>> MR. LARRY MOORE (USGS): I'm here representing the National Geospatial Program at the USGS, not the USGS as a whole.

Most of you probably know, the 7 and half minute topographic map series was officially declared complete in 1992. And for all practical purposes, we stopped publishing topographic maps in the mid-1990's. One of the things that means, for a good two decades, the United States has not had a national map series that is cast on a modern datum and depicts modern coordinate systems. Almost every presentation I give about maps, and I always wanted to say it in front of a group that understood the significance of it, and I think this is it, if there ever was such a group, I thank you for the opportunity.

About a year and a half ago, Mark Demolder returned to the USGS after spending several years at NGA and is now the head of the USGS National Geospatial Program. Mark has made it a personal priority to revive the quadrangle mapping program.

Yesterday, Admiral Bossler mentioned that in the 27 to 83 conversion, the USGS was kind of resistant to the whole thing. That was early in my career so I don't take any personal responsibility for it but that was a true statement, in hindsight those dash corner ticks were really not a good idea and the last 7 or 8,000 topographic maps published contained a bewildering variety of ways to explain the projection line and the dash corner ticks and how they relate to each other and that is a source of confusion that is still haunting us today. Something we can probably learn from.

As I said, Mark Demolder has made it a priority to revive the 7 and a half minute mapping program and we are in the process of designing a new map product and producing it and publishing it. Mark has an objective that he's almost obsessed with, with refreshing the 48 continuous states everything 3 years, with a 1 to 24,000 seven and a half minute quad map.

This product is not the old map but has many superficial similarities to the old map; it is deliberately designed on the 7 and a half minute cell format with the familiar quadrangle layout, collar, grids all intended to raise the comfort level of the nonprofessional map user.

And we are actually doing this and in the last year, since last June, we've published 20,000 and some quadrangles and are currently producing them at the rate of about 100 a day. There is about 54,000 quadrangles in the continental United States. So that pretty much puts us on a pace to meet his goal of 3 year refresh cycle. The products are geo pdf, ones we published can be downloaded from one of our web sites. The issues we are talking about here at this meeting don't have a lot of scientific significance to a 1 to 24,000 scale general purpose map. The shifts being talked about on this new datum are typically less in aligned with and completely swamped by other sources of error and the data that we are using.

But as Dave mentioned yesterday, meta data is important and there will come a point sometime in the next few years where we will need to change the credit note and change the associated meta data files on this product to reflect whatever this new reference system is called. And I guess I would like to suggest that is a fairly important point in time because it will start to expose some of these issues to a larger and less professional and less knowledgeable group of map users.

I think we know from experience, these kind of things just confuse the hell out of the average map user and it's pretty important to do it as correctly and as transparently as you possibly can.

>> MR. DOYLE: Thank you Larry. I was part of the transition team that worked with USGS to come up with those tick marks and I have to agree, it was a monumental effort on their part and one that required significant resources and we realize the importance of that particular issue.