



California GIS Council Workgroup Report

Workgroup: State Plane Coordinate System Workgroup page*: Workgroup Chair: Nathaniel Roth	Report Date: December 12, 2019
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*See the workgroup page for workgroup charter, members, contact information, and prior reports.

Requests for Council Action

None

Status Update

The State Plane Coordinate System Workgroup had its first meeting Friday 12/6/2019

Attendees:

- Nathaniel Roth, Chair, California Department of Conservation
- Patrick Tami, DWR, Chief Geodetic Branch
- Joel Dudas, DWR, GIS Lead, Division of Engineering.
- Jose Mandanas, County of LA, Cadastral Landbase
- Bruce Joffe, GIS Consultants

Notes:

1. Those representing the Ca. GIS Council do not have the background to add meaningfully to discussions about the geodetic component of the State Plane Coordinate System update for 2022. We do for the GIS applications.
2. The California Land Surveyor's Association has an existing working group and does have the knowledge. We'll ask to add an observer (Joel Dudas, Primary, Nathaniel Roth, backup) to the CLSA's workgroup.
3. Overall, those present agree that encouraging the definition of a state plane zone system including a layered single statewide zone that applies the principles demonstrated in the Preliminary Zone 5 and the Statewide Zone defined by the National Geodetic Survey is desirable. These are based on the updated national reference system and apply a population weight to achieve lower distortions in areas with higher population densities.
4. We will try to develop a better understanding of how an Oblique Mercator projection for the state may differ for both the better or worse from the current widely used California Albers.
5. DWR already uses an Oblique Mercator projection, similar in structure to the Preliminary Statewide Zone, for use with some of their data and responded favorably to a similar projection being defined for state use.
6. The workgroup agreed that there will be a need for good guidance for GIS practitioners in California in how to appropriately translate data into these new coordinate systems and how to maintain the data in them.
7. This guidance will likely require two components:
 - a. A primer on the theory and concepts underlying the new national spatial reference system (vertical and horizontal datums)
 - b. A practical instruction set for best practices with specific software packages (specific emphasis on ESRI software).
8. The workgroup would benefit from increased input from folks that span the surveying and GIS fields of practice.
 - a. Bruce Joffe recommended soliciting participation from Ryan Hunsiker, San Bernardino County Department of Public Works

Action Items:

1. Patrick Tami to request an observer seat for the workgroup in CLSA's related workgroup
2. Joel Dudas (Nathaniel as backup) to participate in those CLSA workgroup meetings and report back, and to the extent possible, contribute to ensuring that Note 3(above) is represented.

3. Nathaniel Roth to contact Michael Dennis (National Geodetic Survey) to see if it's possible to develop comparisons between the distortions in the California Albers projection and the Preliminary Statewide Zone.
4. Nathaniel Roth to reach out to ESRI to learn what they're anticipating producing both to support and educate users about the application of the updated state plane zones in ESRI software.
5. Next meeting to be scheduled following the next CLSA workgroup meeting.

Legislative/Policy Update

None

Next Actions & Key dates

List next actions and key dates

Action	Key Date
Next workgroup meeting	TBD
P. Tami to reach out to CLSA workgroup	
J. Dudas to participate in CLSA workgroup	
N. Roth to contact Michael Dennis (NGS) on distortion comparison	
N. Roth to contact ESRI on their implementation of the updated zones.	

Documents and Attachments

NGS SPCS: <https://www.ngs.noaa.gov/SPCS/index.shtml>

NGS SPCS 2022 webinar recordings: https://www.ngs.noaa.gov/web/science_edu/webinar_series/2019-webinars.shtml

Specific attention to the webinars from July 25, 2019 and October 10, 2019

Notes

None