Colorado & Wyoming State Showcase

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BRUCE: Welcome to the second go-around of the State Showcase Concurrent Sessions. I am Bruce Burrows from the Wyoming Department of Transportation out of Cheyenne, and my partner-in-crime over here is Jim Golden from Kimley-Horn & Associates. We are both last-minute fill-ins. In fact, Jim is truly a last-minute fill-in as he was notified about an hour ago that he was going to help moderate. My deal for the word moderate means I stand up here and blabber for a couple of minutes and put the harness on the rest of you to discuss any area of interest you have. I believe the agenda item talks a little bit about Pre-Pass in Colorado and Wyoming, electronic vehicle credentialing, and early deployment of ITS projects where there was little or no ITS expertise before.

We actually had some pretty good discussion in the first session. We learned about some things that happened Wyoming in Colorado, but I think that they were certainly perfect to the rural environment. Wyoming is obviously very rural, perhaps the most rural state. I think the population is at least…well it has the smallest urban centers. The city of Cheyenne has somewhere between 60,000 and 70,000 and that's our biggest city. So even for me coming here to Boise and seeing Boise, this is kind of a big city. However, certainly outside of Boise, I think Idaho is probably in the same situation. In fact, outside of the Front Range, Colorado has many of the same challenges as Wyoming. With that, I'd like to get out of the way for a minute and let [Jim] talk.

JIM: I am with Kimley-Horn and Associates out of our Denver office. During the first session, we kind of got up here and gave a book report of ITS activities in Wyoming and Denver. And we both got together afterwards and figured that's probably not what people wanted to here about. I will briefly say that Colorado has a lot going on. Some of it I've worked on, some of it I've seen driving through it, and some of it I've just sort of heard about. So my knowledge of everything that is going on there is by no means complete. Obviously the focus is I-25 and I-70, and also the Denver metro area and the US-36 corridor between Boulder and Denver. Just about every type of thing that you are seeing vendors display – dynamic message signs, weigh-in-motion, express tolls (services on the E-4070 beltway east of town), etc. – [can be found] there.

Denver is rather the center of the universe right now as it is home to the Transportation Expansion Project, TREX – you might have heard about. It also has an ITS component, but it is sort of an interesting situation in that it is a massive roadway project within a big city. So it is kind of going back to the [Idaho] Director's comment about "out-west is not necessarily a mature roadway system". Even in big cities like Denver it's still being built and there are some lane miles being added.

As we said we wanted to do a better job of moderating and less of a job of "book reporting". What I would ask real quick is who people are – and I'm not saying standup and say your name. How many of you are vendors? How many of you are from state DOTs? The rest of you are Counties, Cities? Okay, there are a lot that are missing. Who's left, consultants, federal and communications? I have to admit that being last minute some of the topics (automatic credentialing, commercial vehicle stuff) I haven't done much of. So I can't speak

too much to that section. But when you decided to join this session today, why did you want to be in this room? What were you hoping to find out? As a consultant I wanted to find out what was going on. I didn't realize I would moderate.

Attendee question: [Light Rail]

I can speak very briefly to that and if it generates discussion – great. As part of TREX project there is an extension of a light rail line south of Denver. There are already two corridors in place south of Denver. One thing that is happening [now] is that some of the HOV lanes are being stalled. People who were resisting the light rail are starting to become more attracted to the express bus (where a bus has priority all the way through its trip). So instead of the entire infrastructure needed for light rail, you only need a couple of city busses. That is still in the very early planning stage. I'm not sure what has been put down on paper as far as where to do it, how to do it, and what it would cost, but it is definitely going on. Light rail in Denver consistently has some political trouble because we like our cars. Myself, I go both ways, not as a consultant but as somebody who uses the bus to get to work and I would love to have a light rail line. But it is very hard to get people out of their cars. So a result the cost/benefit analysis is always swagged at best. So you can never tell what people are going to use.

Other folks, what were you hoping to find out?

Attendee question: [Rural ITS]

BRUCE: In Wyoming, our focus – I'm not going to say it is exclusively rural – is predominately rural. We do have a strategic plan which has been prepared over the last two years and the final step will be the approval of that plan next month by our Executive [Planning Committee]. There are elements in [that document] addressing the traffic signal systems between Casper and some other places in the state. But certainly, to me, the focus is predominately in the rural area.

Incident management on Interstate 80 for example, is a big thing for us. Even though we are very rural, we carry a high degree of commercial traffic on I-80 across what they call a "bridge state" (for those of you who may be familiar with that term). At times up to three-quarters of the traffic on Interstate 80 is in the form of big trucks. And those are the guys who are least likely to want to stop – because they have a schedule to meet, etc. – when the weather comes in. Those of you who have had the pleasure to drive across I-80 in a winter storm, it tends to have pretty nasty conditions develop! So you have a mix of a lot of commercial traffic trying to punch their way through and the necessity of closing the road when it gets pretty nasty out. So we end up with some very long traffic cues. So that's a very important part of our plan, I'm not going to say it is unique to Wyoming. I'm sure other states have it, but perhaps in the East people can take alternate routes very easily. There is no alternate route in Wyoming unless you want to go way, way, way out of your way and sometimes those roads are closed to. So our awareness is growing. One of the things that was flushed out in the last session was education, education, education. That is certainly something that we are going to be working on more as this plan provides a foundation for our future.

JIM: We are supposed to be discussing what problems have been encountered when little or no ITS experience is present. I guess I turn the question back to the group, and this would include the consultants because half the time this includes us…what are some of the challenges that come up when you have little or no ITS experience in an area or region or project? Does anyone have any real good headache stories to tell?

I'll kick it off with something. Wyoming and Colorado – the DOTs have very different levels of staffing, obviously. The entire ITS section of Wyoming is what 3, 4 guys? No? Half a guy! Well in Colorado, you have six regions plus an ITS section. Each of the regions has some people with a level of ITS [experience]. In the ITS section you also have quite a bit of experience concentrated (obviously). I'll let the Wyoming folks speak to that. But as a

consultant what very often happens is….I'll put it this way.

From an ITS Rocky Mountain point of view it is wonderful to see the level of knowledge about ITS in Colorado improving. As a consultant it is not as fulfilling because it is much harder to convince a client that they need us. But what often happens is the regions are behind the ITS section [in their technology and/or experience]. So very often the consultant role or the project engineer from the region's role becomes making sure it [project] gets done the way the rest of the state is doing it, and coordinating with the ITS Section and making sure there is a good dialogue there. And because (and I guess Wyoming can speak to this to) it's hard for DOTs to hang onto qualified people in the process there is quite a bit of personnel turn-over. [This occurs to such a degree] that you may have someone who is a very, very sophisticated ITS contact and the next year you've got somebody who is just learning what the initials stand for. And so that's one headache – where you get so used to where somebody wants it done a certain way and you have to suddenly come in and re-begin the education process for that engineer or planner or whoever you are dealing with.

Wyoming is working on – or is almost completed – their pre-deployment or early deployment plan, their strategic plan for ITS. You guys can speak to that a little because you've got the process right there – the education process that happens from a formal federal highways point of view.

BRUCE: In the last session we came back to strategic planning and Steve Albert, Western Transportation Institute chimed in and talked about trying to get that early winner and identifying the champions before the strategic plan is even completed. I would say in Wyoming that I think we've done that. And one area that really pops into my mind – and perhaps a little bit of serendipity – our first webcam that went online was a couple of years ago on I-80 between Cheyenne and Laramie in a false summit. The highest point on transcontinental I-80 is at 8,640 feet and when winter hits that area it can be pretty nasty up there – like a lot of other places on I-80! A lot of folks like to commute back and form between Cheyenne and Laramie as well as the commercial truck traffic that comes through there and so forth. That site has become the number one hit page on our entire WYDOT website. That right there was an eye-opener for people, of the power of that application. Once it was in and up and running, people found out about it and in a storm it just gets hit thousands of times. People don't necessarily want to read about [the conditions] they just look at the picture and make a decision. As a result, we are doing a whole lot more video cam up there. There has been some infrastructure issues as far as how to transmit the images. We don't have a dedicated phone line or anything. We spoke about that in our last session about innovative ways to use the radio system or microwave system to get the images back home. We put the system back online here in the last week. We have actually upgraded that part of the webpage and there is a lot more webcams on there and it is easier to navigate. That is one – at least in my mind – early winner. Maybe somewhat unintentional, but there it is.

JIM: I said I would try to tie in the transit question with the rural area. I've been recently working in Michigan. They are doing it statewide, but of course they are breaking it down into regions. Some of the regions – you get up into the Saginaw area or out around Lansing – are just not that big. And part of that process, or one of the things that has been most important for us, has been convincing stakeholders they are stakeholders in the first place. As engineers and planners, we are obviously very sensitive to when we find out there is something that causes injuries or death, or something that we have something to do with. I think that is one of the reasons some of us pick the job we did, so people don't get hurt – emergency services. Included in this, and what happened very quickly [in this project], was we found out that some of the hospitals had paratransit need(s).

A lot of retirement communities in the rural part [of the state] have to get people who can't drive back into the major hospitals in the bigger cities.

[Showing the] benefits of ITS and an on-call service where you could track vehicle [location] – not necessarily just fire and ambulance – but also who is picking up who [would a big selling point]. For those dispatchers, being able to get [service] to where people need it even if they just need a checkup and they can't drive there to get it [is a key rural transit solution]. That is an area of transit where I think you don't necessarily need the high volumes of ridership like you would for…say a light rail job. If people find out that there are individuals that need to get from these rural areas into healthcare to be kept alive…[perspectives and opinions quickly change]. Part of the Tier 1 education process (in Michigan instead of phases they call them tiers) was really convincing people and agencies (including private organizations and companies). Obviously in Michigan they have car manufacturers, and if there is a slow-down on the road that affects their bottom line. That [is part of the] process of educating how ITS can help [the client] out.

I know that in Wyoming one of the things they deal with is being a bridge state. In those bridge states, even if you don't have a huge metropolitan area, if companies that are using the roads as their shipping lanes can save time…that can mean a lot. And so that process of convincing them that they have a stake is, in my experience with Michigan and some of the other states we've worked with, imperative.

Sometimes you have to be creative in determining who the stakeholders are. Obviously [you include] the State DOTs, Federal Highways, Cities (especially big cities), but you should start throwing in "What are the private companies that use that road?", "What are the transit agencies?", "Tourists?", etc. It's not easy, but its important.

BRUCE: One of the things that Jim (Jim Gaulke, WDOT) wanted me to mention, and this is a good opportunity here, is that one of the biggest challenges we face is we have a project list of about 100 short, medium and long-range projects that have been identified in the strategic plan both on a statewide basis and at headquarters, as well as in the districts. Varying dollars are required to get those things off the ground or in the ground so to speak. One of the big issues for him as a half-time ITS coordinator, and I'm happy to say that in the strategic plan it does recommend that he becomes full-time and I anticipate that that will be reality, is: (1) who is going to maintain ITS deployments; and (2) how are we going to fund it in the future at a sustainable level?

One of the points that came out in the last session – and I think that the California/Oregon area and the COATS initiative was used as an example – is a type of hybrid approach. I'm probably doing a poor job of regurgitating, but whereas [there are] established deployments which have gained acceptance both institutionally (and perhaps even publicly or politically) those will be the most likely for some type of a DOT funding mechanism to keep it going. Whereas vendors or consultants might be better to put on the cutting edge of what might be called an experimental project – I hope I've got that right.

I don't know how much of that applies to you folks from the other states. I imagine that it is one of the continuing issues to try to resolve. Over the last ten years, like we've heard from Dwight Bower and the others this morning, this was all new and everybody was all excited about the new toys. Now the hard reality sets in and, "Oh, we have to have somebody who's trained and isn't hired away by consultants to maintain these devices when they go down." I know when they go down in Wyoming they may be down for a couple of days because we might have to get somebody to drive 500 miles just to fix it. As far as funding [is concerned], create a dedicated funding stream to guarantee that maintenance will occur. This is something that we are probably more at the beginning than we are at the end of.

In the last session, there was some discussion about life-cycle costing and making sure you plug in these [new] deployments so that items that maybe traditionally were seen as add-ons [become more mainstreamed]. [Another comment suggested] actually trying to make

some kind of Division that maintains the trust fund for ITS maintenance.

BRUCE: I think in Wyoming we have had the recognition [of ITS] throughout the strategic planning process. There is a strong tradition in our state, and it may be the same in [other states], but our districts are fairly autonomous and they've had a great deal of control over their own operations over the years. CEOs and executive staffs have treaded pretty lightly on that and they have allowed them, in some cases, to have somewhat different standards for how they run their operations. I think [the] realization that changing that may not be in our best interest – or even very doable – is there. So, for example, one of the things that's identified is a Rural Transportation Operations Center – basically building up a radio room function there. Do we start pushing for some kind of standardization, but with the realization that the local control is always going to be paramount? Our role at headquarters is going to be more of an important issue. Mostly in information/coordination – they make the decisions out there and implement whatever steps they need based on conditions. Which is critical in terms of traveler information as well as operations? And we are going to be keeping track of it, doing a better job than we have in the past, as far as making sure that all the information is correct? So, I don't really foresee a Traffic Management Center as being centralized. It will be more of a traffic information/coordination role.