

# Meeting Notes

Texas Shared Technology Services  
Geographic Information Systems Solution Group Meeting  
May 7, 2019 • 2:00PM – 3:30PM

Texas Department of Transportation  
118 E. Riverside Drive Austin, TX 78704  
TPP Conference Room A – 2D-01

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

Participants                    **(Attendees in Bold)**  
**Raj Nadkarni (TCEQ), Scot Friedman (GLO),** Monica Watt (CSEC), Vonda Payne (CSEC), Felicia Retiz, **Gayla Mullins,** Ilyanna Kadich (TWDB/TNRIS), **Chris Bardash (TxDOT), Travis Scruggs (TxDOT),** Jeremy Rogers (TxDOT), **Jeremy Nobles (TPWD),** Michelle Swindle, Bobby Bruner (Atos), Michael Kersey (DIR), Michelle Valek (THC), Laura Rojas; Susan Seet (CSEC), Jodie Erickson (DIR), Chad Lersch (DIR), Dave Ballinger (DIR), **Jennifer Neutzler (DIR), Jennifer Kirby (TCEQ),** Michael Chamberlain (TxDOT), **Burhan Girgin,** Terese Shade (DIR), Lorie Ramirez (DIR), Carrie Davie (Capgemini), Dan Otto (DIR), **Brooks Myers,** Greg Smithhart (UT), **Mary Ann Smither (Capgemini)**

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

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**Welcome and Introductions** (Richard Wade)

**Agenda:**

- Texas Imagery Service Discussion (Gayla Mullins)
  - Discussion with Google (Richard Wade)
- Authoritative Data Discussion (Richard Wade)
- Group Discussion (Group)

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**Texas Imagery Service Discussion** (Gayla Mullins)

- Will not have access to new Google imagery past August 2020
  - Will have access to past imagery (digital files and service) as long as contracted with AppGeo or find it a new 'home'
    - Files will be downloadable via Giza



# Meeting Notes

- If you want more than that, then can subcontract out to a third party
- Can continue to serve out Google imagery to possibly use as a foundation
- Gayla sent updated maps of what has been completed since last met
  - Tier Areas jpg illustrating different Tier areas to begin discussion of what we might want to do in the future
  - NAIP – Texas one of last states to be flown in 2018 of US states scheduled
    - Texas has not started inspection
      - This is the 16cm/4-band/public domain imagery received every other year under the Federal program that is available for free along with its services from TNRIS
        - Dependent on Fed funding
        - NAIP was not going to do Texas, but started in September
          - Will be a mix of leaf-on/leaf-off
      - Requested estimated completion date – no response yet, but it is currently showing it has not started inspection
    - Can we rely on the imagery every other year?
      - \$23 million in federal appropriations for NAIP program
      - NAIP seems to be a consistent project for Texas, but cannot be sure
  - Overall – mixed feedback from Google announcement to current participants, but overall the feedback was positive from agencies/entities
    - Gayla took diligent notes on the responses
    - Will need to be prepared for complaints
      - Now an option to purchase or get a set of the imagery along with the service
        - NAIP is talking about possibly going to a license model
          - Currently doing it for their field/farm offices
          - NAIP was never meant to be as publicly available and relied upon by other organizations as it has become
          - Will keep in touch with them to see where they are
            - Currently working with Hexagon
  - UPDATE (R. Wade)
    - Historically, wanted an image flight that was contiguous for the state and that was within 18 months
      - We can still do with TNRIS TOP program or team up with NAIP
    - Now that we have already offered the Texas Imagery Service at 6”, what do we want to do as a state now?
      - Take StratMap funding and buy up 6” for critical areas and start piecemealing knowing that NAIP might have that contiguous dataset?
      - Take StratMap funding and have the TOP program fly the state at one time?
      - Take StratMap funding and buy 6” imagery of Tier 1 areas plus any other areas that agencies have identified?
        - This approach neglects rural areas
    - Direction needs to be decided
      - Discussion with Randy Mayden (Hexagon): Hexagon’s 6” program has a service similar to Google that will fit the bill (primarily leaf-off)
        - Can decline leaf-on
        - Flights over populated metro areas at 18 months guaranteed at 6”



# Meeting Notes

- Rest of state follows NAIP model
- Concern of some double dipping with Hexagon
- Google discount for next year since they won't meet the contract
  - Flights will not fly State of Texas schedule but still collecting imagery for Google maps
  - Will agree to imagery next year from Sept 1 2019 to Aug 31 2020?
    - Will take \$300K off - \$598K Flight Cost (includes any updates)
    - Buys a year and returns \$300K back
    - Will we get \$600K worth of imagery?
      - Currently on the standard schedule which is providing substantial imagery
      - What they've updated since last meeting to now – taking \$300K off seems to make sense
      - Will work urban area refresh, but rural areas (pink 2014/yellow 2015) may not get refreshed at all – is that worth the discount?
      - Can contract discussions speak to specific areas that MUST be flown or use as part of StratMap funding to fly these areas?
  - Expressed interest to license Google imagery 'as is'
    - Google is still working on determining annual cost
    - Will entertain as an option – pricing will make determination
    - Google will fly their standard imagery as if we were not involved
      - Duplicate imagery and send to AppGeo
    - Google has to do some extra work and will provide a dollar amount
  - What if we take Hexagon's offer for major metro areas at 6" imagery and mix and match with Google's offerings and still be under initial \$900K?
    - StratMap funds may not be critical re: imagery
  - If Google is going to continue doing urban 6" anyway, is Hexagon still on the table?
    - Google beyond 9/1/2020
      - Google Maps/Earth – replicate imagery to us from a different server
        - Gives us everything and we put inside of our service
    - For CSEC – may take longer for updates
      - Do a hybrid and put in same resolution as a layer
      - Layers at different levels moving from county to county causes issues
- Have we looked at Pictometry? Have not had formal conversations yet
  - It is expensive
  - Currently oblique imagery in 4" and 9", but could be told to do 6"
  - Reviews are less than stellar even though they saturated the market over last 10 years
- From Gayla's research, currently, there is not a 6" statewide provider as an imagery content program



# Meeting Notes

- Suggestion: Continue using Google imagery for metro areas but look at areas that are 3-5 years old to see how much it would cost at 6"
- Gayla will need to point the ship in the agreed-to direction
  - Past objective was to try to keep everything contiguous but may not be the current objective
    - 6" resolution is not going to get out to West Texas
    - Anything older than 2017 – put together a priority list and determine the dollar amount to get these areas to 6" resolution
      - A plethora of partners to accomplish within specific specifications
      - May be piecemealed but same spec
    - If we supplement with StratMap 6" imagery, it will have better integrity than Google imagery
    - If we get Google Maps piece, then we have continuous update anyway but depends on negotiated cost
    - Rough estimate for 6" statewide-leaf off: \$16.5 million (original cost – still same today)
    - Competitive procurement process – supplemental runs may be a good option
    - Hybrid option may eliminate the 'publicly available' data conversation
      - Assuming NAIP is in picture, it handles the public domain issue and we can serve NAIP imagery on our servers (Giza)
      - If NAIP is not in picture – does Texas need its own imagery program that the state owns
    - Best case scenario: Continue using Google imagery but on their terms and augment with rural areas
      - Cannot always dictate Google will get all those rural areas
      - What could that dollar cost be that we can be happy with Google? (\$400-\$500K)
    - Worst case scenario: Fly entire state at 6" at what cost
      - Cannot complete in one year
  - Another option is to find a different vendor than Google
- Short term solution suggestion
  - Give 12 months to nail down which areas they are going to fly
  - Will executives let us piggyback on their flights?
    - What would the cost be?
    - What is there timescale?
  - What will lowest cost be for 6" resolution?
    - For regional area, \$100/sq mile – most counties are about 1000 sq miles
- From a customer base prospective – HHSC is not currently on board but interested in GIS data and would like to discuss
- Request regarding 1-year contract negotiations with Google
  - How long will it take to make data currently 'in our hands' part of the public domain
    - Google does not want to set a precedence
    - Google understands their decision put the State of Texas in a bad way and are willing to work with program so may have more leverage



# Meeting Notes

- Jack O'Connell (Sales) – his only state is Texas so personally vested in making sure Texas is happy
  - If doing this on our own, flights over rural areas can go past US state borders and into Gulf of Mexico to capture platforms
  - If program had to come up with more money – would any present agencies be able to extend more money on the project?
    - Consensus: it could be possible
    - If looking at additional funding – first biennium year works better than the second year
    - The program can come up with more funding
      - Pricing schema may need to change in next biennium (bump up a certain percentage)?
        - How? Create a new tier system: Currently made to get up to \$1M
        - What if upped to \$2M? Will need to supplement with grants until next biennium
  - Next meeting: options/budget/status of funding
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## **Authoritative Data Discussion (Richard Wade)**

- Previous topic but has recently taken on some urgency
  - Spreadsheet sent out and shed some light on issues
    - Mandates at board level and at the flood level
      - Legislature wants to see a unified statewide approach of disseminating data
      - Also wants to know the privacy/security/access of information
    - Flooding has been the driver of the urgency
      - How do we know where the data resides and who owns the data?
  - Back on this Governance agenda to yield an outcome to go to the Portal to find authoritative data
    - Needs to be simple
    - Needs a 'registration of data' process
  - Today's discussion is to look at obscure data
    - Some agencies don't want data disseminated
      - Agencies do not have to provide a 'link' but at a minimum provide a phone number to obtain requested data
  - Will need to get into the weeds at subsequent meetings because it will soon be mandated
    - A preliminary flow chart has been started
  - Will create a data strategic plan over the next 5 years
    - GIS representation needed (Master Data Management)
    - Requires agencies to higher Data Management officers (GIS and non-GIS)
      - Data Coordinator at every agency
- What is the product?
  - Data Portal created will be the foundation
    - Wherever anyone registers information, it will get shared via the statewide Data Portal
    - Currently passing through the portal
    - Registration of data process will need to be in place
    - List of authoritative data



# Meeting Notes

- Don't accept data that doesn't have an authoritative owner
    - May be difficult to maintain
  - Data Catalog
  - From a GIS data perspective, make sure to have a greater understanding of how are we going to define those words
    - GIS Rule: DIR currently houses but is moving to TWDB
    - Possible workshop to define words that will dovetail with DIR definition data
  - Will be an agenda item until this is determined/agreed to
    - Propose: A workshop to talk this out - around start of fiscal year
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## Group Discussion (Group)

- Parcel data is moving along with 157 counties collected
- Currently with help of funds from TCEQ, will try to normalize data to hopefully be complete by end of fiscal year
  - 6 months to 1 year for a fully-functional service
- For those that do not have GIS
  - Working with contractor to help tap into the market and how can we get them to where they need to be to get data from them
- Address Points
  - Collected a newer version from CSEC and from other groups not under CSEC
  - Purchasing Houston area data
  - In gathering mode: next month will have another Address Point dataset refresh
    - Currently still using 2017 UT CWE dataset on website
  - For both datasets, only recent data is available for download and will archive everything we get
  - Shooting for an 'add submission' by November
  - New standard is that address points hit the structure/building and not the street
- Any discussion on potential new projection?
  - Last community meeting only had approximately 25 people show
  - Stacey Lyle – TXDOT has someone handling their side of projection
  - Requested time to get together soon to move this forward
    - May be another workshop (TXDOT, TNRIS, etc.)
    - Needs to be the same timeframe as Authoritative Data
  - Requested presentation he spoke to at community meeting
  - Concern about custom projections with known amount of skew that Lyle did not seem to know about



# Meeting Notes

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## Next Agenda and Action Items

### Action Items:

| Owner                     | Description   |
|---------------------------|---|
| Richard Wade              | Create Matrix/Straw Man of Imagery options  |
| Richard Wade/<br>Ed Kelly | Authoritative Data: Coordinate what we need to be asking ourselves to get this moving forward |
| Richard Wade              | Send Stacey Lyle's presentation out to the group  |

**Next Meeting: June 4, 2019 (2:00PM – 3:30PM)**  
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**Next Meeting Agenda Items:** Imagery options; LIDAR updates

