MEETING AGENDA
GIS Advisory Committee Meeting
Thursday, February 9, 2017
5:00 PM to 6:00 PM, NS-136

Attendees:

Allen Risley (CSUSM)
Elizabeth Ridder (CSUSM)
Maryam Wagner (City of Oceanside)
Saeid Noori Bushehri (City of Oceanside)
Phil Debarros (Palomar College)
Russ Thomas (Palomar College)

Joel Paulson (NV5)
Abe Coughlin (City of Escondido)
Trish Garcia (Valley Center Water District)
Matt Turner (CalFire)
Sean Taugher (CitiBank)
Suzanne Leininger (NCDJPA)
Wing Cheung (Palomar College)

A. Agenda and meeting discussion items

ID	Time	Item title	Participants
1	5:00-5:05	Welcome and introductions	All
2	5:05-5:10	Review and approval of previous meeting minutes (see Page 2)	All

3	5:10-5:20	Program updates
		• Palomar program updates
		  o Next semester course offering
		    ▪ GEOG 120: Intro GIS
		    ▪ GEOG 134: Python Programming in GIS
		    ▪ GEOG 136: Advanced Spatial Analysis
		    ▪ GEOG 143: Cartography
		    ▪ GEOG 140: Remote Sensing
		  o Marshall University partnership
		  o CSUSM ENVS Program
			Wing

4	5:25-5:40	Curriculum development and updates • GEOG 132: SDE, RTK, UAS, Collector, Survey123, **ArcPad?** • UAS Applications in GIS • Open Source GIS • **ArcGIS Pro** • Emerging applications of GIS	Wing
5	5:40-5:50	Industry trends • **Skills and abilities required** • Job Market • GEOG 120 Service Learning Opportunities • Internships	All
6	5:50-5:55	Events & announcements • Instructors needed • Drone Conference (July 2017)	Wing

B. Outcomes and remarks of discussion items

ID	Remarks/Outcomes/Concerns
1	The meeting was well attended by previous members and several new members. Thanks to all for the discussion of trends related to the GIS industry, and the direction of Palomar's GIS program.
2	Participants were asked to review the minutes from the last meeting. Abe motioned to approve the minutes, Allen seconded, and the minutes were approved.
3	**Program updates** – Wing shared with the committee the courses that will be offered in the upcoming semester, and updated the committee on the status and structure of the Palomar-Marshall University online program partnership. Wing also explained that the inclusion of GIS in CSUSM's environmental studies program has boosted GIS interest at Palomar.
4	**Curriculum development** – *ArcGIS Pro* Wing surveyed the group on the need to shift instruction to ArcGIS Pro. The three most popular answers were: 46% said they plan to adopt ArcGIS Pro in less than 1 year. 15% said they plan to adopt it in 2 years. 15% said they will adopt when forced by ESRI. Matt and Joel agreed that it is important for Palomar to stay ahead, even though many organizations may have constraints (e.g. customizations) that may prevent them from transitioning over to Pro immediately. However, Allen, Maryam, and Saeid cautioned that some organizations may not adopt Pro for several years due to the lack of fundamental functions in the current release of Pro, thus it may be unwise to train students entirely in Pro. Overall, the committee agreed with the suggestion to offer a short course on the Pro interface, while ArcGIS 10.X will remain the main software taught in GIS classes. Elizabeth suggested incorporating demos on Pro in existing GIS classes. *ArcPad* No one in the committee is using ArcPad nor know of anyone who is still using it. The committee unanimously agreed with the decision to phase ArcPad out from the program curriculum. *UAS* Two members (Elizabeth, Joel) of the committee are currently using UAS in landscape survey and LiDAR survey. Two other members (Alex, Abe) are interested in incorporating UAS in their workflow. Specifically, Abe mentioned that a special workgroup has been formed at his organization to explore such a possibility. *Open Source* GeoDa (Sean), QGIS (Joel), GeoServer (Joel) are among the open source software mentioned as being used in the workplace. The committee agreed that a short course on open source GIS is warranted in order to familiarize students with the software interface. Sean and Wing mentioned that they currently have activities in their courses on GeoDa and QGIS. *Emerging Trends* Abe and Suzanne mentioned that open data and GIS applications in civics warrant more emphasis in GIS courses. This should include the sharing of spatial and tabular data with the wider community.
5	**Skills and abilities** – Communication skill was the most sought after skill based on advisory members' feedback. Elizabeth and Maryam suggested that communication skill could be enhanced by asking students to explain their work to each other. Phil and Joel suggested a clear division of labor in group projects. In addition, other desirable qualities that committee look for include leadership, the ability to sell oneself, the ability to work with people from different age groups and backgrounds, and data exploration and data organization skills. In the survey of three most important skills expected of entry level GIS technicians, the most commonly listed one is data editing/manipulation/creation (58% of respondents listed this), the second most commonly listed one is data collection/data exploration (50%), and the third most common response is database (42%). Wing spoke of ongoing service learning partnerships with North County Food Policy Council members, and encouraged advisory members to suggest other service learning opportunities and internship opportunities for students.
6	Wing pointed out that Palomar will be looking for a GIS instructor who is skilled in Python to teach its GEOG 134 course in Fall 2017. Wing also spoke of an UAS conference that will take place at Palomar College in July 2017. The conference is open to educators and industry professionals for a minimal registration fee, and will have an introductory and an intermediate track for different users. Wing also updated the group on the status of its UAS-focused NSF grant proposal.

Active Action Items

Assigned To	Start Date	Due Date	Status	Item Description & Notes
Wing			Open	Continue working on UAS Certificate Program and provide updates.
Wing			Open	Draft plan for rolling out new courses in areas such as OSGIS and Pro.
All			Open	Seek out internship opportunities for Palomar students & introduce projects for service learning.