A public meeting of the Arizona Geographic Information Council was convened on October 12, 2022 at 10:01 am on Webex. Present at the meeting were the following members or designees of the AGIC Data Committee:

# Table 1: Committee Voting Members

Member	Agency/Company	In Attendance
Howard Ward, Co-Chair	TerraSystems SW	No, w notice
Jenna Leveille, Co-Chair	AZ State Land Department	Yes, phone
Jack Avis	Pima County	No, w/o notice
Kevin Blake	Yavapai County	Yes, phone
Jerome Breyer	GIS Works	No w/o notice
Nicole Eiden	AZ Dept of Health Services	No, w notice
Eric Feldman	Maricopa County	Yes, phone
Bo Guo	Gistic Research	Yes, phone
Ben Hickson	Anderson Optimal	Yes, phone
Boyd Larkin	AZ Dept of Revenue	Yes, phone
Keith Larson	NRCS	Yes, phone
James Meyer	AZ Department of Transportation	Yes, phone
Jason Nyberg	Quantum Spatial	Yes, phone
Susan Smith	AZ Forestry and Fire Management	Yes, phone
Jamie White	City of Phoenix	Yes, phone
Steve Whitney	Pima County	Yes, phone
Andrew Zaffos	AZ State Geologic Survey	No w/o notice

### Table 2: Public Members at Large

Member	Agency/Company	In Attendance
Madyson Bradford	MakePath	Yes, phone
Chris Chalmers	WGI Geospatial	Yes, phone
Mark Christiano	USDA	Yes, phone
Aiko Condon	ADEQ	Yes, phone
Drew Decker	USGS	Yes, phone
Karen Fisher	CAP	Yes, phone
Kasey Green	ASLD	Yes, phone
Wolfgang Grunberg	DFFM	Yes, phone
Elizabeth Heller	ADWR	Yes, phone
Cory Homuth	ASLD	Yes, phone
Dan Jones	US Census	Yes, phone
Phillip Ponse	EMS	Yes, phone
Seth Lewis	City of Tempe	Yes, phone
James Merrill	USDA	Yes, phone
Ayan Mitra	ASU	Yes, phone
Mariah Modson	ASLD	Yes, phone
Veronica Nixon	ADWR	Yes, phone

Bill Nye		Yes, phone
Tammy Petersen	Veridaas	Yes, phone
Nahide Reynolds	Westland Resources	Yes, phone
Thara Salamone	State Demographer's Office	Yes, phone
Eric Shreve	ADOA	Yes, phone
Sue Smith	DFFM	Yes, phone
Sara Thompson	ADOT	Yes, phone
David Waltz	ADWR	Yes, phone
Jeff Wolkove	ADOA	Yes, phone
Shaun Ylatupa	City of Maricopa	Yes, phone

Meeting called to order at 10:01 a.m.; established a quorum

July Meeting Minutes, on a motion by Ben Hickson and a second by James Meyer, were approved unanimously

I. Presentation: USDA Geospatial Enterprise Operations Overview & NAIP Program Buyups for Arizona (James Merrill, Imagery Program Manager)

James Merrill introduced himself and presented on the NAIP buy up program. His presentation is available as a PDF upon request. Several questions followed the presentation as summarized below:

- Q: Are there partnership opportunities below the State level? A: State is usually the coordinator for all those other levels of government.
- Q: Can different areas have different resolutions? A: No, based on the way contracts are specified with the vendors. It could be done, however, as separate contract for each differing area.
- Q: What were the bottlenecks encountered in the Oregon contract? A: Communication about payment, so payment is required up front.
- II. Announcements: Jenna reviewed the following announcements
  - AGIC Council Meeting November 3, 2022 | 10 AM | Hybrid | AZDEMA EOC 5636 E McDowell Rd, Phoenix, AZ 85008
  - PhxGeo meet-up | Oct 18 virtual | Experience Builder
  - Green Drone education engagement opportunities (survey)
    - GIS & UAS Career Day | Oct 28th | 11a 1p Rio Salado Audubon Center
    - Geospatial Professional Outreach to middle & high schools | National Geography

Awareness Week | Nov 14-18

2022 Esri SW User Summit | Nov 15 | Hyatt Regency Downtown | 7:30a – 5:30p | Free (registration required)

### II. Workgroup activity summaries and action items

Jenna reviewed the following summary and called for votes as noted below

- AZCORS Workgroup This workgroup has not met since the last Data Committee meeting. The next meeting is scheduled for Oct 18, 2022, at 3PM. At the most recent, April 26, 2022, meeting, a poll was distributed among stakeholders to understand and compile AZCORS use cases. The responses will be discussed at the next meeting. Leadership has met several times since the previous meeting to discuss several NCN CORS that are currently experiencing technical difficulties. Corrections to several of these stations are forthcoming, and a few of the stations are probably planned to be decommissioned. Full report of this activity will be given at the next work group meeting. No action items to discuss at this time.
- **Cadastral Workgroup** This workgroup has met once since the July Data Committee meeting, on Oct 7, 2022. Attendees discussed the results of the Arizona Cadastre and Land Records Questionnaire and best next steps. It was determined that specific county outreach is required to have a more complete understanding of where counties are with the development and maintenance of their parcel data. We also discussed next steps on writing our cadastral glossary of terms, the AZGeo parcel administrators' group, assisting with statewide dataset development and the use of parcel fabric for parcel maintenance. No current action items for the committee
- **4D Workgroup** The 4D workgroup held its fourth meeting on September 27th. Joel Sankey from USGS presented the applications of Lidar and remote sensing in the Grand Canyon. The presentation highlighted difficulty of collecting Lidar and imagery in the canyon due to the depth and what has been done with the information gathered. Dr. Sankey will be returning to discuss the broader application of remote sensing and Lidar in the state of Arizona. The group also discussed the upcoming 3DEP BAA and Drew Decker highlighted the great work done to date. The 4D workgroup also hosted two Special Interest Group sessions at the annual AGIC Conference. There was a wide cross section of presentations, showcasing several different 4D topics, many focused on using Lidar data for analysis. Workgroup members were excited to see the large number of applicants for Lidar presentations in the Symposium. We also had several hands-on workshops during the conference to provide training opportunities in how to use Lidar, such as Open Topography. Several members of the UAS workgroup attended the meeting as the co-chairs of the workgroups have been considering a merging of the two groups. No action items for the Committee.
  - **Natural Resources Workgroup** This group last met June 14, 2022. The next meeting is scheduled for Oct 11, 2022. In the time since the Data Committee has last met:
    - The Natural Resources Track at the 2022 September AGIC Education and Training Symposium was a success. Jay and Elisabeth gave an overview of the Natural Resources working group. Austin Rutherford, PhD, Elisabeth vanderLeeuw, PhD candidate and Jason Nyberg, Mischa Hey of NV5 Geospatial presented on their work (utilizing remote sensing and geographical information systems for natural

resource management). The presentations were followed by a panel discussion of the role of geospatial technologies in natural resource management.

- NRWG Hub site team continues to meet monthly to continue to expand the NRWG presence on AZGeo. They continue to add authoritative data sources, relevant applications and story map use cases. This group has revamped the content survey and simplified the hub site design. The Protected Areas Database collaborative has been added and additional Story Maps have been organized. They are requesting that workgroup participants submit information on publications to add to the site.
- NHD Pilot project workgroup continues to meet regularly.
  - This group has learned that the USGS will stop accepting NHD edits after Dec 1, 2022. The NHD will become a static dataset until the Elevation Derived Hydrology data is released, sometime in 2024/25. Without statewide lidar data, Arizona is at a disadvantage.
  - Issues with certain features such as streams and intricate elevation geometries need to be addressed for forward movement on the development of tools.
  - This sub-group will be re-evaluated considering USGS goals for program.
- The Protect Areas Database (PAD-US) Update subgroup continues to meet monthly.
  - The group is developing a repeatable workflow for updates.
  - Contacts have been made with roughly 50% of Arizona Counties.
  - Meeting scheduled to develop County transformation of datasets workflow.
- At the Oct 11 meeting the group will discuss all the above topics and activities. The chairs plan to propose a virtual presentation event to be held in December; topics will be discussed. A presentation on using MODIS as a tool for analysis is planned.
- No action items for the Committee
- **SPCS2022 Workgroup** This group has not met since the July Data Committee Meeting. The report below reflects the most recent activity. Brian Fisher has been working with the APLS Committee on a path forward to amend the current SPCS statute. Draft language has been circulated among stakeholders. Report from July Data Committee meeting:
  - Work group received a written memo from National Geodetic Survey on 15 JUNE 2022 detailing general path forward for the project on a national level. Work group held a meeting to present the memo on 21 JULY 2022. There is no action required at this point from the work group and we are holding for outside input from both NGS and APLS (as listed below).
  - The next step for this work group is to discuss updates to State Statutes that relate to SPCS2022. There is an Arizona Professional Land Surveyors association committee currently discussing and drafting recommendation to the statutes. That committee hopes to have a draft for this work group in the fall of 2022. Once received this work group will work with other groups in AGIC to more this forward so that we can have recommendations for AGIC on moving forward.

- **Unmanned Aerial Systems (UAS)** For this quarter the UAS Workgroup reports the following in support of the approved 2022 Workplan goals:
  - UAS TECHNOLOGY INFORMATION EXCHANGE AND BEST PRACTICES DOCUMENTATION DEVELOPMENT
    - The UAS Workgroup section on the AZGeo Website continues ongoing development and content gathering. The UAS Workgroups plan to host UAS datasets will soon be a reality with AZGeo's large dataset plan taking effect in the near future. Although the workgroup has been excited to host UAS data we understand that it takes time to implement the necessary upgrades to store large datasets
  - COORDINATE UAS EDUCATIONAL OUTREACH
    - The UAS WG coordinated and hosted 2 Special Interest Group sessions at the AGIC Education & Training Symposium. They were both well attended and informative, providing relative information on the practical applications of UAS technologies in the geospatial industry.
    - The UAS Workgroup and Green Drone recently participated in the SciTech Stem & Innovation Summit on September 27, 2022. The event was a great outreach opportunity for the UAS Workgroup and Green Drone which supported our goal to increase our contact with the community. During the summit the UAS Workgroup conversed with students, teachers, community members, and faculty from across the state.
  - Upcoming Events
    - The UAS Workgroup will be hosting a booth at AZDroneFest 2022, October 22, 2022. AZDronFest is a film festival and UAS Expo. In addition to hosting a booth, UAS workgroup members will give presentations during the festival.
    - GIS and UAS Career Day Friday, Oct 28th, 2022 Students will meet and interact with a variety of STEM professionals and educators in the fields of GIS and UAS technology.

### III. AGIC Education and Training Symposium Debrief (All)

- 280 attendees & 50+ sessions
- Keynote Cy Smith NSDI & GDA Implementation
- Lunch presenters statewide imagery programs, Camp Naco, Green Drone
- Awards:
  - Chairperson's Volunteer of the Year: John Danloe (Pima County)
  - Arizona Geospatial Volunteer of the Year: David Enriquez (Red Cross Volunteer, Retired)
  - Outstanding Service Award: Morgana Laurie (AZDEMA)
  - Gene Trobia Lifetime Achievement Awards: Rudy Stricklan and Gary Irish
  - Maps & Apps:
  - o Best Cartography: 50 Years of Arizona Wildfire; Morgana Laurie
  - Best Analytical Presentation: Maricopa County Health Facilities; William McConahey
  - Best Story Map: Rediscovering Camp Naco; Crystal Carrancho, Helen Erickson, Gerald Lamb, Sarah McDowell, and Rebecca Orozco
  - o Best Overall Application: Yellowstone Trail 2022; Paul Rosevear

- o Best Student Project: Wrangell St. Elias National Park; Chrisovalantou Karakozis
- Orientation, Mentorship Program, SIGs

## IV. NSGIC Annual Conference Debrief (Jenna Leveille)

Annual conference was held in Portland. Jenna noted we had good representation with six persons from Arizona. Jenna is now past president of NSGIC as of the conference. Keynote was former Governor of Oregon, John Kitzhaber who gave an excellent talk connecting the housing industry and homelessness. Jenna noted that it was really a call for action for all of us to coordinate better and to make those connections from the geospatial side of things. The federal representation was probably the best it has been in years, including representatives from the FGDC. There was a lot of discussion of joint funding opportunities between the States and the Feds. There was good information exchange between federal agencies and a lot of discussion on cross border coordination of geospatial data without getting bogged down in legal nitty gritty. A good example was evacuation zones. There was discussion of governance and how to get more bottom-up participation. This discussion included some pilot programs to illustrate what that governance would look like. One of those pilots may be organized around drought which could benefit Arizona greatly. Filling gaps in authoritative data was also discussed, including supplementing locally sourced data with things like Open Street Map and the Living Atlas.

### V. Statewide/Regional Data

- State Agency GIS Manager Workgroup (Jenna Leveille/Veronica Nixon) Veronica introduced herself as ADWR GIS Supervisor. She is helping explore the idea of forming a group of GIS managers to discuss things at a leadership level: negotiations, Pro transition planning, enterprise data management, security and technology changes, etc. She and Jenna are planning to schedule a meeting for early November. It is possible that a Google Group will also be formed. Jenna will be emailing points of contacts with a Google Pool to determine the level of interest. Some discussion followed, including expanding the topics of interest beyond just those of interest state agencies.
- Imagery Program Meeting and Survey (Jenna Leveille/Kevin Blake) Jenna noted that there is quite a bit of interest being expressed in a statewide imagery acquisition program and what that would look like. Kevin and his team have developed a survey to identify stakeholders. Keven noted other states have developed such costsharing acquisition programs from which all participants can benefit. Some counties are already running acquisition programs and it would be good to pull them in, maybe even every other year. The survey will include and overview and benefits, discuss the experience of other states. It will collect needs for bands, perspective, frequency, budget available, area of interest, etc. Jenna noted that the State 911 program might be interested in participating. She encouraged all who are interested to fill in the survey. A meeting is being tentatively planned for mid-November. Some questions and discussion followed including how complex such a program can be, but also how worthwhile.
- AZGeo Updates (Jenna Leveille)
  - NAIP service past technical problems and NAIP 2021 service should be available

by the end of the week.

- Large data storage DEMS and UAS delivering the Maricopa County Lidar collection to see how that works. It is essentially a fancy ftp site that allows quick access and download. Not going to host the Lidar coming from 3DEP and that would be somewhat duplicative and it is available from the USGS. There are a few projects who have requested support and those are being considered now.
- Portal State is now implementing Portal for public entities and users to access to large datasets on enterprise server. Should help with performance. Experimenting with statewide 911 datasets and will report back on how that goes.
- Authoritative Data and Tagging Workgroups these have been established and a white paper on best practices for definition and use. It will be based on standards being developed across the nation and should be completed by the end of the year. Tagging group's work will help users more easily discover data.
- QL1 LIdar for Yavapai County in route to stakeholders. It is complete and the DEM's and derivative products will be posted on AZGEO as soon as they are available.
- 3DEP Update (Drew Decker) Drew from USGS introduced himself and displayed and discussed the latest status map. The Grand Canyon project is now complete and available for download from the USGS site. The Blackrock-Goodwin project also completed. He discussed the status of several in-progress projects across the state. He noted folks can contacts him anytime about partnering on projects. He noted that the USGS has a BAA coming out by the end of the month with the 1<sup>st</sup> proposal review done the following month. Applicants with immediate needs should get their proposals in as soon as possible. OK to submit later, for example projects that would be flown in the Spring.
- 911 Office Update (Eric Shreve) Eric from the ADOA 911 Office introduced himself and reviewed on-going projects. They currently have 17 PSAP's, cut over onto the new Next Gen system and that offers the ability for full geospatial routing for wireless wireline and VOIP calls. Yuma County finished tomorrow which makes five completed counties. Pinal, Graham and Greenlee should be done by end of the year which brings total to about 50% complete. Moving statewide datasets for roads and addresses to portal which should solve the current data download timeout problem. The Data Validation and Aggregation software has been migrated to Microsoft Azure platform which will be the mechanism for upload, validation, and incremental updates of statewide NG datasets. Revised language for statutes related to the Program have been submitted to the State for approval which will provide data requirement guidance for the fifteen 911 Systems and 81 PSAP's. Will be working on assembling statewide parcels next.
- Jeff Wolkove, ADOA, talked about components of their data management program. He
  noted that they will have a data management conference Dec 6-7 from 8:30 to Noon both
  days. He is looking for geospatial speakers to present their work. He also noted that
  ADOA is implementing a new data framework, called the "Data Management Capabilities
  Assessment Framework and there will be training and certification available. Ethics will be

offered as a second certification area and the developer of the certification course will also be a be the keynote at the conference. A third certification area will be the Cloud. Even if you store your data in the cloud, you are still the owner and have to manage it. Jenna noted she would put the conference in the AGIC calendar

## VII. Information or Topics for Future Meetings: none were suggested.

The meeting adjourned at 11:30 a.m.