evaluation of Alaska Highways. Alaska DOTPF Research Report No. FHWA-AK-RD-80-1.

[6] Lunardini, V. J. 1981. Heat Transfer in Cold Climates. Van Nostrand-Reinhold Co., NY.

PUBLICATIONS

Note: Building in the North, the collection of classic Eb Rice articles, is being reissued with some minor revisions and updating by the School of Engineering here at the University of Alaska-Fairbanks. In keeping with Eb's wishes, profits – if any – from sales of his book will go toward furthering the cause of northern engineering education.

Important sidelight to the foregoing note: *The Northern Engineer* has very few copies left of the earlier printing of Building in the North. If you need the book, place your order with the *Office of the Dean, School of Engineering, University of Alaska, Fairbanks, AK 99701.* The new copies will be available sometime after the first of the year; price is not yet known, but given inflation over the intervening years, it is sure to be more than the previous $4.

• • • •

NOTED

Undergraduates studying civil engineering, geology or geological engineering are eligible to apply for a $1000 annual scholarship established at the University of Alaska by R&M Consultants. The scholarship is a memorial to the late Ralph Migliaccio, founder of R&M and the firm's president until his death.

Preference will be given to applicants demonstrating high scholastic ability, and financial need may be considered. The University of Alaska Foundation will administer the scholarship fund; scholarships will have a spring semester application deadline and will be awarded for the following fall semester. Forms and further information are available from *Dixie Brown, Executive Director, University Foundation, 113 Bunnell Building, University of Alaska, Fairbanks, AK 99701.*

• • • •

The Alaska Academy of Engineering and Sciences is up and going. A newly released flyer states the academy is open to any individual with a professional interest in Alaska engineering and science. No discipline, group or geographic region within the state will dominate; potential members from academia, industry, government and the private sector are encouraged to join.

The overall purpose of the academy is given as "the advancement of engineering and scientific knowledge, practice, and public service through the encouragement of: (a) scientific research and discovery, (b) technological innovation, (c) discussion of engineering and scientific problems and issues, and (d) publication and discussion of technological and scientific information and knowledge."

Ambitious plans already exist for the group to fulfill its aims. The academy plans to hold a conference each spring; to

HCR

44

HOUSE TRANSPORTATION COMMITTEE
DAILY AGENDA

1) CALL MEETING TO ORDER

2) Tuesday, April 24, 1984
Note Time

3) Note members present and excused

4) Recognize VIP's

PROCESSION OF MEETING

5) Discuss proposed legislation:

HCR 44 by Rep. Szymanski requesting reduce speed zone on the Seward Highway.

6) Announce time of adjournment

STATE OF ALASKA 1984 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date:

REQUEST
Bill/Resolution No.: HCR 44
Title: "...requesting a speed zone on (the) Seward Highway."
Sponsor: Representative Szymanski
Requestor: House Transportation
Date of Request: 2-9-84

FISCAL DETAIL
Agency Affected: Public Safety
Program Category Affected: Administration of Justice
BRU, Program or Subprogram(s) Affected: Alaska State Troopers

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	0.0	0.0	0.0	0.0	0.0	0.0
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

ANALYSIS: Attach a separate page for analysis

Prepared By: Francis C. Allan F.C.A. mcl Phone: 269-5691
Division: Alaska State Troopers Date: 01/31/84

Approved by Commissioner: Robert J. Sundberg Jr. Date: 2/14/84
Agency: Public Safety

Distribution (by Agency preparing fiscal note):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

12/1/83

FEB 15 1984

DEPARTMENT OF PUBLIC SAFETY

POSITION PAPER - HCR 44

Support

January 31, 1984

HCR 44 - "An act relating to requesting a speed zone on (the) Seward Highway."

Our initial indications reveal that the lowering of the speed limit on this portion of the Seward Highway would not be in the overall best interest of the public. However, since the resolution requests that Department of Transportation "investigate the possibility" of lowering the speed limit in this area, we concur that this would be a worthwhile effort.

Robert J. Sundberg
Commissioner

Alaska State Legislature

House of Representatives

Representative Mike Szymanski

Official Business

SR-A-Box 1304B
Anchorage, Alaska 99502
Phone (907) 349-3373

While in Session:
Pouch V
State Capitol
Juneau, Alaska 99811

February 10, 1983

TO: Representative Bette Cato

FROM: Representative Mike Szymanski

SUBJECT: HCR 44

I am enclosing some back-up information on HCR 44. I would very much appreciate it if this bill could be scheduled for hearing as soon as possible and would also like to request that a teleconference be set up during the hearing.

Thank you.

Alaska State Legislature

House of Representatives

Representative Mike Szymanski

Official Business

SR-A-Box 1304B
Anchorage, Alaska 99502
Phone (907) 349-3373

While in Session:
Pouch V
State Capitol
Juneau, Alaska 99811

October 10, 1983

Mr. Dave Haugen
Deputy Commissioner
Central Region
Department of Transportation
and Public Facilities
State of Alaska
Pouch 6900
Anchorage, Alaska 99502

Dear Dave:

Just a short note to bring you up-to-date on the Bird/Indian public meeting the other night which covered a request they have made to establish a speed zone in their area.

Mr. Don Morefield of your staff did an outstanding job of presenting the technical aspects of the speed study but, unfortunately, it was very difficult for the people to understand why a zone is not warranted with the high rates of speed existing in this area.

While I understand from a technical perspective the highway is well designed to accommodate the 55+ mile per hour traffic, it does not appear to accommodate the evergrowing residential area in the Bird Creek community.

Enclosed is a copy of the draft speed zone resolution I anticipate introducing during the next legislative session, but before it is actually introduced, I would like to suggest possibly another meeting be scheduled with one of your Design/Construction representatives, Highway Safety Planning Agency and/or Municipality of Anchorage Public Safety official to discuss the establishment of the speed zone and any alternatives that may be possible.

It is my understanding from Mr. Morefield's presentation that the highway can more than accommodate the high speed traffic that is running on it now and that past statistics related to accidents and fatalities cannot be used toward the current speed zone request. I am a little concerned with the fact that we will have to have additional fatalities/automobile accidents before the safety conditions warrant a speed zone or other alternatives to be recognized by the department. This is unacceptable to me and I will not wait for more deaths to occur before pursuing the matter further.

Also enclosed for your information and consideration is a letter from Renee Wilson of Bird Creek which clearly sets forth the community concern.

Your suggestions and thoughts and a meeting with the community would be greatly appreciated.

Sincerely,

Mike Szymanski
Representative

xc: Turnagain Arm Community Council
Senator Paul Fischer
Senator Don Gilman
Assemblyman Dana Brockway
Assemblyman Don Smith

Alaska State Legislature

House of Representatives

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

January 24, 1983

Mr. Pat Durkin
President
Boretide-Indian Community
Council
SRA Box 8705
Anchorage, Alaska 99540

Dear Pat and Council Members:

I would like to take this opportunity to formally thank all of you for having taken the time to meet with me on January 5. I was very pleased with both the turnout and the seriousness of the conversation. The meeting was informative and better prepared me to represent your interests here at the capitol.

Now that I've had a few weeks to nose around, I thought I would fill you in on what I found out on some of the projects we discussed. Before I left Anchorage, my staff and I attended a series of meetings with State and Municipal officials. Here is the word on the status of various projects:

1. Bike Path: I have been assured by Municipal and State officials that the bike path planning is on schedule and that the path will be completed this coming summer. I was also told that $250,000 was sufficient for the project. Please note enclosure from Department of Transportation which shows a breakdown on expenditures to date.

2. School Bus Stop Signs: I asked Dick Armstrong of DOT about the procedure for erecting signs and he informed me that the signs would be posted as soon as construction in the area is completed. He said that this is normal DOT procedure.

3. Bird House/No Passing Zone: Dick and his staff were not really aware that this was a problem, but agreed to study it. He said that if there was a history of accidents in the area, as you mentioned, he saw no problem with changing that section to no passing. One of his staff suggested that perhaps it had been designated for passing because of the relative lack of acceptable passing zones on the Turnagain Arm part of the highway.

They will most likely wait until construction is complete to make a decision. I'll pester them.

4. Speeding Problem Through Indian: DOT is aware of the problems and plans to monitor conditions once the highway is finished. Although federal regulations dictate 55 mph for interstate highways, Dick said that there can be exceptions and this may be one. It is a volatile issue with many groups opposing a rezoning. The final determination will be made after traffic and density studies are complete. Be assured that I'm with you and will fight for reduced speed.

5. Boat Ramp: DOT suggested that not only is a boat ramp probably not desirable, but that there are some technical problems as well. They suggested that while the ramp would benefit experienced Inlet boaters, it would also encourage foolhardy Cheechakos and would no doubt prove a burden to emergency rescue operations in the area. There are also some DOT restrictions on constructing off-ramps, etc., which preclude the construction of a ramp at that site.

6. Reflectors at Driveway Entrances: DOT does not erect reflectors as a rule. They could, but it would set an expensive precedent and would cost the State about ten times what a private individual can do it for. However, DOT has no restriction against individuals erecting reflectors themselves.

7. Ball Parks: Chip Dennerlein, Director of Public Services, and his executive staff met with me for over four hours. We discussed several South Anchorage issues, including your park. He said that there is no problem with constructing a simple playing field area which could be maintained locally. The Municipality of Anchorage is not averse to the use of the old dump site and are looking into the possibility of converting it. $250,000 is available in the 1984 CIP for an Indian Ballpark.

8. People Mover Service/Commuter Trains: The extension of bus service to the Turnagain Arm is already being studied. Apparently, ridership is the determining factor and, as yet, there are not sufficient numbers to warrant the cost. Express buses (twice a day) and/or contract bussing has also been considered. While the possibility of extending service to the Arm has been studied, in Chip's words, "it is probably still a few years away." The same is true for commuter train service.

I realize that the above is brief and does not represent everything we talked about on the 5th. I am still investigating some of the other projects we discussed (e.g.: airstrip, campsite) and will keep you informed of any progress. If any of you wish to discuss these

projects in more detail, or anything else, please don't hesitate in contacting me or my staff (Mark Higgins and Joan Metcalf) in Juneau at 465-4978. You can also write to me care of Pouch V, Juneau 99811.

Please don't be strangers, and count on hearing from me soon.

Kindest regards,

Mike Szymanski

Mike Szymanski
Representative

Enclosure

P.S. I would like to set up a teleconf. for the next council meeting. With advance notice, you can check the phone equipment out of the Leg-Affairs office in Anchorage.

Alaska State Legislature

House of Representatives

Representative Mike Szymanski

Official Business

SR-A-Box 1304B
Anchorage, Alaska 99502
Phone (907) 349-3373

While in Session:
Pouch V
State Capitol
Juneau, Alaska 99811

March 23, 1984

TO: Rhonda

FROM: Jane

Additional back-up for HCR 44 (to accompany "contributing factors report").

Thanks.

Number of accidents involving excess speed as the contributing factor on mile 100 - 103.5 of the Seward Highway (through Bird/ Indian)

DATE		NUMBER OF ACCIDENTS	DEGREE OF INJURY
1977		4	4 minor injuries
1978		3	3 minor injuries
1979		3	3 minor injuries 3 major injuries
1980		3	2 minor injuries
1981		4	4 minor injuries
1982		1	1 fatal injury
1983	(until Sept.)	3	4 minor injuries

Alaska State Legislature

House of Representatives

Representative Mike Szymanski

Official Business

SR-A-Box 1304B
Anchorage, Alaska 99502
Phone (907) 349-3373

While in Session:
Pouch V
State Capitol
Juneau, Alaska 99811

March 20, 1984

TO: Representative Bette Cato
Chair, House Transportation Committee

FROM: Representative Mike Szymanski

SUBJECT: Scheduling of HCR 44, legislation requesting a speed zone on the Seward Highway.

I would like to request that HCR 44, legislation requesting a speed zone on the portion of the Seward Highway that passes through the community of Bird/Indian, be heard before the Transportation Committee.

Attached is back-up information which includes a petition from the residents of this community in support of the resolution and accident statistics for this portion of the highway over a seven year period.

Your attention to this request would be appreciated.

STATE OF ALASKA 1984 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date:

REQUEST
Bill/Resolution No.: HCR 44
Title: "...requesting a speed zone on (the) Seward Highway."
Sponsor: Representative Szymanski
Requestor: House Transportation
Date of Request: 2-9-84

FISCAL DETAIL
Agency Affected: Public Safety
Program Category Affected: Administration of Justice
BRU, Program or Subprogram(s) Affected: Alaska State Troopers

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	0.0	0.0	0.0	0.0	0.0	0.0
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

ANALYSIS: Attach a separate page for analysis

Prepared By: Francis C. Allan F.C.A. mcl Phone: 269-5691
Division: Alaska State Troopers Date: 01/31/84

Approved by Commissioner: Robert J. Sundberg Date: 2/14/84
Agency: Public Safety

Distribution (by Agency preparing fiscal note):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

12/1/83

DEPARTMENT OF PUBLIC SAFETY

POSITION PAPER - HCR 44

Support

January 31, 1984

HCR 44 - "An act relating to requesting a speed zone on (the) Seward Highway."

Our initial indications reveal that the lowering of the speed limit on this portion of the Seward Highway would not be in the overall best interest of the public. However, since the resolution requests that Department of Transportation "investigate the possibility" of lowering the speed limit in this area, we concur that this would be a worthwhile effort.

Robert J. Sundberg
Commissioner

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CONTRIBUTING FACTOR REPORT

ROUTE	MIPT	DATE	NUMBER	FATAL	MAJ INJ	MIN INJ	STREET	CROSS STREET	CONTRIBUTING FACTORS
130000	100.03	790828	7908270			4	NEW SEWARD HWY	MI 99.5	62 50 - -
130000	100.36	830201	8302069				MI 100 SEWARD HWY		15 74 01
130000	100.36	830212	8302821			2	MI 100 SEWARD HWY		(21) 04
130000	100.48	770628	7709433				SEWARD HWY MP 100		X X
130000	100.48	780614	7806834				SEWARD HWY	MILE 100	15 - - -
130000	100.48	790705	7905939			1	SEWARD HWY	MI 100	46 -
130000	100.48	800626	8006655		1		SEWARD HWY	MI 100	04 -
130000	100.48	800726	8007531			1	MI 100 SEWARD HWY		01 - 22 -
130000	100.53	780113	7800686			1	MI 100 SEWARD HWY		(21) 74
130000	100.68	810111	8100439		1		MILE 100.2	SEWARD HWY	(21) 74
130000	100.86	821220	8219007				MI 100.5 SEWARD HWY	N/B	(21)
130000	100.92	820404	8205054				MI 100.9 SEWARD HWY		05 09 01
130000	101.01	780317	7803640				MI 100.5 SEWARD HWY		09 - 01 -
130000	101.03	770813	7711748		3	1	SEWARD HWY	THE BIRD HOUSE	22 06 06 -
130000	101.05	800728	8007753				SEWARD HWY	BIRD HOUSE P/L	X X X X
130000	101.05	801207	8015772				MI 100.8 SEWARD	BIRD HOUSE P/L	(21) - 01 - 01 -
130000	101.05	810419	8104059				NEW SEWARD HWY	BIRD HOUSE BAR	15 -
130000	101.13	770729	7711010				SEWARD HWY	BIRD HOUSE	15 - - -
130000	101.22	770603	7708166			2	SEWARD HWY	SCOTTISH INN	01 - 01 - 01 -
130000	101.22	770603	[illegible]82				SEWARD HWY	SCOTTISH INN	01 -
130000	101.25	810325	8103421				MI 101.8 SEWARD HWY	BIRD CREEK BRIDGE	09 - 01 -
130000	101.28	801102	8012825				SEWARD HWY	MI 106.8	27 (21) - -
130000	101.28	801127	8012949				SEWARD HWY		X X X X
130000	101.28	801127	8015753				SEWARD HWY	MP 100	2 - 22 -
130000	101.30	770701	7709612				SEWARD HWY		X X X X
130000	101.30	770827	7712400			1	SEWARD HWY	BIRD CREEK CAMP GRND	04 (21) 01 -
130000	101.30	780725	7808683				SEWARD HIGHWAY	BIRD CK CAMPGROUN R	15 - 20 -
130000	101.41	770122	7701178				SEWARD HWY	101 MI	X X
130000	101.41	770521	7707567			1	NEW SEWARD HWY	MILE 101	02 -
130000	101.41	780619	7807038				101 MI POST SEWARD H		61 -
130000	101.41	781203	7815950				NEW SEWARD	MI 101	74 - - -
130000	101.41	790217	7901141				MI 101 SEWARD HWY		(21) - 01 - 01 -
130000	101.41	791110	7911742				MI 101 SEWARD	DRIVEWAY	22 -
130000	101.41	810620	8106701			1	MI 101 SEWARD	DUMP RD	22 - 01 -
130000	101.41	820106	8200192				SEWARD HWY	MILE 101	
130000	101.41	820531	8207385			2	SEWARD HWY	AT MI 101 SB	15 20
130000	101.41	820820	8211969			2	SEWARD HWY SB	MILE 101	15 -
130000	101.41	821222	8219780			1	SEWARD	AT MP 101	64 07
130000	101.41	830718	8309959				MI 101 SEWARD		(21)
130000	101.41	830807	8311788				MP 101	SEWARD HWY	02
130000	101.41	830822	8313099			2	SEWARD HWY	2000' S BIRD CRK BRI	(21) 01 01
130000	101.41	830904	8313539				SEWARD HWY	AT MI 101	11 01 01
130000	101.59	830818	8312955				MI 101	BIRD CK CAMPGD	01 -
130000	101.60	821215	8220511	1			SEWARD HWY APPROX	MI 101.7	20 15 02
130000	101.71	810516	8105262			3	SEWARD HWY MI 101.5	BIRD CRK BRIDGE	04 (21)
130000	101.81	810614	8106350			1	MI 101.7 SEWARD	BIRD CREEK BRIDGE	15 (21) 01 -
130000	101.81	820524	8207082				MI 101.7 SEWARD HWY	BIRDCRK BRIDGE	10 (
130000	101.83	780822	7810336			2	SEWARD	BIRD CREEK BRIDGE	04 (
130000	101.83	810729	8107509				SEWARD HWY	BIRD CREEK BRIDGE	11
130000	101.85	801102	8012822			2	MI 101.6 SEWARD HWY	BIRD CRK BRIDGE	(21) -
130000	101.85	811206	8115335				SEWARD HWY	BIRD CRK BRIDGE	7[illegible]
130000	101.85	820820	8211473				SEWARD HWY	NEAR BIRD CREEK	7[illegible] 01
130000	101.87	820819	8211451				SEWARD HWY	BIRD CK BRIDGE	11 J 78

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CONTRIBUTING FACTOR REPORT

ROUTE	MIPT	DATE	NUMBER	FATAL	MAJ INJ	MIN INJ	STREET	CROSS STREET	CONTRIBUTING FACTOR
130000	101.88	770625	7709290				SEWARD HWY	BIRD CREEK	15 - 01 -
130000	101.88	771203	7717456			1	SEWARD HWY	BIRD CK CAMP	01 -
130000	101.88	790930	7912207	1		1	SEWARD HWY	MI 102	03 43 01 -
130000	101.88	810121	8100766				SEWARD HWY	MI 101	74 - 22 -
130000	101.88	810718	8107318				SEWARD HWY	MI 101.5	04 05 01 -
130000	101.88	810816	8108418				SEWARD HWY	BIRD CREEK	06 - - -
130000	101.90	820407	8205136				SEWARD HWY	17 MI S ANCH	
130000	101.91	770127	7701468				SEWARD WAY	BIRD CREEK BRIDGE	- -
130000	101.91	770405	7705575			3	SEWARD HWY	ANCHORAGE	04 (21)
130000	101.91	770819	7712050			1	SEWARD HWY	MI 101.5	10 04
130000	101.91	780123	7801194				MILE 101.5 SEWARD		64 -
130000	101.91	790122	7918788			2	SEWARD HWY MI 101.5	BIRD CREEK BRIDGE	04 74
130000	101.91	790611	7906410				SEWARD HWY	BIRD CREEK BRIDGE	42 - - -
130000	101.91	790804	7907218				BIRD CRK BRIDGE	SEWARD NEW HW	06 - 06 -
130000	101.91	800816	8003809				SEWARD HWY	MI 101.5	- -
130000	101.93	810521	81054				MILE 101.8 SEWARD	BIRD CREEK BRIDGE	15 07 01 -
130000	101.93	810612	8106024		1		MI 101.5 SEWARD HWY	BIRDCRK BRIDGE	X - 01 -
130000	101.95	771202	7717403		1		SEWARD HWY	BIRD CREEK BRIDGE	06 -
130000	101.95	780525	7805594				MI 101 SEWARD	BIRD CREEK BRIDGE	15 - 15 -
130000	101.99	800823	8010568				SEWARD HWY	BIRD CREEK	(21) - 62 -
130000	102.01	790101	7917804		3	3	SEWARD HWY	MI 101.6	04 (21) - -
130000	102.01	811111	8113501				SEWARD HWY	BIRD CRK BRIDGE	06 04
130000	102.01	830508	8305917			1	SEWARD HWY	AT MI 101.6	10
130000	102.21	790111	7919228				SEWARD HWY	BIRD CREEK	X X
130000	102.25	801102	8013310			2	SEWARD HWY	BIRD CREEK	74 47 74 47
130000	102.34	811206	8115361				SEWARD HWY	MCHUGH CREEK	X X X X
130000	102.35	790305	7901891				MI 102 SEWARD		(21) 74
130000	102.35	790414	7903855				MI 102 SEWARD		10 21 01 -
130000	102.35	791130	7912945				NEW SEWARD	MI 102	61 74
130000	102.35	800619	8008219				SEWARD HWY	SEWARD	01 -
130000	102.35	810605	8105883				MI 102 SEWARD HWY		61 -
130000	102.35	830422	8305539				SEWARD HWY	MI 102	-
130000	102.47	770113	7700721				SEWARD HY	MILE POST 102	(21) -
130000	102.75	780523	7805552			1	SEWARD HWY AT	MI 102.4	61 -
130000	102.75	790908	7909211			1	SEWARD	MI 102.4	16 - 63 -
130000	102.86	791103	7911610			3	MI 102.5	SEWARD HWY	04 09 01 -
130000	102.88	780224	7802868	1			MILE 102.5 SEWARD HY		01 63 01 -
130000	102.88	800916	8013690				SEWARD HWY	MI 102 1/2	01 01 48 -
130000	103.15	790512	7904600				MI 102.8 SEWARD		22 -
130000	103.17	790803	7907113				SEWARD HWY		X X X X
130000	103.22	800203	8002755				MI 102.9 SEWARD HWY	DIMOND JIMS BAR	09 - 01 -
130000	103.22	810721	8107285				SEWARD HWY	INDIAN CK BRIDGE	06 09 01 -
130000	103.22	810929	8111535				NEW SEWARD HWY	DIAMOND JIMS CLUB	11 -
130000	103.29	790119	7918626				SEWARD HWY	INDIAN CREEK BRIDGE	X X
130000	103.31	770217	7702760				SEWARD HWY	103	- - 15 -
130000	103.31	771230	7719097				SEWARD HWY	MI 103	07 (21) 07 21
130000	103.31	780205	7801838		1		SEWARD HWY	MI 103	22 30 22 80
130000	103.31	780615	7906867				SEWARD HWY	MP 103	X X X X
130000	103.31	780722	7809603				SEWARD HWY	MILE 103	06 07 20 06
130000	103.31	781227	7817523				MI 103 SEWARD	INDIAN CREEK	(21) - 01 - 21 -
130000	103.31	790804	7907214				MI 103 SEWARD HWY		X X X X
130000	103.35	790528	7905198				SEWARD HWY	INDIAN CREEK BR	22 - - - 11 -
130000	103.41	820501	8206174				MI 103 SEWARD HWY	AT ENT TO BORE TIDE	22 15 01

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CONTRIBUTING FACTOR REPORT

ROUTE	MIPT	DATE	NUMBER	FATAL	MAJ INJ	MIN INJ	STREET	CROSS STREET	CONTRIBUTING FACTOR
130000	103.61	790710	7906005		1	1		SEWARD NEW HW	22 -
130000	103.64	820630	8208794				SEWARD HWY	12.3 MI S WEIGH STAT	
130000	103.68	810626	8106425				SEWARD HWY 1/8 MI		X X X X
130000	103.81	790413	7903704			1	MI 103.5 SEWARD		07 (21)
130000	103.81	791221	7913786				MI 103.8 SEWARD	INDIAN HOUSE	09 - 01 -
130000	103.81	800306	8003130				MI 103.5 SEWARD HWY		06 -
130000	103.81	800530	8005890				MI 103.9 SEWARD HWY	INDIAN HOUSE BAR	09 - 01 -
130000	103.81	820101	8200009				SEWARD HWY	INDIAN HOUSE	06 09 01
130000	103.81	830823	8313125			2	SEWARD HWY	MI 103.5	
130000	103.96	780802	7809904				SEWARD HWY	DEARMON	X X
* 130000	TOTALS:		116 ACCIDENTS		3 FATALITIES		12 MAJOR INJURIES	53 MINOR INJURIES	

MORE
INFORMATION FOR FIELD CONFAC :

THIS IS A CODED ITEM WHICH INDICATES THE CONTRIBUTING FACTORS ASCRIBED TO THIS VEHICLE IN THIS ACCIDENT. THIS COMES FROM FORM 12-203 BOXES 22(ITEM #450) & 23(ITEM #460) IF THIS IS THE LEFT VEHICLE RECORDED ON THE FORM OR BOXES 24(ITEM#470) AND 25(ITEM #480) IF THE RIGHT VEHICLE RECORDED ON THE FORM.

VALID CODES AND MEANINGS:

-	NOT APPLICABLE
X	UNKNOWN
01	NONE
02	ALCOHOL TEST GIVEN
03	ALCOHOL-NO TEST GIVEN
04	ALCOHOL SUSPECTED,NOT PROVEN
05	BACKING UNSAFELY
06	DRIVER INATTENTION
07	DRIVER INEXPERIENCE
08	DRUGS (ILLEGAL)

MORE

09	FAILURE TO YIELD
10	FELL ASLEEP
11	FOLLOWING TOO CLOSELY
12	ILLNESS
13	LOST CONCIOUSNESS
14	PASSENGER DISTRACTION
15	PASSING OR LANE USAGE IMPROPER
16	PEDESTRIAN ERROR/CONFUSION
17	PHYSICAL DISABILITY
18	PRESCRIPTION MEDICATION
19	TRAFFIC CONTROL DEVICE DISREGARDED
20	TURNING IMPROPERLY
21	UNSAFE SPEED
22	OTHER HUMAN FACTOR
41	ACCELERATION DEFECTIVE
42	BRAKES DEFECTIVE
43	HEADLIGHTS DEFECTIVE
44	OTHER LIGHTING DEFECTS
45	OVERSIZED VEHICLE
46	STEERING FAILURE
47	TIRE FAILURE/INADEQUATE
48	TOW HITCH DEFECTIVE
49	WINDSHIELD INADEQUATE

MORE

50	OTHER VEHICULAR FACTOR
61	ANIMAL'S ACTION
62	GLARE
63	VIEW OBSTRUCTED/LIMITED
64	OTHER ENVIRONMENTAL FACTOR
71	LANE MARKING IMPROPER/INADEQUATE
72	CONSTRUCTION DEBRIS
73	PAVEMENT DETERIORATED
74	PAVEMENT SLIPPERY
75	SHOULDERS
76	SIGNS MISSING/INOPERATIVE
77	TRAFFIC SIGNAL INOPERATIVE
78	CONSTRUCTION AREA
00	OTHER ROADWAY FACTOR

WE, THE UNDERSIGNED, RESIDENTS OF INDIAN AND OF BIRD CREEK, ALASKA - ON TURNAGAIN ARM- RESPECTFULLY REQUEST YOUR SUPPORT IN OUR APPEAL TO THE STATE'S DEPARTMENT OF TRANSPORTATION TO CREATE A SPEED ZONE ON THAT STRETCH OF THE SEWARD HIGHWAY THAT PASSES THROUGH OUR TWO COMMUNITIES. WE FEEL THAT THE ABOVE IS A PARTICULARLY DANGEROUS (AND WELL-TRAVELED) PIECE OF HIGHWAY, ONE THAT BY ITS VERY STRAIGHTNESS AND OPENESS ENCOURAGES MOTORISTS TO DRIVE AT HIGH SPEED THROUGH OUR RURAL, RESIDENTIAL COMMUNITIES.

(PLEASE PRINT)

NAME MAILING ADDRESS

Vincent D. O'Connell Box 8700 Indian
Vivian Neuman Box 8700 Indian
Kenneth Wilkins Box 8700 Indian
Clarence R. Johnson Box 8745 Indian
[illegible] Box 8575 Indian
Barbara A. [illegible] Box 8575 Indian
Mary Lou Redmond Box 8700 Indian
William M. Johnston Jr. Box 8500 Bird Creek, AK
Harold M. Deane Box 8500 Bird Creek AK
Deborah D. Hagan Box 8606 Bird Creek AK.
Kay Russell Box 8540 Bird Creek AK.
Michael Redmond Box 8700 Indian creek AK.
Lynn Hansen Box 8540 Bird Creek
Hydee J. Hagan Box 8606 Bird creek Ak.
John Bury Box 8501 Bird Creek Alaska
Steven L. Matter Box 8501 Bird Creek AK.
Mike Purkis Box 8642 BIRD CREEK AK.
[illegible] K. Holman SR Box 8515 Bird Creek Ak
Larry Bushnell P.O. Box 583 Girdwood AK 99587
Agnes Emby Emby % [illegible] Bird Creek
Jack S. Porter SR 8600 Bird Creek AK
James Coyle Coyle SR BOX 8642 BIRD CREEK AK

We, the undersigned, residents of Indian and of Bird Creek, Alaska - on Turnagain Arm - respectfully request your support in our appeal to the State's Department of Transportation to create a speed zone on that stretch of the Seward Highway that passes through our two communities. We feel that the above is a particularly dangerous (and well- traveled) piece of highway, one that by its very straightness and openess encourages motorists to drive at high speed through our rural, residential communities.

(PLEASE PRINT)

NAME	MAILING ADDRESS
Lee Miller	Box 8755 Indian ak. 9954[illegible]
CHAD McGREW	4th & Feather ak 99540
Cody Myles	SRA 8800 Indian AK 99540
[illegible]	SR Box 8745 Indian AK 99540
John [illegible]	Box 8801 Indian AK. 9954[illegible]
Nancy Nix	Box 8565 Indian AK. 995[illegible]
[illegible] Mohar	Bird Creek, Al.
Moh[illegible]	

Lethie Collins SR Box 8800 Indian 653-76[illegible]
Jim Veronick Box 8820 Indian 653-764[illegible]
Loren Stout Rt 5 Box 8800 Indian 653 780[illegible]
Rodney G. Vest BX 8735 - Rural Rt Indian AK 995[illegible]
Grace Gordon Box 832 Soldotna, Ak.
Arthur Gordon Soldotna Ak. 283-84[illegible]
Rebecca Sue Hunter % Indian Ak. 653-73[illegible]
~~[illegible]~~
Mary Flynn SR Box 8800 Indian 653-790[illegible]
Warren D. Braddock SR Box 8855 Indian AK 653 750[illegible]
William Curtice PO Box 8531 Indian AK 563-382[illegible]
Gloria A. Young Anch., AK. 562-54[illegible]
David Young Anch, AK " "
Timothy K. Bundy SRA 8654 Indian AK
Dennis Rose SRA 8800 Indian AK 6537313
Rick Wendt SR Box 8800 Indian AK
Brian D. Benson SRA 8654 Indian AK
J. C. Johnston (J.C. Johnston) SRA 8800 Indian, Alaska 653-731[illegible]
Dee Olsen Box 8790 Indian, AK. 653-7647
Robert Marshall Box 8765 Indian AK 653-7234
[illegible] Box 8555 Indian AK 653-7732
[illegible] M. Harkness SRA Box 8800 Indian AK. 653-76[illegible]
Tim McDonald SR Box 8810 Indian AK 653-7212
William J. Khamis 3d Indian AK. 653-7211
Kimberly Gibson Box 8790 Indian Alaska 653-764[illegible]
[illegible] Box 8800 Indian, Alaska 653-731[illegible]
[illegible] Box 8585 Indian Alaska 653-720[illegible]
James David SRA 8800 Indian Alaska 653-7313
Linda Kessler SRA BX 8855 Indian AK 653-7502
Jack [illegible] SRA Box 8855 Indian AK. 653-7502
Tom Weber SRA Box 8855 Indian AK 653-7502
Betty A. Young SRA Box 8725 Indian 653-7732
Yolanda Castro SRA Box 8863 Indian 653-7[illegible]

Steve Wright Box 875 Bird Creek 99540

NANCY E. MCDONALD ST. RT. BOX 8810 INDIAN. AK. 99540

CECILIA R. BRAUND SRA 8154 INDIAN AK 99540

Karlee Wilson Box 8515 Bird Creek 99540

Chris Daniels Box 470 Girdwood 99587

Frank Erlwein Box #31 Girdwood 99587

HUGH CRUIKSHNK JR. TO THE BIRD HOUSE BIRD CREEK 995

SB

165

Offered: 4/18/83

Original sponsor: V.Fischer

IN THE SENATE BY THE RULES COMMITTEE

CS FOR SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 (Rules) am

IN THE LEGISLATURE OF THE STATE OF ALASKA

THIRTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to racing events on public highways."

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

* Section 1. AS 05.90.001 is amended to read:

Sec. 05.90.001. RACING EVENTS. (a) To the extent that it is consistent with federal law and regulations, a [SNOW VEHICLES, AUTOMOBILES, AND MOTORCYCLES MAY BE OPERATED ON STATE HIGHWAYS FOR] special racing event [EVENTS] of limited duration that is [WHICH ARE] conducted according to (b) of this section may be held on a state highway.

(b) The Department of Public Safety may grant permission for a [ATHLETIC COMMISSION MAY ISSUE, AND FOR CAUSE CANCEL, A PERMIT TO CONDUCT A SNOW VEHICLE, AUTOMOBILE OR MOTORCYCLE] racing event as provided in this section under terms and conditions and at times and places the department [COMMISSION] may determine. [IF THE COMMISSION REFUSES TO GRANT A PERMIT TO AN APPLICANT, OR CANCELS A PERMIT, THE APPLICANT OR HOLDER OF THE CANCELLED PERMIT MAY, UPON APPLICATION, HAVE A HEARING UNDER THE PROVISIONS OF THE ADMINISTRATIVE PROCEDURE ACT (AS. 44.62). NO PERMIT MAY BE ISSUED BY THE COMMISSION FOR THE USE OF A STATE HIGHWAY WITHOUT THE CONCURRENCE OF THE COMMISSIONER OF HIGHWAYS AND THE COMMISSIONER OF PUBLIC SAFETY.]

STATE OF ALASKA
FISCAL NOTE

I. REQUEST
Bill/Resolution No.: SS SB 165
Title: Racing on Public Highways
Sponsor: Fischer
Requestor:

II. FISCAL DETAIL
Agency Affected: DOT&PF
Program Category Affected:
BRU, Program of Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING	*-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

*Fiscal impact to the Department is not quantifiable.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Harry Keller
Phone: 789-0841 Ext. 2
Division: Standards & Technical Services Division
Date: 4/12/83

Approved by Commissioner: Jan Seger
Date: 4/26/83
Department: DOT & PF

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
Copy to Department (for Governor introduced bills)
Copy to Sponsor
Copy to Requestor (if different from Sponsor)

3/8/8

SS SB 165
Racing Events on Public Highways
Department Analysis

Presently AS 05.90.001 permits issuance by the Alaska Athletic Commission of permits to hold snow vehicle, automobile, and motorcycle racing events on State highways. Such a permit may be issued only with the concurrence of the Commissioners of Public Safety and Transportation and Public Facilities.

SS SB 165 proposes to amend AS 05.90.001 so as to allow issuance of such a permit for any racing event. While there is some evidence in SB 165 that the intent is to provide for bicycle racing, the language of SS SB 165 would allow for human foot races, animal races, "go-cart" races, and any other type of speed contest which could be staged upon a public right-of-way. The major impact of this proposal, if it were enacted, would be to increase the number of racing events allowable on the public ways. This increase in racing events would also increase the number of incidents wherein the traveling public would have less than full use of the public highway for normal transportation functions.

AS 19.05.030 sets forth the duties of the Department in terms of planning, programming, design, construction, maintenance and operation. The Alaska Supreme Court has further defined those duties as follows:

> "The duty to maintain a highway safe for travel includes ...a duty of warning the travelling public of any other condition which endangers travel...caused by...the act of third persons." (Racers)

17 AAC 20.020 permits the Department to close or restrict any highway for the protection of the public and requires traffic guidance and/or suitable detours be provided "...as soon as possible to minimize traffic delay."

The interaction of these requirements to provide a safe efficient public way for normal transportation operations is reasonable in light of the large public investment in highways and the need to maintain safe, efficient, transportation for the economic well being of the State.

Enactment of SS SB 165 would minimally increase the operations costs of the Department by increasing the number of times temporary warning and directional devices would be needed to safely and efficiently direct traffic through or around a section of highway where races were being held. The larger cost to the State is not readily quantifiable. These costs are those related to increased user cost associated with detours and

potential tort claims against the State in the event of damage or injury caused by restricting use of the section of highway.

As indicated previously, SS SB 165 increases the exposure by permitting more racing contests on State highways than are now permitted. The existing statutes already inhibit public use of the public ways for motor vehicle racing and further restriction of general public use of public ways does not appear to be in the best interest of the State. There are not too many organizations which are financially able to sponsor snow vehicle, automobile and/or motorcycle races so the demand for use of State highways for such racing is minimal. However, a number of organizations are capable of sponsoring human foot races, bicycle races, "go-cart" races, etc., which could lead to substantially increasing pressure to use State highways for racing participants and observers to the detriment of the traveling public.

We therefore recommend against enactment of SS SB 165. Further, considering the increasing demand being placed upon our transportation facilities we suggest that repeal of AS 05.90.001 may be appropriate.

Page 1, following line 14:

Delete all material and insert

"Sec. 2. AS 05.90.901(b) is repealed and reenacted to read:

(b) the Department of Public Safety may issue, and for cause cancel, permission to conduct a special racing event as provided in this section under terms and conditions and at times and places the department may determine. If an applicant's permission is refused or cancelled, the applicant may, upon application to the Department of Public Safety, have a hearing under the provisions of the Administrative Procedure Act (AS 44.62).

Senator Vic Fischer
Alaska State Legislature
Pouch V • Juneau, Alaska 99811 • (907) 465-4954

May 5, 1983

To: Representative Bette Cato, Chair
House Transportation Committee

From: Senator Vic Fischer

Re: SS SB 165

SS SB 165 is currently before the House Transportation Committee. Following is a brief history of the evolution of SB 165 along with other considerations addressed by this legislation.

* Current regulations (13 AAC 02.400 (h) forbid bicycle racing events on state highways unless they are permitted under AS 05.90.001.

* Apparently by oversite, AS 05.90.001, gives authority to issue permits for special racing events along state highways only to snow machines, automobiles, and motorcycles.

* SB 165 amended AS 05.90.001 to include bicycles.

* Prior to the first committee hearing on SB 165 it became apparent that simply including bicycles under AS 05.90.001 failed to address the inevitability that permits would be sought for racing events involving vehicles other than those authorized (foot races, bathtub races, roller skating races, etc.).

* SS SB 165 was introduced amending AS 05.90.001 so that permits can be issued for any special racing event of limited duration along state highways within limits set by provisions for public safety and compliance with federal laws.

* SS SB 165 was amended in the Rules committee and on the floor of the Senate to require the Department of Public Safety rather than the Athletic Commission to issue permits for special racing events. The Senate felt the troopers were a more appropriate agency to grant and administer permits. A requirement that permits only be issued with the concurrence of the Commissioner of DOTPF and provisions for hearings under the Administrative Procedures Act for persons denied permits were also deleted by floor amendment.

* The Senate clearly concurred that permits for special racing events along state highways should be made more available to the general public and that the process for obtaining those permits should be made easier.

Under current law, no state agency has clear authority to grant permission to conduct racing events along state highways except ones involving motorcycles, automobiles, and snowmachines.

In the absence of that authority, general statutes governing the use of highways apply. These statutes (AS 28.35.140) and regulations (13AAC 02.175(d)&(e)) specifically forbid pedestrians and others from obstructing traffic or being on or along a state highway. Without SB 165, footracers, cross-country skiers, dog-mushers, etc. cannot legally conduct racing events on or along state highways.

Particularly in Alaska, where transportation corridors are at a premium, the need for the public to occasionally use state highways for racing events is apparent. SB 165 is a vehicle for streamling the process of obtaining permits in a manner consistent with public safety.

/gb

Senator Vic Fischer
Alaska State Legislature
Pouch V • Juneau, Alaska 99811 • (907) 465-4954

May 3, 1983

Dan Casey, Commissioner
Department of Transportation
and Public Facilities
Pouch Z
Juneau, AK 99811

Dear Commissioner ~~Casey~~:

On April 26, 1983, I received a fiscal note and department position paper on SB 165--a bill relating to racing events along state highways. There are several things about the way the fiscal note was prepared, its timeliness, and the arguments offered to support the department's recommendation against the bill that I want to bring to your attention because they demonstrate why legislators sometimes become exasperated with agency actions and interactions. Specifically they are:

** The fiscal note (and presumably the position paper) was prepared on 4/12/83. It was not approved until 4/26/83 and not delivered until 4/27/83. During those two weeks SB 165 was on the Senate floor twice and referred back to the Rules Committee for five days. There was ample time to address the issues raised in the position paper, but the failure to submit it on a timely basis prevented the Senate from doing so. In fact, I received the fiscal note nearly a week <u>after</u> SB 165 passed the full Senate.

** SB 165 has a zero fiscal note. I have been unable to find out who originally requested a fiscal note from your Department on this bill. As best as I can determine, neither the State Affairs Committee, the Senate Transportation Committee, nor the Senate Rules Committee's records indicate that they requested it.

Personally, I question why a division would offer a late, and apparently unsolicited position paper on a bill which, as their own research indicated, would have minimal or no impact on their division.

** I truly resent what I refer to as the "Ferraris ok/no bicycle" argument used to justify the department's opposition to this bill. To support current law because it restricts the use of state highways for racing events to the "not too many organizations which are financially able to sponsor snow vehicle, automobile and/or

motorcycle races so the demand for use of state highways for such racing is minimal" is in my opinion a lazy, shallow, and callous argument.

I bring these points to your attention mainly in the hope that you can assure more timely and sensible responses by people in your department.

Best personal regards,

Senator Vic Fischer

bcc: Ginger Baim

STATE OF ALASKA
FISCAL NOTE

I. REQUEST
Bill/Resolution No.: SS SB 165
Title: Racing on Public Highways
Sponsor: Fischer
Requestor:

II. FISCAL DETAIL
Agency Affected: DOT&PF
Program Category Affected:
BRU, Program of Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING	*-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

*Fiscal impact to the Department is not quantifiable.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Harry Keller Phone: 789-0841 Ext.
Division: Standards & Technical Services Division Date: 4/12/83

Approved by Commissioner: [signature] Date: 4/26/83
Department: DOT &PF

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
Copy to Department (for Governor introduced bills)
Copy to Sponsor
Copy to Requestor (if different from Sponsor)

3/8/8

SS SB 165
Racing Events on Public Highways
Department Analysis

Presently AS 05.90.001 permits issuance by the Alaska Athletic Commission of permits to hold snow vehicle, automobile, and motorcycle racing events on State highways. Such a permit may be issued only with the concurrence of the Commissioners of Public Safety and Transportation and Public Facilities.

SS SB 165 proposes to amend AS 05.90.001 so as to allow issuance of such a permit for any racing event. While there is some evidence in SB 165 that the intent is to provide for bicycle racing, the language of SS SB 165 would allow for human foot races, animal races, "go-cart" races, and any other type of speed contest which could be staged upon a public right-of-way. The major impact of this proposal, if it were enacted, would be to increase the number of racing events allowable on the public ways. This increase in racing events would also increase the number of incidents wherein the traveling public would have less than full use of the public highway for normal transportation functions.

AS 19.05.030 sets forth the duties of the Department in terms of planning, programming, design, construction, maintenance and operation. The Alaska Supreme Court has further defined those duties as follows:

> "The duty to maintain a highway safe for travel includes ...a duty of warning the travelling public of any other condition which endangers travel...caused by...the act of third persons." (Racers)

17 AAC 20.020 permits the Department to close or restrict any highway for the protection of the public and requires traffic guidance and/or suitable detours be provided "...as soon as possible to minimize traffic delay."

The interaction of these requirements to provide a safe efficient public way for normal transportation operations is reasonable in light of the large public investment in highways and the need to maintain safe, efficient, transportation for the economic well being of the State.

Enactment of SS SB 165 would minimally increase the operations costs of the Department by increasing the number of times temporary warning and directional devices would be needed to safely and efficiently direct traffic through or around a section of highway where races were being held. The larger cost to the State is not readily quantifiable. These costs are those related to increased user cost associated with detours and

potential tort claims against the State in the event of damage or injury caused by restricting use of the section of highway.

As indicated previously, SS SB 165 increases the exposure by permitting more racing contests on State highways than are now permitted. The existing statutes already inhibit public use of the public ways for motor vehicle racing and further restriction of general public use of public ways does not appear to be in the best interest of the State. There are not too many organizations which are financially able to sponsor snow vehicle, automobile and/or motorcycle races so the demand for use of State highways for such racing is minimal. However, a number of organizations are capable of sponsoring human foot races, bicycle races, "go-cart" races, etc., which could lead to substantially increasing pressure to use State highways for racing participants and observers to the detriment of the traveling public.

We therefore recommend against enactment of SS SB 165. Further, considering the increasing demand being placed upon our transportation facilities we suggest that repeal of AS 05.90.001 may be appropriate.

SB 165 SENATE JOURNAL - PAGE 339- 4 3/ 8/83

SENATE BILL NO. 165 by Senator Vic Fischer, entitled:

"An Act relating to bicycle racing on public highways."

was read the first time and referred to the Transportation Committee.

SB 165 SENATE JOURNAL - PAGE 458- 1 3/22/83

(SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165) by Senator Vic Fischer, entitled:

"An Act relating to racing events on public highways."

was read the first time and referred to the Transportation Committee.

SB 165 SENATE JOURNAL - PAGE 495- 2 3/25/83

The Transportation Committee considered (SPONSOR SUBSTITUTE) (FOR SENATE BILL NO. 165) (racing events on public highways) and a majority of the committee recommended do pass. The report was signed by Senator Moss, Chairman and concurred in by Senators Faiks and Kerttula. Senator Gilman signed "no recommendation".

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 was referred to the Rules Committee.

SB 165 SENATE JOURNAL - PAGE 592- 1 4/ 6/83

The Rules Committee considered (SPONSOR SUBSTITUTE FOR SENATE) (BILL NO. 165) (racing events on public highways) and a majority of the committee recommended it be placed on the April 6 calendar. The report was signed by Senator Faiks, Chairman and concurred in by Senators Kelly and Ferguson.

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 appears on today's calendar.

SB 165 SENATE JOURNAL - PAGE 339- 4 3/ 8/83

SENATE BILL NO. 165 by Senator Vic Fischer, entitled:

"An Act relating to bicycle racing on public highways."

was read the first time and referred to the Transportation Committee.

SB 165 SENATE JOURNAL - PAGE 458- 1 3/22/83

(SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165) by Senator Vic Fischer, entitled:

"An Act relating to racing events on public highways."

was read the first time and referred to the Transportation Committee.

SB 165 SENATE JOURNAL - PAGE 495- 2 3/25/83

The Transportation Committee considered (SPONSOR SUBSTITUTE) (FOR SENATE BILL NO. 165) (racing events on public highways) and a majority of the committee recommended do pass. The report was signed by Senator Moss, Chairman and concurred in by Senators Faiks and Kerttula. Senator Gilman signed "no recommendation".

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 was referred to the Rules Committee.

SB 165 SENATE JOURNAL - PAGE 592- 1 4/ 6/83

The Rules Committee considered (SPONSOR SUBSTITUTE FOR SENATE) (BILL NO. 165) (racing events on public highways) and a majority of the committee recommended it be placed on the April 6 calendar. The report was signed by Senator Faiks, Chairman and concurred in by Senators Kelly and Ferguson.

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 appears on today's calendar.

SB 165 SENATE JOURNAL - PAGE 600- 1 4/ 6/83

(SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165) (racing events on public highways) was read the second time.

Senator Ray moved and asked unanimous consent that SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 be considered engrossed, advanced to third reading and placed on final passage. Without objection, it was so ordered.

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 was read the third time.

The question being: "Shall SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 (racing events on public highways) pass the Senate?" The roll was taken with the following result:

SS SB 165 3RD

Yeas:	15	Bennett, Elkason, Fahrenkamp, Faiks, Ferguson, Fischer Paul, Fischer Vic, Josephson, Kerttula, Moss, Mulcahy, Ray, Sackett, Sturgulewski, Ziegler
Nays:	5	Gilman, Halford, Kelly, Pettyjohn, Rodey

and so, SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 passed the Senate.

Senator Rodey gave notice of reconsideration on SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165.

SB 165 SENATE JOURNAL - PAGE 625- 1 4/ 7/83

Senator Rodey requested that the reconsideration of (SPONSOR) (SUBSTITUTE FOR SENATE BILL NO. 165) (racing events on public highways) be taken up at this time.

SENATE BILLS IN THIRD READING

SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 was before the Senate on reconsideration.

Senator Rodey moved and asked unanimous consent that SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165 be held one day. Without objection, it was so ordered.

Senator Vic Fischer moved and asked unanimous consent that (SPONSOR SUBSTITUTE FOR SENATE BILL NO. 165) (racing events on public highways) be returned to the Rules Committee. Without objection, it was so ordered.

ALASKA STATE LEGISLATURE
SENATE STATE AFFAIRS COMMITTEE
SENATOR VIC FISCHER, CHAIRMAN
POUCH V, JUNEAU 99811
(907) 465-4954

TO: Senator Pappy Moss, Chair
Senate Transportation Committee

FROM: Senator Vic Fischer

DATE: March 12, 1983

RE: Explanation of SB 165.

Senate Bill 165 amends AS 05.90.001 to include bicycles among vehicles authorized to seek permits for the athletic commission for racing events of limited duration on state highways.

AS 05.90.001 provides authority to grant special permits, consistent with federal law and regulations, for racing events on state highways involving snow vehicles, automobiles and motorcycles. AS 05.90.001 (b) specifically authorizes the athletic commission to grant those permits and sets out application procedures and methods to appeal denial of a permit from the commission.

Recently, bicycle enthusiasts have sought permits to conduct races along state highways for community fundraising events and other public purposes. Because AS 05.90.001 does not mention bicycles, the athletic commission cannot grant permits which they have no authority to consider.

AS 05.90.001 clearly establishes the legislatures intent to provide special authorization for "unconventional" use of state highways involving specified vehicles. It appears bicycles were left out as an oversite, rather than any intention on the part of the legislature to exclude them.

In order to provide authorization for bicycle events this summer, it is necessary to pass SB 165 as soon as possible. Your earliest consideration on this bill would be much appreciated.

cc: Senator Jalmar Kerttula

3-17-1983

Representative Terry Martin
State Capitol Building
Pouch V
Juneau, Alaska 99811

Re: Legislative efforts to develop a permitting procedure for bicycle races.

Dear Mr. Martin:

I am working on behalf of the bicycle racing community to help modify certain Alaska Statutes so that we may be able to develop a permitting procedure for bicycle racing.

Within the past few years an addition has been made to Title 13 of the Alaska Administrative Code which reads as follows:

> " (h) No bicycle race may be conducted upon a roadway, except as provided under AS 05.35. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)
>
> Authority: AS 28.05.011 "

However, Chapter 35 as referred to in the above quotation, through apparent oversight, neglects to mention " bicycles " within Sec. 05.35.010 and Sec. 05.35.020. In the most recent update of the Alaska Statutes AS 05.35 has been renumbered AS 05.90.001. A copy of the relevant part of Title 13 and the current wording of AS 05.90.001 is attached.

I have also included a letter I received from Senator Jay Kerttula, dated 2-28-1983, and a bill which Senator Vic Fisher introduced on our behalf, dated 3-8-1983. In the letter from Senator Kerttula he acknowledges that an oversight was made concerning bicycles when Title 13 was adopted. I had contacted Senator Kerttula in my initial request for legislative help. He forewarded our packet of information to the Senate State Affairs Committee, chaired by Senator Vic Fisher and to the Health, Education, and Social Services Committee, chaired by Senator Joe Josephson for their review. Within a matter of days Senator Vic Fisher had introduced the attached bill.

I have been in touch with aides of both Senators Vic Fischer and Joe Josephson. I have been told that if a similar bill were introduced on the House side, speedier legislative action might result. I am hoping you might be in a position to help us with this legislation. Our racing season gets underway in less than a month. Until the bill passes we have the support of law inforcement officials and the highway department as long as we do all we can to help expedite the legislative process. According to AS 05.90.001 we must obtain permission through a permitting procedure from the athletic commission with the concurrence of the commissioners of highways and public safety. I have contacted the latter two commissioners and their replies are attached. I have written a letter to commission chairman Bob Vogt of the athletic commission, but he will apparently be out of state until later this month. With regard to your efforts in working with Senator Joe Joesepnson to redefine the responsibilities of the athletic commission, we would certainly be in favor of any legislation which would help streamline our permitting process for bicycle racing.

Please contact me if you have any questions. I look foreward to hearing from you.

Sincerely,

Bjarne Holm
P.O. Box 4-2442
Anchorage, Alaska
99509

(b) No person may violate the provisions of secs. 385–420 of this chapter. The parent or guardian of a child may not authorize or knowingly permit a child to violate a provision of this chapter.

(c) When signs are erected indicating that no right, left or U-turn is permitted, no person operating a bicycle may disobey the direction of the sign unless first pulling to the extreme right or shoulder of the road, dismounting and making the turn as a pedestrian. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.390. TRAFFIC LAWS AND REGULATIONS APPLY TO PERSON RIDING BICYCLE. Repealed 6/28/79.

13 AAC 02.395. RIDING ON BICYCLES AND CERTAIN NONMOTORIZED CONVEYANCES. (a) Repealed 6/28/79.

(b) No person operating a bicycle upon a highway may carry a person other than the operator, unless the bicycle is equipped with a seat for the passenger, except that an adult rider may carry a child securely attached to his person in a backpack or sling.

(c) No person operating a bicycle or other nonmotorized conveyance may attach, hold on by hand or otherwise secure the bicycle or conveyance or himself to another vehicle so as to be towed or pulled.

(d) A person operating a bicycle upon a highway shall maintain control of the bicycle and shall at all times keep at least one hand upon the handlebars of the bicycle.

(e) No person may operate a unicycle, coaster, roller skates or a similar device on a roadway.

(f) This section does not apply upon a roadway closed to motorized vehicle traffic. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

13 AAC 02.400. RIDING BICYCLES ON ROADWAYS AND BICYCLE PATHS. (a) A person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, and shall give way to the right as far as practicable to a motor vehicle proceeding in the same direction when the driver of the motor vehicle gives audible signal.

(b) Persons riding bicycles on a roadway may not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding bicycles two abreast may not impede traffic and, in a laned roadway, shall ride within the farthest right lane.

(c) When a shoulder of the highway is maintained in good condition, an operator of a bicycle shall use the shoulder of the roadway.

(d) A person operating a bicycle on a trail, path, sidewalk, or sidewalk area shall

(1) exercise care to avoid colliding with other persons or vehicles;

(2) give an audible signal before overtaking and passing a pedestrian; and

(3) yield the right-of-way to any pedestrian.

(e) Repealed 6/28/79.

(f) A person riding a bicycle intending to turn left shall, unless he dismounts and crosses as a pedestrian, comply with the provisions of sec. 200 of this chapter. The operator of a bicycle must give a signal by hand and arm continuously during the last 100 feet traveled unless the hand is needed in the control or operation of the bicycle. When stopped to await an opportunity to turn, a hand and arm signal must be given continuously by the operator.

(g) No person may ride a bicycle upon a sidewalk in a business district or where prohibited by an official traffic-control device.

(h) No bicycle race may be conducted upon a roadway, except as provided under AS 05.35. (In effect before 7/28/59; am 12/15/61, Reg. 3; am 8/10/66, Reg. 22; am 12/31/69, Reg. 31; am 6/28/79, Reg. 70)

Authority: AS 28.05.011

Sec. 05.30.100. Reporting of accidents. The operator of a snow vehicle involved in an accident resulting in injury to, or death of a person, or property damage other than to his snow vehicle the estimated amount of which is $100 or more, shall immediately, by the quickest means of communication, give notice of the accident to the nearest state trooper or city police officer. (§ 1 ch 182 SLA 1968)

Collateral references. — Accidents involving negligence in operation of snowmobile, skimobile, or similar vehicle. 42 ALR3d 1422.

Liability for injury or death allegedly caused by defect in snowmobile or other recreational-purpose vehicle. 81 ALR3d 394.

Sec. 05.30.110. Penalty. A person who violates a provision of this chapter or a regulation adopted under this chapter is guilty of a misdemeanor and, upon conviction, is punishable by a fine of not more than $100 for each offense. (§ 1 ch 182 SLA 1968)

Revisor's notes. — The word "adopted" was substituted for "promulgated" by the revisor of statutes pursuant to AS 01.05.031(b).

Cross references. — As to sentences for misdemeanors, see AS 12.55.135.

Sec. 05.30.120. Definition. In this chapter "snow vehicle" means a vehicle propelled by mechanical power, supported in part by skis, belts, cleats, or low pressure tires, and primarily designed to travel over ice or snow. (§ 1 ch 182 SLA 1968)

Revisor's notes. — A former paragraph defining "cowling" was transferred and redesignated as AS 05.30.040(b) by the revisor of statutes pursuant to AS 01.05.031(b).

Chapter 90. Miscellaneous Provisions.

Section
01. Racing events

Sec. 05.90.001. Racing events. (a) To the extent that it is consistent with federal law and regulations, snow vehicles, automobiles and motorcycles may be operated on state highways for special racing event of limited duration which are conducted according to (b) of this section.

(b) The athletic commission may issue, and for cause cancel, a permit to conduct a snow vehicle, automobile or motorcycle racing events as provided in this section under terms and conditions and at times and places the commission may determine. If the commission refuses to grant a permit to an applicant, or cancels a permit, the applicant or holder of the cancelled permit may, upon application, have a hearing under the provisions of the Administrative Procedure Act (AS 44.62). No permit may be issued by the commission for the use of

a state highway without the concurrence of the commissioner of highways and the commissioner of public safety. (§ 2 ch 192 SLA 1970; AS 05.35.010, 05.35.020)

Revisor's notes. — This section derives from AS 05.35.010 and AS 05.35.020 and was renumbered by the revisor of statutes under AS 01.05.031.

In renumbering the provisions comprising this section, the revisor designated the provisions of former AS 05.35.010 as subsection (a) and the provisions of former AS 05.35.020 as subsection (b), substituted "(b) of this section" for "a prearranged schedule under permit as provided for in AS 05.35.020" in subsection (a), and substituted "this section" for a reference to former AS 05.35.010 — 05.35.020 in the first sentence of subsection (b).

Collateral references. — 4 Am. Jur. 2d Amusements and Exhibitions §§ 28, 29-34, 46, 78.

61A C.J.S. Motor Vehicles §§ 571-587.

Zoning regulation forbidding "racing" or a "race track." 83 ALR2d 877.

Liability of participant in unauthorized highway race for injury to third person directly caused by other racer. 13 ALR3d 431.

Liability of public authority for injury arising out of automobile race conducted on street or highway. 80 ALR3d 1192.

Alaska State Legislature

Senate

Office of the President

Pouch V
State Capitol
Juneau, Alaska 99811

Official Business

February 28, 1983

Mr. Bjarne Holm
The Arctic Bicycle Club
P.O. Box 4-2442
Anchorage, AK. 99509

Dear Mr. Holm:

Thank you for your recent letter. It does appear that there has been an oversight made concerning bicycles when Title 13 of the Alaska Administrative Code was adopted. I have forwarded your letter and attached materials to the Senate State Affairs Committee, Chaired by Sen. Vic Fischer; and the Health, Education, and Social Services Committee, chaired by Sen. Joe Josephson for their review and possible action. You may also wish to contact them directly on this matter.

Thank you for contacting me. I hope this matter is corrected to your satisfaction, and your race is a success.

Sincerely,

Senator Jay Kerttula
Senate President

JK/ja/jdk

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

POUCH Z
JUNEAU, ALASKA 99811
(TELEX 45-328)

February 8, 1983

Mr. Bjarne Holm
Arctic Bicycle Club
P.O. Box 4-2442
Anchorage, AK 99509

Dear Mr. Holm:

In response to your letter of January 11, 1983 as stipulated in Alaska Statutes Supplement Section 05.35.010, the Athletic Commission has the authority for initial issuance of permits for racing events. If the event occurs on the State highway, the concurrence of the Commissioner, Department of Public Safety must be obtained.

Since the permitting authority rests with the Athletic Commission, the basic requirements should be established by them. However, any vehicle, i.e. bicycle, operated on a State highway must conform to all general and any specific traffic regulations pertaining to that vehicle. Any Department of Transportation and Public Facilities restrictions or requirements would be in keeping with these Alaska Statutes or Administrative Code governing such activities. If these procedures are followed, there should be no problem in obtaining Department concurrence.

Thank you for the opportunity to comment on this matter of mutual concern.

Sincerely,

Daniel A. Casey
Commissioner

ILH

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY
OFFICE OF THE COMMISSIONER

POUCH N
JUNEAU, ALASKA 99811
PHONE: 465-4322

January 21, 1983

Mr. Bjarne Holm
Arctic Bicycle Club
P.O. Box 4-2442
Anchorage, AK 99509

Dear Mr. Holm:

It sounds as if you and your organization are in the midst of planning for an exciting year. Your first priority should be to ensure that the amendment to the wording of AS 05.90.001, to include bicycles, is accomplished. This will allow you to proceed legally for the proper authorization for the event.

Any future correspondence with reference to the request for authorization to conduct these events should be directed to the following address:

Alaska State Troopers
P.O. Box 6188 Annex
Anchorage, AK 99502
Attn: Director's Office

Your correspondence should include the scheduled date, time, proposed route, insurance coverage, and any other pertinent data. The Director's office will provide the originator of the correspondence with a form listing all the requirements and will be responsible for forwarding the required documents to this office for authorization.

To provide an idea of what this involves, a copy of this particular type of document is attached for your review. This involves snow machine racing so yours would be somewhat different.

As you can see from the enclosed document, approval must be obtained from the Commissioners of Athletics, Transportation and Public Facilities, and Public Safety. I can expedite the application once it is received by my office. However, I would recommend that you allow at least thirty (30) days from the date of application until the final authorization.

2LH

I do hope that I have been able to assist you in this matter, and if you have any further questions, I will be happy to discuss them with you.

Sincerely,

Robert J. Sundberg
Commissioner

cc: Col. Michael Kolivosky, Director
Alaska State Troopers

Attachment: a/s

The (agency's name) _____ will sponsor this race, and as sponsors will have liability insurance coverage in effect at the time of the event for all participants in the amount of $_____.

This event, to be known as _____(name of race or contest) is scheduled to occur between _____, Alaska and _____, Alaska (route map attached) on the date of _____, 198____.

The sponsors will provide road guards, flagmen, signs, and barricades for any and all road crossings along the route of snowmachine travel.

All snowmachines will be properly registered in compliance with State statutes AS 05.30.020 through AS 05.30.080.

The crossings of all roads and bridges shall be at a maximum speed of 15 miles per hour.

All crossings will be so located as to provide adequate sight distance for motorists using the roadway.

At road crossings, all caution and safety signs intended to regulate traffic flow and insure maximum safety shall provide the follwoing information (BE PREPARED TO STOP, CW20-8, 36" by 36", located 1000 feet from each side of crossing point). Two flagmen with orange vests and stop-go paddles are provided, one for each direction of travel.

Sign stating flagman ahead, 500 feet, size CW20-7, 36" by 36", shall be located 500 feet each side of crossing point. These signs and placement shall conform to the Alaska Traffic Manual. If, at any time, either the Department of Transportation and Public Facilities or the Department of Public Safety feel that the race is endangering the traveling public, the race will be suspended.

No night (hours of darkness) crossings will be authorized.

No parking within 500 feet of any snowmachine crossing point.

The motor mushers will file a bond with the State for any necessary cleanup as a result of this race.

Other Special Requirements:

By signing below the applicant agrees to perform all the conditions of this permit and shall indemnify and save harmless the State, it's officers and employees from all liability, judgement, cost, expenses and claims growing out of damages or alleged damages, of any nature whatsoever to any person or property arising out of performance or nonperformance of the permit.

_____ _____
Authorized Representative Director of Alaska State Troopers

_____ _____
Authorized Representative Date

APPROVAL

_____ _____
Commissioner, Dept. of Transportation/Public Facilities Date

_____ _____
Commissioner, Department of Public Safety Date

_____ _____
Commissioner of Athletics Date

SB

184

561-4221

April 5, 1983

The concept that the transportation industry should be regulated by specific regulatory agencies dates back to the late 1880's in the United States. In Alaska the transportation industry has been regulated since statehood under AS 42.10--Alaska Motor Freight Carrier Act and AS 02.05--Alaska Air Commerce Act of 1960. Initially, regulation was under the Public Service Commission which was split in 1966 into the Alaska Transportation Commission and the Alaska Public Utilities Commission.

Generally, the reason for the regulation of transportation is that it falls within those certain occupations or services which because of their vital and essential interest to the public require a minimal guarantee that certain standards be met. The minimal standards are set through either licensing or registration covering such professions as medicine, law, teaching, barbering and services such as banking institutions, insurance companies, hospitals, taxi cabs, real estate agencies, and transportation. While there is a variety of reasons for the regulation of the individual profession or service, the central reason is that the consumer/public deserves a guarantee that the service received will not be harmful either physically or monetarily. There is a further link in that all such services will be performed efficiently and in most cases at non-discriminatory rates.

Under Alaskan law, the key areas of regulation of transportation are:

1. Entry of new competition (includes expansion of existing authority);

2. Rates for services;

3. Performance of service;

4. Safety of operation (primarily for trucking); and

5. Proof of adequate insurance.

The Commission administers its regulatory authority through various means, a majority of which are required by the statutes. The statutes provide that as a quasi-judicial agency the Commission has powers of subpoena and other processes necessary to conduct hearings, investigations and proceedings necessary to reach a final determination. The statute provides that all parties are assured of fair treatment legal due process and that rules of evidence will apply as well as providing for the appeal of any final administrative order to the Superior Court.

Specifically, the theory behind regulation of transportation is that a level of control is necessary to assure the availability of adequate, dependable and available transportation services for the movement of necessary supplies, materials, and people while at the same time providing the consumer with stable service at rates that foster sound economic conditions among the carriers. Further, the consumer is to be provided reasonable rates without undue discrimination or preference while protecting the carrier from unfair or destructive competitive practices.

Without regulation the possibility exists that destructive competition will occur due to the unlimited entry of carriers many of whom may not have adequate knowledge to use the correct equipment or routing for the task to be performed, to establish a system to prevent loss of cargo through misplacement or theft, or to employ competent employees.

If regulation did not exist, there would be no market protection for existing carriers. To many people this is the most offensive aspect of transportation regulation. However, the concept is based on the rationale that transportation companies should be granted a share of the market place that allows a reasonable return on the required investment. The carrier must have a wide range of equipment, personnel, and facilities that will not be fully utilized, but are necessary to meet the public demands for service. Therefore, as long as the authorized carriers maintain adequate equipment, facilities, and personnel to meet the public demands, then new entries should be limited since all that new entries will do is take existing businesses away from existing carriers thus denying them revenue necessary to provide full service.

It should be understood that a high degree of competition exists between the regulated carriers since rates are generally the same or very close for each type of commodity or trip. The carriers compete for customers by demonstrating service, reliability and efficiency in meeting the public demand. If a carrier does not perform for a shipper, there is someone else who will, or there is another mode of transportation. In the situation where a new entrant can prove that none of the existing carriers are performing or that shipping needs are not being met, then new entry is allowed.

In all cases it is the consumer that pays the shipping cost. There seems to be an overriding thought that regulation of transportation places the public in the position of subsidizing an archaic system. What regulation really does is to guarantee the public that a transportation system will exist to move people and commodities throughout an area at reasonable prices and with assurance of competent handling. The current movement toward deregulation is clearly showing a trend toward carriers, both air and motor, concentrating their efforts in high market areas for large shippers and ignoring equal service for small demand areas and small shippers.

Another function of regulation relates to the requirement to file rates for approval and for a carrier to abide by the posted rates. This function reduces the possibility of

either a shipper or a carrier controlling the price and assures that all shippers are treated equally. In the situation where a shipper dictates the price of transportation since it controls a large enough segment that a carrier allows the shipper to dictate its own price, other shippers not having a controlling segment will have to pay higher rates since the carrier is not receiving adequate compensation for the controlled moves. Thus, one shipper gets a lower rate and everyone else makes up for the difference.

Based on its statutory authority the Commission also has the authority to require all common and contract carriers to provide proof of adequate insurance necessary to protect the public. If a carrier does not have insurance on file, it cannot legally operate. The Commission also has authority to conduct safety inspections of all commercial motor vehicles over 4,000 pounds to assure vehicle and load safety. While the commercial vehicle safety program has previously been funded primarily through other agencies responsible for the operation of the weigh stations, as of March 12, 1983, the ATC again became the sole administrative agency responsible for commercial vehicle safety.

The Commission consists of 30 employees, including three Commissioners, two Hearings Examiners and a staff of 25 employees. Attached is a Staffing Chart. In the operating budget for FY 1984 the staff will be reduced by two positions, the Transportation Field Agent II located in Soldotna and the Accounting Technician I in Anchorage, in accordance with the 5% reduction mandated by the administration.

The functional responsibilities of the various employee classifications are:

Commissioners and Hearing Officers are responsible for the adjudicating proceedings. As quasi-judicial officials they are separate from the daily operations of the staff. The Commissioners set general policy guidelines that are implemented by the Executive Director.

Executive Director is responsible for the daily supervision of the staff and the implementation of Commission policy.

Tariff Staff is responsible for reviewing all applications filed with the ATC, review all rate filings, and assist the public by answering questions concerning the statutes and regulations. The staff will assist any applicant in completing any of the necessary forms or in the preparation of a tariff. The tariff staff may intervene at application or revocation hearings as well as opening investigations on rate matters.

Enforcement Staff is responsible for the actual field investigations necessary to prove a violation of the statutes or regulation. The field agents are responsible for initiating most accusations or complaints filed before the Commission for violations and assist the Assistant Attorney General who presents the case at hearings. The field agents also conduct the safety inspections and answer many inquiries from both carriers and non carriers concerning alleged illegal operations.

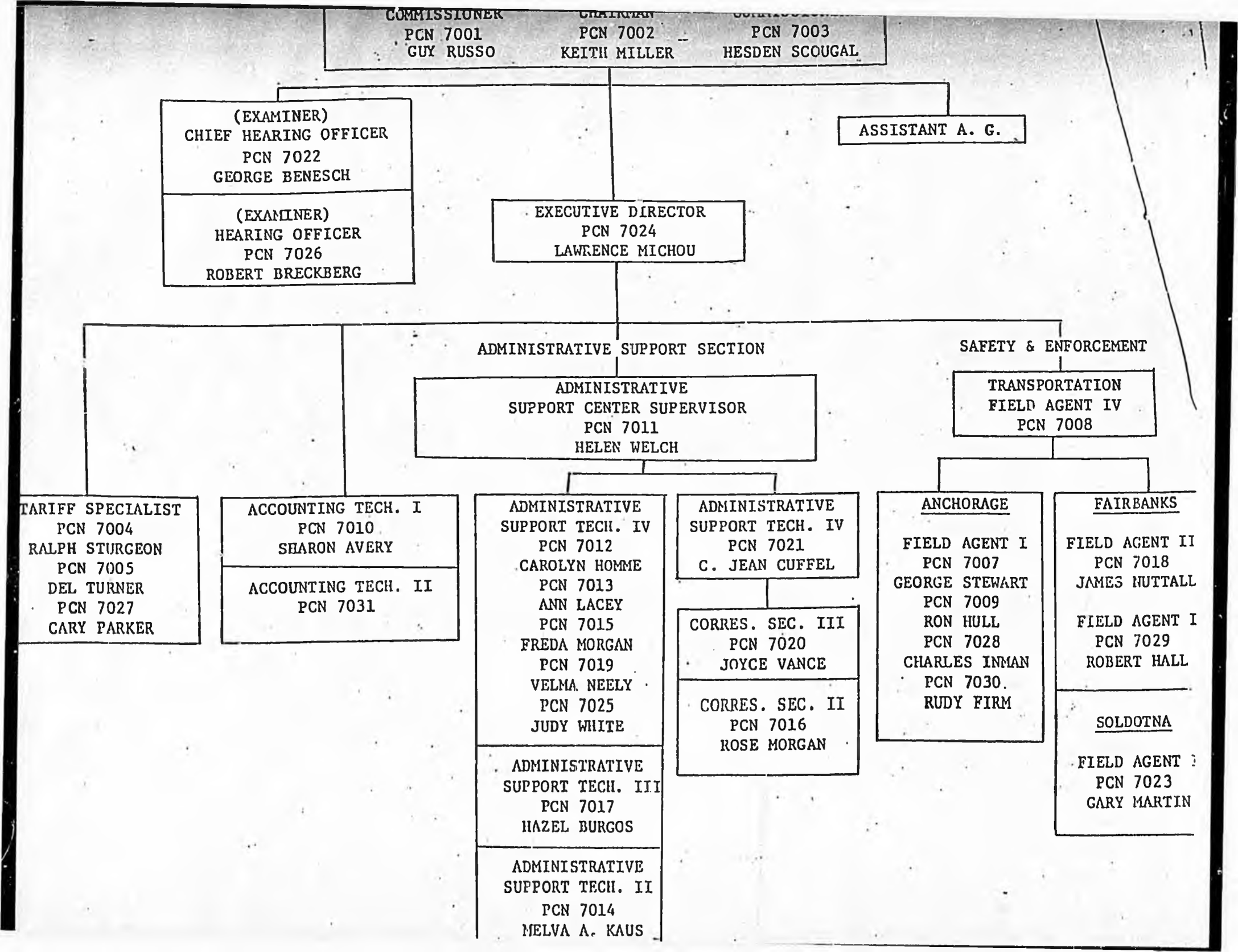
Administrative Support Staff handle the daily work flow and assist the other sections by providing clerical support. Unlike most clerical positions these employees are assigned specific tasks and are responsible for all of the work necessary to complete the processing of the document or bringing it to the attention of either the Tariff Specialist or the Field Agent if a violation is suspected.

ALASKA TRANSPORTATION COMMISSION

ACTIVITIES FOR CALENDAR YEAR 1982

DOCKETS FILED	AIR	MOTOR
Applications for Authority	33	105
Transfers	26	27
Extensions	35	19
Petitions	100	45
Complaints	3	2
Investigations	0	6
Revocations	11	10
Accusations	46	199
	254	413

TOTAL WRITTEN ORDERS ISSUED	803
ENFORCEMENT ACTIVITIES:	
Formal Complaints Acted on	284
Citations (Non-dismissable)	35
Accusations	245
Civil Penalties Collected	$43,275
HEARING SECTION:	
Number of oral Hearings, by docket	132
Number of Hearings by show cause procedure or written submission, by docket	26
REVENUE: FISCAL YEAR 1982	
Applications, Aircraft Registration, Civil Penalties and Sale of Documents Revenue	$155,063
Motor Carrier Weight Fees Collected by ATC	
Motor Carrier Weight Fees (Collected by Division of Motor Vehicles for ATC)	617,054


COMMISSIONER
PCN 7001
GUY RUSSO
CHAIRMAN
PCN 7002
KEITH MILLER
PCN 7003
HESDEN SCOUGAL
(EXAMINER)
CHIEF HEARING OFFICER
PCN 7022
GEORGE BENESCH
(EXAMINER)
HEARING OFFICER
PCN 7026
ROBERT BRECKBERG
ASSISTANT A. G.
EXECUTIVE DIRECTOR
PCN 7024
LAWRENCE MICHOU
ADMINISTRATIVE SUPPORT SECTION
SAFETY & ENFORCEMENT
ADMINISTRATIVE
SUPPORT CENTER SUPERVISOR
PCN 7011
HELEN WELCH
TRANSPORTATION
FIELD AGENT IV
PCN 7008
TARIFF SPECIALIST
PCN 7004
RALPH STURGEON
PCN 7005
DEL TURNER
PCN 7027
CARY PARKER
ACCOUNTING TECH. I
PCN 7010
SHARON AVERY
ACCOUNTING TECH. II
PCN 7031
ADMINISTRATIVE
SUPPORT TECH. IV
PCN 7012
CAROLYN HOMME
PCN 7013
ANN LACEY
PCN 7015
FREDA MORGAN
PCN 7019
VELMA NEELY
PCN 7025
JUDY WHITE
ADMINISTRATIVE
SUPPORT TECH. III
PCN 7017
HAZEL BURGOS
ADMINISTRATIVE
SUPPORT TECH. II
PCN 7014
MELVA A. KAUS
ADMINISTRATIVE
SUPPORT TECH. IV
PCN 7021
C. JEAN CUFFEL
CORRES. SEC. III
PCN 7020
JOYCE VANCE
CORRES. SEC. II
PCN 7016
ROSE MORGAN
ANCHORAGE
FIELD AGENT I
PCN 7007
GEORGE STEWART
PCN 7009
RON HULL
PCN 7028
CHARLES INMAN
PCN 7030.
RUDY FIRM
FAIRBANKS
FIELD AGENT II
PCN 7018
JAMES NUTTALL
FIELD AGENT I
PCN 7029
ROBERT HALL
SOLDOTNA
FIELD AGENT
PCN 7023
GARY MARTIN

STATE OF ALASKA

DEPARTMENT OF COMMERCE &
ECONOMIC DEVELOPMENT

ALASKA TRANSPORTATION COMMISSION

BILL SHEFFIELD, GOVERNOR

SUITE 778, FRONTIER BUILDING
3601 C STREET
ANCHORAGE, ALASKA 99503

PHONE: 561-4221

March 14, 1983

Senator Richard Eliason, Chairman
Labor and Commerce Committee
Senate
Pouch V
Juneau, AK 99811

Dear Senator Eliason:

Your staff has requested that the Alaska Transportation Commission respond to comments made in the Analysis of Public Need section of the April 1, 1982 Performance Review prepared by the Division of Legislative Audit.

The following statement appears in the introductory paragraph:

> "This analysis is not intended to be comprehensive in nature."

Then follows comments relating to nine specific statements. The comments are obviously slanted against the ATC and no effort is made to avoid unsupported generalities. There is no effort made to support the conclusion other than references back to the Recommendations.

Our specific comments for each of the nine areas are as follows:

I. The extent to which the board, commission, or programs has operated in the public interest.

The ATC believes that its operations are in the public interest. Efforts have been made to reduce the processing time of applications while still guaranteeing that all parties receive due process. While this effort may have not been obvious during the time frame covered by the audit, calendar year 1980-81, it was obvious in calendar year 1982 when processing time for non-protested applications averaged less than 90 days. This reduction has been made in spite of the fact that requested additional staff that was recommended in the 1978 audit were never approved in the operating budget.

There is no indication of how the public interest is to be better served by the recommended merger of the ATC and the APUC. It would appear that the public and the regulated industries would be better served by an adequately funded ATC rather than further diluting the economic regulation of transportation by combining it with the regulation of utilities.

The enforcement effort is being improved with a concentration of manpower in three general areas--authorized carrier compliance, elimination of unauthorized operations, and commercial vehicle safety. Again, this effort does not always generate obvious results since seven agents must supervise about 445 authorized motor carriers, 270 authorized air carriers, probably 1500 legitimate private carriers and probably, at any one time, about 50 active unauthorized carriers.

II. The extent to which the operation of the board, commission, or agency program has been inspired or enhanced by existing statutes, procedures and practices which it has adopted, and any other matters including budgetary resource and personnel matter.

The ATC concurs that it was necessary to promulgate revised regulations to assist in a more efficient processing of applications and enforcement action through the hearing stage. However, the length of time in promulgating the regulations did not impede the program as the existing regulations were adequate. It was simply an effort to clarify the procedures for the sake of all concerned. Since the revisions of the procedures covered some 28 pages of the Administrative Code, its is not surprising that it took several years for them to get through drafting into final print. Further, other proposed changes in the regulations have been tabled as the comments received at public hearings indicate they had the potential of causing more problems than improving the situations. It is our opinion that the ATC should have received a more positive comment for not implementing regulations that might have caused an economic hardship on the regulated industries without adequate staff justification.

Again we note that no comment was made concerning the attempts the ATC made to get additional staff as was recommended in the 1978 audit. Further, the fact the Commission recieved a budget reduction in fiscal year 1980 of $103,200 from its maintenance level is not mentioned. It is difficult to maintain a level of service and to improve service without adequate funding and positions.

III. The extent to which the board, commission or agency has recommended statutory changes which are generally of benefit to the public interest.

The Commission has recommended several items for legislative action and has testified on several others. It is difficult for a regulatory commission to recommend legislative changes as such changes have a tendency to either increase or decrease the level of regulation. The Commission is in a better position to advise the Executive and Legislative Branches of the State on the impact of proposed legislation on the industries and the Commission's ability to carry on its mandate.

IV. The extent to which the board, commission or agency has encouraged interested persons to report to it concerning the effect of its regulations and decisions on the effectiveness of service, economy of service, and availability of service which it has provided.

As stated in the audit report, the Commission conducts its business through the hearing process that is designed to guarantee all participants fair treatment and due process of law. Further, the Commission publishes its journal twice a month which is sent to local newspapers, libraries, radio and television stations. The journal contains notices as well as procedural matters that are designed to inform the public of the Commission's business.

V. The extent to which the board, commission or agency has encouraged public participation in the making of its regulations and decisions.

As stated in the audit report, the journal is designed to inform the public of the Commission actions. To further insure that all local participants that wish to take part in a proceeding, the Commission travels to the locality most convenient to the applicant or the respondent. While general public comment is not solicited at Commission proceedings, as such proceedings are quasi-judicial in nature and all parties must be assured of the right of cross-examination, time is allowed for public comment if requested by any party.

VI. The efficiency with which public inquiries or complaints regarding the acitivities of the board, commission or agency filed with it, with the department to which a board or commission is administratively assigned, or with the office of the ombudsman have been processed and resolved.

The response in the audit appears not to relate to the statement. The statement concerns inquiries or complaints of the Commission activities not how enforcement is doing in answering complaints about violation of the statutes or regulations. While we have agreed that the enforcement effort can be improved, this effort has no bearing on our willingness and performance in answering inquiries from the public. We answer as promptly as possible and seek to generally satisfy the public that the ATC is functioning within the law.

The statements concerning the Ombudsman's office are totally misleading. The Commission makes every effort to answer all correspondence from that office within the time frames indicated. Our records indicate that with very few exceptions the Ombudsman has not found the Commission in error. It appears to us that the 33 complaints should have been analyzed so a clear picture of the exact number of resolved and unresolved complaints could be established.

II. The extent to which a board or commission which regulate entry into an occupation or profession has presented qualified applicants to some of the public.

The Commission agrees that more analytical work might be performed on applications. However, this does not mean that the applicant is unqualified. It must be remembered that the regulated transportation industry is highly competitive that the as well as being at the mercy of changing economic condition. Therefore, the analytical evaluation of the application and projected services do not guarantee success, but only that the applicant meets entry standards.

VIII. The extent to which state personnel practices including affirmative active requirements, have been complied with by the board, commission or agency to its own activities and the area of activity or interest.

The Commission has made every effort to function within the state personnel systems, labor agreement and affirmative action program. To the best of our knowledge there have not been any problems in this area for several years.

IX. The extent to which statutory, regulatory, budgeting or other changes are necessary to enable the agency, board, or commission to better serve the interest of the public and to comply with the factors enumerated in this subsection.

The comments in the audit referring the reader to the "Findings and Recommendations" does not answer this statement. The recommended merger of the two Commissions even with the suggestion of a management study does not evaluate the need for statutory, regulatory or budgeting changes necessary for the ATC to conduct its business.

The ATC has requested new positions that would have assisted in the elimination of some of the problems enumerated in the audit and in fact recommended in the 1978 audit. Everyone realizes that any agency can only perform the tasks for which it is funded and must determine the priority of service based on the funds received. The ATC would like to expand its activities in the area of enconomic review of active carriers as well as determination of market needs for additional service, but neither the funds nor the positions have been approved.

In the area of enforcement, the ATC could obviously increase the number of illegal activities that are brought before the Commission for adjudication. But the increase requires more manpower as again priorities must be set between the three areas of enforcement--surveys and enforcement of authorized carriers, prevention of unauthorized carrier, and vehicle safety. As stated in our response to the audit, the Commission recognizes the need to streamline the processing of accusations and citations, but only so much can be done to improve without additional manpower. The enforcement of economic regulation is not a simple matter and requires many manhours of work to gather the evidence to prove a violation has occurred and to prove who committed the violation. It is easy to accuse, but it can be difficult to prove that the accused should have a civil penalty levied against him.

There is no doubt that the major question that should be before the Legislature is that of deregulation. There needs to be a decision as to what direction should be taken in the future as to the amount of economic regulation is needed or desired by both the public and the industry. While very few

states are completely deregulating, several have started looking at lessening regulation that is shown to be of little real value or unreasonably blocks entry or competition. The Commission and the Staff would be happy to assist the Legislature if it is determined that review of AS 42.10 and AS 02.05 is needed. There will always be a need to protect the public by requiring carriers to register, show a degree of fitness, provide proof of insurance, and to operate safe vehicles. However, the need to prove public convenience and necessity for entry, filing and justifying tariffs, and all the required filing of reports may not be as necessary as it was once thought to be.

If you need any additional information, please let me know and we wish to thank you for this opportunity to express our views.

Very truly yours,

Keith H. Miller

Keith H. Miller
Chairman

KHM/LWM/rm

cc: Richard Lyon, Commissioner
Department of Commerce &
Economic Development
Pouch D
Juneau, AK 99811

Emil Notti, Legislative Assistant
to the Governor
Pouch A
Juneau, AK 99811

561-4216

April 11, 1983

David Dye
Administrative Assistant
Senate State Affairs Committee
Pouch V
Juneau, AK 99811

Dear Mr. Dye:

During your discussion with our Executive Director of the Alaska Transportation Commission's role in commercial vehicle safety inspection, you requested that we provide you with a written summary of our proposed program.

The ATC has authority under both AS 42.07 and AS 42.10 to conduct safety inspections of all commercial vehicles in Alaska weighing over 4,000 pounds. The only vehicles that are exempt from inspection are buses and government vehicles. Under its statutory authority, the ATC has published administrative Code 3 AAC 62 which is in fact a safety manual. A copy is enclosed for your information.

The ATC's transportation field agents have conducted random safety inspections for years, but with the enforcement of the safety regulations at the weigh stations by first the Alaska State Police and then the Division of Measurement Standards, the ATC has not attempted to develop a comprehensive safety program. The weigh station program was part of a federally funded program that expired on March 11, 1983. With the completion of the federal program, the responsibility for the safety program has returned to the ATC, but without any funding to administer the program.

A commercial vehicle safety program normally covers three areas--the driver, the power unit and trailing equipment, and the load. The objective of such a program is to protect the public, the driver, and the cargo. Our program would continue the emphasis in all three areas as all three are important in a successful program. Actual safety inspection can and should be conducted in three locations--the terminal, at selected roadside points, and random roadside stops (usually based on obvious violations).

While there are many requirements that a commercial operator must meet for its equipment to pass with 100%, the Commercial Vehicle Safety Alliance has identified 11 as the critical points. A copy of that standard is also attached along with a handout used by the Alliance. Generally, the ATC expects to follow the CVSA standards in its inspection program.

Our proposal includes provisions for both voluntary and involuntary terminal or job site inspection, road site inspection, and random inspection. We expect to use the assistance of the Alaska State Police, local police and the weigh station personnel, in addition to our own staff. We would hope to incorporate a reporting system that would allow the central processing of all inspections in order to develop a good data base to develop statistical analysis necessary to identify problem carriers and/or vehicles.

The actual inspections can result in various classes of recommendations or citations, generally depending on the problem. The first category would be a "fix-it" which simply means something needs to be repaired, is not hazardous to the public, the driver, or cargo. If it is a violation that can be repaired on the s[illegible] a compliance report would not even be written. More se[illegible]s violations would also fall into the "fix-it" category, bu[illegible]he repairs would require verification of repair and possibly could result in a civil penalty. The third category would be more serious violations that require either repair or correction and a formal citation that requires a hearing, as staff would expect to prove a violation that would result in the levying of a civil penalty. The fourth category are deadlines--a vehicle will not be moved under its own power until corrected and a civil penalty would definitely be expected. A fifth category of violations would be primarily lodged against companies that have allowed the operation of vehicles that are found unsafe or who operate vehicles that have not been repaired as indicated.

The ability to cite both the operator and the carrier is a definite advantage of a safety program conducted by an agency with quasi judicial authority rather than a police agency. An agency such as the ATC can require both the driver and the carrier to answer for the violation while a police agency normally can only cite the operator. By making the carrier

assume its responsibilities for its vehicle, we can hopefully develop an awareness among carriers that its vehicles must remain in good repair, that loads be properly secured and protected and that only qualified drivers be employed. While the program should not be viewed as a revenue source, the ability to levy civil penalties of up to $1,000 is defnitely an incentive for a carrier to get into compliance.

The attached budget projection if funded would augment the ATC's staff to a level that would allow it to continue its enforcement functions in the area of economic regulation as well as to initiate a vehicle safety program. We would expect to use all the transportation agents in conducting the safety program as well as to assist in the economic regulation of transportation. With the additional staff, we would expect to log at least 4,000 actual vehicle inspections the first year as a minimum and with possibly as many as 6,000 as a maximum. The number of inspections will vary greatly depending on the completness of the inspection and the number of deficiencies found on the vehicles. Stated simply, the greater the number of violations, the more staff time necessary to conduct the inspection and the follow-up compliance inspection. We would expect that much of the quantify work and data collection can be done by existing staff. The more assistance that we receive from other agencies, the greater the number of vehicles that can be inspected.

The funds necessary to conduct the program would be as follows:

100 Account			
2 Transportation Field Agents - Range 16 - Anch.			
2 X 12 mo X 2463/mo			$59,112
2 Transportation Field Agents - Range 16 - Fairbanks			
2 X 12 mo X 2638/mo			60,112
1 Paralegal Assistant II, Range 16, Anch.			
1 X 12 mo X 2463/mo			29,556
1 Admin. Support Technician, Range 12, Fairbanks			
1 X 12 mo X 2218/mo			26,616
			$183,396
Benefits 183, 396 X .0613		11,243	
Variable Benefits 183, 396 X .1550		28,426	
Health Benefits 6 X 12 X 240 mo		17,280	56,949
		Total	100

240.3