

Meeting Notes

Texas Shared Technology Services
Geographic Information Systems Solution Group Meeting
November 13, 2019 • 2:00PM – 3:30PM

Texas Department of Information Resources
Wm. P. Clements Building – 13th Floor
Conference Room #4 (The Congress Room)

Meeting Chair Richard Wade (TWDB/TNRIS)
Co-Chair Ed Kelly (DIR)

Participants **(Attendees in Bold)**
Raj Nadkarni (TCEQ), Scot Friedman (GLO), Monica Watt (CSEC), Felicia Retiz (TNRIS), **Gayla Mullins (TNRIS), Chris Bardash (TxDOT), Travis Scruggs (TxDOT),** Ilyanna Kadich (TNRIS), Jeremy Rogers (TxDOT), **Jeremy Nobles (TPWD),** Michael Kersey (DIR), Susan Seet (CSEC), Jodie Erickson (DIR), Jennifer Neutzler (DIR), **Jennifer Kirby (TCEQ),** Michael Chamberlain (TxDOT), Burhan Girgin, Terese Shade (DIR), Lorie Ramirez (DIR), Carrie Davie (Capgemini), **Brooks Myers (DIR),** Greg Smithhart (UT), Kate Fite (DIR), **Mark Howard (DIR),** John Barton (TxDOT), Stephanie Harris (DIR), Kelly Parker (DIR), Jonathan Martin (TxDOT), John Andrade (DIR), Tammy Kyle (Texas Open Data Portal), Michelle Valek (THC), Monica Watt (CSEC), **Carolyn Wilson, Christian Astoria (RRC), James Harcourt (RRC), Horace Massey (RRC), Mary Ann Smither (Capgemini)**

Conference Number: 1-877-873-8018 Access Code: 3298261#

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Welcome and Introductions (Richard Wade)

Agenda:

- Imagery for Texas Update - Richard Wade/Gayla Mullins-TWDB/TNRIS, Travis Scruggs-TxDOT
- Google Cloud Platform Training - Richard Wade-TWDB/TNRIS
- Open Discussion – Giza Vector Service, DCS overage - Group

Imagery for Texas Update (Richard Wade/Gayla Mullins-TWDB/TNRIS, Travis Scruggs-TxDOT)

- Have held productive meetings with a couple of vendors that feel they can fulfill the obligations of the program that Google is vacating



Meeting Notes

- Met with Tere Shade (DIR) and will provide her a scope of work to have sent out for bids
 - GIS group will be able to review for input/feedback
 - DIR recommends the Scope of Work be very specific
 - Currently have sufficient resources in the program to cover the cost
 - New members joining the service and no one is dropping out
 - Overage may be needed for whatever vendor/service selected
 - Mark Howard (DIR): Suggestion of having a Non-Disclosure Agreement (NDA) in place once Scope of Work is distributed for review in order to protect procurement
 - Clarification that discussions prior to distribution of Scope of Work do not fall under this directive
 - Once Scope of Work is produced and ready for review, NDAs become effective (DocuSign)
 - Will need addresses for all reviewee(s) before Scope of Work is distributed
 - Timeline: 1st or 2nd week of December to have document to DIR
- Intention is to ensure that some type of imagery solution service is in place after August 2020 while in parallel, continuing to work the longer-term possibility of a state-owned aircraft/sensor option, along with applying any lessons learned. State-owned aircraft option would likely take two or more years to accomplish, if adopted.
 - Identify pros/cons of replacing imagery service while going through this process
 - **Question:** Has Google completely gotten out?
 - Google is coming up with another program that gives states the rights to use their imagery 'as is' and on Google's update schedule free of charge with the same current license agreement
 - Caveat: TNRIS would have to generate an annual report for Google on how the imagery gets used and for what reasons, etc.
 - May raise a legal question for \ as to why Google is asking for the data and how they plan to use the information
 - Google has not yet determined the details of this report
 - The State does not want to use Google as an only source so another resource will be engaged
 - There will still be an additional cost for storage (Giza/AppGeo) of approximately \$200-\$300K/year regardless of vendor resource
 - Archiving data (3 months or 1 year differential) would probably say yes
 - For later discussions: TxDOT contributing a fair amount currently - do those contributions continue or get pulled out if they are using their aircraft?
 - **Suggestion:** May need a secondary Scope of Work to address the future storage component, and not just focus on imagery
 - A secondary project (Storage)
 - A future tertiary project (Lidar)
 - **Question:** DPS does not participate currently, but some DPS group reached out to TxDOT with interest and TxDOT plans to meet with them next week
 - What is the appropriate methodology to show the service to interested groups?
 - TNRIS can provide a 14-day trial link (can customize the length of time)
 - TNRIS can reactivate current link to DPS



Meeting Notes

Imagery for Texas Update – continued – State-owned aircraft idea – outside DCS (Travis Scruggs-TxDOT)

- Background Data: Current state of Texas Imagery Service is expiring in 2020 and TxDOT looked at the acquisition of another aircraft
 - Current fleet of aircraft is for transportation purposes, etc.
 - TxDOT is mandated to house/maintain all state-owned aircraft, except for DPS
 - Texas and TxDOT used to fly imagery for highways and now with imagery service expiring with Google, research has begun looking at costs of flying the state with state-owned aircraft vs. contractors
 - Cost differences are extreme for a comparable product
 - Contractor: State-wide/6" imagery – estimated \$16M/year
 - Currently, do not have a contractor estimate for a multi-year agreement which may drop prices, but not low enough to compete with the state-owned option
 - State-Owned: State-wide/6" imagery – estimated \$9M/first year
 - Ends at approximately an estimated \$2M/per year operating costs
 - Port space for additional sensor for cost recovery methods (city mapping, oblique, etc.)
 - TxDOT is taking the lead because of access to federal reimbursement through the State Planning and Research (SPR) program
 - Proposed program would qualify for valid use of funds
 - Currently, working the bureaucratic process
 - Comprehensive plan previously presented to Governance group included flight logs, setting up FTEs/staff, computers/hardware, processing costs, etc. and are all included in the cost estimate
- Currently, TxDOT working with the Federal Highway Administration (FHWA) and Finance to ensure these funds may be appropriately used for a state-owned aircraft imagery initiative
 - Agreeable with FTE estimates, but need a higher comfort level with the capital acquisition estimate, but they are supportive
 - Project Status/Next Steps:
 - Still waiting on an official response from the FHWA to ensure that funds are approved and can get spent as proposed
 - Review the numbers and pitch to the executives
 - Met with Interim Aviation Director (Dan Harmon)
 - He thought the FTE estimates were a bit high
 - Did not think the 'scheduler' and an 'analyst' position were needed.
 - 'Scheduler' function could be performed by lead pilot assigned to the project
 - **Concern:** Thought the 'scheduler' would be utilized to ensure other state agency's needs were integrated, as needed/as authorized
 - The primary focus of the program is to fly the state every year, and anything else is secondary
 - If FHWA funds are essentially going to pay for the plane, it needs to be used to support the planning process at TxDOT
 - Interim Aviation Director indicated there is an official form to state in writing how the plane is going to be used to define a narrow use case



Meeting Notes

- Pilot could attend these governance meetings
- Governance group could set other agency request priorities
- TNRIS could provide a communicator/liaison between group and pilot
 - Requests could be online (web application)
 - \$2M yearly budget could potentially be expended by September
 - Once yearly budgeted funds are depleted, agency additional requests could be billed to the customer as an extra project
 - If multiple agencies have an equivalent need (e.g., coastal erosion imagery as a result of an emergency incident), does that fall under a billable event or a 'no-charge' state requirement event?
- Wording/Language of overall scope of work needs to be clear to ensure participating agencies know the primary use of aircraft and that additional agency costs could be incurred for requests beyond that scope
- TxDOT (Flight Services Section) is mandated to be cost neutral, so they are required to generate a bill to track costs
- Will FHWA allow the use of an aircraft if does not directly benefit TxDOT?
 - If yes, some agency/group will have to pay for it
 - DCS funds could be used for one-off projects
 - StratMap funds (~\$2.1M) can also be used
 - Ensure language in scope of work does not explicitly say the aircraft is to be used for the sole benefit of TxDOT; and it should not mention the purchase is part of the fleet replacement plan to release the group from any contractual plan/sensor access by TxDOT
 - TNRIS should manage the dedicated coordinator role (0.5 FTE)
- **Concern:** What legally would the plane be used for eventually
 - What is the timing of the possible acquisition?
 - Will need to go through the Legislative Appropriations Request (LAR) process (Spring 2020), so approximately 2 years out
 - How is the Bureau of Economic Geology (BEG) lidar different from Texas Imagery Service?
 - There are specification differences (quality) but the lidar data is not that different
 - TNRIS (Wade) will look into differences and get back to the group
 - Discussions inside TxDOT regarding what to do with all the current lidar data
 - Contract to maintain service for the next couple of years; play this out to see what works better
 - Regarding using SPR funds, if the legal language indicates that the aircraft cannot be used for anything other than for the benefit of TxDOT, there may be conflicts with agreements with BEG
 - Need to work out the semantics (i.e., aircraft being used to acquire data vs. purchasing an aircraft/sensor) so that the process of acquiring data is not specified from a legal standpoint
- **Question:** Previously discussed engaging executives from different agencies - is that off the table?
 - Want to make sure the language from FHWA is nailed down first
 - Need to know what will be presented to and asked of the agency executives
 - What kind of support? Monetary? A letter of support? Statement to the Legislature?
 - Will not ask for FTE or monetary support, generally
 - Monies are already being contributed to DCS



Meeting Notes

- Will ask for written, oral and physical presence support to communicate this is beyond an aircraft purchase for the Aviation Division
 - **Concern:** During the Legislative session, most agency executives are there to make sure their budgets get through and approved
 - TNRIS and TWDB could provide support needed during Session since it is part of their mission and executives are aware of the need for support
 - Need to look to agencies for support for the 'idea'
 - Letter of Intent towards the Legislative Budget Board (LBB) and to representatives from an agency side may be the best option
 - Need to focus on what TxDOT needs and provide whatever details are needed to meet short term objectives
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Google Cloud Platform Training (Richard Wade – TWDB/TNRIS)

- After discussions with Tere Shade (DIR), all details have been worked out with Google regarding training
 - Need to arrange for anyone interested in learning about Google Cloud offerings (Giza, etc. being served up on Google Cloud Platform) to put imagery in the cloud
 - The program has invested 4 years developing this platform, so we want to leverage it
 - 16 seats available for training 6 days (does not have to be contiguous)
 - If interested, each agency asked to submit names of employees
 - Start date will be in February 2020 time frame
 - This training was built in to this last round as Google departs from imagery service
 - How to schedule classes: spaced out or contiguous
 - Richard Wade to provide class descriptions and framework of scheduling options
 - Richard will get with Google to see if they have a recommendation-will work with Tere Shade (DIR)
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Open Discussion – Giza Vector Service, DCS Funds (Group)

- Discussion with AppGeo are underway about the desire to put vector-based services inside Giza (specifically parcel data) and having it served out
 - To be able to query, we would need a vector service which currently does not exist in Giza but it has the capability to add
 - Looking to download parcels and not county by county
 - Unable to simply drop them into Giza - technology does support that capability
 - Will have to build a separate Giza-like instance
 - Will be able to monitor usage
 - Land parcels would be a good first dataset with address points, etc.
 - Pilot: Estimate for sole source contract is <\$50K (one-time cost)
 - Discussed with Tere Shade (DIR) about potentially using the available funds from Texas Imagery Service
 - More discussions needed with AppGeo



Meeting Notes

- If all agree, group will ask Tere Shade (DIR) to use available funds from Texas Imagery Service for the development of a tool for a Giza-like vector service as a way to host a future service
 - **DECISION: GROUP CONSENSUS – the GIS Solution Group agreed through consensus to move forward with the pilot initiative with AppGeo**
- TxDOT is hosting a Survey and GIS conference (Spring 2020)
 - Looking to get other state agencies to participate on the GIS side to discuss how they use the technology, how they create/share/manage spatial data, etc.
 - Provide a 15-minute pitch/story
- Preparing the GIS Community meeting for the January 2020 time frame

Next Agenda and Action Items

Action Items:

Owner	Description
Richard Wade (TWDB/TNRIS)	Imagery for Texas Update: Look into the differences between BEG and Texas Imagery Service lidar data and provide information to the Group
GIS Group	Google Cloud Platform Training: Group to provide names of those from their respective groups to attend training to TNRIS
Richard Wade (TWDB/TNRIS)	Google Cloud Platform Training: Provide class descriptions and a framework of scheduling options and engage Tere Shade (DIR) to work with Google to see if they have recommendations of the best way to schedule the classes

Next Meeting: December 11, 2019 at 2PM

Next Meeting Agenda Items:

