

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

Materials and Geotechnical Branch
4670 Holly, Unit A
Denver, Colorado 80216-6408



April 13, 2006

CDOT North Holly Complex
Material Conference Room #146

Smoothness Task Force Incentive / Disincentive Sub-Committee Meeting #1 Minutes

The following members attended the meeting:

Smoothness Task force I/D sub Committee

Name	Company	email
Eric Priere	CDOT	Eric.Priere@dot.state.co.us
Brad Parker	Asphalt Paving Co.	Bparker@asphaltpavingco.com
Duaine Couart	RoadTrac Inc	dcouart@roadtracinc.com
ROBERT LESTER	KIEWIT	RLESTER@KIEWIT.COM
Jamie Johnson	Rocky Mtn. Cement Council	Johnson@cementcouncil.org
ERIK JENSEN	CRCC	EJENSEN@CRCC.LLC.COM
Ron Youngman	CO/WY ACPA	2Young2b - Ron@comcast.net
Glenn Frielev	CDOT	Glenn.Frielev@dot.state.co.us

The full Task Force sent the following issues to the Sub-Committee.



Agenda Topic 1:

How do we write an Incentive / Disincentive spec that has the same incentives and disincentives for both industries?

The committee discusses the differences between paying by the square yard or by the cost of the product placed in the lane. It was agreed up on that basing incentives and disincentives off of the cost of the product placed in the lane would be the best way to address the above requirement. Many states are already taking this approach. We will use their examples while tailoring the specification to our needs here in Colorado. Rough examples of this would be paying a percentage of the cost of HMA that was designed to be placed in the lane, or a percentage of the furnished and placed PCCP designed to be placed in the lane. The incentive will be based off the bid price for HMA, SMA, PCCP, etc...items.

Agenda Topic 2:

How do we write a spec that addresses service life and level of investment?

The committee took a look at service life and how we could incorporate it into the specification. The committee felt that changing the spec to pay a percentage of the item unit price, service life would be addressed. This may not be exactly true for all projects but it will be true for the majority of projects. For example an HMA overlay with two 2-inch lifts will generally have a longer service life than a single 2-inch lift. The same could be said for PCCP. A 13-inch pavement will generally last longer than a 8-inch pavement. With each example the cost of the total product placed in the lane will be more for the longer life pavements. Since incentives and disincentives will be based off of that cost a Contractor will be able to earn more incentive on those projects with a perceived longer service life. The committee also understood that service life is dependent on traffic volume. The committee feels that including actual service life into the equation will cause the specification to become difficult to understand and that too many tables would need to be created to address the many situations. I was agreed that the above solution addresses the problem statement and satisfactorily meets the needs set forth by the Task Force.

Agenda Topic 3:

What dollar level will be enough to make the specification meaningful?

The committee looked at several other states levels of incentive. It was discussed that with an increase in the amount of incentive there needed to be a corresponding increase in roadway smoothness. Several of the states we looked at had a ten percent (10%) incentive in the unit price for smoothness. Like wise there was a 10% disincentive to match. The committee felt that we should start with 10% to develop our tables. We will wait until we have the 2006 construction season data before we assign IRI or HRI levels to those tables. After the 2006 construction season the committee will meet and examine the past and present data and develop the tables in such a way that a contractor will have to build a superior roadway in order to reach the 10% increase.



Agenda Topic 4:

What type of incentive / disincentive tables should the spec contain? Stepped? Graduated? Tiered?

The committee discussed the different types of tables that could be incorporated in the specification. The committee agreed that the graduated table with a neutral zone would be the best choice. This type of table would base incentives and disincentives off calculated increments and not steps on a table. Examples of this will be developed and presented at the next Task Force meeting.

Agenda Topic 5:

Should we have different levels of incentives and disincentives for rehabilitation as opposed to new construction?

The committee discussed the kind and number of tables that will be needed for the specification. The committee felt that there should be separate specifications for Asphalt and Concrete. This approach will reduce the confusion that is created when a requirement for one is misinterpreted and applied to the other. There will be two different categories for each specification, (New Construction/Re-Construction) and (Resurfacing). Under resurfacing Asphalt and Concrete will have the following sub-categories:

Asphalt

Cat 1 – Intermediate treatment and one lift
Urban Reconstruction

Cat 2 – Two or more lifts

Cat 3 – Percent Improvement
Rural
Urban

Concrete

Cat 1 – Thin Whitetopping
Urban Reconstruction

Cat 2 – Whitetopping



These categories as with the current and past specifications will not address every situation but will address the majority. Judgment on the part of the Designers and Project Personnel will need to be used with this spec as well. Intersections, short lanes, piece work, etc... will have to be addressed on a case by case basis.

It was decided that members of the committee representing industry would present our work to the full Task Force at the May 23rd meeting. These same representatives would also present at the May 24 AIF and June 13th Joint Co-op meetings. Volunteers to present were **Brad Parker of Asphalt Paving Company** and **Robert Lester of Kiewit**. Brad will be taking the lead at the Joint Co-op meeting and Robert will be taking the lead at the AIF.

