



Purpose:	Managed Lane Technical Discussion Meeting		
Day:	Thursday	Date:	April 12, 2012
Location:	CDOT Traffic Operations Center, Golden, Trail Ridge Conference Room		

Participants:

Attendee	Representing	
Carol Anderson	EPA	Y
Jim Bemelen	CDOT R 1	Y
Tom Breslin	Clear Creek Co.	Y
Allan Brown	Atkins	Y
Steve Cook	DRCOG	Y
Tony DeVito	CDOT	Y
Maria D'Andrea	Jefferson Co.	Y
Stephanie Gibson	FHWA	Y
Dave Hattan	FHU	Y
Vanessa Henderson	CDOT EPB	Y
Matthew Hogan	Kraemer	Y
Randy Jensen	FHWA	Y
Carol Kruse	USFS	Y
Darrell Liebno	Kraemer/Obayasai	Y

Attendee	Representing	
Gina McAfee	Jacobs	Y
Alison Michael	USFWS	Y
Laura Meyer	Jacobs	Y
Jack Morgan	Idaho Springs	Y
Cindy Neely	Clear Creek Co.	Y
Taro Nonaka	Kraemer/Obayasai	Y
Pat Noyes	Pat Noyes	Y
Tim Russ	EPA	Y
Jill Schlaefer	CDOT	Y
Kevin Shanks	THK & Associates	Y
David Singer	CDOT	Y
Jo Ann Sorensen	Clear Creek Co.	Y
Mary Jo Vobejda	CH2M HILL	Y
Mandy Whorton	CH2M HILL	Y

Mary Jo Vobejda said the purpose of this meeting is to answer any questions you may have about the operation of managed lanes and to give you the opportunity to see and comment on the proposed signing plan

The managed lane will not be barrier separated. A solid double white line will be used to mark where the managed lane begins. Until drivers reach that point, they can still legally get out of lane.

Randy Jensen commented that he is not in agreement with using a solid double white line because the managed lane is not operational 24/7. Allan Brown said the solid double white line is the only legally enforceable way to stripe the lane and is required by MUTCD and Colorado state law. When the managed lane is a general purpose lane, moving in and out of the lane will not be enforced. Randy said he will work with CDOT to ensure the striping is enforceable.

Jack Morgan is concerned that CDOT is depending on striping for the success of the

managed lane. He said the striping doesn't last long and noted the striping at the Idaho Springs exit is only a few months old and it's almost completely gone. He commented that the Minneapolis managed lanes are in an urban area and the speed in most of it is 45 mph. Randy said the signs and striping will work together to manage driver expectations. Tony DeVito said the public will need to be educated and, once they are, the rest will follow their lead.

Jack said he feels the majority of the drivers on I-70 are from out of state and he thinks the managed lane will penalize local residents.

Moving in and out of the general purpose lane into the left lane is a concern for the group. Allan said when the managed lane is a general purpose lane, the three lanes should be sufficient for people to stay in the other two lanes.

Cindy Neely said the signs need to provide the end destination. The regulatory sign has US 6 on it so drivers may think they have to stay in the managed lane to get to US 6.

Cindy said drivers also need to know that once they get in, they cannot get out of the managed lane until they're nearly to the US 6 exit. Allan suggested putting in mile markers and Cindy said drivers don't pay attention to those. Allan said the managed lane ends $\frac{3}{4}$ of a mile before the US 6 exit so that shouldn't be an issue but they would do their best to make the signing as clear as possible.

Carol Anderson said she understands CDOT is moving to tolling because there are no Federal dollars to build improvements. She thinks it is a bad idea to start managed lanes with this project because she doesn't think it meets the Purpose and Need of the project to improve safety and mobility. Gina said the improvement of the roadway geometry does improve safety and the managed lane controls congestion which will improve mobility.

Carol inquired how many safety studies for managed lanes have been looked at and did any of them have a curvy mountain road like this? Dave Hattan said there are 13 installations across the country and most are in urban areas so there is no precedence for this managed lane. Allan and Dave confirmed they will include safety in the design and construction of the facility and they believe it will reduce accidents by 20%-30%.

Tony DeVito said he has been meeting with corridor stakeholders and has explained the managed lane is not intended as a revenue generator. It is being considered to provide reliable travel time by managing congestion now and in the future.

It was clarified that the information on some of the signs is regulated by legal requirements and cannot be changed. There are seven signs planned for the managed lane. All signs will be on the left in the median or on/or near structures. Each sign will include "left" so drivers know the managed lane is on the left.

Driving eastbound, the first sign will be at MM 238, approximately $\frac{1}{2}$ mile west of Idaho Springs and 3 miles before the managed lane toll starts. This will be a static sign that will indicate whether the managed lane is operational.

The second sign is at CR 102 exit.

The third sign was removed due to its close proximity to the Idaho Springs campground.

The fourth sign is half-way between CR 103 and MM 241 and 1 mile before the managed lane toll. This is a static sign and the first sign that will display what the toll price is. The fifth sign is the ½ mile warning sign. It is close to the bridge at MM 241.

The sixth sign is at the start of the managed toll lane.

The seventh sign is where the toll starts. The cameras will be at this location.

The eighth sign will be a smaller sign indicating the express restriction ends. At this point the solid striping ends.

If, in the future, the managed lane goes further to the west and there is only one entry and one exit there will only need to be one series of signs. If there is more than one entry and exit, another series of signs will be required.

Kevin O'Malley commented that I-70 is a scenic corridor and it could end up a sign jungle. He suggested to reduce the number of signs, the signs should be multi-purpose. The "slippery when wet", the "state law concerning Jake brakes", and the toll signs could be combined. Allan said in the design phase they will consider consolidating existing signs with the new signs.

Allan said some of the bridges may not support having a sign mounted on them. The group was in agreement that having the signs close to the bridges helps visually even if they can't be mounted on the bridge.

Carol Kruse inquired how drivers will know if they can drive in the left lane when the managed lane is not operational. The static sign cannot say "closed" but it will indicate "toll" or "no toll". **The group agreed that when the managed lane is a general purpose lane, this sign should say "free" instead of "no toll".**

Jack Morgan said business owners are very concerned about the managed lane limiting access to Idaho Springs. He noted their 1041 regulation that allows them to accept or not accept tolling in the city limits. Randy Jensen said the existing lanes cannot be tolled but the third lane can. Tony DeVito said if it's free today, it will remain free, but he would be happy to have a meeting with Jack's constituents if they need clarification that the two free lanes will remain free.

The signing plan shown at today's meeting is preliminary and subject to change during design and will be reviewed by the Design PLT and TT. It will not be part of the EA; however the EA will address the visual perspective and how it will be minimized.