

MINUTES
MICHIGAN STATE TRANSPORTATION COMMISSION WORKSHOP
January 25, 2007
Lansing, Michigan

Meeting noticed in accordance with Open Meetings Act, Public Act 267 of 1976.

Present: Ted Wahby, Chair
 Linda Miller Atkinson, Vice Chair
 Maureen Miller Brosnan, Commissioner
 James R. Rosendall, Commissioner
 James S. Scalici, Commissioner

Also Present: Kirk Steudle, Director
 Larry Tibbits, Chief Operations Officer
 Leon Hank, Chief Administrative Officer
 Frank E. Kelley, Commission Advisor
 Marneta Griffin, Executive Assistant
 Jerry Jones, Commission Auditor
 Patrick Isom, MDOT Attorney General
 John Friend, Bureau Director, Highway Delivery
 John Polasek, Bureau Director, Highway Development
 Myron Frierson, Bureau Director, Finance and Administration
 Susan Mortel, Bureau Director, Transportation Planning
 Tim Hoeffner, Administrator, Intermodal Policy

Excused: Vincent J. Brennan, Commissioner

A list of those people who attended the workshop is attached to the official minutes.

Chair Wahby called the workshop to order at 10:15 a.m. in the Bureau of Aeronautics Auditorium in Lansing, Michigan.

The Workshop topic was Project Estimating and Material Indexing.

Larry Tibbits gave a brief overview regarding the purpose of the workshop that was recommended during the November 16, 2006, Commission meeting. Over the last few months there were a number of discussions had concerning the escalating cost of some of the materials used in our projects. So far we have shared what has happened nationally and some information that we get from AASHTO as to what happens in other states—what other states are seeing as far as which materials are escalating the cost and how fast. During the last Commission there was a lot of discussion on some of those projects where we come in more than 10%, particularly in hot mix asphalt (HMA) and concrete, and the volatility of those fuel dependent products (and different ways of handling the bids). One of the ways to address this is material indexing. Indexing involves locking in costs at the time of the bid.

Overview and General Industry Position on Material Indexing

Glen Bukoski, Vice President, Michigan Infrastructure and Transportation Association (MITA), presented the following information:

Industry Diversity

MDOT requires any contractor working on a project to be pre-qualified in one of 53 categories/disciplines. As of last week 716 contractors statewide were pre-qualified in one or more of the 53 categories/disciplines. The five most significant disciplines and the number of contractors pre-qualified are: concrete paving (50), HMA paving (86), earthwork (340), bridges (107), and underground (i.e., water main) (259).

Material suppliers are those that provide for the 716 pre-qualified contractors the materials the contract documents specify, and the materials and products they need to build the projects. These materials include: aggregates, cements, steel reinforcement, bolts, etc. The MDOT Materials Source Guide lists 1,000+ Certified Suppliers and Manufacturers of products that are approved to be incorporated into MDOT projects.

It is believed that this diverse range of 716 pre-qualified contractors combined with the 1,000+ materials suppliers provide a competitive bid environment which generates the best low price on the project for the taxpayers of Michigan.

Bidding Experiences

MDOT estimates projects and generates an engineers' estimate by using Average Unit Prices (AUP). Average prices are snapshots of market conditions for a selected period of time. In applying the AUP methodology to estimating projects, MDOT's efforts are applauded in accounting for local types of considerations, local market dynamics, seasonal considerations through to the letting, schedules, and also those global considerations (natural disasters, global economy, global marketing), which have an impact on the volatility of material and construction prices, not only in Michigan but across the world. Sometimes the mark is missed. The difficulty is in trying to apply AUP to a non-average project. This creates difficulties when trying to add in or account for those local and global considerations.

Fiscal year 2006 results shows 476 state projects put out for bid by MDOT. Every project had an average of 4.97 bidders; 93% of those projects were automatically approved by the Commission; the total accumulative low bid of all 476 projects came in at 4.1% (\$40.9 million below the engineers' estimate). Finally, MDOT's projects final cost estimates at less than 0.1% over contract amount.

Material Indexing

Historically, still today, MITA has not promoted or supported material indexing of any kind. In the last four years of discussions with the department regarding material indexes for materials such as structural steel, guardrail products, and fuel, the response has always been "thanks, but no thanks". MITA is not supportive of this because they believe that material indexes are a form of price control that limits competition. When you limit competition taxpayers lose because they miss the opportunity to get that best low price. It is further believed that material indexes create situations where bidders begin to bid the risk of the index, trying to guess where the index will go, into their bids.

One concern that is not often talked about is that implementing any kind of indexing provision will be a significant administrative burden to the department and the construction industry. Those efforts would be better spent in developing and competitively bidding in quality construction projects for the taxpayers of the state.

Specific Industry Perspectives on Material Indexing

John Becsey, Executive Director, Asphalt Paving Association of Michigan (APAM), presented the following information:

Project Estimating and Materials Indexing

It appears that two major issues of concern to the Commission involve the general trend of increasing costs for construction materials and the volatility of bid prices. People are interested in how this impacts the department's ability to accurately predict construction costs, and whether there is a way to manage the risk of hot mix asphalt (HMA) price volatility.

There is always discussion about hitting the engineer's estimate especially when the department comes before the Commission on projects that are 10% or greater over the engineers' estimate. There is always the concern brought forward on jobs that go over; rarely is there a discussion on jobs that are under. This all raps up into an impact of how these estimates will impact on the current year construction program, and how they will affect medium to long term planning and program delivery and how it affects the Five Year Program.

A price adjustment index will not increase the department's ability to predict construction costs; mainly because indexing is a dynamic process. It occurs after the bidding is done, and after the engineers' estimate is done. Especially in volatile periods of pricing and lots of fluctuation, it's very difficult to track all the pluses and minuses. We view that as not a positive reason why you would move to a price adjustment index.

MDOT's estimating record is excellent, especially considering the enormity of the task. In the calendar year 2006 (for all the hot mix asphalt paving projects that require a "Cb" or an asphalt paver as a prime to pre-qualify), the total of all jobs bid through the department was 0.23% under the engineer's estimate. MDOT's estimating is based on AUP, there is an extensive database which is well maintained and a very valuable tool, however there is no "average job" - each is unique.

There are many variables that affect pricing: type of work, schedule and project staging, contractor's work load, materials availability, use of recycled asphalt pavement (RAP), and competitive advantage of each contractor.

Managing the Risk of Asphalt Paving Price Volatility

Pricing fluctuations due to swings in the price of asphalt cement and the price adjustment index play a role in managing this risk. Hot mix asphalt (HMA) is made up of 95% aggregate (stone, sand) and 5% asphalt cement (AC). Asphalt cement comes through the crude oil refining process and is the most expensive component of HMA.

APAM's position on price adjustments is that as long as "firm asphalt cement price quotes" are available for bidding, contractors can manage the risk; therefore price adjustment indexes are not needed, and we do not support the use of them for AC.

A typical methodology of how an agency would structure and manage an indexing system involves the asphalt cement index (ACI) being determined monthly, the agency obtains prices from AC suppliers (called "posted prices"), the agency calculates the ACI based on the average of prices obtained, the ACI is published monthly (used for bidding letting in current month, and for price adjustments of work completed that month).

A typical methodology for doing an asphalt paving adjustment to adjust the price of asphalt mix due to the changes in asphalt cement involves the price adjustments being determined monthly, based on asphalt cement index (ACI) during the current month versus the month of the bid for all asphalt paving work completed during that month.

APAM's concern with indexing and how it works is that an asphalt cement index (ACI) may not accurately reflect "true market prices". Oil companies set the price for asphalt cement, but paving contractors can and do negotiate Supply Agreements. These Supply Agreements possibly cover several bid lettings, and bring competitive pricing pressure to the market. The effect of these Supply Agreements may not be reflected in the "posted price" - the "posted price" is similar to the sticker price for a car.

Price Adjustment Example

Part 1:

Assume the bid letting date is April 6th; the April index price for asphalt cement is \$350/ton; Contractor "A" has negotiated a price of \$300/ton for asphalt cement purchased April through July;

Part 2: Index Price for Asphalt Cement Falls

The work is done in June; the June index price for asphalt cement is \$325/ton so there would be a price adjustment— $\$350 - \$325 = \$25$ **deduct**; however the contractor's asphalt cement cost did not change = \$300; **the contractor then suffers a \$25 loss.**

Part 3: Index Price for Asphalt Cement Rises

The work is done in June; the June index price for asphalt cement is \$375/ton so there would be a price adjustment— $\$375 - \$350 = \$25$ **increase**; however the contractor's asphalt cement cost did not change = \$300; **MDOT pays an additional \$25 for a cost increase that didn't occur.**

To summarize, our position is that asphalt cement index is not needed. It is not beneficial to MDOT or Industry, contractor's can manage the risk, and MDOT's estimating is excellent.

Dan DeGraff, Executive Director, Michigan Concrete Paving Association (MCPA), presented the following information:

The members of this Association make up about 95% of the concrete work done in the state. Years ago when there was a shortage of cement and the price went up. Once the supply increased, prices fell—a clear indication of how the market can go up and down. As long as we keep the pressure on being the low bidder, we are going to have the best prices.

MCPA recommends that MDOT maintain the system “as is” on the bidding table without introducing indexing.

Mike Newman, Managing Director, Michigan Aggregate Association (MAA), presented the following information:

This Association represents 50 corporations, producing almost 85% of the aggregate that is produced in Michigan. Michigan has access to numerous out-state markets due to the fact that we have the availability of procurement brought in from other markets. Our members are quite comfortable in a competitive bid process are willing to assume the risks that are inherent in this type of environment. It is our observation that the best price will result from using the market price. We do not support the indexing program; the current system that is used by MDOT is more than sufficient.

MDOT Overview on Material Indexing and MDOT’s Recommendation

John Friend presented the following information:

Mr. Becsey gave examples of fairly straightforward indexing calculations, however there is a repetitive frequency (as well as burdensome administrative costs) in doing this type of calculation when you take into account the number of Transportation Service Centers (TSCs), the number of Project Engineers, and the number of projects that are out there.

In general, we are always watching what percentage of our program is being spent through the design phase, and what percentage is being spent in the construction engineering phase—we don’t want to over-engineer either phase.

The department believes that we receive a sufficient number of bids compared to our national peers. The final recommendation from MDOT’s standpoint to the Commission is that we not implement material indexing of any form. We should continue to monitor the number of bids we receive, and continue to monitor how we are estimating projects to make sure that those fall well within any kind of national accepted standard.

Questions/Answers

Commissioner Rosendall stated that he would have liked to have had the written presented materials a week ahead of time instead of just prior to the workshop; he has not learned anything new. We are talking about spending billions of dollars; therefore the bottom line is finding ways to save money.

Commissioner Scalici asked when the last time indexing was used.

Mr. Friend answered around the late 1980’s early 1990’s.

Commissioner Scalici asked, across the country, how many states are using this.

Mr. Friend answered that is used in a majority of the DOT’s. As for the specific statistics, he can get the information and provide it to the Commission.

Commissioner Scalici then asked, since we abandoned it, have we revisited the possibility of re-entering into it.

Mr. Friend answered that we continue to re-visit it and have looked at it on a number of occasions. It is not something that has been ignored since the 1980's.

Commissioner Scalici asked if you can index certain items or does it have to be blanket.

Mr. Friend answered that he believes you can index certain items.

Commissioner Atkinson asked what circumstances brought about the change from material indexing to not indexing.

Mr. Bukoski answered that he believes it was the industry experience at the time that the indexes were found to be ineffective in doing what the department thought they would be. In fact, the way it was managed before there was no benefit from indexing.

Commissioner Atkinson asked if the department or the industry have as extensive a historical database to draw on as the one referred to in the presentation that allows us to make such accurate estimates.

Mr. Friend stated that he believed the answer is yes, however deferred to John Polasek for a more qualified answer.

Mr. Polasek answered that the database used for their estimating is a national AASHTO program on transport to nationally take into account bidding by areas, unit prices within areas, and different commodities at different times of year.

Commissioner Atkinson asked if it were fair to say that those states which do use material indexing have access to that database just like we do.

Mr. Polasek answered yes.

Commissioner Atkinson stated that she had heard it said that Wisconsin uses indexing but she does not know that for a fact, therefore asking if anyone knew.

Mr. Becsey answered that Wisconsin does not; at least not on asphalt.

Commissioner Rosendall stated that he would like to know how many and which states use indexing.

Commissioner Brosnan stated that she looks at today's workshop as phase one of a continuing educational process for the Commission. She, as one Commissioner, is looking to make a decision (not to be led to a certain decision), but to have a scope of information presented so that she can make a reasonable and responsible decision. Not just about whether indexing as a whole is a good idea, but whether or not there is some type of hybrid that we might be able to put together. In order to help her come to a better decision about whether or not it is a good or bad idea for Michigan, she would like a chance to talk to someone in the industry who has an overall national perspective—who can tell her a little more about the states that are using it, states who have used it in the past, states that have abandoned it or moved to it. She would like the

information to come to her “fresh” not “filtered”.

Further, Commissioner Brosnan stated that what prompted this discussion was the notion that the department was using a 3% margin for the cost of the increase. Information was presented to indicate that that number was not going to be functional for too much longer and we would have to look at re-visiting that. The question was asked to the department as to “what it was going to be”. Subsequently the department was trying to determine what that number would be. Maybe the resources are not available to do it today, but she would like to get back to that big question too as part of the discussion.

Chair Wahby stated that Commissions’ comments were heard and asked that the department get back to them, as a whole, with the requested information.

Director Steudle stated that he would have Mr. Friend get his specific information to the Commission right away. Further, he would tap those “national experts” that Commissioner Brosnan referred to and get written statements or documents from them for the Commissions’ review.

Commissioner Atkinson asked if the other Commissioners wanted the historical information (what was indexed and why it was discontinued); they all agreed.

Director Steudle answered that the department could provide this information from their archives and possibly bring back a couple of MDOTs’ retirees or former employees that lived through this to give the ins and outs of why we did it and why we stopped.

Commissioner Scalici stated that he would suggest the Commission revisit the issue of indexing and its opportunities more often than every few years, and the cost doing a study to get this information.

No other questions, comments or requests were forthcoming.

ADJOURNMENT

There being no further business to come before the Commission, the Chair Wahby declared the workshop adjourned at 11:10 a.m.

Frank E. Kelley
Commission Advisor