

**MEETING MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
DATA COMMITTEE
LIDAR WORKGROUP**

DRAFT

A public meeting of the Arizona Geographic Information Council was convened on November 8, 2018 at 1:30 pm am at the Arizona State Land Department, 1616 West Adams Street, Phoenix, AZ 85007 in room 215 and at the Coconino National Forest Supervisors Office, 1824 S. Thompson St., Flagstaff, AZ 86001 in the Sunset Conference Room. Present at the meeting were the following members or designees of the AGIC LiDAR Workgroup:

Table 1: Committee Voting Members

Member	Agency/Company	In Attendance
Ann Anderson	Beale Mountain Forestry	No, without notice
Kevin Blake	Yavapai County	Yes, phone
Mark Christiano	US Forest Service	Yes, Flagstaff
Mary Darling	Darling Geomatics	Yes, phone
Steve Fugate	The Nature Conservancy	No, with notice
Angie Garcia	GISTracker	No, with notice
Benjamin Hickson	University of Arizona	Yes, phone
Mignonne Hollis	Aerospace Arizona	No, with notice
Richard Lawrence	AZ Game & Fish Department	Yes, phone
Jenna Leveille	Arizona State Land Department	Yes, Phoenix
Roses Lockwood	Campbell Global	Yes, phone
Jim Meyer	AZ Department of Transportation	Yes, Phoenix
Austin Smith	AZ Game & Fish Department	No, without notice
Travis Wooley	The Nature Conservancy	Yes, Flagstaff

Table 2: Public at Large in Attendance

Member	Agency/Company	In Attendance
Helen Costello	Coconino County	Yes, phone
Kimberley Denny	Atlantic	Yes, phone
Kris Estes	Coconino County	Yes, phone
Jared Hansen	Grand Canyon NP	Yes, Flagstaff
Kim Istok	City of Flagstaff	Yes, phone
Ariel Leonard	US Forest Service	Yes, Flagstaff

**MEETING MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
DATA COMMITTEE
LIDAR WORKGROUP**

Member	Agency/Company	In Attendance
Andrew Sanchez Meador	NAU	Yes, phone
Teki Sankey	NAU	Yes, phone

Items on the agenda may be heard out of order. The Committee/Workgroup may discuss and act on the following items:

- I. **Call to order:** Meeting was called to order at 1:38pm; Introductions were made by the committee; around the tables and on the phone, ensuring attendance list was managed and quorum established

- II. **Approval of July meeting minutes:** Mark Christiano asked for a motion to approve the July 16, 2018 meeting minutes. Richard Lawrence motioned, and Ben Hickson seconded. There was no discussion. The motion passed unanimously.

- III. **Housekeeping:**
 - Review of Open Meeting Laws & Member status: Jenna Leveille reviewed Open Meeting Laws for the new attendees. She explained responsibilities associated to a voting vs public member; attendance requirements. She asked for any attendee interested in being a voting member who has not communicated that to email her.

 - Chair nominations & voting: Mark Christiano identified for the group that the workgroup has had one official meeting, he and Jenna Leveille have been acting Co-chairs while the workgroup is becoming established. Both are willing to continue the roles officially if the group chooses. He asked for additional nominations. There were none. Jim Meyer made a motion for the workgroup's Co-chairs to be Jenna and Mark. Travis Wooley seconded. There was no discussion. Motion passed unanimously.

 - The secretary responsibilities were discussed. Mark encouraged multiple people to volunteer to reduce the work. Travis Wooley, Mary Darling, Noah Bard and Kim Denney all volunteered to assist with future meeting minutes/notes.

 - Future meeting dates: the group collectively agreed on quarterly meetings with additional subgroups meeting on topic specific activities between workgroup meetings. Dates for the quarterly meetings are a little difficult

**MEETING MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
DATA COMMITTEE
LIDAR WORKGROUP**

to identify. Mark would like the group to meet before the BAA application each year. There needs to be a meeting before the first Council meeting of the year to create an annual workplan. The group agreed on meeting in January to finalize the 2019 workplan and Mark would bring the additional 3 meeting dates to the group at the meeting for approval/agreement.

IV. Review of LiDAR Workgroup activities to date:

- **2018 AGIC LiDAR Symposium (8/15/18):** ~60 attendees; post symposium survey was very positive. The overall take away was that people are interested in additional events (annual/biannual) and the networking was seen as particularly important.
- **2018 AGIC Conference LiDAR Track (9/21/18)** Good turn out and excellent feedback from attendees. The track was followed by lively discussion and networking.
- **LiDAR Acquisition Planning Meeting (10/12/18)** The purpose of this meeting was to get all interested stakeholders in a room to discuss long term planning for the 3DEP program and BAA application process. USGS 3DEP program is funded through 2023. Because of the time limitations, it is important to plan how we ask for money to get the greatest LiDAR coverage at the lowest cost. The attendance was good, and the result was a general plan we will review later in this meeting.

V. 2019 AGIC LiDAR WG Workplan Discussion:

- Review LiDAR WG Goals from July meeting - Mark Christiano led the group in a review of the following goals:

The AGIC LiDAR workgroup is focused on promoting all aspects of LiDAR (Light Detection and Ranging) efforts in the State of Arizona. The group will focus on the following goals:

- Information exchange between Federal, State, County, Cities, Nonprofits, Private Sector, Universities and all other interested parties and institutions to facilitate LiDAR acquisition and collaboration, especially through the 3DEP program.
- Utilize AZGeo as a key part of a LiDAR products distribution system of all LiDAR data collected in Arizona and its derivative products.

**MEETING MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
DATA COMMITTEE
LIDAR WORKGROUP**

- Develop educational material and coordinate with the Outreach Committee to expand the general knowledge of LiDAR and its uses to the public.
- Develop recommendations for all LiDAR data standards and best practices.
 - As part of this goal, a specific Focus on developing field plot protocols to expand the uses of LiDAR.
- Explore new and innovative ways to use LiDAR.

Ben Hickson commented that this goal is a bit vague. Kim Denney offered that perhaps this should something about extracting the derivative products for specific uses; document use cases and present findings annually at AGIC?

- Facilitate an annual LiDAR symposium which supports the above goals.

Andrew Sanchez Meador commented that academic protocols and white papers should also be included; Andrew will provide specific language to Jenna for workplan draft.

Jenna presented the Data Committee workplan for the group to understand the format and she reviewed the expectations of the AGIC Data Committee and Council. This plan will be updated by the group each year for approval by Data and then the Council. She will put together a draft workplan based on the goals reviewed and present it at the next meeting in Jan.

- AGIC Website LiDAR page – Jenna Leveille showed the group the (empty) LiDAR page recently added to the AGIC website. Mark Christiano led the group through his vision of what would eventually be added:
 - Education – understanding how LiDAR works; definitions & use cases
 - Mark asked for volunteers to coordinate collected content with the Outreach Committee to get posted on the website. None were identified. He will send out a request to the larger distribution list.
 - Data Standards - protocols & standards/best practices
 - Interactive map of LiDAR in AZ (both existing footprints and areas of interest)
 - Discussion followed on format of the map & storage, type of collection, standard schema information for submissions. Ariel Leonard suggesting starting with the hand drawn map compiled

**MEETING MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
DATA COMMITTEE
LIDAR WORKGROUP**

at the Symposium. Mark suggested that a subgroup be created to facilitate schema standards and development of the map. Ben Hickson volunteered to lead the group. Jenna Leveille will assist with coordination. Kim Denney and Noah Bard also volunteered.

- 2019 AGIC LiDAR Symposium – Group discussion on logistics: location, duration, time of year, possible speakers & facilities. ADOT training center in Phoenix may be an option. General agreement on multiple events per year; one with the annual AGIC conference and another mid-year. Cost & budget came up; some discussion on the complexities of this. Mark asked for volunteers for a planning team for this; none identified. An email will be drafted to the distribution group. Ideally, a meeting in December should be held to begin planning a spring event.

VI. LiDAR Acquisition Plan 2019-2023: Mark displayed the planned acquisition areas for the Northern AZ in 2019 (both QL1 & QL2). The planning group generally cut the state in two for focus areas of acquisition (the rim being the demarcation between N & S). For each, those areas were then cut into thirds: central, west and east. In the north, central is essentially planned for 2019, the west will be the focus for 20-21 & the east for 22-23. The hope is that with coordination and identification of areas of acquisition (with written acquisition plans), more stakeholders will come to the table. Mark has volunteered to be the champion for the North. A champion for the South is needed and Mark will send an email out to the distribution list asking. A written plan is needed outlining the general plan as mentioned above; 3-5-person teams to develop the document. Kim Denney volunteered to assist. Jenna will coordinate/facilitate meeting.

VII. Comments and/or future agenda items: Budget considerations was requested by Ariel Leonard; there is \$80 left over from the Symposium donation bucket for use by this group.

Next meeting is set for Jan 15, 2019 1:30-3:30p.

VIII. Call to the Public: None

IX. Adjourn: Meeting adjourned at 2:47

A copy of the agenda background material provided to working group members is available for public inspection at the Arizona Geographic Information Council's office at 1616 West Adams Street, Phoenix, AZ 85007, Room 216A.

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Members of the Committee will attend either in person or by telephone conference call.

Questions regarding the meeting may be referred to Jenna Leveille at 602-364-3747.

This agenda will be posted at Arizona State Land Department, 1616 W. Adams, Phoenix, AZ 85007 by Jenna Leveille on 24 hours prior to meeting.