# Landsat Advisory Group (LAG) Status Report

# NGAC Meeting

**December 6, 2018**

**Frank Avila**
**LAG Chair**

**Roberta Lenczowski**
**LAG Vice-Chair**

# Agenda

- LAG Mission
- LAG Membership
- Task #3 Status Update
- New Tasks
- Questions / Discussion

# LAG Mission

***Provide advice*** *to the Federal Government, through the Department of the Interior National Geospatial Advisory Committee,* ***on the requirements, objectives and actions of the Landsat Program*** *as they apply to continued delivery of societal benefits for the Nation and the global Earth observation community.*

# LAG 2018 Membership

| Name | Organization |
|---|---|
| Frank Avila (LAG Chair, NGAC Member) | National Geospatial-Intelligence Agency (NGA) |
| Roberta Lenczowski (LAG Vice-Chair, NGAC Member) | Roberta E. Lenczowski Consulting, LLC |
| Rebecca Moore (NGAC Member) | Google, Inc. |
| Kevin Pomfret (NGAC Member) | Centre for Spatial Law and Policy |
| Kass Green | Kass Green & Associates |
| Peter Becker | ESRI |
| Tony Willardson | Western States Water Council |
| Steven Brumby | Descartes Labs |
| Walter Scott | MAXAR Technologies/DigitalGlobe |
| Joanne Gabrynowicz | University of Mississippi |

Federal Contact: Tim Newman and Peter Doucette (USGS)

# LAG Task #3 – Cost sharing models for Landsat data

- DOI leadership has requested that USGS[1] consider new prospects for cost sharing of Landsat data to support USGS's role toward the Sustainable Land Imaging model.
  - Recognizing that aspects of this issue were investigated by the Landsat Advisory Group (LAG)[2], DOI leadership is seeking to better understand economic and data policy considerations and impacts in relation to user needs, as well as the potential for public-private partnering (P3), with respect to various cost sharing models for Landsat data.
  - USGS is requesting that the Landsat Advisory Group (LAG) review the findings of [2, 3], and other potentially relevant studies, to consider a range of possible Landsat data cost sharing models that may include, but are not limited to:
    - resource leveraging for data processing, management, and distribution;
    - resource leveraging for satellite ground mission development and operations;
    - various forms of fee recovery models for different market sectors. The LAG should consider pros and cons of the cost sharing models investigated.

# Status Update
# LAG Task #3 – Cost sharing models for Landsat data

- Task Team Lead – Kevin Pomfret
- USGS [Ft. Collins] Study was closed on 7 NOV 2018
  - Over 3,000 completed surveys submitted
  - Study is professionally designed to support critical analysis
  - Preliminary results expected to be available to LAG by January 2019
- Projected LAG report timelines:
  - Spring 2019 NGAC Meeting: Present final report to NGAC for adoption

[1] sustainablelandimaging.gsfc.nasa.gov/
[2] www.fgdc.gov/ngac/meetings/september-2012/ngac-landsat-cost-recovery-paper-FINAL.pdf
[3] John Loomis, Steve Koontz, Holly Miller, and Leslie Richardson, "Valuing Geospatial Information: Using the Contingent Valuation Method to Estimate the Economic Benefits of Landsat satellite Imagery", PE&RS, 81 (8), 647-668, 2015.

# Status Update
# LAG Task #3 – Cost sharing models for Landsat data

- Team is finalizing draft report focusing on three areas:
  - Charging for “traditional” data
  - Charging for value-added products and services
  - Private-public partnership (P3) structures
- USGS and LAG have received over 30 letters advocating for the importance of free and open data policy
  - State entities
  - Academia (professors and students)
  - Non-profit groups
  - Professional and International user community groups
  - Private industry
  - Public citizen

# New LAG Tasking

- Task 2018-01: Formulation of a Deep Learning Challenge for Land Imaging Time-Series Data
  - USGS is exploring establishing a Government Challenge to investigate the utility and efficacy of deep learning methods that can exploit the temporal and spectral content of Landsat data applied toward time-series analysis and Land change forecasting. Algorithms explored may consider complementary data sets, as well as machine learning algorithms in general, as needed.
- The LAG is crafting recommendations on how to structure a Government Challenge to incentivize exploration into the utility and efficacy of deep learning methods to exploit Landsat Analysis Ready Data for time-series analysis and land change forecasting

# Draft LAG Tasking

- Draft Task 201x-xx: Review of the Land Remote Sensing Policy Act of 1992 (Public Law No: 102-555)
  - PL 102-555 repealed the Land Remote-Sensing Commercialization Act of 1984, and established the function of the National Satellite Land Remote Sensing Data Archive at USGS.
  - www.congress.gov/bill/102nd-congress/house-bill/6133

- LAG is holding off on making recommendations on this proposed task until current Task #3 is completed.

# *Questions?*