

>> MIKE LONDE (BLM): Okay, I'm going to get started.

This is Mike Londe, geodesist with the Bureau of Land Management and I'm also the NGS state coordinator for Wyoming. I've been in this business for about 40 plus years started out with a 300-foot chain and worked with plane table, EDM, Transit, GPS now, worked with both mapping and resources so you know, I've been kind of around the block a few times with this now. In my typical fashion, I'm going to break the love fest that has been going on this morning since we have some real issues that we really need to address.

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We can see -- we recognize that there is a need for development of 3 dimensional data will support modern technology. We recognize the need for improvements in the geoid to support the use of GNSS height transfer. BLM has projects, require elevations but we have difficulty in finding existing and consistent benchmarks for the project. So we recognize there is a need.

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-- is there really truly a need to define a new datum? Or is this just a chance to do neat science? And this has been a question that has been bothering me for a couple of years. What does the conversion to a geometric or geocentric datum gain us? It does not seem a real convincing argument. The BLM has the need to tie past, present and future survey and the mapping projects together. We are I believe the largest land management agency within the Government. We are responsible for all of the federal land surveys, cadastral surveys so we have data that goes back I think next Thursday is 225 years of cadastral surveying.

We also have multiple mapping projects that we have to tie through time. So, the question would be with the proposed change, will the tools be developed and available in a timely fashion to transport between the datum vertical because it will not do us any good to have a data with transformation tools promised later. That will be critical that if we proceed forward with the new datum, you know, that the tools will be delivered in a timely fashion.

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Now, new coordinates will be introduced on the CORS this year. A big question we've got is, is this going to be the first of many changes by 2018 or whenever the new datum will come into effect? In a sense this is causing datum creep. It is not clear to us what the magnitudes of the changes in the CORS position. There are email discussions with the NGS, graphics that seem to show some locations 5, 6, 7 centimeters relative to the ITRF 2008. When you come back and ask if that is true, you are told it is always not that bad. We need better information. How well if we relate surveys that I say start next fall, you know, using new course positions, how well might you be able to base that on stuff that I started earlier this summer or last year because we have multiple projects across the BLM that we are building out and expanding. So we need a better idea of the implementation and what these interim changes are going do to us.

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Another major concern is it took the BLM more than a decade to convert our existing GIS data to the NAD 83. And while those of you that know me, know I'm a stickler for epoch dates we got because of the types of accuracies, we have different data realizations. It took us so long because there was not a budget, personnel or the

resources for that conversion and if anything over the next several years, with the way the budgets and stuff are looking, it's not going any better in terms of the amount of money that it will take us to convert all those GIS and survey data to a new system. If the magnitude of the proposed changes that we heard yesterday are about 2 meters, then, it might not make any sense to actually transform in which case the needs for the tool are going to be important. So that which have not done a good job to date. You can incorporate these tools re-project on the fly, software if we have that capability, ESRI, Map Info, Trimble, Topcon, whatever, we might be able to alleviate some of that transformation pain.

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So what do we want to see, what requirements? Basically, we want to see a stable horizontal and vertical datum referenced to a specific epoch or epochs where practical. And we will need the transformation tools to move positions between these various realizations of NAD 83, WGS 84, ITRF, various vertical datums. In many cases, because of the nature of our missions, it is not practical to store the raw of observations and recompute every time a new realization comes in.

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Finally, again, to reiterate transformation tools need to be available at the time of release of the datum and not at a promised future date. Lastly, better explanations and more transparency needs to be done on proposed changes in where we are going. As Dave mentioned earlier in his lead off to his session, OK, it's cast in stone but outside of some small circles, meetings and stuff, I have not seen a lot of discussion especially on the federal side. So if we want to make this a success, we do need to engage all of both the private and the government sectors to put forth ideas; to make this successful to actually producing something now, if we expect to get everything done in the next decade. I would like to thank you folks for this opportunity to put these thoughts forward. That's all I got.

>> MR. DOYLE: Thank you Mike. It's good to hear the challenges that BLM could be faced with these. And I think many of us would certainly agree with your issue of more explanations and as you pointed out, transparency. As Dru pointed out yesterday, that the ten year plan has been vetted if you will, through the American Congress on Surveying and Mapping and we made several presentations there and realizing that is far away insufficient to meet the needs of many of our user communities. So what we are doing here yesterday and today is the kickoff, if you will, the beginning of this effort to increase the visibility of this, and will certainly be developing not only this particular forum but outreaching to states and the private sector through a variety of other venues as well and we appreciate everybody's input on where is the best place to go.

Carl Brown pointed out something that we are very well aware of at NGS, but it is somewhat problematic and that is a significant portion of our user community now is not the surveyors. The surveyors are vitally important to this and they are more our historic user community and we deal with them very well, they're very organized and we know how do that. But there are many other disciplines out there that are challenging for us, and that's creating new environments for us to participate in. So we are anxious to hear from those of you who may represent those various communities and how we can best

meet those needs whether it's forums like this or through the use of our State geodetic advisers or webinars that is part of our agenda here today.