

NJ Geospatial Forum - Geodetic Task Force

Goals

- Research and provide guidance on Transformation tools between datums, between Cad and GIS, and between State Plane systems, and on software and hardware changes related to the datum changes.
- Produce Best Practice and Standards documents for data and metadata collection, processing, publication, and documentation, including model RFP language, with respect to the new datums.
- Produce education materials for GIS users, GIS data producers, surveyors, field data collectors, and decisionmakers. Plan education campaign for professional groups and decision makers.
- Identify and formulate necessary legislation changes in coordination with the New Jersey Society of Professional Land Surveyors (NJSPLS.)

Initial goals-meeting notes

Transformation Tools

- Conversion workflows
 - Between datums
 - CAD <> GIS
 - After conversion, how to relate to past datum
- Use of legacy data and preserve accuracy
- Relation to NY/PA

Best Practices and Standards

- Proper metadata documents for collection
 - What information needs to be collected
 - How to document errors
 - Time and place information
 - Horizontal and Vertical Datum
- What to put in contracts/RFPs
- How to handle jobs already in system, in design, deliverables (A. Gmeiner and R. Carlson)
- How to handle legacy site datums and their legacy data?
- What to do if legacy data lacks necessary metadata?
- How long will NGS support both old and new datum (overlap period?)
- Plans for reference GIS data published by authoritative sources for NJ (e.g. NJEMS, County and Municipal Boundaries)
- For interactive mapping
- For data publication
- For partners in statewide compilations

Education

Easy to understand is crucial

Need not only for technical (GIS, surveyors, engineers, field data collectors), but also for decision makers in government, private industry, who must make decisions about change and assess cost. And for casual users.

Emphasis on the need to record time of observations, ref epoch of base data

Applies to all groups/aspects

- How to convert

- What errors introduced?

Should be a single group with input from other groups

Terminology, background, what it is

Workshops within each industry

- Present at industry meetings and conferences

 - MAC URISA

 - NJSPLS SurvCon

 - NJ League of Municipalities

 - NJ Land Rally

 - Other?

Training Students (NJIT – L. Potts)

Get word out so wrong datum isn't used (G. Taylor)

Legislation

How to handle change from passive control – i.e. How will Real Time GNSS (RTK GPS) users be able to document positions and elevations that they are deriving from real time networks provided by Leica and Trimble (e.g. what will hold up in court?)

Will sites that use NGVD29 for reporting to the State of NJ be forced to change to the new datum? This could be very expensive for some large sites with many decades of data and drawings.

Will counties and municipalities be forced to change their requirements?

Software and hardware changes

Software: Esri, AutoCAD, Etc.

Hardware: Leica, Trimble, etc.

- Firmware updates

Impact on mobile data collection