MEETING AGENDA AND MINUTES
GIS Advisory Committee Meeting
Wednesday, March 20, 2013
5:00 PM to 6:00 PM, NS-117

Attendees:

☒ Rick Quinlan	☒ Doug Key	☐ Chris Morissette	☐ David Lindsay
☐ Mike Klein	☒ Kimberly Knowles-Yanez	☒ Wing Cheung	☐ Catherine Jain
☐ Philip Debarros	☒ Brad Rosen	☒ Mettja Kuna	☐ Allison Pickering
☐ Dom Gagliardi	☐ Melisa Caric Lee	☒ Jose Vargas	☒ David Toney
☒ Dan Sourbeer	☐ Wilma Owens	☒ Russell Thomas	☒ Matt Funk
☐ Antonea Peterson	☐ Matt Van Eck	☒ Brenda Morris	☐ Cliff Hu
☐ Allen Risley	☐ Rick Tallman	☐ Kathleen Porter	☒ Colleen Finch
☐ Laura Horner	☒ David Boulware	☒ Bob Whitney	☐ Maryam Wagner

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	All

3	5:10-5:20	Program updates
		• CSUSM partnership
		    o Geospatial Studies minor update
		• Palomar program updates
		    o GEOG 150: Spatial Statistics
		    o GEOG 144: Internet Mapping and Application Development
		    o Online offerings?
		• Orange Glen and Westview High Schools
			Kim, Wing, Bob

4	5:25-5:35	Curriculum development • ArcPad vs. Terrasync; Data Collection Hardware • Problem Based Learning (USGS, others?) • Python	Wing

5	5:35-5:50	Industry trends
		• Skills and abilities required
		    o Entry level workers
		    o Veterans in transition
			All

5	5:50-5:55	Upcoming events
		    o URISA CalGIS 2013
		    o CSUSM GIS Day 2013 (April 17, 11:30-1:30)
			Kim, Wing

B. Outcomes and remarks of discussion items (from part A)

ID	Remarks/Outcomes/Concerns
1	The committee conducted introductions, and thanked new and existing members for attending the meeting.
2	Motion to approve minutes by Mr. Sourbeer, seconded by Mr. Russell, and the minutes from the previous meeting was passed.
3	Ms. Knowles-Yanez stated that the Geospatial Studies minor at CSUSM is undergoing review by CSUSM's University Curriculum Committee. CSUSM's Extended Learning division is also developing a technique-based GIS Certificate that will complement the Palomar GIS Certificate program by offering more advanced GIS courses. Mr. Cheung explained that Palomar College is now offering its Spatial Statistics course (GEOG 150) that is designed to train GIS Analysts. Another new course focused on Internet Mapping and Applications (GEOG 144) was approved by the College, and Ms. Kuna and Mr. Quinlan offered assistance with finding an instructor for that course. The committee was surveyed regarding the feasibility of offering an online Introductory GIS course in the future. 9 of the committee members supported an online only version of the Introductory GIS course, and 10 of the committee members supported a hybrid version of the Introductory GIS course. Ms. Knowles-Yanez was opposed to the idea of shifting the entire GIS program online, but is neutral when it comes to teaching solely the Introductory GIS course online. She emphasized the importance of student interactions in the classroom, and valued the support that students tend to give one another. Mr. Whitney reported that 30 students signed up for the GIS course at Westview High School. The course is now integrated into the Environmental Science AP course as a full year course (as opposed to a standalone semester course). Due to this change, he reported a decline in student ability in the classroom. He has advertised the GIS course at 8th Grade Fairs, where he recalled parents of incoming freshman being amazed that GIS is being offered at Westview High School. Field trips to Nielsen and BAE also helps to retain student interest in the GIS program at Westview High School. Mr. Cheung reported for Ms. Caric-Lee's GIS course at Orange Glen High School. The enrollment at the Orange Glen High School course is at a record high at 22 students.
4	When asked about data collection software, 3 committee members commented that they used ArcPad, while 2 committee members use TerraSync. Ms. Kuna noted that the City of San Marcos is shifting from data collection to data editing, and is focusing more on ArcGIS Mobile solutions at the moment. Mr. Rosen commented that the instruction in data collection should NOT be focused on the software (i.e. ArcPad or TerraSync), but should instead focus on the process. Mr. Toney agreed with Mr. Rosen, and emphasized the importance of teaching the process of setting up data dictionaries, pre-planning data collection missions, as well as the actual process of collecting, importing, and processing data. A majority of the committee agreed that since the instruction in the software is less important than the instruction in the data collection process, a more user-friendly software such as TerraSync should be adopted (over ArcPad), so more instructional time can be spent on the process of data collection. When asked about the appropriate hardware to acquire, Mr. Rosen and Ms. Kuna emphasized the importance of acquiring reasonably accurate devices that will support ArcGIS Mobile. Ms. Kuna suggested for the program to acquire a mixture of Trimble Juno's and Android tablets. Mr. Cheung announced that the GIS Programming course (GEOG 134) will be adopting Python Scripting for ArcGIS (Zandbergen, Paul A. *Python Scripting for ArcGIS*. Redlands: ESRI, 2013. Print.) in order to provide students with more training with Python scripting. In addition, Mr. Cheung has worked with USGS to created problem based learning projects for the course, and welcome other committee members to provided similar problem based learning scenarios for GIS courses at all levels.
5	Mr. Cheung surveyed the committee about the importance of various tasks when hiring a GIS technician. These tasks were identified by the "Developing A Curriculum" technique by the National GeoTech Center (Johnson, John. "What GIS Technicians Do? A Synthesis of DACUM Job Analysis." *URISA Journal* 22.2 (2010): 31-40. Print.). This allows Palomar College to compare the needs of the local San Diego workforce with the needs of the national workforce (as identified by the GeoTech Center). Mr. Russell expressed the need for more time for committee members to review the given tasks during the survey. The results are attached. Mr. Cheung also reported that efforts are underway to recruit more veterans into the GIS program. Mr. Sourbeer suggested that it may be a good idea to work with individuals who are involved with the Transitions program.
6	Mr. Cheung informed the committee about the URISA CalGIS Conference (April 15-17, 2013) in Long Beach. Ms. Knowles-Yanez reminded the committee about GIS Day at CSUSM on April 17 11:30-1:30, and solicited additional guest speakers and posters for the event.

Active Action Items

Assigned To	#	Start Date	Due Date	Status	Item Description & Notes
Jose Vargas; Russell Thomas	1	2/10/11		Open	Explore the hardware and software needs in order to implement remote access of GIS applications.
Brad, Melisa, Rick, Dave	2	9/9/09		Open	Brainstorm data or real-world problems that can be converted into the technical curriculum of GIS course.
Wing	3	3/20/13		New	Explore the cost of acquiring Trimble Juno's and Android based mobile devices for instruction in data collection.
Wing	4	10/4/12		Closed	Explore short-term project opportunities with industry partners.
Wing	5	10/4/12		Open	Speak with Palomar veteran office to explore the articulation of military courses/training with Palomar's GIS program.
Allison	6	10/4/12		Open	Explore models and best practices established by Veteran Transition Services.