CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

GIS STEERING COMMITTEE

10/4/2017

Hosted by the Office of the Chief Technology Officer

open.data@dc.gov

CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

AGENDA

- Welcome, Data Program News & Updates
  Barney Krucoff, Chief Data Officer, Office of the Chief Technology Officer
  - Esri – FY18 Renewal
  - Invite to Esri Technology Overview
  - GIS User Group Meeting October 19th
  - Http Shut Off – Schedule and Affected
  - Nearmap Imagery from August 20th
  - Cyclomedia Imagery Drive Soon
- Systems and Development
  Julie Kanzler, PM for Data APIs and Applications, Office of the Chief Technology Officer
  - Big Data 2018 Road Map
  - Disaster Recovery Maintenance Schedule
  - MAR 2.0 Test Pages
- 2017 Orthophotography and LiDAR
  Megan Blaskovich, Keith Owens, Michael Wernau with Fugro Geospatial Inc.
  - Status of 2017 Spring Data Capture and Challenges with True Ortho
  - Discussion: LiDAR Year 2 Capture
- Data Report and Inventory
  Mario Field, PM for Data Curation, Office of the Chief Technology Officer
  - New Layers and Recent Data Requests
  - Metadata Improvements

ESRI FY18 RENEWAL

- Optional: ArcGIS Hub – new product 10/1/2017 . Price- TBD
- GeoAnalytics Server: Two (2) 4-core licenses
- GeoAnalytics Server - Staging: Two (2) 4-core licenses
- Portal for ArcGIS: Fifty (50) Level 2-users, one hundred (100) Level-1 users (new)
- InSights for ArcGIS Named User Term Licenses – 37 (already covered by Contract MOD6)

ESRI TECH OVERVIEW

- Hosted by Esri in Vienna, VA Office

- October 18th, 9:30am to 12:00pm
  - Enterprise 10.5.1
  - Portal for ArcGIS / ArcGIS Pro
  - Field Operation suite
    - Workforce, Collector, Survey123, Ops Dashboard
  - Spatial Analytics

CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

FIRST GIS USER GROUP MEETING

WHEN & WHERE

Hosted at OCTO

200 I Street SE, 5th Floor
Conference Room 5009

10:00am to 12:00pm
Also on Webex

Contact
Eva.Stern@dc.gov
for invite

WHAT

- Limited to District agency users
- Not in the business of policy, or recommendations for GIS in DC
- Loose agenda:
  - Expectations
  - Meet the users
  - Brainstorm future meetings

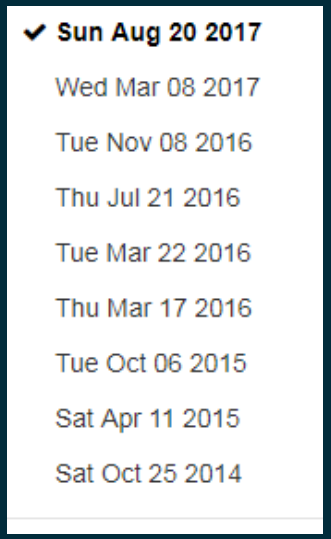
HTTP NO MORE

- DC GIS map services will be https only
  - October 11th

- Update your apps by changing urls
- AGOL web maps: reload any http layers with https

NEARMAP

- Citywide update flown on August 20th, 2017 (Sunday)
- Gain access by visiting http://octo.in.dc.gov/node/165505
- Available as imagery service (ArcGIS Desktop), Web Viewer and in ArcGIS Online marketplace (join Imagery Apps group)

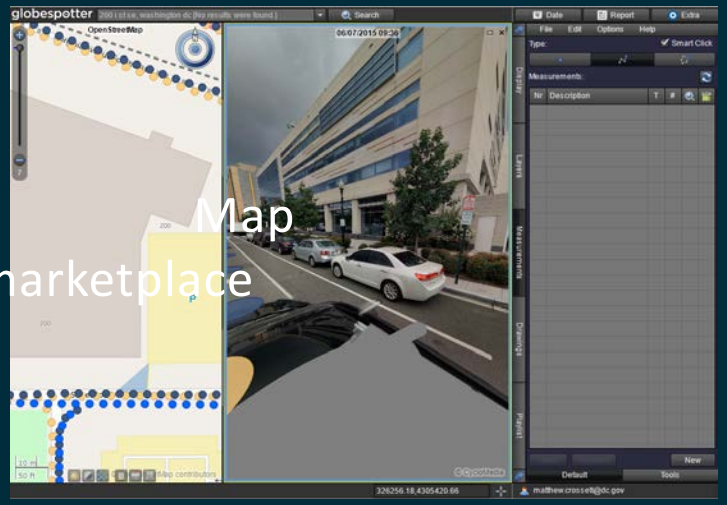


CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

CYCLOMEDIA – GLOBESPOTTER

- Cyclomedia photography is a warehouse of 360 degree, spatially referenced imagery (Cycloramas)
- Data has been collected in Nov/Dec 2013, summer of 2015 and Fall/Winter 2016. Current collection in progress (50% complete)
- Gain access by visiting http://octo.in.dc.gov/node/165369
- Available as imagery service (Desktop), Viewer and in ArcGIS Online (join Imagery Apps group)

Map marketplace



CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

SYSTEMS AND DEVELOPMENT UPDATE

JULIE KANZLER

MODERNIZED DATA BACKEND ROAD MAP

Big Data *API Gateway * RDBMS redesign

- Hadoop + friends
- Elasticsearch
- Informatics / FME
- ORACLE upgrade

MAR 2.0

- Available in the beta test:
  - Based on Elasticsearch Search Engine
  - Shares backend with Crime Map update (launch date: October 16)
  - Fuzzy matching for addresses and named locations
  - Reverse geocode
  - Point-in-poly
    - E.g., request geocode and snow zone with a single request
  - RESTful / GET requests / JSON
  - Fundamentally different from MAR 1.0, requires rewrite of consumers
  - Will likely retire MAR SOAP web service at end of FY18
- What is missing?
  - Selected based on usage, but what is important to you on the MAR, and why?

ALL THINGS SYSTEMS

ArcGIS Server Progress

- All servers migrated to hyber-V
- ArcGIS 10.5 Production Portal is live

Geoevent Server

- Configured and tested in development environment

GeoSystems Monitor

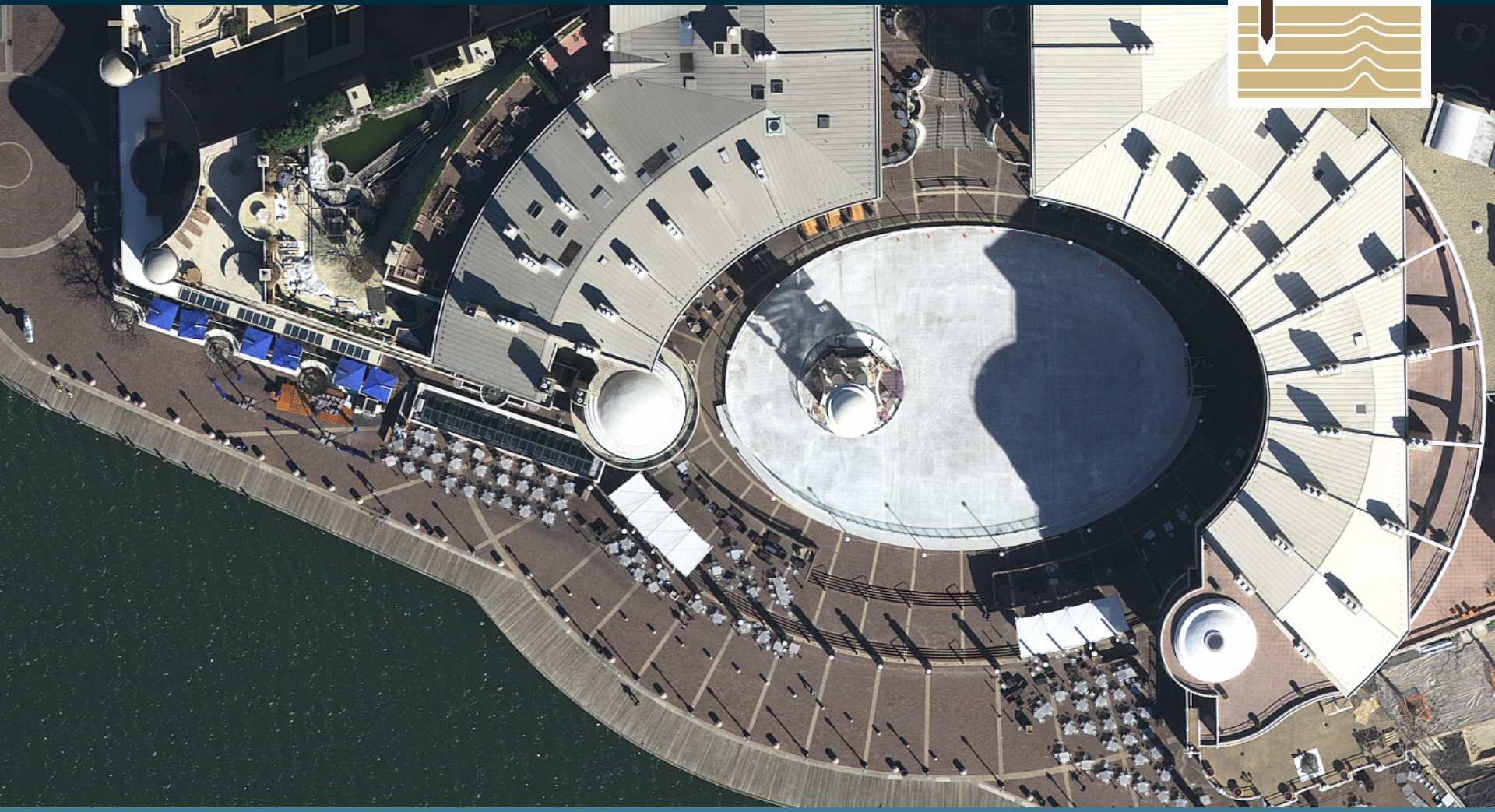
- Now used to monitor and notification on GIS server uptime

Elasticsearch

- Production servers are setup and running

Disaster Recovery Testing

- What is it?
- Scheduled for October 19th
- Evening hours starting at 10pm



GIS STEERING COMMITTEE

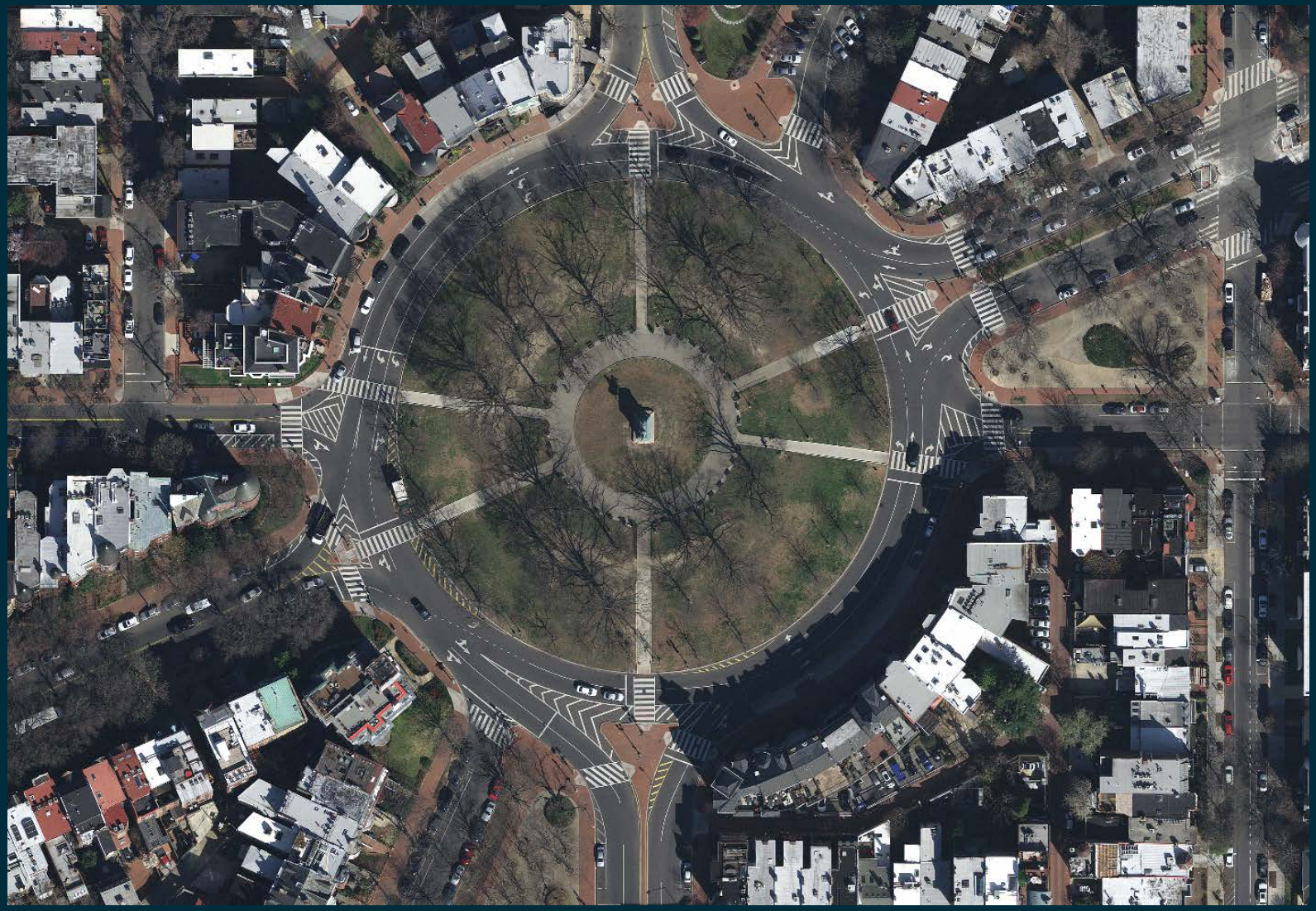
DC OCTO

October 4, 2017

2017 - IMAGERY COLLECT UPDATE

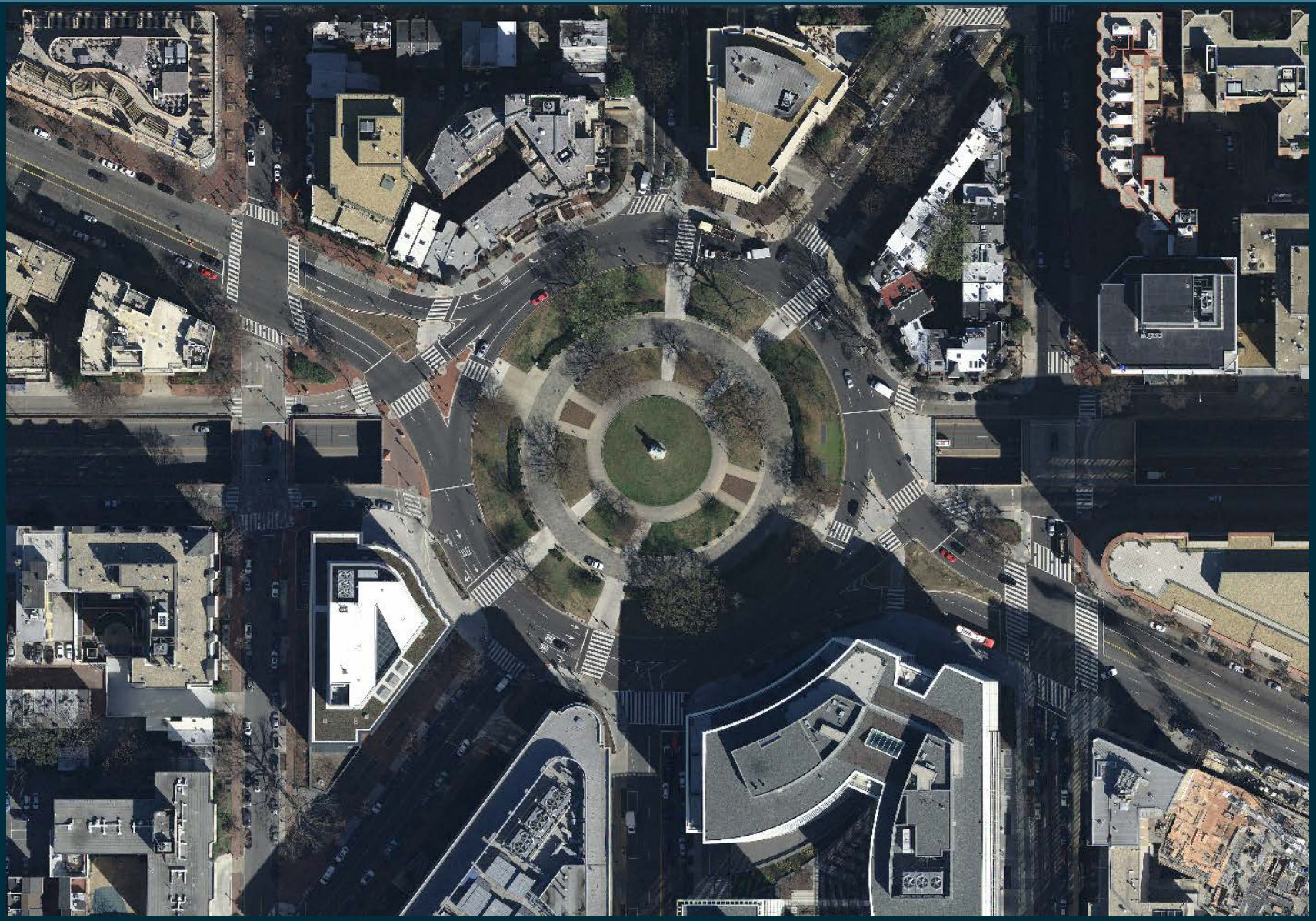
- 3inch (8cm) Aerial imagery was acquired between March 4-8, 2017
- Full coverage of entire District of Columbia was achieved
- Imagery was delivered to OCTO on September 14, 2017, currently under review
- ADS100 sensor was used for acquisition to optimize flight altitude and speed for efficient collection

2017 Sample Imagery



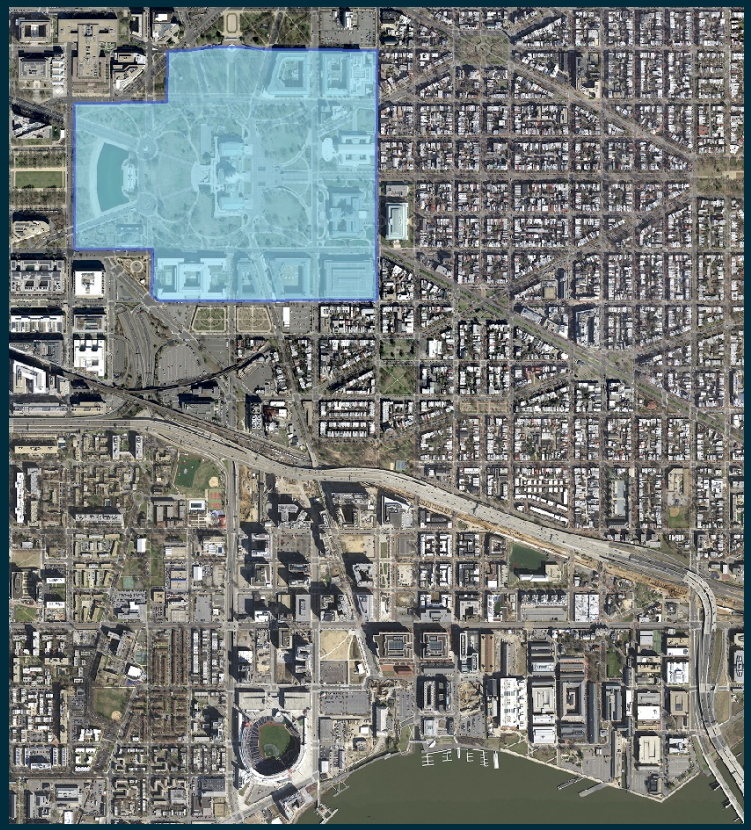
2017 – TRUE ORTHO CHALLENGES

- True Ortho was not delivered
  - Strong history of generating true ortho products with previous generations of the sensor (ADS40, ADS60, ADS80)
  - Determined ADS100 did not have an efficiently developed software solution available to Fugro for the production of quality 3 inch true ortho
  - Working with multiple software vendors to develop the product, will not be available to satisfy this year of the contract
- 2017 product has reduced building lean coverage of downtown area
- True Ortho will be provided in 2019 collect

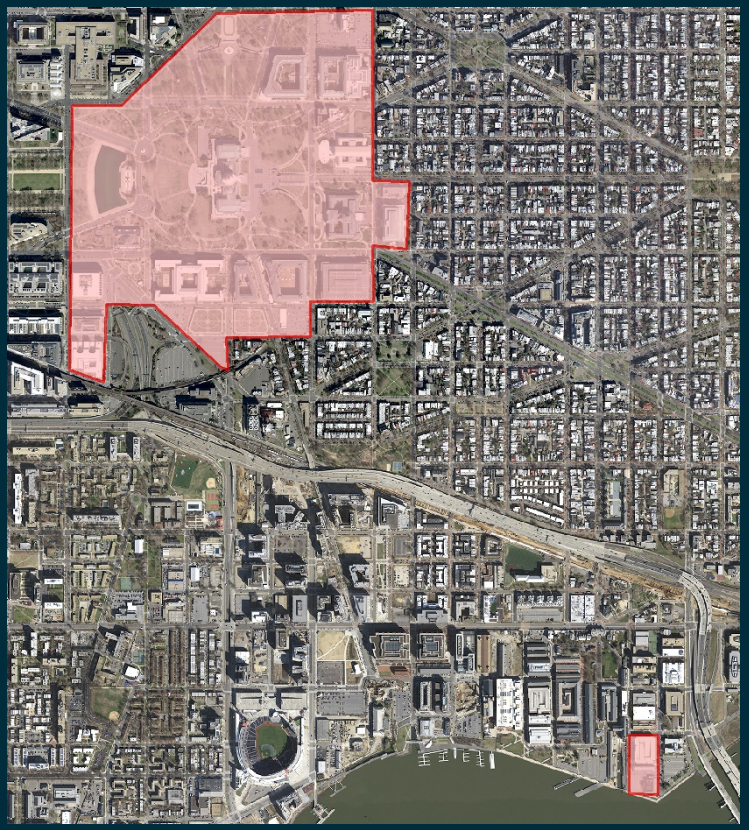


2017 – REDACTION AREA

- The redaction area was increased at the request of the USSS
- Area around the Capitol grew, added a small area in the Navy Yard
- White House, Naval Observatory did not change



2015 Redaction around Capitol



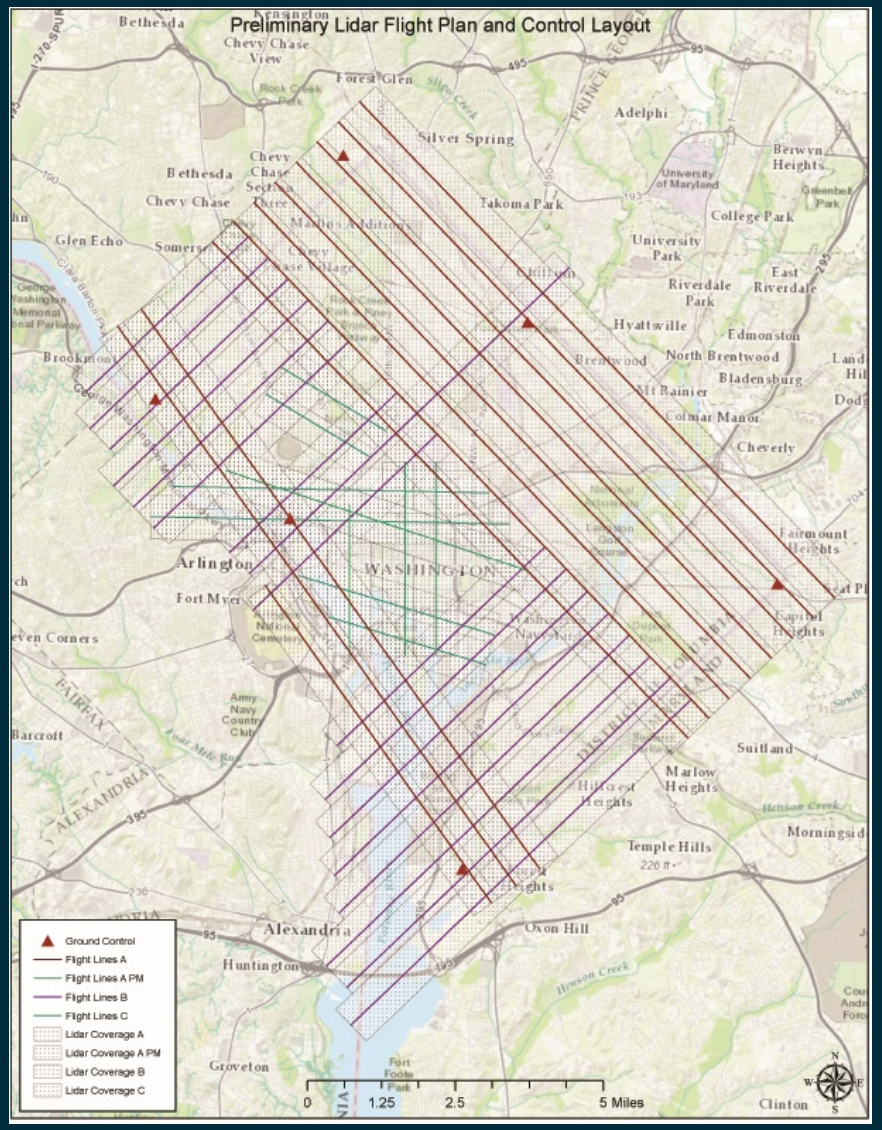
2017 Increased redaction around Capitol, new Navy Yard AOI

2017 – PLANIMETRIC STATUS

- Planimetrics were collected at 1”=100’ scale as an update to 2015 planimetric data
- Full recollect of remaining 2013 data around White House/Mall area
- Crosswalks were a new collect added to sidewalk class
- Three of four planimetric area have been delivered to OCTO for review
- Final area (downtown/mall area) will be delivered to OCTO October 5, 2017

2018 Lidar Collection and Processing

Requirement	Specification
Sensor	Riegl LMS-Q680i
USGS Specification	Quality Level II
Laser Class	Class 3R
Flight Altitude (Above Ground Level)	3,400’ AMT
Side lap	25% minimum
Flight Acquisition Speed (knots)	140 Knots
MPiA (Multi pulse in Air)	2 pulses
Scan Angle (FOV) Field of View Rotating Mirror	60 degree
Scan Pattern	Parallel Scan Lines
Laser Wavelength	1550 nm
Point Density	2 pts/m²
Returns per Pulse	Unlimited/full waveform
Flight Lines with cross flights – Main AOI	38 + 1 cross flights for boresight
Flight line miles with cross flights– Main AOI	254
Vertical accuracy	10 cm RMSE (QL2)



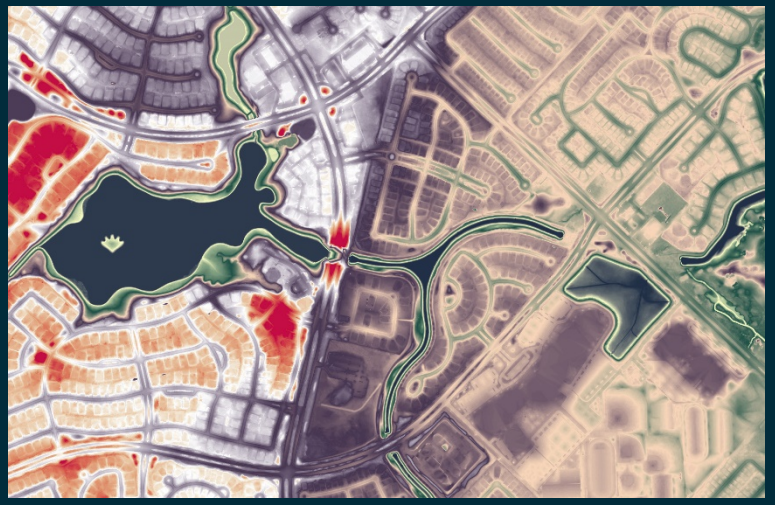
2018 Lidar Collection and Processing

Deliverables:

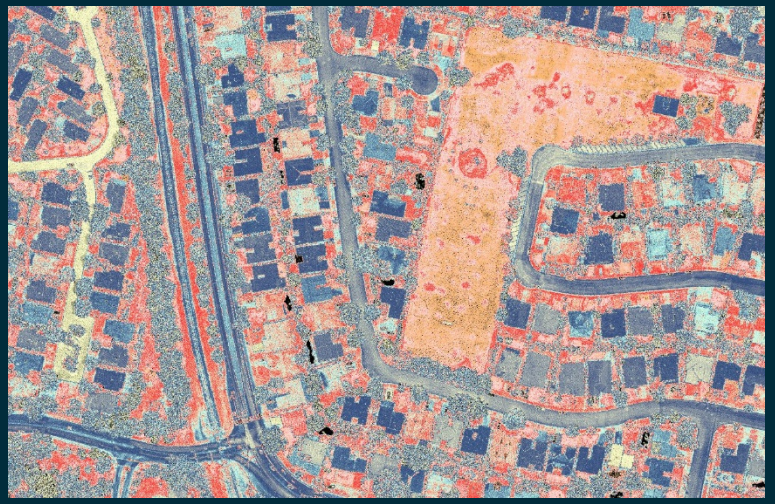
- Raw Point Cloud
- Classified Point Cloud
- Bare Earth Surface (Raster DEM)
- Breaklines
- Lidar Intensity Imagery
- Ground Control
- Metadata
- Project Report
- Acquisition Report
- Project Pilot Area

Optional Products:

- Vegetation Height (heights TBD)
  - Low Vegetation
  - Medium Vegetation
  - High Vegetation
- Building Classification
  - Standard Building Classification (op1)
  - Detailed Building Classification (op2)

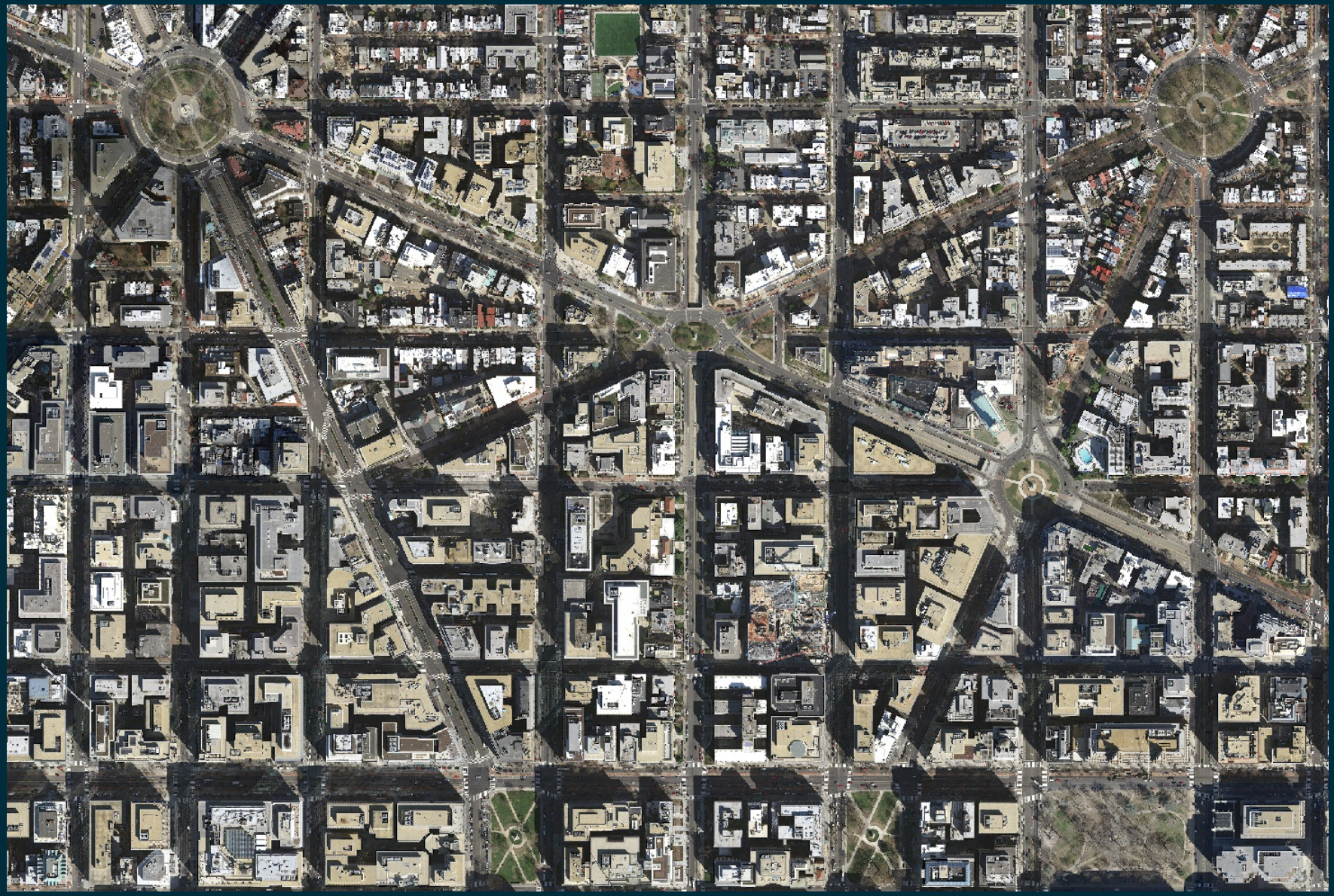


Hydro-flattened Bare Earth DEM



Intensity Imagery

2017 Sample Imagery



THANK YOU

MEGAN BLASKOVICH

MIKE WERNAU

KEITH OWENS

octo

CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

DATA REPORT

MARIO FIELD

WE ARE WASHINGTON DC

DATA POSTINGS - UPDATES

- Bus Line
- Bus Stop
- Camera Enforcement
- Construction Permit Boundary
- *Credit Trade Area*
- DC property
- *FOIA request*
- Great Street Grantee
- Great Street Boundary
- Homeless Service
- Homeless Shelter
- *Homeless Shuttle Stop*
- Notary Public
- Residential Recycling Route
- Residential Trash Route
- Water Facility
- Zip Code
- ZR 16 Standards

DATA POSTINGS – NEXT BATCH

- Business
- *DC Agency List Domain*
- Energy Benchmarking
- Federal City Boundary
- Income by tract – 2015
- Liquor License
- Moving Violation
- Parking Violation
- Litter Cans
- State of Washington D.C. Boundary
- Wetlands

METADATA

- Currently re-baselining to end FY17 (80% done)
- Metadata Action items FY18
  - Develop simple interface for metadata input
  - Integrate metadata into data curation process
- Data Catalog Action Items FY18
  - Research and develop comprehensive data catalog solution that integrates with metadata
  - Integrate existing catalogs into a standard set and publish

octo

CUSTOMER SERVICE. ACCOUNTABILTY. EFFICIENCY. SECURITY.

THANK YOU FOR JOINING US ☺

Feedback

open.data@dc.gov

DC GIS

WE ARE WASHINGTON DC