

# Louisiana Geographic Information Systems Council

## Digital Data Committee

Meeting of November 19, 2020

### 1. Call to Order

Committee Chair Warren Kron (LMA) called the meeting to order at 12:14 PM. A quorum was present via Webex for the meeting. The meeting was held remotely pursuant to the waivers of viva voce mandates of LA R.S. 42:11 *et seq.*, contained in 2020 JBE 41.

### 2. Attendance

Committee Members Present:

Kathrine Cargo – Louisiana Chapter Emergency Numbering Association (NENA)  
Warren Kron – Louisiana Municipal Association (LMA)  
Darryl Mack – Department of Transportation and Development (DOTD)  
Josh Manning – Louisiana Association of Planning and Development Districts (PDD)

Others Present:

Phillip Breaux – LSU Center for Analytics & Research in Transportation Safety (CARTS)  
Jason Carr – Department of Transportation and Development (DOTD)  
Chris Cretini – US Geological Survey (USGS)  
Lynn Dupont – Louisiana Association of Planning and Development Districts (PDD)  
Brad Mooney – Louisiana Department of Wildlife and Fisheries (LDWF)  
John Sheehan – Louisiana Department of Environmental Quality (DEQ)  
Rachel Watson – Department of Culture, Recreation and Tourism (CRT)

### 3. Meeting Summary

Mr. Kron (LMA) asked members to review the minutes from the October 15, 2020 meeting. Josh Manning (PDD) made a motion with a second by Kathrine Cargo (NENA) to approve the October minutes and the committee unanimously approved.

Mr. Kron (LMA) asked the committee to nominate a new member to replace Collin DeGueurce. Mr. DeGueurce's appointment by the Louisiana Police Jury has ended and Ms. Chelsey Salpietra is the new appointed member on the LGISC. Suggested appointments were made including David Gisclair (Senate), Lynn Dupont (PDD), and Philip Breaux (CARTS). After a brief discussion the committee decided to wait until the full council meeting to ask Mr. Gisclair (Senate) or any other interested attendees if they wish to serve on the Digital Data Committee.

The next item was a quick review of the minor changes that had been made to the Address Point schema during the October meeting. Mr. Kron (LMA) shared the updated spreadsheet displaying the new "TRKWY – Truckway" value that was added to the Road Type domain. Also, the additions to the data descriptions for the St\_PreMod, St\_PreTyp and St\_PosType fields were highlighted. No other discussion was had about the Address Point schema. Mr. Kron (LMA) will ask the full council for its approval of the completed work if a quorum is present.

For the remainder of the meeting, the attendees focused on discussing development of a minimum schema for land cover. Mr. Kron (LMA) introduced the topic and Lynn Dupont (PDD) provided insight about a Louisiana Watershed Initiative (LWI) conference call she attended. Ms. Dupont (PDD) inquired about the data inputs that will be used for the regional modeling efforts, and the modelers on the call

did not have answers at the time. Ms. Dupont (PDD) also reiterated that the committee's work to develop a land cover schema will draw from existing resources as to not recreate the wheel. Jason Carr (DOTD) commented that DOTD recently added a few layers from USGS into its Topographic Mapping Program including woodlands, impervious surfaces and others that are derivatives of land cover data.

Ms. Dupont (PDD) commented that whether it is the National Land Cover Database or the USGS Gap Analysis, it would help to know which data the various state agencies are using. For regional use, Ms. Dupont (PDD) stated that generalized categories and higher resolution data is required, but this is probably not the case for a statewide land cover dataset. Ms. Dupont (PDD) asked Mr. Carr to provide a list of sources for the land cover data already being used by DOTD.

Mr. Kron (LMA) shared the C-CAP Simplified (7 class) Land Cover Classification System that is used within District 1 – Regional Planning Commission as provided by Ms. Dupont (PDD). These classes include: 0-Background, 1-Impervious, 2-Bare Land, 3-Grassland, 4-Scrub/Shrub, 5-Forest, and 6-Water.

Brad Mooney (LDWF) asked the committee to explain its vision for the land cover minimal schema. Darryl Mack (DOTD) provided feedback and suggested that before the committee attempts to create a table for documenting the schema, it first needs to decide which data will be used. Mr. Mooney (LDWF) then discussed the two different types of classifications he has been involved in. The statewide classification he worked on at DEQ was derived from the Anderson system which is the de facto standard. However, the smaller classifications Mr. Mooney has worked on at LDWF are driven by end-user classification preference. Ms. Dupont (PDD) asked Mr. Mooney to provide information about the dataset he starts with, the source(s), and the update cycle. Mr. Mooney (LDWF) responded that the main input is the imagery (LandSat) and that the resolution (30 m) is appropriate for large areas of interest, but would not be for an urban area.

John Sheehan (DEQ) added that DEQ uses the cropland data layer (CDL) from the NRCS which is highly skewed towards agricultural lands. Within the data are extractions of developed areas from the USGS land use data which are split by permeable surface ratio. The CDL is a 30 m resolution dataset that is updated every two (2) years and provides statewide coverage. There are other better datasets but none of those are statewide. Mr. Sheehan (DEQ) suggested that the metadata from the CDL could be used to initiate the development of the LSDI Land Cover minimum schema.

There was a brief discussion about the differences between land use and land cover and the usage of both datasets for different purposes. Ms. Dupont (PDD) distinguished the differences in the two layers by pointing out that land use can be very specific. Mr. Sheehan (DEQ) provided an example that no statewide land cover layer would include swimming pools because the imagery resolution would simply not support that level of detail. Whereas a land use layer could potentially classify swimming pools.

Ms. Dupont (PDD) suggested using the metadata from the NLCD in developing the LSDI Land Cover minimum schema. Chris Cretini (USGS) added that the latest NLCD data is from 2016 with a five-year update cycle and 30 m resolution. Ms. Dupont (PDD) envisioned the LSDI Land Cover schema would

provide metadata for all of the data sources which would assist end-users in determining which layer is best for their project.

Ms. Dupont (PDD) and Mr. Sheehan (DEQ) continued discussions specific to land use. It was pointed out that no statewide land use layer has been developed. Also, Ms. Dupont (PDD) reiterated the importance of being clear about the difference between land use and land cover, because planners consider land use to be an activity and a function of smaller units that leads to zoning regulations. Mr. Kron (LMA) commented about the idea of providing different versions of the data based on scale, to which Ms. Dupont (PDD) agreed but suggested concentrating on land cover.

After reviewing the C-CAP Simplified (7 class) Land Cover Classification System, Mr. Mack (DOTD) stated that it is what he envisions for use at a statewide level. Mr. Carr (DOTD) confirmed that this classification is the closest to what DOTD currently ingests from USGS, and commented that there is a business case for utilizing the expanded 14 class land cover classification system but not necessarily for the Topographic Mapping Program.

Mr. Kron (LMA) asked Mr. Sheehan (DEQ) to share the CDL metadata and Mr. Mooney (LDWF) was able to find the documentation and send to the committee members. Mr. Kron (LMA) shared the metadata record with the committee and Mr. Mack (DOTD) noted that the data would need to be clipped to Louisiana. Mr. Sheehan (DEQ) noted that classes can change between classifications. For example, blueberries may not be included in one year because there were no crops, but do appear in the next data classification cycle (annual updates). Therefore, no classes should be removed which would allow users to decide which classes they want to utilize for their project.

Ms. Cargo (NENA) asked the committee whether the Anderson system would be used, and Mr. Sheehan (DEQ) commented that the C-CAP Simplified (7 class) Land Cover Classification System is very close to being exactly like the Anderson system. Mr. Mooney (LDWF) mentioned that the Anderson system provides for very detailed classifications given the resolution of the imagery. Mr. Sheehan (DEQ) pointed out that if the committee decides to select one or all of the C-CAP, CDL or NRCS classification systems, then it does not really matter whether it is called "Anderson" or not. Mr. Cretini (USGS) participated in this discussion. Mr. Mooney (LDWF) also sent the Anderson system guidelines to share with the committee. The document provides the various methods and levels for performing classifications.

#### **4. Action Items**

Mr. Kron (LMA) will create a working draft of the land cover metadata as discussed during the meeting.

#### **5. Next Meeting**

Scheduled for Noon on Thursday, December 17, 2020 and the location will be determined later.

#### **6. Adjourn**

The meeting ended at 1:03 PM after the committee voted unanimously on a motion made by Ms. Cargo (NENA) and seconded by Mr. Manning (PDD).