



# LIDAR 2020

## Requirements Gathering Meeting

*Presented by:*

**Ashley Summers**

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# Agenda

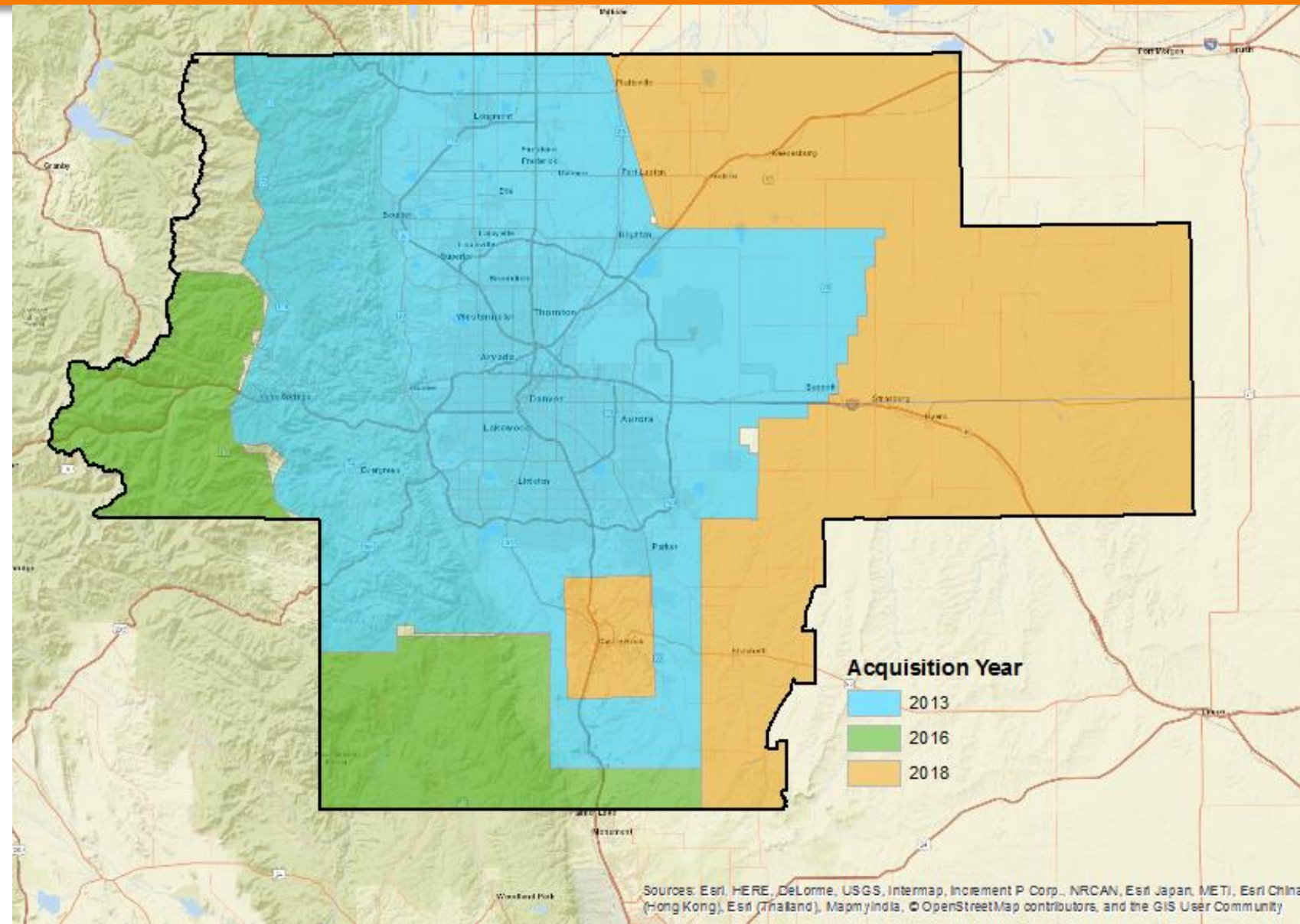
- DRCOG presentation
  - History of lidar in the region
  - Context of this project
  - DRCOG's goals
  - Funding
  - USGS BAA award
- Sanborn presentation
  - USGS lidar specification
  - Deliverables and derivatives
- Roundtable discussion of needs
  - Preliminary survey results
- Timeline and next steps



# History of lidar in the region

## Recent acquisitions:

- 2013
- 2016
- 2018

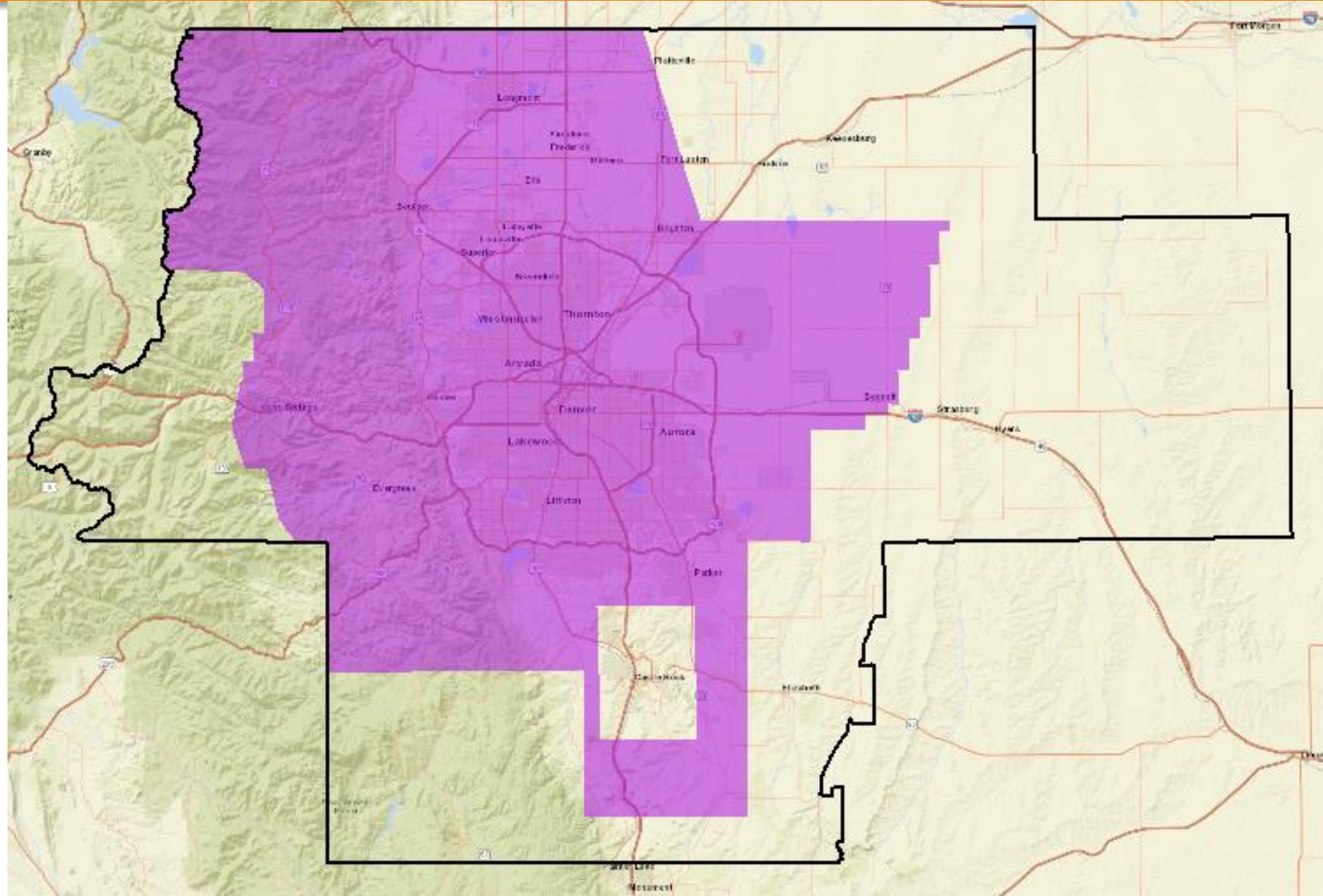






# LIDAR 2020 Extent - *draft*

- Includes areas not collected since 2013 or older
- 3380 square miles





## Context

Related projects planned for 2020/21:

- DRAPP imagery acquisition
- Planimetric data capture
- Land use land cover collection

DRCOG routinely facilitates **regional data acquisition** projects on behalf of up to 50 stakeholders.

Why?

Because **open, foundational data** allows city planners, researchers, analysts, consultants, and entrepreneurs to spend **more time answering questions and less time developing data.**



## Data acquisition goals

- regional extent; local use
- goldilocks scope - a package of foundational data that's *just right* for the most users and use cases
- value to the whole community – public, private, academic
- high-quality, up-to-date data at a reasonable cost
- free distribution to drive innovation and entrepreneurship



# Funding

## Who can provide funding?

- State agencies (e.g. CWCB)
- Local governments (e.g. cities and counties)
- Public entities (e.g. water utilities, highway authorities, flood control districts)
- Private sector (e.g. consulting firms)
  
- Federal government (USGS BAA Award)
  - In FY18, the average BAA award covered 39% of the total project cost, with an average award of \$403,134. By law, USGS can't cover more than 50% of the cost.



# USGS BAA options

Acquisition Proposal (GPSC)	Financial Assistance (Cooperative Agreement)
USGS manages the contract with the vendor. We can make a vendor recommendation.	DRCOG manages the contract with the vendor we select. This potentially gives us more flexibility to coordinate with our other projects (e.g. collecting in time to use the data for orthorectification of our 2020 imagery).
To estimate costs, we can request an Independent Government Cost Estimate from USGS. In addition, we have to add a 5% fee for USGS contract management.	We need to solicit bids via a RFP process to get cost estimates.
Final project cost is determined post-award.	The award amount is set when granted and can't be modified.
USGS can't issue a task order for the work until they receive a Joint Funding Agreement that obligates our contribution.	State and local funds must be at least 25% of the total.

We can apply for both...





# USGS BAA selection criteria

- Higher scores are awarded for:
  - Applicants that offer to cover a large percentage of the overall cost.
  - Geographic areas where data is lower quality than QL2 or where data is 8 years or older.
  - Geographic areas that are high priority for multiple federal agencies.
  - Geographic areas over 1,500 square miles.
  - Applicants with mature funding sources/partnerships.
  - Applicants that allow USGS to administer the contract (i.e. direct the technical approach).
  - Applicants that have done a similar project in the past.



## Our competitive advantage

- DRCOG has a successful history of facilitating partnerships in this region, including existing relationships with local and state government, as well as public and private sector entities. This includes significant fundraising capability.
- We routinely manage large data acquisition projects, including imagery and planimetric data capture. We have been involved in several past LIDAR captures (although not the lead on those projects).
- Our area of interest hasn't been collected in 7 years.

# SANBORN PRESENTATION

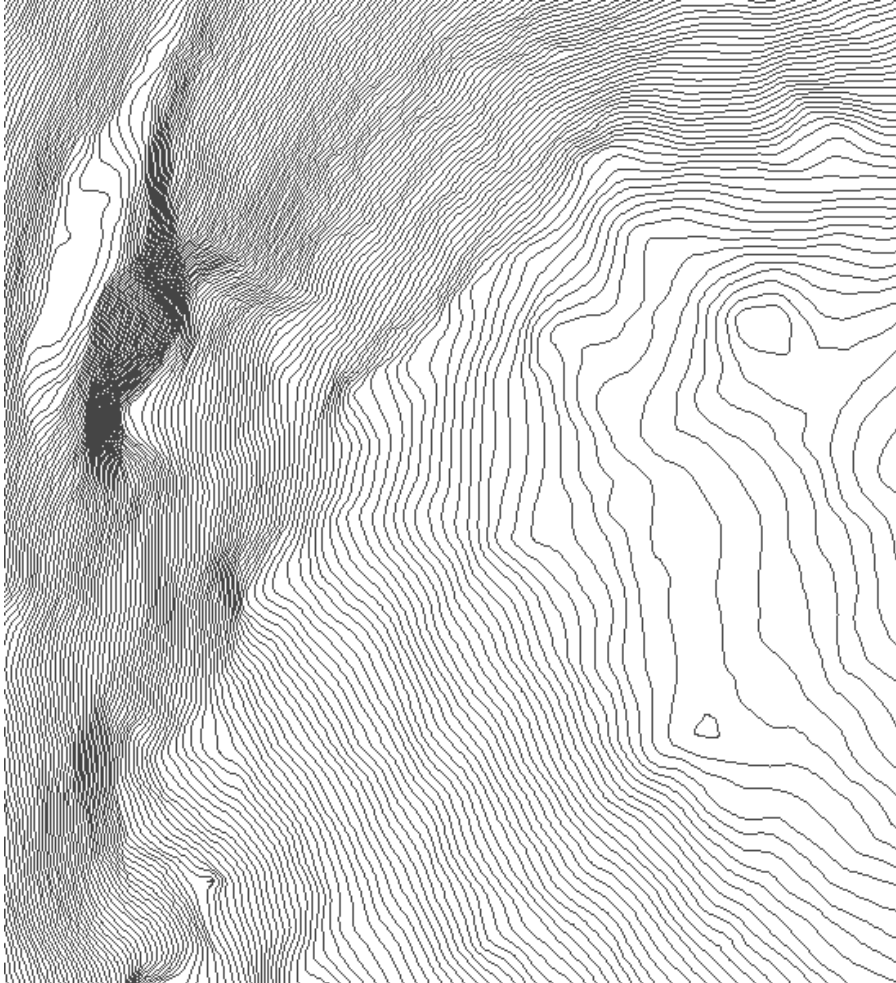


# ROUNDTABLE DISCUSSION OF NEEDS





# Preliminary survey results



- Uses
  - **1 foot contour generation**
  - 3D modeling
  - Landscape classification
  - Feature mapping (e.g. conduits, dams)
  - Slope and terrain analysis
  - Trail location determinations
  - Storm water drainage sizing





## Uses cases

How would you and/or your organization use lidar data?



Where should we collect QL2 data?

Are there areas where we need to upgrade to QL1?



Are there areas where we should *not* collect data?



# When should we collect the data?



How will you store, consume, and analyze the data?





# Timeline

- **Feb 4 2019**– *LIDAR RFP distribution (?)*
- **Mar 1 2019** – *Submittals Due (?)*
- **April 15** – Quotes to potential partners
- **September** – Will need signed LOIs!
- **October** – Submissions due to USGS for BAA
- **Mid November** – USGS BAA notifications
- **November 2019** – Recommendations to DRCOG Board
- **January 2020** – Contract execution
- **Winter or Spring 2020** – Acquisition



## Next steps

- More opportunities to submit your requirements
  - Respond to survey
  - Another meeting(s)?
- Find more stakeholders
  - Who else should know about this project?

Questions? Reach out to Ashley Summers at [asummers@drcog.org](mailto:asummers@drcog.org).

**THANK YOU**