

2024 LiDAR and Aerial Imagery Updates

GDW

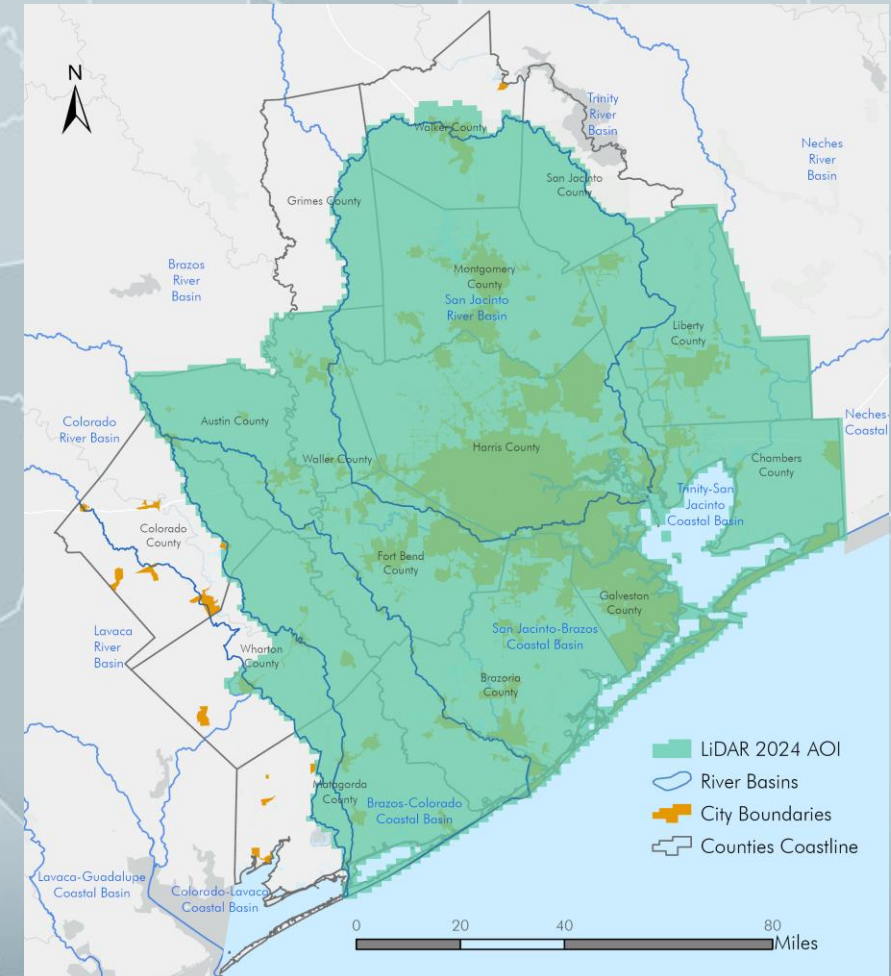
August 7th, 2024

2024 Lidar Program

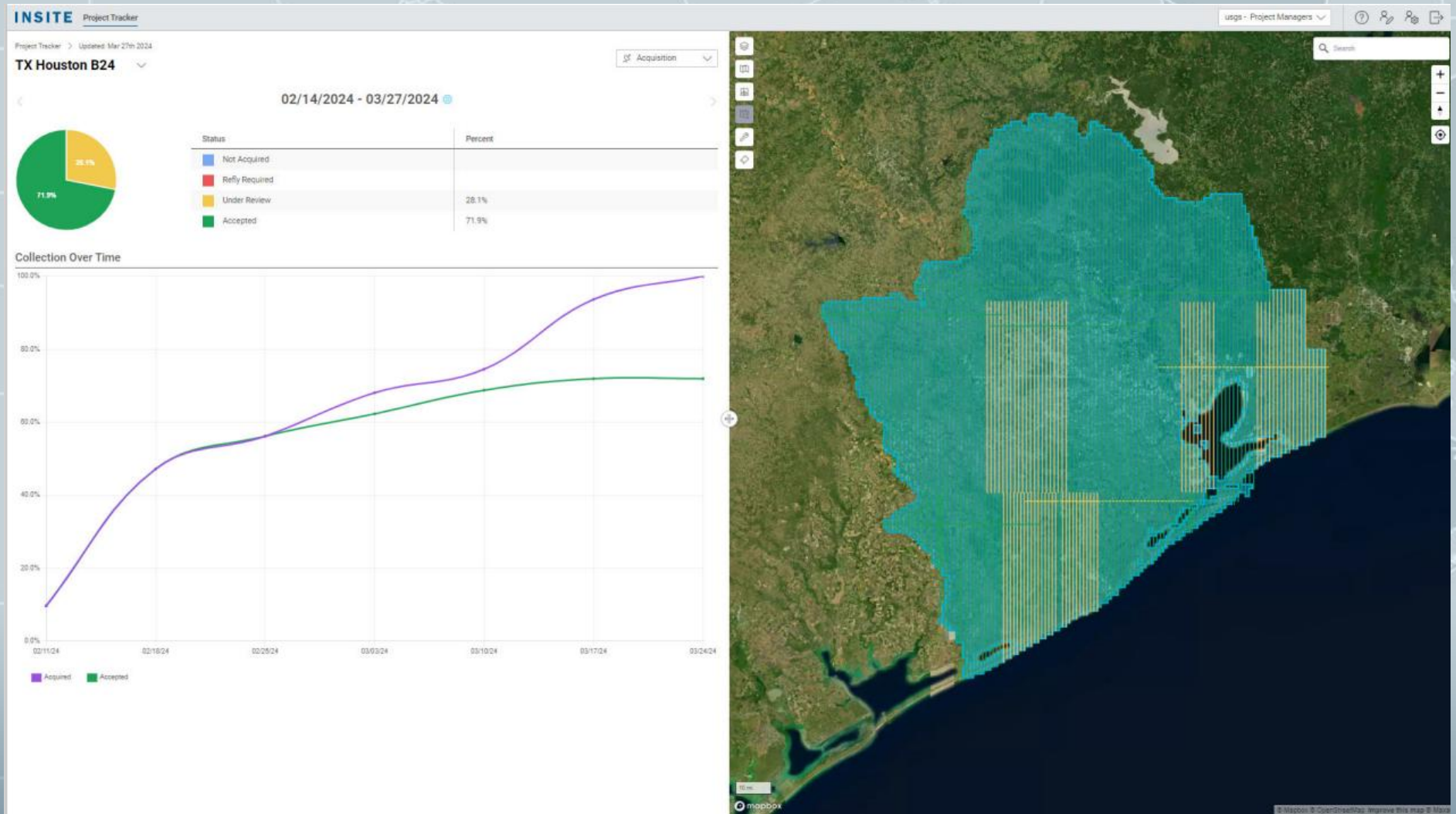
- Point density of 8 pls/m2 for > 11,500 mi2
- Funds committed by fifteen (15) cost-share member organizations for a total of \$1,764,480.
- Federal contributions through USGS' Data Collaboration Announcement (DCA) for a total of \$1,064,255.
- Total program value \$2,828,735.

Cost-Share Partner Organizations

Harris County Flood Control District
Harris County Engineering
Liberty County
Fort Bend County
Galveston County
Brazoria County
Waller County
Austin County
City of Houston
City of Pearland
City of Huntsville
Friendswood
Port of Houston
Rice University
City of Wharton
City of Webster
City of Missouri City
Houston Advanced Research Center



Acquisition Updates



Project Updates

Deliverable Description	% of Task Order	Complete	Compound	Due
Lot 1 - Kick Off Meeting	3%	100%	3%	3/31/2024
Lot 2 - Acquisition Updates	3%	100%	3%	5/31/2024
Lot 3 - Lidar Acquisition	40%	100%	40%	5/31/2024
Lot 4 - Ground Control Survey	7%	100%	7%	5/31/2024
Lot 5 - Vector Data for Data Validation	2%			7/15/2024
Lot 6 - Pilot Data	5%			7/30/2024
Lot 7 - Preliminary Data Delivery to Funding Stakeholders	5%			11/27/2024
Lot 8 - AOI Delivery	20%	5%	1%	5/31/2025
Lot 9 - Sixteen (16) Copies	5%			12/31/2025
Lot 10 - USGS Final Acceptance	10%			1/30/2026
	100%		54%	

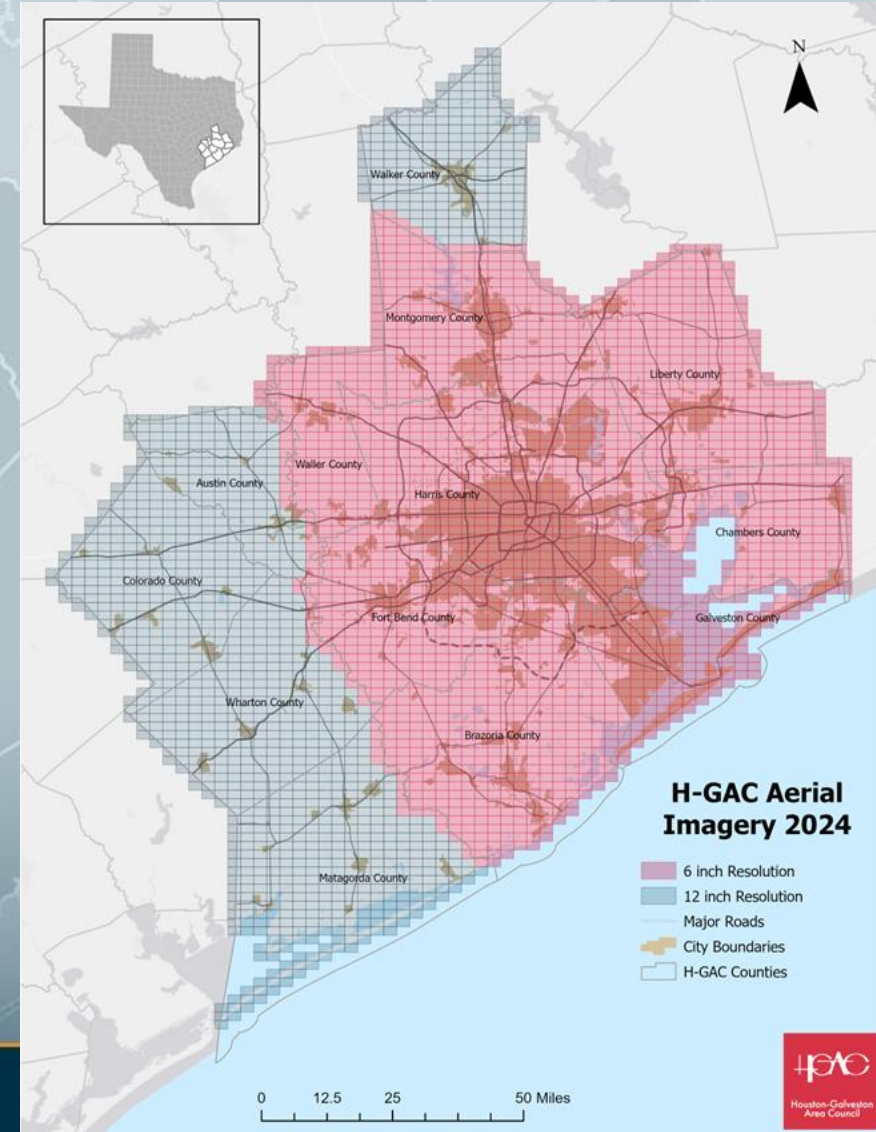
Aerial Imagery Cost-Share Program – 2024

- Cost-Share Procurement
- On-prem 4-Band Imagery (RGB+IR)
- 6 & 12"
- Total cost: ~\$630k
- Cost per tile (4 mi²)

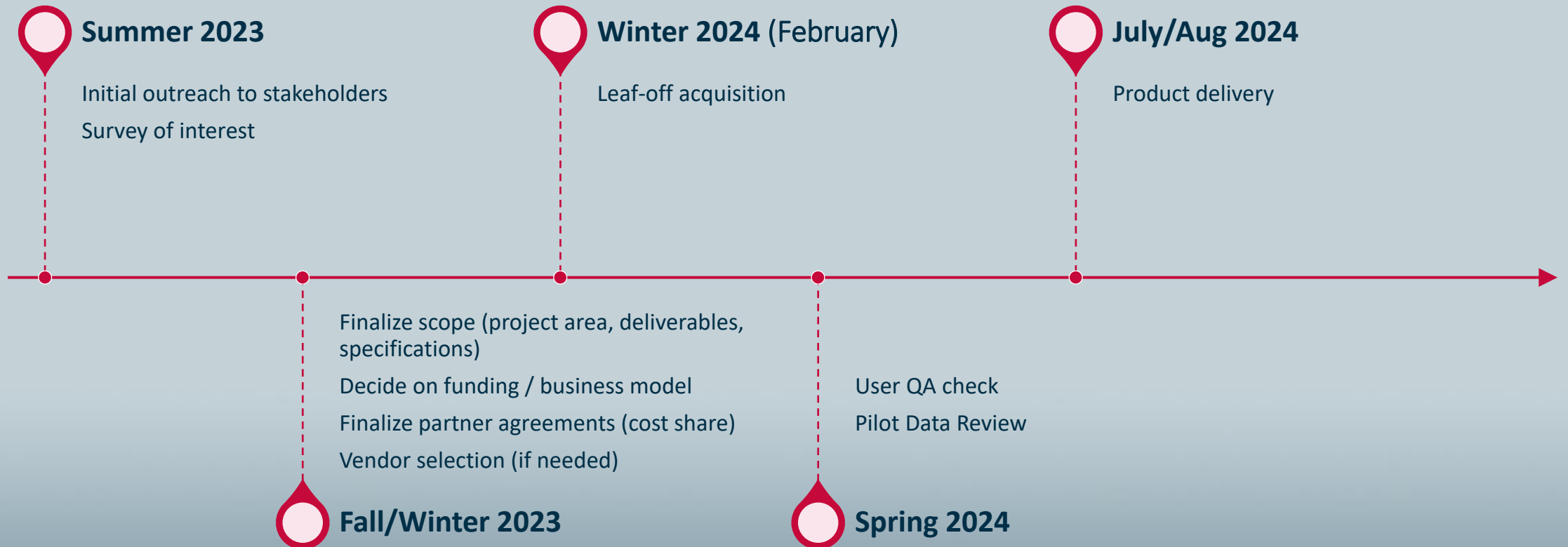
2024 6 Inch CIR & RGB Tiles	2024 6 Inch CIR & RGB Cost
1-15	\$5,000
16-30	\$9,000
31-60	\$15,000
61-250	\$18,000
251-600	\$22,000
601-2,234	\$37,000
2,235-3,473	\$49,000

Cost-Share Partners

- Brazoria County Engineering
- City of Pearland
- City of Sugar Land
- City of Houston
- City of Webster
- City of Manvel
- City of Friendswood
- City of Jersey Village
- City of La Porte
- City of Lake Jackson
- Greater Harris County 9-1-1 Emergency Network
- Harris County Flood Control District
- Harris County Toll Road Authority
- North Harris County Regional Water Authority
- Texas Department of Transportation
- Houston Metro
- Rice University



Timeline



Pilot Data Review

- 6-inch Urban and Suburban samples



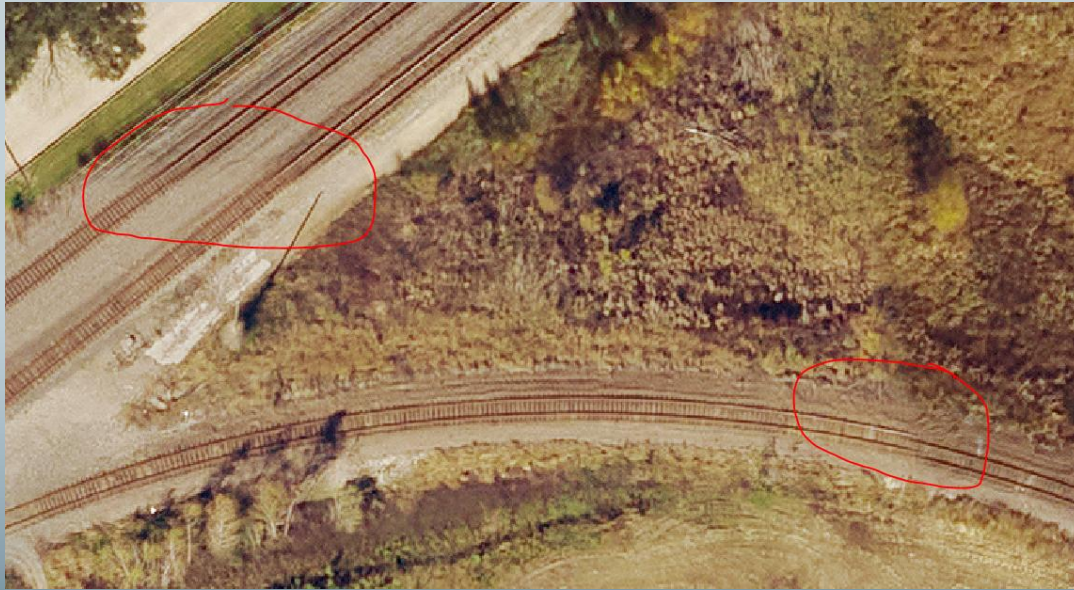
Sample Reviews



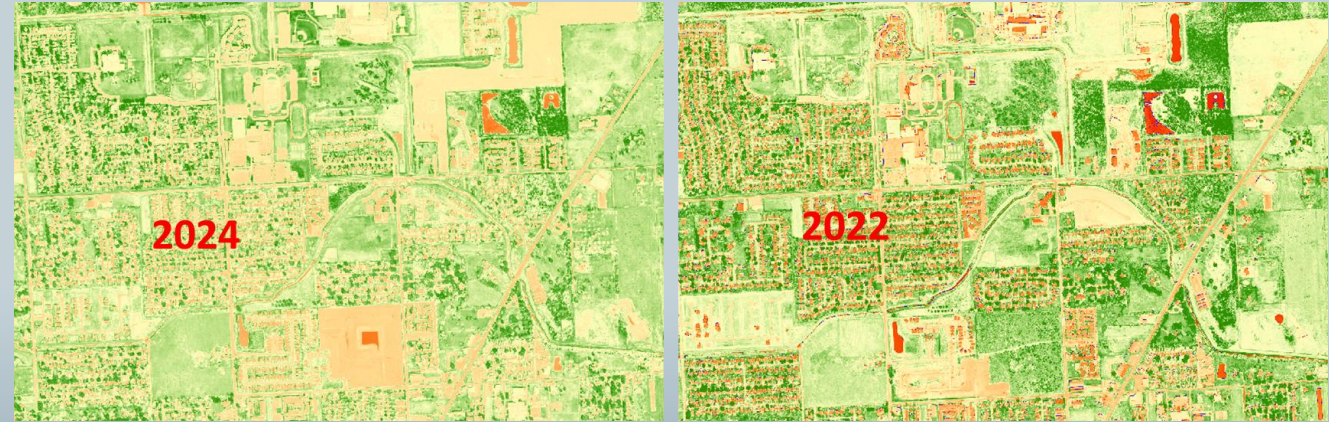
Contrast Stretch



Color Balancing



Linear Alignments

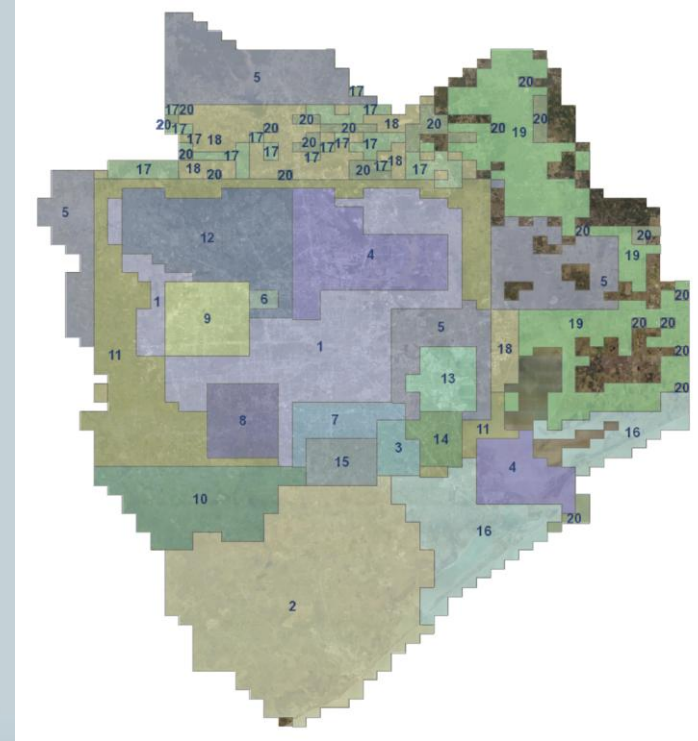
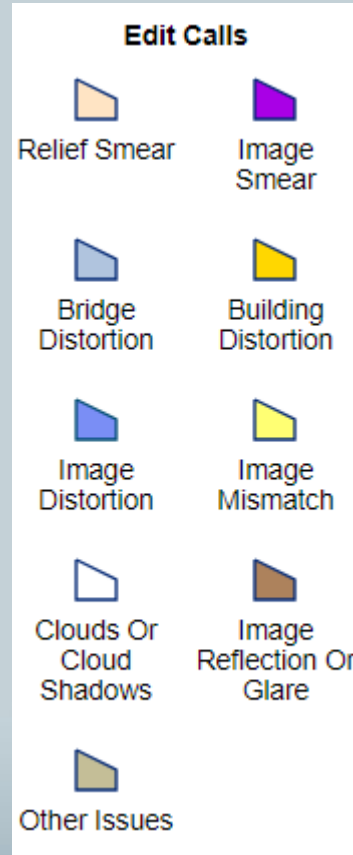


Pixel value stretch

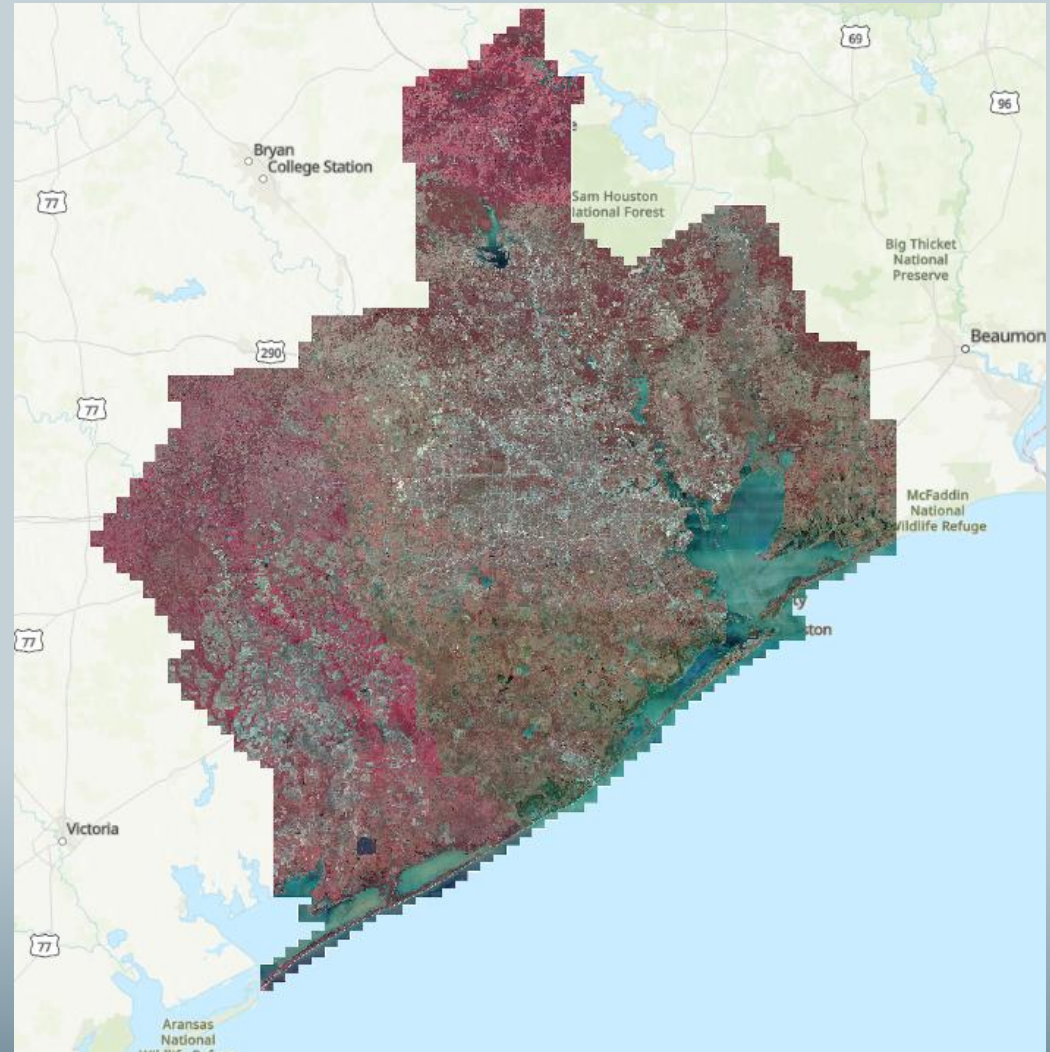
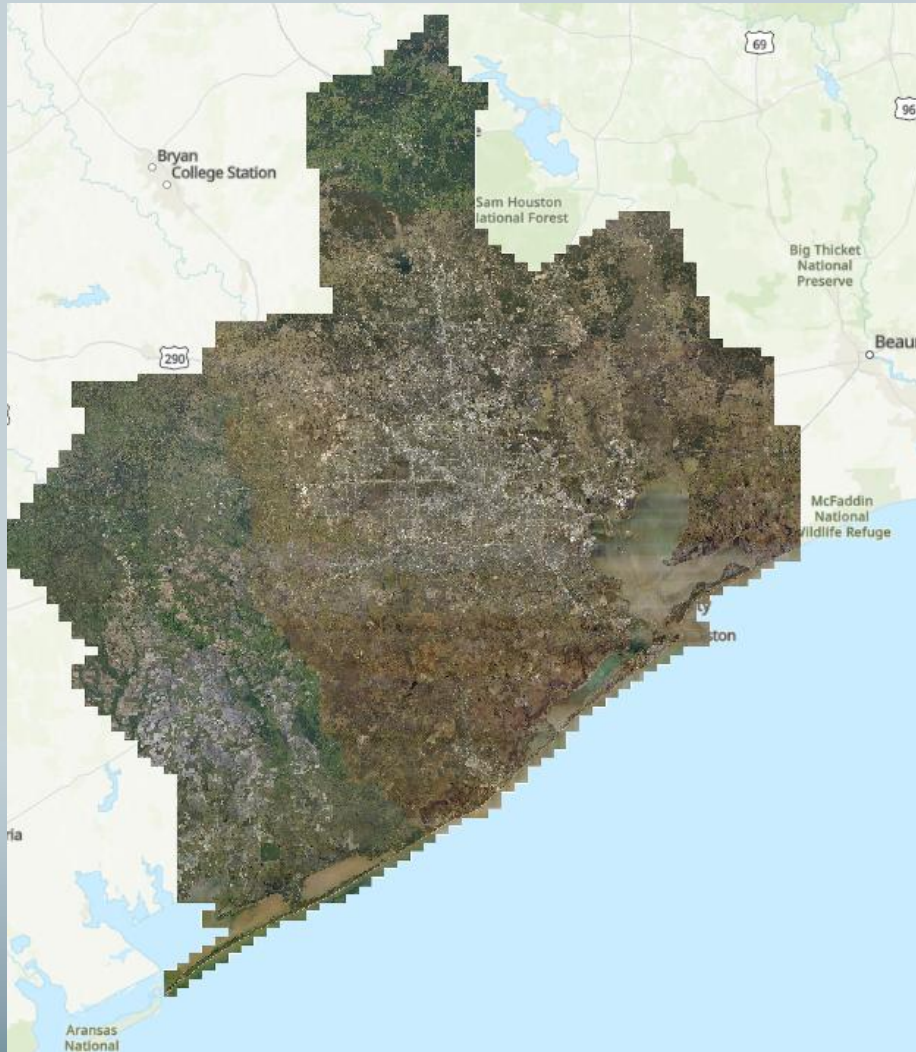
QAQC – SurCheck Tool

- 6-inch 17 Zones
- 12-inch 5 Zones
- Cost-share partners will get log in for each zone to review

- Invoices are issued.



Final Delivery



Final Delivery

