

I-70 TRAFFIC & REVENUE STUDY ISSUES TASK FORCES

<h2 style="margin: 0;">TRAFFIC OPERATIONS & MAINTENANCE TASK FORCE MEETING MINUTES</h2>

▶ **Meeting Date:** *Nov 15, 2013* ▶ **Time:** *10:00 am – 12:00pm*

▶ **Meeting Place:** *CDOT West Campus - 425B Corporate Circle, Golden, CO*

▶ **Distribution / Attendees:**

Traffic Operations & Maintenance Task Force

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Modeling Task Force Meeting Notes

We did introductions.

Ben kicked off the meeting and went over the roles and responsibilities and the mission of this Issues Task Force.

John explained he handed out three items: agenda, O&M annual costs (a generic example, not detailed) for consideration for the group.

Paul Scherner asked if the costs were current? John answered Yes, some of the costs are derived from CDOT and others from Managed Lane Projects.

The third item is a summary of options and the key costs that we need to plug in. John said we should review the options we are considering, he quickly went over the alternative options we are considering. He quickly covered the categories the group needed to cost, such as ITS, toll collection, third bore at the EJMT and BRT.

Jill Scott asked if all three lanes would be in the same direction. Have we considered one HOV lane in each direction and then a reversible lane. Ben said we could present it to the alternatives task force, she noted that the gates required for this configuration would be extensive. John explained the gate configuration at either end.

Ben and John noted that we would only be gating one lane. Access would be limited to one lane coming in and going off.

John noted we are behind some of the other groups but the advantage is that other ITF's are developing costs and we can feed these into this effort.

Dick Bauman noted when we talk about maintenance there are two policy issues. 1) Toll Road entities have a higher standard of maintenance, expectations are that maintenance will be done immediately because people are paying. Budgeted costs for maintenance is 4 to 10 times what a typical state highway would cost. Number 2 is that since we are borrowing money, banks require toll road properties to accrue money on an annual basis so they can fix anything that needs to be fixed immediately, this should be considered as part of maintenance budget. It needs to include the accrual to replace investments. Dick suggested one source: IBBTA (Intl Bridge and Toll Road association) we should use these costs. Nick said at least for the managed lanes maybe not for the alternatives out of the PEIS.

Nick suggested maybe we use US36. John pointed out our project is at a much higher elevation so we need to consider that as well.

Wendy asked Nick if Ernst and Young would be considering this. He thinks so because they need to consider the "useful life" of the facility. Dick said sometimes contractors want everything in "good shape" at the end of contract. He thinks they are accounting for that, We need to make sure this is addressed with the Finance ITF.

John talked about the need for a high tech control center to monitor action on the managed lanes.

He noted that we need to look at the 50 year concession period and we have been using 2017 dollars. He defined routine maintenance, patching, guardrail repair, striping and signs that get hit. Pavement would be "mill and fill." Rehabilitation will be on going especially due to the elevation.

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Dick asked how do we decide when to restripe? David from CDOT said patrol supervisor goes out and prioritizes maintenance needs, he said guardrail and cable is always number one. The highway commission dictates CDOT maintain that we maintain a B level of service. Dick said B is not that good, CDOT doesn't have enough money to do what it needs, his point is for a managed lanes expectations are higher.

David oversees from 470 to tunnel, his total budget is 3.5 million, if he had to go to A LOS, they would need an extra two people with equipment on each patrol. It would be 600k or 700k for just equipment, for each FTE is 155,000. The costs could go up 50% to go from B to A> David said with revenue from toll road they may be able to accomplish A. David also noted that if you change LOS from one place to another, you are "robbing Peter to pay Paul."

Alazar asked if for managed lanes if it needs to be LOS A. John answered yes. Dick B thinks we should stipulate in the documents we need LOS A.

David said in maintenance terms, it takes three snow plows to cover just two lanes. John said the thinking is that we would have to pay for this maintenance by tolls.

Dick also said with median, there is also a need to remove snow fully not just put it aside. If we use chemicals, it affects Clear Creek and CDOT gets penalized. Dick said if we just let snow melt it would ice over the general purpose lanes. John said the roadway group is working on the elements to figure this out. He noted that all overpasses and underpasses so we will be updating water quality measures. We will be mitigating for the effects.

David from CDOT he envisions snow storage is pushed to one side of the wall and maintenance comes in at 1 or 2 am and crews blow the snow out of way. John said there is also an option to bring in snow melter machine, likely this would be needed at EJMT.

Dick asked what happens on i-25? David and Nick answered chemicals because precipitation levels so different.

John said bear in mind managed lanes will not be open 100% of the time, only during peak period, probably only on the weekends. So snow removal could happen Tuesday, Wednesday and Thursday.

Ken from CDOT said peak performance would be in a snow storm. John said that is the thought but it wouldn't be a 24 hour need. As soon as sun comes up people will want to get to the ski areas. Paul S also said it would apply for incidents as well. Would the concessionaire allow managed lane use for incidents? Nick said they do that on US 36. John said these things will be negotiated with concessionaire before agreement is made.

Another maintenance costs would be washing signs. The entrances and exits (16?) must be considered

Dick said if we have LOS A for managed lanes, shouldn't we consider it for the general purpose lanes as well?

Ken asked if maintenance covered monitoring, towing stalls and accidents? John said yes, we need to consider this so we can maintain the 65mph speed in the managed lanes. He said we will have operations center for the managed lanes with staff throughout the corridor. The concessionaire would be responsible for this. John said we need to consider long term contingency costs. Tunnels are separate because tunnels are very different from roadways.

John said for the BRT, we need to consider O&M and consider maintenance facilities and what they cost. The AGS is similar but we have the number 65-89 million a year. For the BRT, the transit ITF has developed costs.

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John then asked what are we missing? Paul S said incident management would be a cost. It should be included in managed lanes operations. We need to add this. David M said we should also have a line item for enforcement.

Ben asked how enforcement work for toll lanes? Nick said local jurisdictions have first right of refusal, and you pay what they tell you to pay for both enforcement and emergency response. Ben A said we need to get CSP, Jeffco, Georgetown, CCC and Idaho Springs. We need to consider Evergreen and Lookout Mountain. (David should be Mike)

Art asked if we have looked at current incident management plan to see what we are missing. John thinks we should look at this in Level 2. Art said we wouldn't want to implement something that would cause us to amend Incident Management Plan.

Art asked if CDOT will have a transponder that is standard? CDOT answered yes there would be interoperability.

Ken said for the options where the median is filled in, it doesn't follow the CSS and people are going to be upset. Ben said that CDOT is coordinating with these groups during the design improvements.

Art asked if some of the improvements done for the PPSL could be incorporated into this to reduce the cost. Ben said this would not apply due to the extensive improvements. The bridge at 103 specifically. CDOT engineer said the 103 bridge will not preclude anything in the future. For instance the abutments will accommodate a wider template.

Dick asked who would be costing out the ITS as far as the capital costs? Ben said not this group. Dick said we need to make sure that someone is taking this. Traffic will give us courtesy patrol costs. Nick can get CSP costs, Parsons will get remaining costs, Jeffco and Summit.

Roadway elements and tunnels and costs will go up substantially. John said for tunnels we do have linear costs. Dick said it is not linear if it gets from LOS B to A. John said he is talking more like the walls, the lights and the ventilation systems.

Ben asked who would be willing to start providing costs. Nick will look at US36 costs to see if we are missing anything.

Parsons can get statewide costs for roadway. Mike will give team snow removal and routine maintenance. Mike said routine maintenance is 69 activities, Ben said we can roll it up. Mike can get from EJMT to C470, lane miles on frontage roads are included. Mike will also provide costs per lane mile for pavement rehab. Parsons will get the rest.

Heavy towing should be included with managed lanes. John will get template to Ben and Ken McGee and then out to the rest of the group.

Nick asked what the deadline for the group? John said everything should be in the first week of December and then this group should meet second part of December.

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These notes are an interpretation of discussions held. Please provide any additions or corrections to the originator within seven days of the date signed, otherwise they will be assumed correct as written.

► *Prepared By:* Wendy Wallach – Parson *Date:* 01-22-14

Next Meeting: TBD

Attachments: none