## Legal Considerations Based on Benefit-Cost Analysis

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The legal authorities addressing considerations of policies based on benefit-cost analysis are extremely skimpy. I have run a computer search for any tort claims cases in which a benefit-cost analysis was used and have not been able to find any in the United States.

Absent any cases that give you any direction, the only thing left to do is to resort to common sense.

In the cost benefit analysis the cost of course is determined by the construction cost and the cost of preliminary engineering, preparing the plans, right of way purchase, etc. The benefit is derived by determining a monetary equivalent to the benefit to the public because of the reduction in accidents that it is estimated will not occur if the improvement is made.

The National Safety Council publishes figures on the cost of fatalities, injury and property damage yearly. This is the basis for the monetary value of the benefit. In using the benefit-cost analysis the same common sense approach must be used as is required in all formulas, that is to have the right ingredients in the formula. You can't "fudge" on the construction costs and the benefit to the public in order to come up with a figure high enough to put the project on the top of the list. You also can not "fudge" with the figures on either side to put the project on the bottom of the list.

It is important that the cost figures be updated to take care of inflation or deflation, whichever may occur; and the figures used to compute the benefits be updated annually on the basis of figures supplied by the National Safety Council. The only admonition I can give here is don't play around with the figures in order to have your result come out to a greater one, so that the project is on the list merely because somebody thinks it ought to be there.

I think it is extremely important that we have been unable to find any cases on this matter. Therefore, it

indicates that it is not a matter that the plaintiff's attorneys are using in bringing tort suits against highway divisions. However, that is not to say such tort suits will not happen in the future and that some bright young attorney may conceive a way to bring the benefit-cost analysis into a case to the detriment of the public body. I have no doubt that the benefit-cost analysis has been brought up and discussed in tort claim cases but it has never become a key factor that has been subject to discussion of review upon appeal. It is probably of more importance to defending a action, or non-action, based on cost benefit; and bringing that action under discretionary function immunity.

One of the things that is very important in using the benefit-cost analysis, in case you do ever end up in court, is being able to explain it in language that is understandable to a layman. Many times it is helpful to have charts and other diagrams that will help the jury understand what you are talking about. Sometimes a slide show might even be worthwhile. It is always important to be a little innovative in your defense tactics in order to bring across to the jury clearly what you are trying to explain. Many times it is the inability to explain a particular theory or a particular method of calculating the priority of highway safety projects that may get a public body in trouble.

I realize that this has not been a brilliant exposition on benefit-cost analysis. B-C analysis does not lend itself to that type of discussion, because it has not yet become a controversial issue.

In closing all I can say is that in applying the factors that are used in the benefit-cost analysis the biggest item is the use of common sense in applying the elements and being able to explain those elements in simple direct language that can be understood by laymen.