

WEBINAR QUESTIONS AND ANSWERS FOR 3/13/13

Q: Will this affect State Plane Coordinate Values? Past observations vs. new observations?

A: JJ: This will impact the Lat/Long/Ellip that are projected into state plane. Since the positions are based on a new spatial reference frame.

Q: Can a mount point be created to broadcast the old NAD83(CORS96) adjustment?

A: As discussed during the webinar the old spatial reference frame coordinate information will not be available because the excessive additional cost would not be justified.

Q: How does this affect the different Mount Points?

A: JJ: Mount points will be unchanged. All RT Products will remain the same.

Q: Can you go out and set new control with the current system and then recalibrate to them when new comes on line?

A: JJ: Yes. This would be a very correct approach. The procedure stated above is a recommended approach for transitioning the project to the new spatial reference frame.

Q: What if we are returning to past projects and all of the markers have been destroyed leaving no markers to calibrate to – is there a set calibration that can be used?

A: LM: In preparation for the new spatial reference frame all of your existing projects can be revisited before the transition to run in additional control to ensure that the project can be transitioned to the new spatial reference frame.

Follow up question by Dee Baxter: **IF they are talking about a project they did, for example, 3 years ago and they have been asked to update the survey or do a post construction survey and the control is gone, how would they transform over to the new spatial reference frame?**

A: JJ: If no control exists there are more problems than a simple coordinate transformation. So... a couple of ideas:

- (1) Re-establish control for the project and create a transformation set based on whatever project points they can re-occupy in addition to the new control.
- (2) If they still have Raw or RINEX data from the original (lost) control, they can reprocess the control network and project points' using the new coordinates.
- (3) NGS does not offer a transformation from NAD83(CORS96) to NAD83(2011) other than use of HTDP. This can transform between the reference frames but will not, strictly speaking, perfectly align with your network adjustment and would be inadvisable.

Q: I have a Carlson surveyor gps system set at nad83. Will this change affect this or is there an upgrade I need to get for my system. If I do nothing how will this affect my data accuracy

A: JJ: This is best answered by your Carlson technical support. DB: INDOT recommends that all users contact their vendors to provide more information regarding their particular equipment for files or updates that may be needed for this move.

Q: Are there any future plans of taking out the dead zones in the network?

A: LM: Network expansion is evaluated on a yearly basis based on funding and availability of infrastructure in the area. Cellular coverage in certain areas has been a factor and we are at the mercy of the cellular providers expanding the coverage in these specific areas. (INDOT EB): If a user has issues with coverage for a particular area, they need to communicate that to us, and we will look at extending coverage where needed, based on the number of complaints, and subject to budget constraints.

Q: If you used a local coordinate system will you see a change

A: JJ: Yes. You will want to check against your control. It is possible you will need to update your coordinate system to correct for the shift.

Q: Will this affect the Seiler VRS network?

A: LM: As stated on the webinar, the Seiler VRS network administrators will need to be contacted to answer this question. JJ: Seiler will be working through the same issues as INDOT. Please contact them directly for a timeline on their solution.

Q: Where do we get Geoid 12a

A: JJ: Contact your dealer or manufacturer. The geoid model is also available on the NGS website at http://beta.ngs.noaa.gov/GEOID/GEOID12A/GEOID12A_data.shtml

Follow up question: **What may a user need to have loaded onto their equipment, via the vendors? And in your opinion within Indiana is 12a better and more accurate than 09?**

A: JJ: Geoid12a is the geoid designed to be used with NAD83(2011)2010.0000 and is recommended for use by the NGS. The 12a model is more up to date and includes more data than the 09 model ... I cannot say what is 'better' for Indiana, but would recommend following the NGS recommendation. If end-users have particular questions about the function of their rovers they need to contact their dealers directly for specific instructions. From an end-user perspective the only rover configuration changes will be the geoid model and any local transformations/calibrations/localizations/etc. These transformations need to be performed on project by project basis, based on re-observation/re-computation of their control.

Q: Will old data files such as rinex be in the old cor. system or the new.

A: JJ: Archived RINEX will still show the previous coordinates in the header.