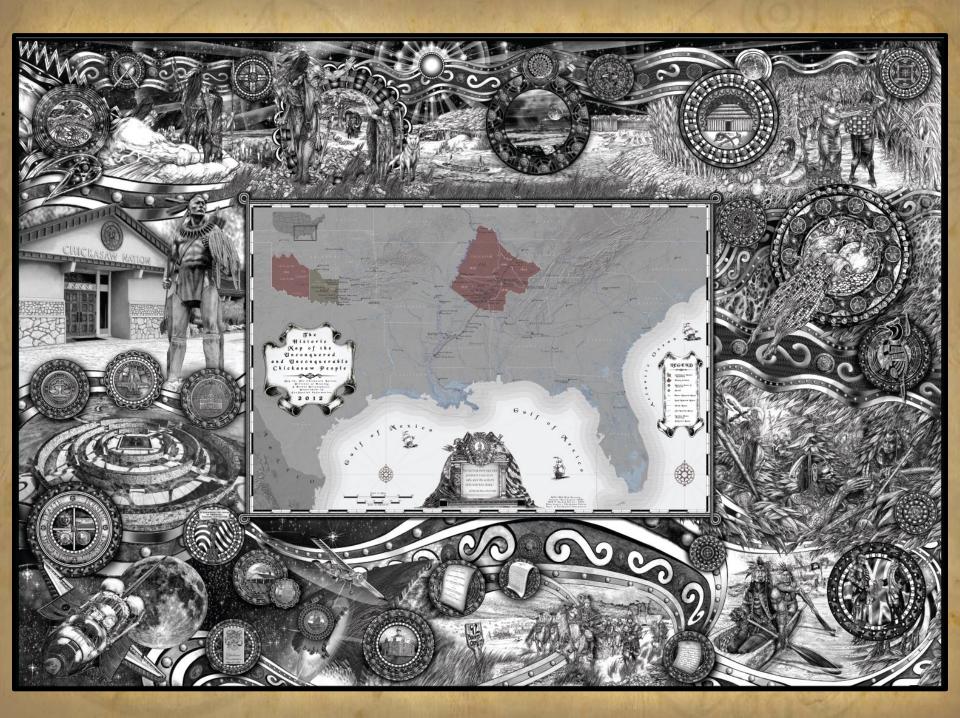


CONSTRUCTION AND SUPPORT SERVICES DIVISION
GEOSPATIAL INFORMATION (GSI)

"Chickasaw Warrior"





"Chickasaw Warrior"

GSI Facts:

Completed 6,400 data and map requests.

What We Do:

Provide an enterprise GIS system to the decision makers within the tribe.

How We Work:

The Chickasaw Nation GSI Department has 15 employees who maintain and collect tribal, historic and cultural data.

GSI at Work:

We have 50 internal web applications.

- These web applications service more than 276 users.
- All websites are HTML5 and are cross-platform for all applications.



We manage and store 21 terabytes of data.

18 SDE databases with a total of 237 gigabytes of data.

Nine ACTIVE SERVERS:

Four database servers

One storage server

Four web map servers

Three servers for general use

SERVICES:

VAP01 – 77 map services

VAP02 – 101 map services

GSI01 – 68 image services

ArcGIS Online:

One Story Map

21 Web Maps

PORTAL:

Four web mapping applications

COLLECTOR APP:

Four web mapping applications

General Land Office (GLO) Basemaps and Features

Basemap statistics:

Downloaded, cropped and georeferenced 855 maps.

Years: 1871, 1872, 1873, 1874, 1896, 1898 and 1899

Created a mosaic basemap for each year.

GLO feature statistics:

Digitized all: fences, railroads, roads, structures, fields, towns, town lots and blocks, rivers and waterbodies.

Total of 114,919 features.

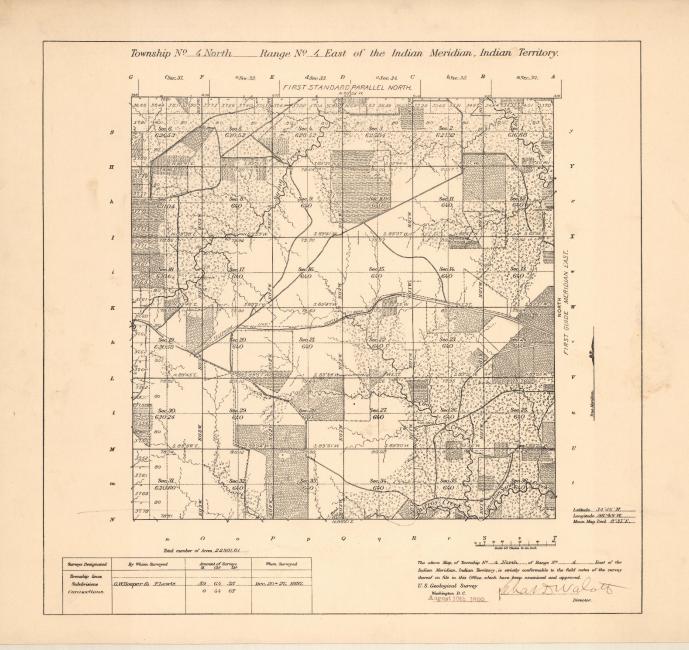
- - HistoricData.GSIADMIN.Survey_Sites_Town_1899
 HistoricData.GSIADMIN.Survey_Sites_TownLotBlock_1899

HistoricData,GSIADMIN,Survey Sites Waterbody 1899

∴ HistoricData.GSIADMIN.Survey_Points_Structure_1899
 ☑ HistoricData.GSIADMIN.Survey_Sites_Field_1899

GLO Website

Se Se	earch Documents	Reference Center	Support		Shopping Cart
Search Docume	ents				
Search Docun	nents By Type Sea	rch Documents By Location	Search D	ocuments By Identifier	
Patents	Search				<u>Clear Form</u>
LSR CDI Tract Books	State: OKLAHOMA County: Any County: Land Description Township: 4 Standard Standar	1. Star 2. You field 3. Clic 4. You You can go over it. You	k the Search So will be switche et a brief descri u can get more	fill in all fields, but provide	e. s by hovering your mouse ting the <u>Glossary</u> in the
	Survey Type: Any S Surveyor: Any S Search Surveyor	urveyor		roup Nr: ed Date: - to - er every state. We do have rese	Survey Nr: ource links, though, for most



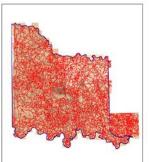
1871 and 1899 Sample Features



FEATURE: STRUCTURES
STATUS: COMPLETE
COMPLETED: 11,634 FEATURES



FEATURE: RIVERS AND CREEKS STATUB: COMPLETE COMPLETED: 29,907 FEATURES



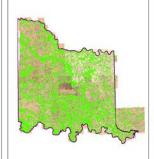
FEATURE: ROADS STATUS: COMPLETE COMPLETED: 20.014 FEATURES



FEATURE: FENGED STATUS: COMPLETE COMPLETED: 22,598 FEATURES



FEATURE: WATER BODIES STATUS: COMPLETE



FEATURE: FIELDS STATUS: COMPLETE COMPLETED: 8,967 FEATURES



FEATURE: RAILROADS STATUE: COMPLETE COMPLETED: 143 FEATURES



FEATURE: TOWN BLOCKS STATUS: COMPLETE COMPLETED: 208 FEATURES



FEATURE: TOWNS
STATUS: COMPLETE
COMPLETED: 182 FEATURES

Make St. CHICAGARIE NATION (CONTRIBUTION & SHEPPINE SERVICES)

SOCIORIANIA, INCREMENTO / DOCTOR MANAGEMENT

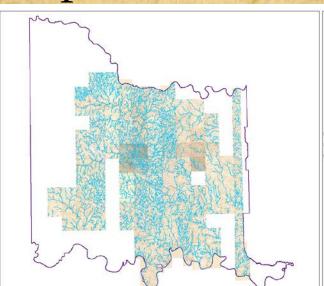
SOCIORIANIA, INCREMENTO / DOCTOR

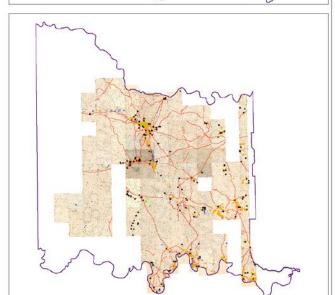
SOCIORIANIA (CONTRIBUTION CONTRIBUTION CONTRI

1899 BLM SURVEY FEATURES STATUS: COMPLETE COMPLETED: 93,886 FEATURES









AND TO CONTROL AND ASSESSMENT OF THE STATE O

1871 BLM SURVEY FEATURES
STATUS: COMPLETE
COMPLETED: 5,190 FEATURES

FEATURE: STRUCTURED
STATUS: COMPLETE
COMPLETED: 241 FEATURES



FEATURE: RIVERS AND GREEKS
STATUS: COMPLETE
COMPLETED: 3,812 FEATURES



FEATURE: ROADS
STATUS: COMPLETE
COMPLETED: 358 FEATURES



FEATURE: FENGES
STATUS: COMPLETE
COMPLETED: 336 FEATURES



FEATURE: WATER BODIES
STATUS: COMPLETE
COMPLETED: 91 FEATURES



FEATURE: FIELDS
STATUG: COMPLETE
COMPLETED: 337 FEATURES



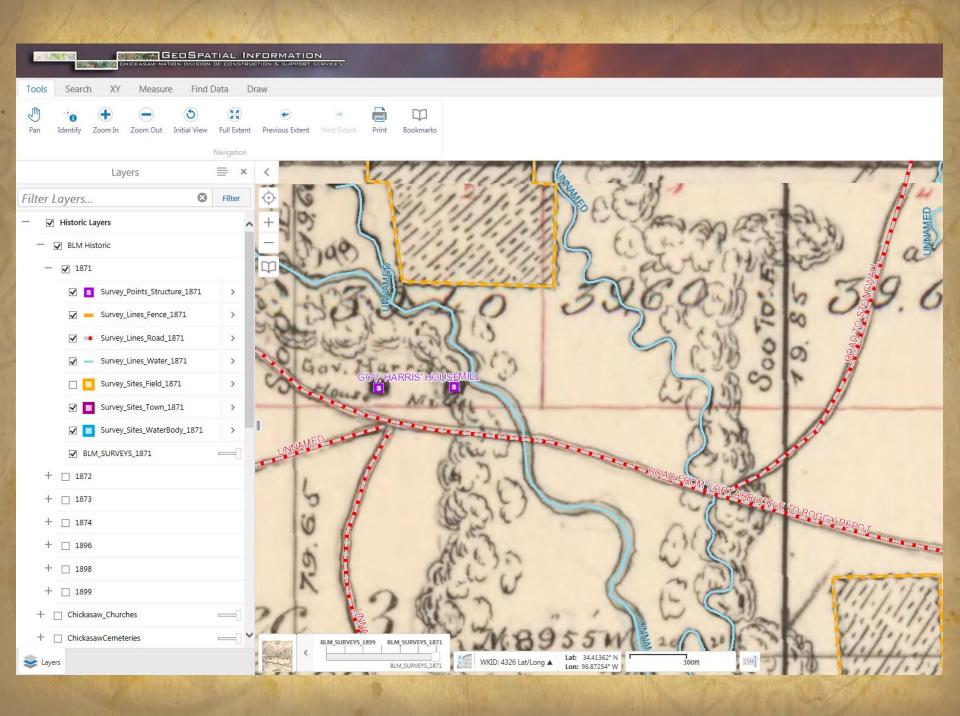
FEATURE: TOWNS
STATUS: COMPLETE
COMPLETED: 5 FEATURES

FEATURE: TOWN BLOCKS
NO TOWN BLOCKS
FOR 1871 SURVEY

FEATURE: RAILFOADS
NO RAILFOAD FEATURES
FOR 1871 SURVEY



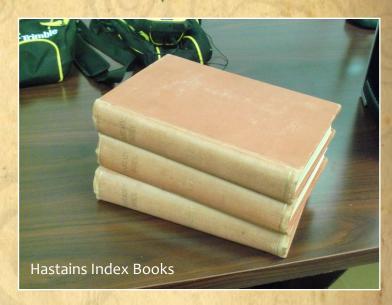


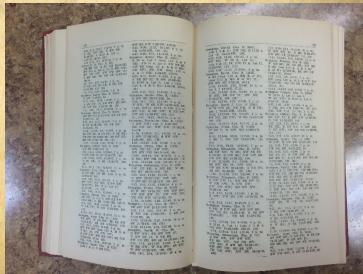


Allotted Land Project

• Project History:

- Hastains Index Books.
- Project began in summer 2013.
- Allotted lands can include farmlands and homesteads.





Attributes Associated With Allotments

110 1111, 1111 DE 11W 20-1N-8W.	7.1
107.03. (H)	6-1
4 1-8, 2-10, 3-16, 3-24-06. 2 p. m.	S
Doak, Lovie Lee. Chi. B. 4827.	36
SW SE NW; E NW SW:	.4:
SW NW SW; NW SW SW 12:	15
SW NW SW; NW SW SW 12;	6-
SE NE SE; NE SE SE 11;	Dob
E NE SW 13-1S-5W. 90.	
2-2, 2-10, 4-3, 4-9-06, 3 p. m.	N
E SW SW; SW SW SW 12;	N
E NE NE 14; NW NW 13-1S-5W, 90.	ST
(H)	2.
2-2, 2-10, 3-20, 3-26-06, 4 p. m.	N
Doak, Lula E. Chi. B. 4861.	SV 2-: N
Lot 18: NE SW:	13
W 20 A. Lot 17, 25-1N-8W, 78.51.	2-1
SE SW NW; NE NW SW;	17.12
	Dobs
N NE SW; SE NE SW 13-7N-25E.	ST
50.	20
4-18, 4-27, 7-16, 7-23-06. 11 a. m.	2-2
W 20 A. Lot 17; NE SW; Lot 18, 24;	SI
S SE NW; SW 10 A Lot 16,	20
25-1N-8W, 108.61. (H)	2-2
4-18, 4-27, 6-11, 6-16-06. 10 a. m.	Dobs
Doak, Vivian Nail. Chi. N. B. 56.	N,
SW SW NW 1; NE NE NE;	E
SW SW SE 11: NE NW;	8-2
SW SE NE 14; W NE SW;	Lo
NW SE SW 12-18-5W, 110.	W
2-27. 2-23. 5-27. 6-7-07. 4 p. m.	8-2
W 20 A T of 2:	Dobs

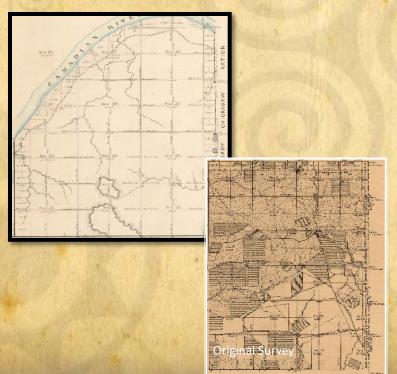
Copyright, 1910, By E. HASTAIN. All rights reserved.

Abbreviation.	Explanation.
(H)	
W	West Half.
N	North Half.
S	. South Half.
E	East Half.
NW	Northwest Quarter.
SW	Southwest Quarter.
NE.	Northeast Quarter.
SE	Southeast Quarter.
Cho B	Choctaw by Blood.
Chi B	Chickasaw by Blood.
Cho F	Choctaw Freedman.
Chi F	Chickasaw Freedman
Cho N B	Choctaw Newborn.
Chi N B	Chickasaw Newborn.
Cho. M., or Int. M	
Ollo, M., Of The, M.	marriage.

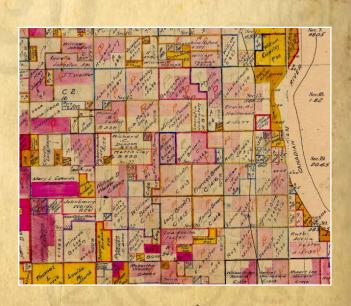
Abbreviation.	Explanation.
Chi. M., or Int. M	Chickasaw by Inter- marriage.
M. Cho. F	. Minor Choctaw
M Chi E	FreedmenMinor Chickasaw
M. CIII. F	Freedmen.
M. Cho	Minor Choctaw.
M. Chi	Minor Chickasaw.
Miss. Cho	Mississippi Choctaw.

Dates following description of allotments are: 1st, date deed signed by Choctaw Chief; 2nd, date deed signed by Chickasaw Chief; 3rd, date approved by Secretary; 4th, date filed for record, in the order named.

- General LandOffice (GLO)plat maps
- Bureau ofIndian Affairs (BIA)maps

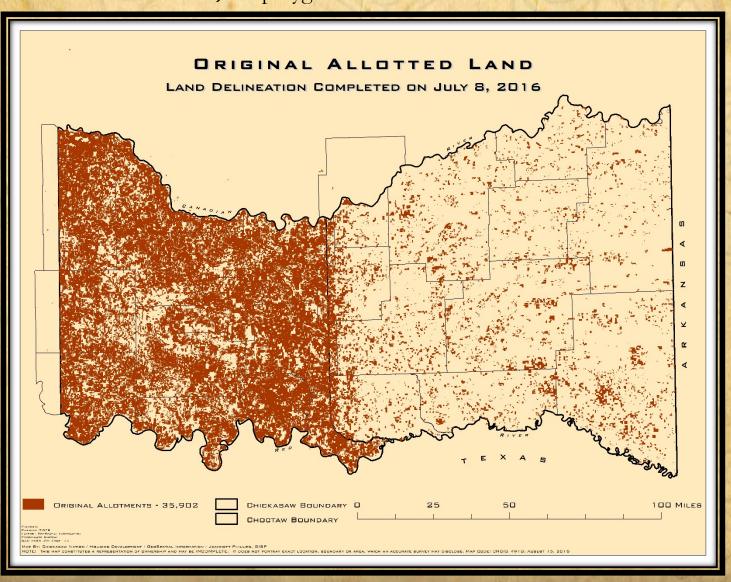






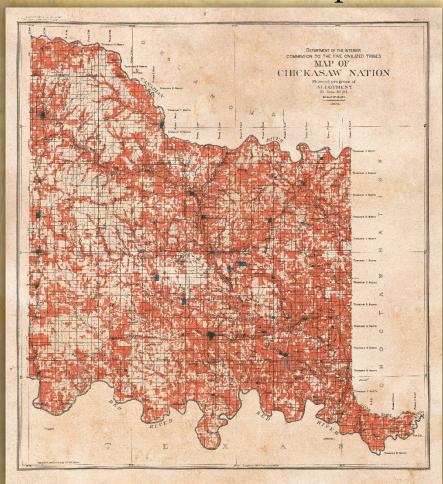
Delineation of Allotted Land

42,083 polygons have been delineated.

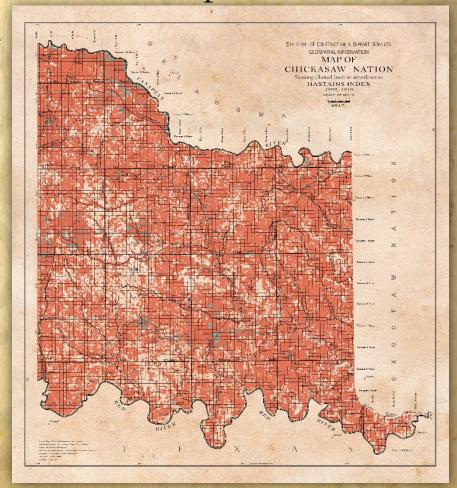


Reproduction of Historic Allotted Lands Map

Historic 1904 Map



2017 Reproduction

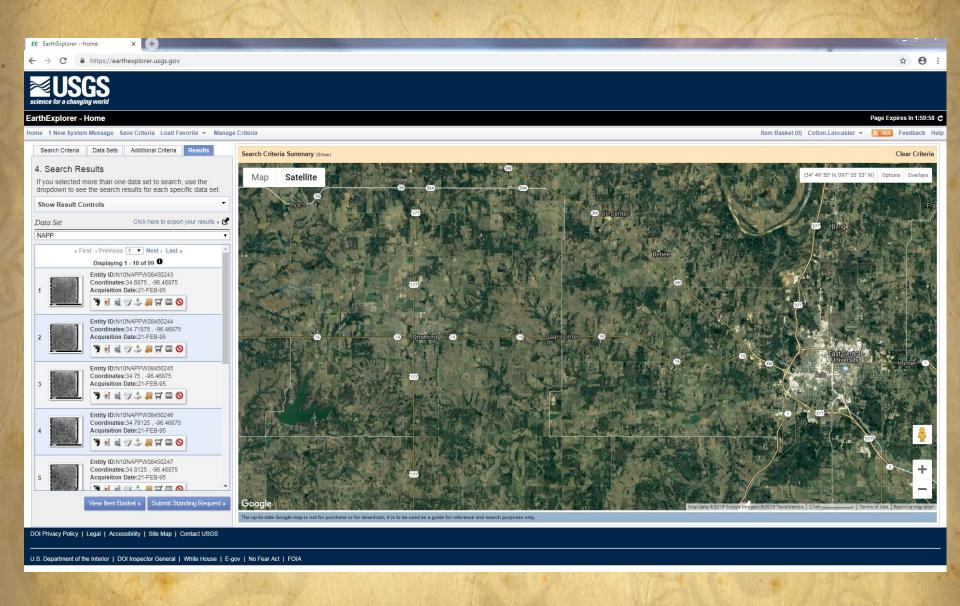


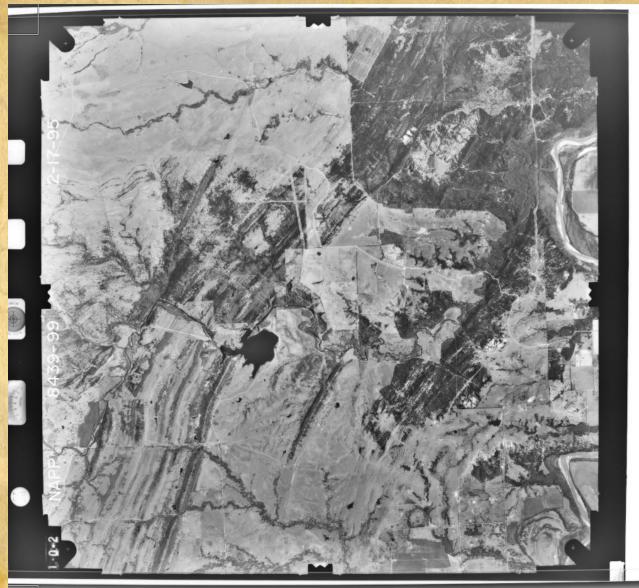
Historic Aerial Photographs from USGS

Historic Aerial Statistics to date:

- Aerial photographs downloaded: 4,154
- Aerial photographs cropped: 2,417
- Aerial photographs georeferenced: 2,000
- Years: 1960, 1961, 1962, 1963,1964, 1965, 1971, 1973, 1974, 1975, 1976, 1984 and 1995

A mosaic basemap will be created for each year as they are completed.





≥USGS



Chickasaw Nation Drone Team

Remote Pilot Airmen Certificate (Part 107)

Greg Skinner – Certified federal land surveyor

• Remote pilot airmen certified since March 8, 2018.

Stephen West – GIS specialist

• Remote pilot airmen certified since Sept. 14, 2018.

Colton Lancaster – GIS intern

• Remote pilot airmen certified since Sept. 12, 2017.

Statistics on all drone flights:

Missions flown- 64
Total flight time- 45.9 hours
Area flown- 12,738 acres/19.9 square miles



UAVs

Fixed Wing eBee Plus Multi-Rotor DJI Mavic Pro



DJI Mavic Pro

- Quad Copter
- Weight of 1.64 lb.
- Flight time up to 27 minutes
- Can capture areas
 up to 25 acres
- 12 megapixel,

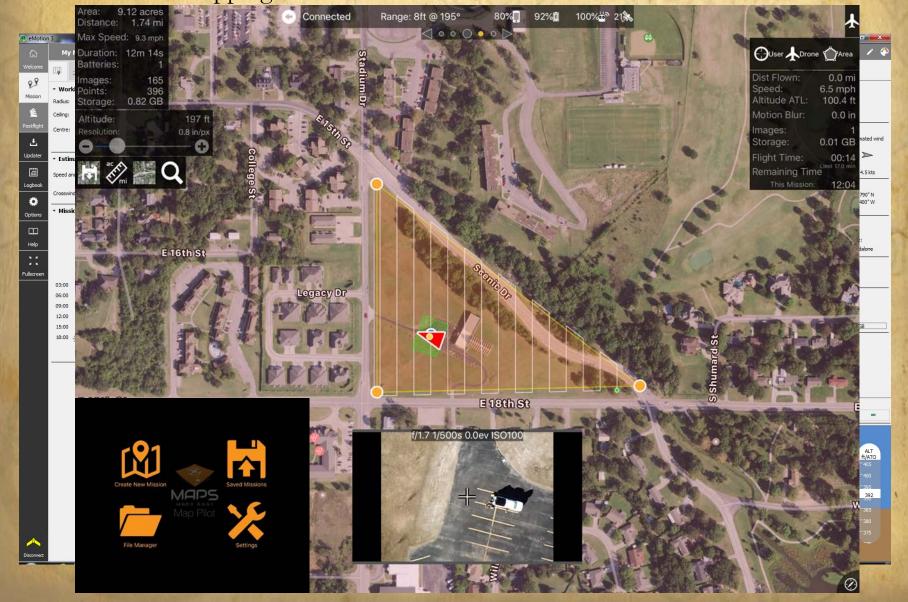
 1/2 inch camera

eBee Plus

- RTK capable fixedwing UAV
- Weight of 1.5 lb.
- Flight time up to45 minutes
- Can capture areas up to 4.6 square miles
- 20 megapixel, 1-inch camera



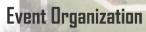
Map Pilot – IOS Mapping UAS Software purchased from the App Store for automated Emotion3 – Mapping UAS software provided with the eBee Plus UAV platform mapping missions for the DJI Mavic Pro platform. for automated mapping missions.







Pre-Event







Event Set Up















ANY QUESTIONS?

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Faith Adams
GIS senior database administrator
GeoSpatial Information
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