State of Oregon
GIS PROGRAM LEADERS (GPL) COMMITTEE
Date: January 10, 2023
Time: 1:30-3:30 pm
Microsoft Teams meeting

## Attendees:

DAS: Willow Crum, Erik Brewster, David Mather, Melissa Foltz, Tom Elder
DOR: Thom York
INR: Myrica McCune
ODA: Diana Walker, Marganne Allen, Jen Ambrose
OHA: Eric Main
DEQ: Malavika Bishop, Don Pettit
ODF: Arthur Rodriguez
ODFW: Jon Bowers
LPRO: Ariel Low
ODOT: Phil Smith
OEM: Daniel Stoelb
SOS: Roberta Robles
OPRD: Brady Callahan
OSMB: Joe Severson
OWRD: Bob Harmon, Tad Larsen
Portland Community College: Christina Friedle, Lorena Nascimento
Lane Council of Governments: Nick Seigal, Bob Clayton

## Announcements (All)

**Thom York:**
ODOE is hoping to hire a GIS staffer (contingent on POP)
There is an open slot in February's GPL agenda for a presentation. Reach out to Thom if interested.

## GEO/OGIC/ODGT Update (GEO)

**Rachel Smith via Thom York:** Still awaiting 2022 imagery from USGS. Brady Callahan will be leading QA/QC effort.
About to start testing GEOHub portal. Looking for testing volunteers (especially publishers of framework data and would like to test the data publishing workflow.

January 25th is next quarterly meeting of OGIC. Approval of strategic plan, and draft work plan. This is the first work plan for OGIC. Will propose the creation of new OGIC committees which will include non-OGIC members and will do a call out for members.

**Dave Mather:** ESRI UC – 5 free seats left (out of 12). Sate of Oregon employees reach out to David for information about how to register if interested. Dev summit only has one person signed up.

**Thom:** Have chairs in the past attended conferences to get ideas about presentation topics? Would the group benefit form that?

**Bob H.:** Occasionally, but also ESRI and other attendees can give highlights/updates in the meeting following a conference.

**Thom**: might look into attending

## OEM & Prep FIT Update (Daniel Stoelb)

**Daniel Stoelb:** Not much from PrepFIT, but on Oregon Department of Emergency Management updates, the director has resigned, so there is a new interim director (formerly with ODOT). The interim director will lead through the transition while there is a search for a replacement. Have moved into new facility in Salem.

The new governor is working on executive orders related to a state of emergency on homelessness. Not sure yet what that would involve on the mapping side.

Continuing work with search and rescue folks. There is a new hub site that is a one stop shop to contribute information related to search and rescue https://osarid-geo.hub.arcgis.com/

Not too many current weather related emergencies at the moment, but can check the status here: https://experience.arcgis.com/experience/9bb52cec4e4943e195a238f160fbcd12

## LCOG Tool Demo – RLID etc. (Nick Seigal, Bob Clayton)

**Bob** (database administrator and team lead within the GIS program):

Lane Geographic Data Consortium (LGDC):

> Partnership between LCOG, City of Eugene, City of Springfield, Eugene Water and Electric Board
>
> Goal of making things more efficient by sharing data, maintenance, and GIS systems.

Regional Land Information Database (RLID) is one of the LGDC products. Created in 1999, overhauled in 2022. Vast database infrastructure (data elements, procedures and functions, programming code, automated processes. Contains data that has been imported, cleaned, standardized. Integrated daily (flowing in from all of the partners). Extensive QA/QC. Not just unidirectional flow: e.g. assessment provides owner address which is then run through a matching program, and compared to an existing database to flag those that might be incorrect and send that back to them. Uses ETL: Extract Transform and Load.

Regional data maintenance is part of the contract as well: address points, structures, roads, boundaries.

All employees of the partner governments have direct access to the warehouse (though the web portal, and via SQL). RLID user support is available on-demand. Offer personalized training and tutorials.

GIS ecosystem: processes to grab data from the partners, data are transformed and integrated, then put out into products and services for the region.

LGDC contract: sums to 3.0 FTE, total of 77 years of experience.

RLID Web Portal:

Way to search and report data out from the data warehouse. Used 2.6 million times/year.

Subscribers can be organizations with many users.

In the process of replacing website: working with a vendor to create a new version over the next couple of years.

LGDC has a steering committee and policy board

Funding: $1,086,000 total. Each member of the consortium pays in annually, and also have revenue from web portal subscribers.

Examples of regional benefits:

Public safety: accurate address points for first responders, accurate continually maintained PSAP boundaries

Government functions: determination of safest walking routes to and from school, student attendance numbers (these numbers are relied on by schools), boundaries and addresses for elections

Economic development: real estate market information, assessed property value, permit history

Future: Jacob Blair (primary GIS guru) continuously expanding what is available. Process of redeveloping website will make it more mobile friendly, but big thing is to leverage all the new things that have been put into the database.

Q&A:

**Thom**: Your cleansing, standardizing, and integrating daily from heterogenous sources is quite appealing. DOR does data gathering on an annual basis. Though there is an ORMAP standard it isn't always used. Do you consider your approach to be a model that others could follow?

**Bob**: For a GIS centric process talk to Jacob Blair. For tabular data, ETL design and programing used extensively. Overhauled for the new data warehouse. Now have a standards document for everything in the ecosystem. Naming can be the biggest challenge. Applies to data elements, databases, columns, data types. Close relationships: are mutually beneficial. "RLID lite" has saved lane county taxation at least one FTE.

**Nick** (GIS analyst, planning background):

LCOG manages many servers. Database servers, ArcGIS Enterprise servers, server for back-end partner access (duplicate geodatabase for access because internal database no longer accessible), license servers, more. Moving to use of services over direct access to geodata.

Three pillars: two counties and one regional

Query interfaces for the various data (e.g. documents database, property search). Advanced property search also gives school district, zoning, (&more) information.

Once you have located a property via the property search, can access a multi-page report (building diagram from assessor, permit information, taxation, value, sales, images cached from image services using ETL).

Parallel mapping application is made with web app builder developer edition. Can view high resolution air photos, view additional reference layers (place names, transportation, etc). Links to the RLID report from the mapping application. Able to search for and add other map services (e.g. services from Lane County).

Q&A:

**Roberta**: Access to Lane County Precinct Polygons?

**Nick**: Yes; look at the website: via a data request.

**Eric**: Are utility service providers linked to the taxlots?

**Nick**: Not currently. There is interest, but also caution around some aspects.

**Daniel**: What monitoring systems are used to ensure that the services are up and running? (External data sources)

**Nick**: Use a technology that isn't GIS specific (monitors when REST services are down). Working on improvements. IT service management monitoring platform. More affordable than other products.

## Framework Program Update (Melissa Foltz)

**Melissa**: New framework coordinator. Coming from private sector. Focusing on working with FIT leads, and the equity mapping that is coming up in the near future.

Currently working on data inventory spreadsheets submitted by FIT leads late last year. Will be meeting with FIT leads to go over the questions, and work with FITs that have not submitted their spreadsheets. Chris Daly nominated Dylan Keon for the replacement Climate FIT lead (up for OGIC vote at next meeting). FIT leads meeting coming up January 30th.

## PCC Geospatial Programs (Christina Friedle, Lorena Nascimento)

**Christina** (faculty member in geography at PCC):

Programs:

       1-year GIS certificate

       Geospatial UAS Certificate (3 courses)

       Geomatics Associate's of Applied Science (2 years)

       National Science Foundation (NSF) Advanced Technological Education (ATE) grant(s)

GIS is long standing program at PCC (started in 2010). Graduate 25-30 students per year.

In 2019 received 1st round of NSF ATE funding: used to develop the UAS program, equipment acquisition, professional development. Fall of 2021 started offering the Geospatial UAS Cert and Geomatics Associate's Degree. Have had two cohorts go through the UAS certificate so far.

June of 2022 second round of NSF funding. Meant to help recruit more diverse population into the programs and the geospatial industry. Support students to keep them in the program. Retention, recruitment, outreach.

**Lorena (**GIS faculty at PCC in geospatial program):

 PCC Geospatial Programs StoryMap:

https://storymaps.arcgis.com/stories/78d95f36e2bd42bb93fbe0d50ee9c366 . Used for recruitment of students. Explains differences between programs, info about financial aid, kinds of geospatial jobs and careers Oregon.

GIS certificate is less than one year (three terms). Include maps and geospatial concepts, GIS analysis, cartography, geospatial applications, GIS electives. In third term students work with a partner; helps to prepare for workplace and jobs.

Geospatial UAS certificate: three terms (one class per term)

Associates degree in geomatics: classes from other certificates, can also take classes on CAD, surveying, databases, and more.

NSF grant has helped with other programs. E.g. summer institute to teach basic GIS applications (esp. using ArcGIS Online). Help high school and community college programs replicate these programs.

https://www.surveymonkey.com/r/mapping-local-landscape

Women in Geospatial Careers lecture series.

Mentorship program with ORURISA. Way to connect mentees with people working in the geospatial field.

Q&A:

**Thom**: Do some go through multiple programs either in parallel or consecutively?

**Christina**: Most students in the geomatics program will also attain the GIS and UAS certificates. Handful of UAS students that are already GIS professionals that are just looking to attain that additional skill set.

**Christina**: Geospatial Internships:

NSF grant allows students to be paid while gaining experience in the field via geospatial internships. 22 interns over 3 years in current grant. Is a collaboration between PCC and the organization hosting the intern. Typically each organization has had a very specific project they wanted an intern to focus on, or ongoing support (e.g. cleaning up datasets, updating historical data). Or a combination of those two. Christina works with the point of contact on the time frame, approximate # of hours. Need a signed contract between PCC and hosting organization. The student is hired by PCC and an employee of PCC, but working for the organization, so the contract outlines how that works and who is responsible for what. Have worked with DSL, ODOT. Ask that hosting organization put together a position description including timeframe, details about the work, and how to apply. Students submit application materials directly to the point person. Typically 3-10 applications are received. The host organization conducts interviews, and Christina helps them get set up initially. At the end of the internship both employer and employee fill out forms to provide feedback and there is a debrief meeting with the student, organizational point of contact, and Christina. Orgs need to have the capacity to host the intern, and a single point of contact for the student. Should be a positive, supportive experience to help the student

grow and gain skills. Student should be included in bigger picture meetings that relate to the project. Applicants can be recent grads as well as current students. Funding is through June of 2025. Agreement with the hosting organization is for the full extent of the grant so that it can encompass work with multiple students.

Q&A:

**Arthur**: Do you have any suggestions for recruitment of entry level GIS positions? (Where to post, or reach out to Christina?)

**Christina**: Can send to her. Maintains website of job opportunities that the student have access to, and can send it to current students.

Contact info:

Christina Friedle

Christina.friedle@pcc.edu

Lorena Nascimento

Lorena.nascimento@pcc.edu

**Bob C**: LCOG is hiring for RLID team: https://www.lcog.org

## Roundtable (All)

DOR: Technical note on GPL meetings: Will be revising repeating meeting invite. Used old GPL address, so if you get a cancelation it is probably a result of switching from the old GPL address to the new GPL address. DOR update: Working to get data from counties and will start aggregating.

ODA: Jen recently hired. ODA is working on a strategic plan for GIS.

> Roberta: Secretary of State is doing the same thing.
>
> Thom: Strategic planning going on at revenue as well. Not specifically about GIS, but interested in conversations.
>
> Ariel: This is the framework framework LPRO has been looking at:
>
> https://www.linkedin.com/pulse/geospatial-strategy-one-page-matthew-lewin

ODF: Continuing to work on private forest accords. Looking at a couple of ESRI software evaluations: site scan (drones), ArcGIS workflow manager. If others have interest in discussing, or have experience in those reach out to Arthur.

ODOT: Starting development effort on an add-on for ArcPro for an ODOT toolbar (functionality for accessing internal data library). Want to complete that before moving to pro. Effort over next 5 or 6 months.

OHA: Adding to community water system boundaries. 900 regulated by EPA, could use LCOG information for Lane County. These boundaries are very important b/c they will be a significant layer in the environmental justice mapping tool  (Nick's contact info for follow up on LCOG boundaries: nseigal@lcog.org)

SOS: working on getting access to taxing districts data from revenue. Testing enterprise connections.

OPRD: GIS software support for new staff. Continuing to move to Pro. Shout out to Willow and Dave for helping with licensing issues when not available. Can modify AGOL email address in python, so will be doing that for their users to fix their email domains.