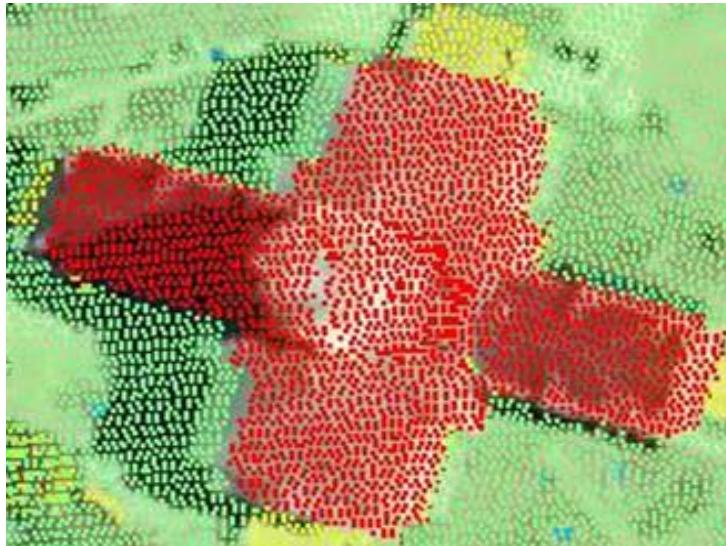
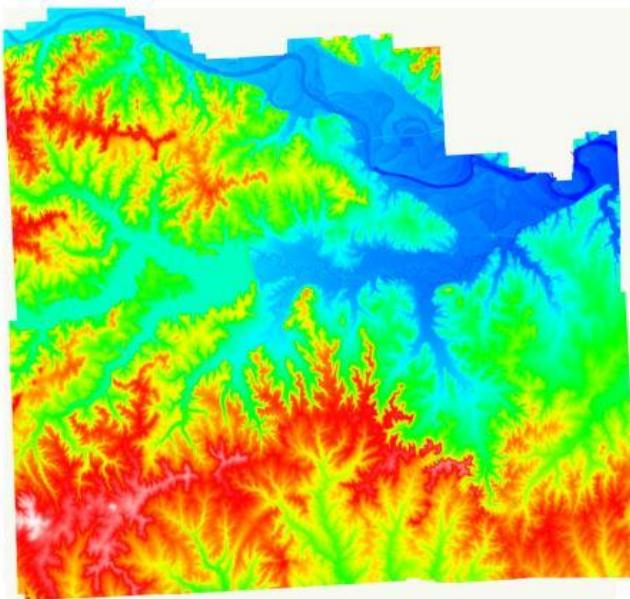


KANSAS LIDAR DATA ACQUISITION

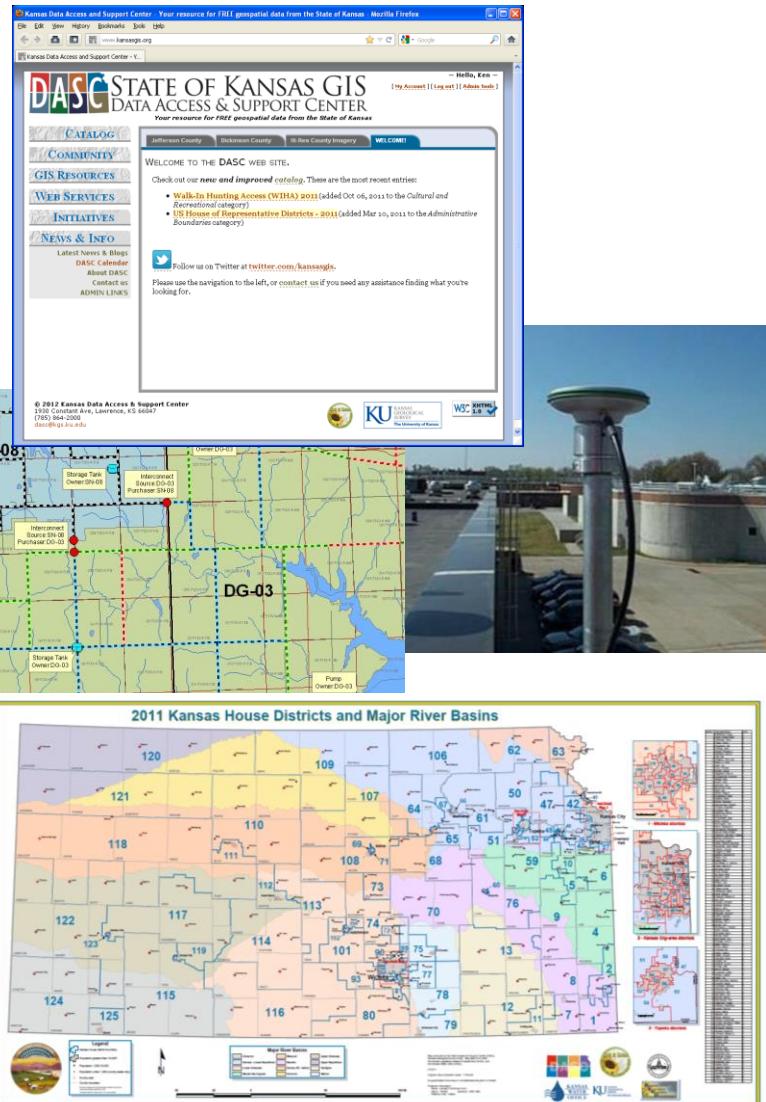


DATA ACCESS & SUPPORT CENTER (DASC)

- Established by the GIS Policy Board in 1991
- Central repository of GIS databases of statewide/regional importance
- Designated as an National Spatial Data Infrastructure (NSDI) clearinghouse node in 1997
- Located at the Kansas Geological Survey at the University of Kansas
- Web site – <http://www.kansasgis.org>

DASC SERVICES

- Database archival and distribution
- Database development & integration
- GIS web application development and hosting
- State & Local Government Coordination
- Support the Esri Enterprise License Agreement (ELA) for state government
- Technical assistance
- Geospatial metadata development assistance
- Cartographic development
- Promotion of the Kansas GIS Initiative
- Development and maintenance of the DASC web site – www.kansasgis.org



DASC WEB SITE – HTTP://WWW.KANSASGIS.ORG

The screenshot shows a Mozilla Firefox browser window displaying the DASC (Kansas Data Access and Support Center) website. The address bar shows 'www.kansasgis.org'. The main content area features the DASC logo and the text 'STATE OF KANSAS GIS DATA ACCESS & SUPPORT CENTER' with a subtitle 'Your resource for FREE geospatial data from the State of Kansas'. A navigation bar at the top includes links for 'Hello, Ken', 'My Account', 'Log out', and 'Admin tools'. On the left, a vertical sidebar menu lists 'CATALOG', 'COMMUNITY', 'GIS RESOURCES', 'WEB SERVICES', 'INITIATIVES', and 'NEWS & INFO'. The 'NEWS & INFO' section contains links for 'Latest News & Blogs', 'DASC Calendar', 'About DASC', 'Contact us', and 'ADMIN LINKS'. The main content area displays a welcome message and recent entries in the catalog, including 'Walk-In Hunting Access (WIHA) 2011' and 'US House of Representative Districts - 2011'. It also features a Twitter link and navigation links for 'Jefferson County', 'Dickinson County', and 'Hi-Res County Imagery'. At the bottom, there are logos for 'State of Kansas', 'KU KANSAS GEOGRAPHICAL SURVEY The University of Kansas', and 'W3C XHTML 1.0'.

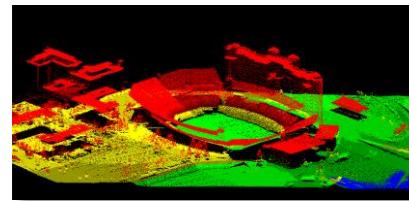
- Online resource for GIS data, documentation, standards, and web services
- Provides access to a variety of web-based mapping applications
- Serves as the central hub for the Kansas GIS community

Kansas LiDAR Specifications

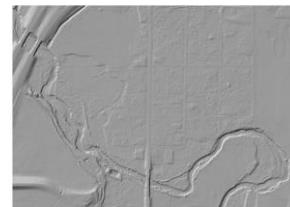
- Data points are 1.4 meter nominal point spacing
- .6 meter horizontal accuracy of bare earth points
- 24.5 cm (12.5 cm RMSE) vertical accuracy of bare earth points
- Data supports 2 foot contour generation
 - 1 ft contours with added breaklines

KANSAS STANDARD LIDAR DATA PRODUCTS

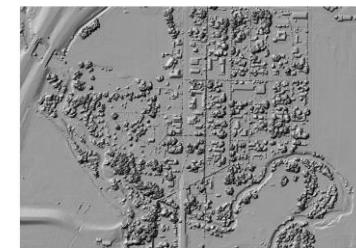
- Classified Point Cloud in .LAS format



- 1-m Bare-Earth DEM in .IMG format

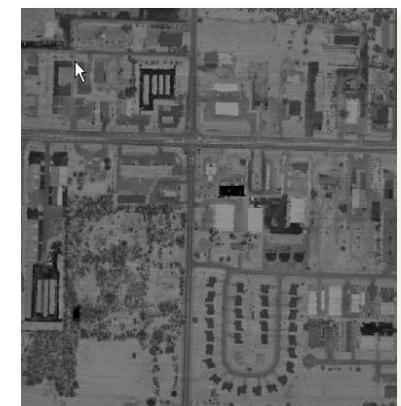


- 1-m First-Return DEM in .IMG format



- Hydro Polygons in Geodatabase format

- Greyscale LIDAR Intensity Return Image in GeoTIFF format



- All products in UTM, NAD 83, NAVD 88

FILE SIZES

2009 - 2010 - 2011 - 2012 LiDAR Project

5000 x 5000 meter Tiles...aka 5K tiles:

- Classified Point Cloud (LAS) – 515 MB
- 1-m Bare Earth DEM – 100 MB
- 1- m First Return DEM – 90 MB
- Hydro Polygons Geodatabase for block – 5 MB
- Intensity Images – 10 MB

FILE SIZES

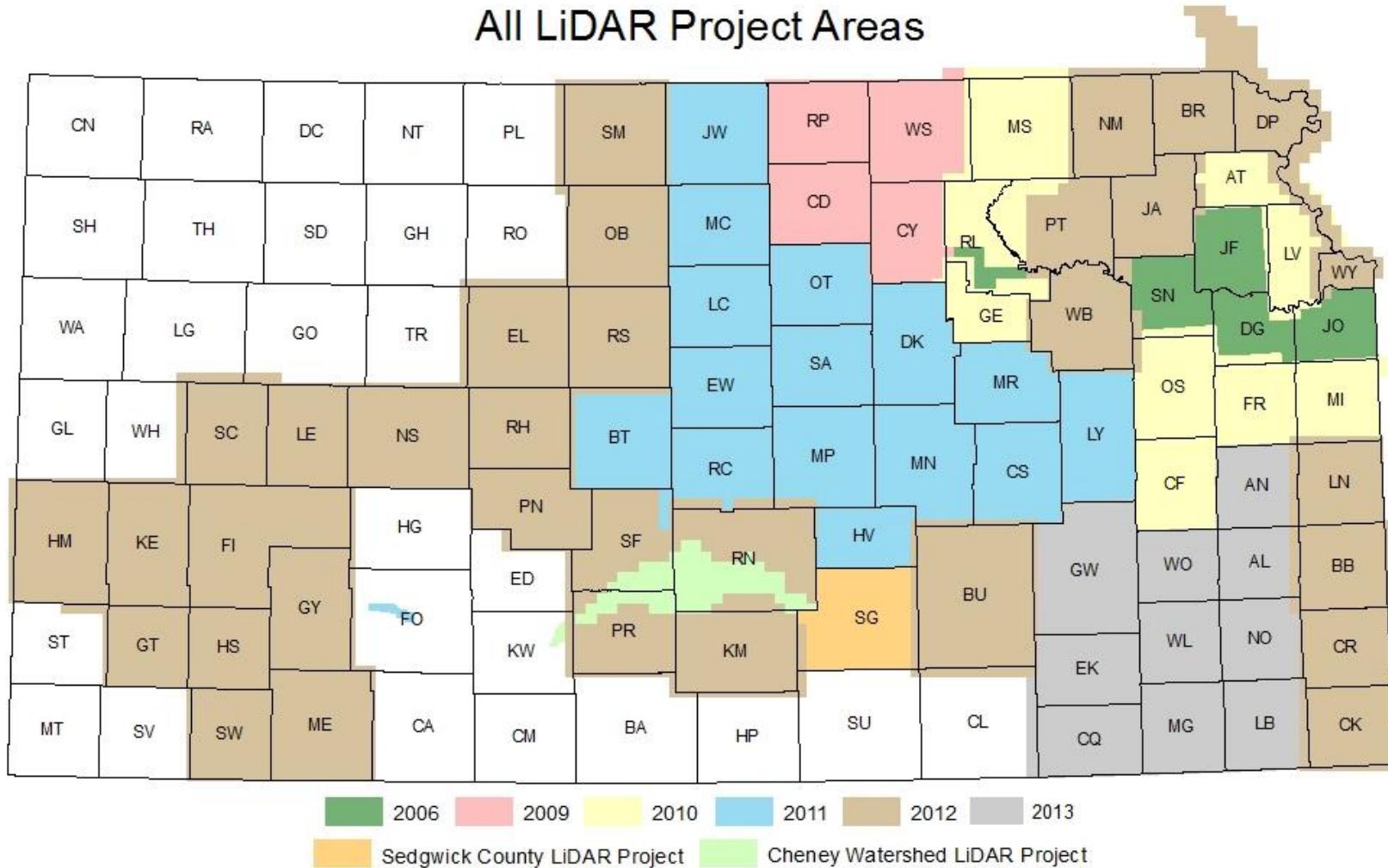
2006 Kansas LiDAR Project- UTM/StatePlane

1000 x 1000 meter Tiles...aka 1K tiles:

- 2-m Bare Earth DEM(XYZ) – 7.2MB
- 2-m All Returns(LAS) – 12MB
- Intensity Images(TIFF) – 2.8MB
- 2-m County HillShade – 353MB

LIDAR DEVELOPMENT IN KANSAS

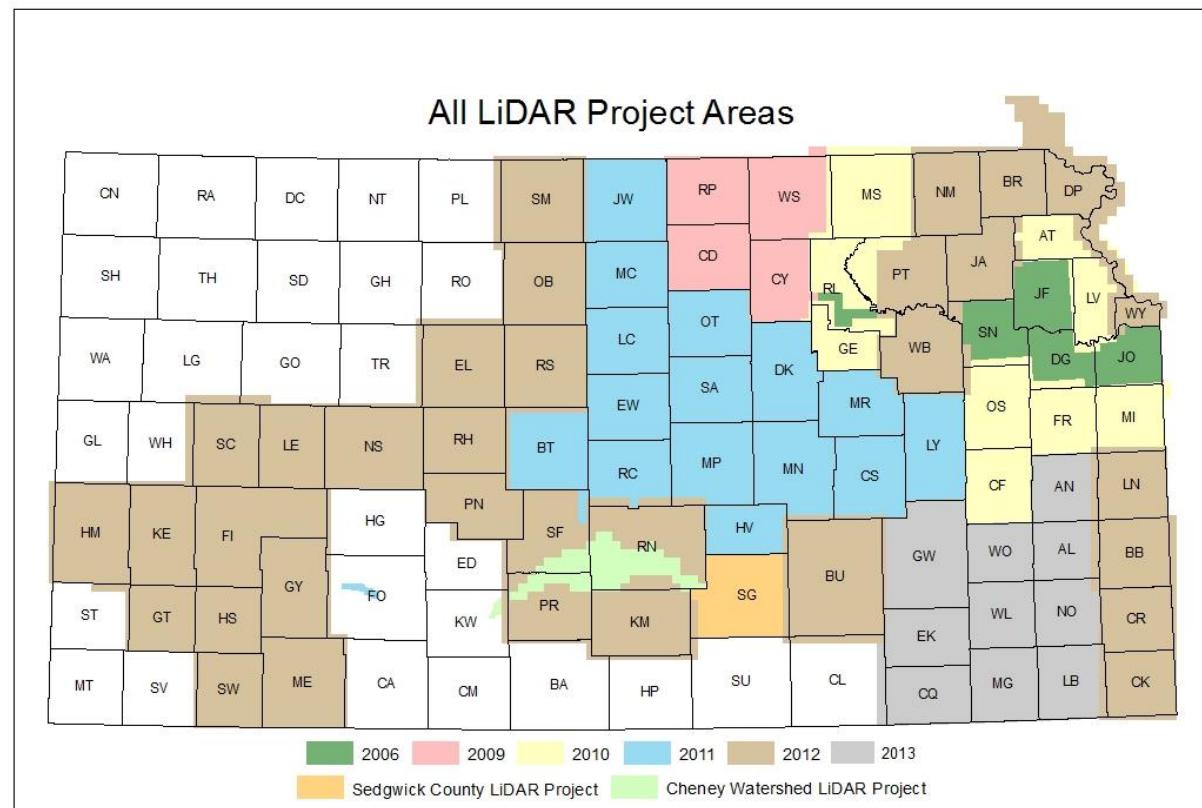
All LiDAR Project Areas



LIDAR DEVELOPMENT IN KANSAS

Project availability:

- 2006 – available online
- 2009 – available online
- 2010 – available online
- 2011 – available online
- 2012 – coming soon
- 2013 – under development



2012 LiDAR PARTNERS

- Natural Resources Conservation Service (NRCS)
- Kansas Dept of Agriculture
- US Army Corps of Engineers
- US Geological Survey
- Kansas GIS Policy Board
- Kansas Dept of Transportation
- Bourbon County
- Crawford County
- Wyandotte County
- Groundwater Management District 3

HOW TO ACQUIRE LIDAR DATA FROM DASC

DASC Data Catalog:

1. <http://www.kansasgis.org/catalog>
1. Select Elevation category
1. Select project year and navigate on interactive map to area of interest

Note: data download requires user to setup a free user account

Categories Alpha Search Help

[Expand all](#)

- + **Administrative Boundaries**
- + **Cadastral**
- + **Critical Infrastructure and Structures**
- + **Cultural and Recreational**
- **Elevation**
 - County 2 Meter LiDAR Elevation Mosaics
 - Depth to Flood - Eastern Kansas
 - Elevation Hillshades
 - GPS-Base - LINK BROKEN (not public)
 - LiDAR 2006
 - LiDAR 2009
 - LiDAR 2010
 - LiDAR 2011
 - LiDAR Grid With Hyperlinks
 - National Elevation Dataset (NED)
 - Tagged Vector Contours (TVC)
 - USGS Contours- 10 Foot Interval
- + **Environmental Resources**
- + **Imagery and Raster**
- + **Land Surface Geology Soils**
- + **Online Services**
- + **Transportation**
- + **Utilities and Energy Resources**
- + **Water Resources**
- + **Archive**

HOW TO ACQUIRE LiDAR DATA FROM DASC

1. Go into the *GIS Resources* section of the web site and select the *Elevation & LiDAR Resource Center*
2. In the resource center, you can view Terms & Definitions, information about current and upcoming projects, and view the interactive map with download links

The screenshot shows a web browser displaying the DASC website at www.kansasgis.org/resources/lidar.cfm. The page title is "Elevation Data and LiDAR". The left sidebar contains links for Catalog, Community, GIS Resources (with sub-links for GIS Resources, About Map Projections, Elevation & LiDAR Documentation), Web Services, Initiatives, and News & Info. The main content area features an "Interactive Map" of Kansas counties, each labeled with its name. The map is color-coded by county, and a legend in the top-left corner of the map area shows symbols for different data layers. A navigation bar at the top includes links for Introduction, Terms & Definitions, Resources, Interactive Map, Current Activities, and Projects. A user login form is located in the top right. The bottom of the page includes copyright information for 2013, logos for KU and the Kansas Geological Survey, and an XHTML 1.0 validation checkmark.

© 2013 Kansas Data Access & Support Center
1930 Constant Ave., Lawrence, KS 66047
(785) 864-2000
dasc@kgs.ku.edu

KU KANSAS GEOLOGICAL SURVEY The University of Kansas

W3C XHTML 1.0 ✓

HOW TO ACQUIRE LiDAR DATA FROM DASC

Kansas Data Access and S X

www.kansasgis.org/resources/lidar.cfm

DASC KANSAS DATA ACCESS & SUPPORT CENTER

Catalog Community GIS Resources Services Initiatives News

user name / email Log in
Need login help? New here? Register.

Elevation Data and LiDAR

Catalog Community GIS Resources Web Services Initiatives News & Info

Introduction Terms & Definitions Resources Interactive Map Current Activities Projects

Interactive Map

Legend

+ -

Rice Inman McPherson Marion

Buhler Hesston North Newton

Reno Harvey

Lidar Grid: 14SPH1530

RowColumn R030C080

USNG 14SPH1530

TILE_ID

Year 2011

Project_Area

GRID

BareEarth [More info](#)

FirstReturn [More info](#)

LAS [More Info](#)

DEM

Projection [Zoom to](#) NAD 1983 UTM Zone 14N

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HOW TO ACQUIRE LiDAR DATA FROM DASC

Kansas Data Access and Support Center – Elevation Data and Lidar

kansasgis.org/resources/lidar.cfm

Map of Kans...Oil and Gas Apple iCloud Facebook Twitter Wikipedia Yahoo! News Popular Kansas Data...e of Kansas Google Reader

Hello, Brent [My Account] [Log out] [Admin tools]

DASC KANSAS DATA ACCESS & SUPPORT CENTER

Catalog Community GIS Resources Services Initiatives News

Elevation Data and LiDAR

[Catalog](#) [Community](#) [GIS Resources](#) [Services](#) [Initiatives](#) [News](#)

[Introduction](#) [Terms & Definitions](#) [Resources](#) [Interactive Map](#) [Current Activities](#) [Projects](#)

2006 River Corridor 2009 Rainwater Basin 2010 LiDAR Project 2011 LiDAR Project 2012 LiDAR Project 2013 LiDAR Project Composite LiDAR Projects

2009 Rainwater Basin LiDAR Project

Files from this project are [available for download in the Catalog](#).

In 2008, the NRCS-KS, USGS, and State of Kansas GIS Policy Board partnered with the NRCS-NE and State of Nebraska to collect LiDAR for the Rainwater River Basin as it reached into the State of Kansas. The four counties collected under this project Republic, Washington, Cloud, and Clay. This project was contracted through the US Army Corps of Engineers - St. Louis District and flown by MERRICK & COMPANY.

Project Area

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dasc@kgs.ku.edu

KU KANSAS GEOLOGICAL SURVEY The University of Kansas

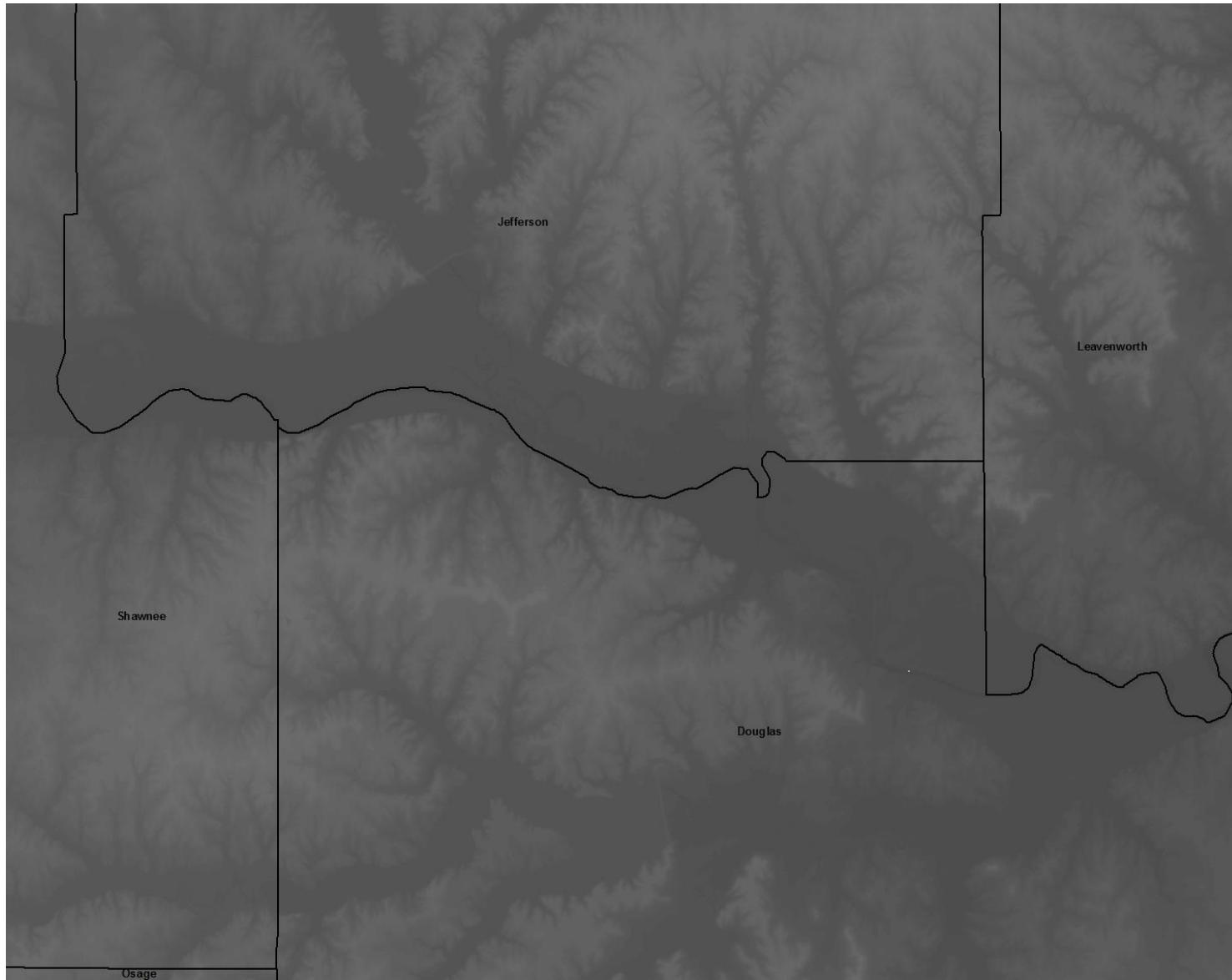
W3C XHTML 1.0 ✓

HOW TO ACQUIRE LiDAR DATA FROM DASC

- Coming soon...LiDAR-based map services available via DASC data catalog
- Similar to accessing DASC's collection of aerial imagery map services, you will be able to view elevation and hillshade map services within Esri Desktop software, or integrate these services into web-based applications
- Map services will allow you to view and query spot elevations in a seamless format, without downloading the individual 5K tiles

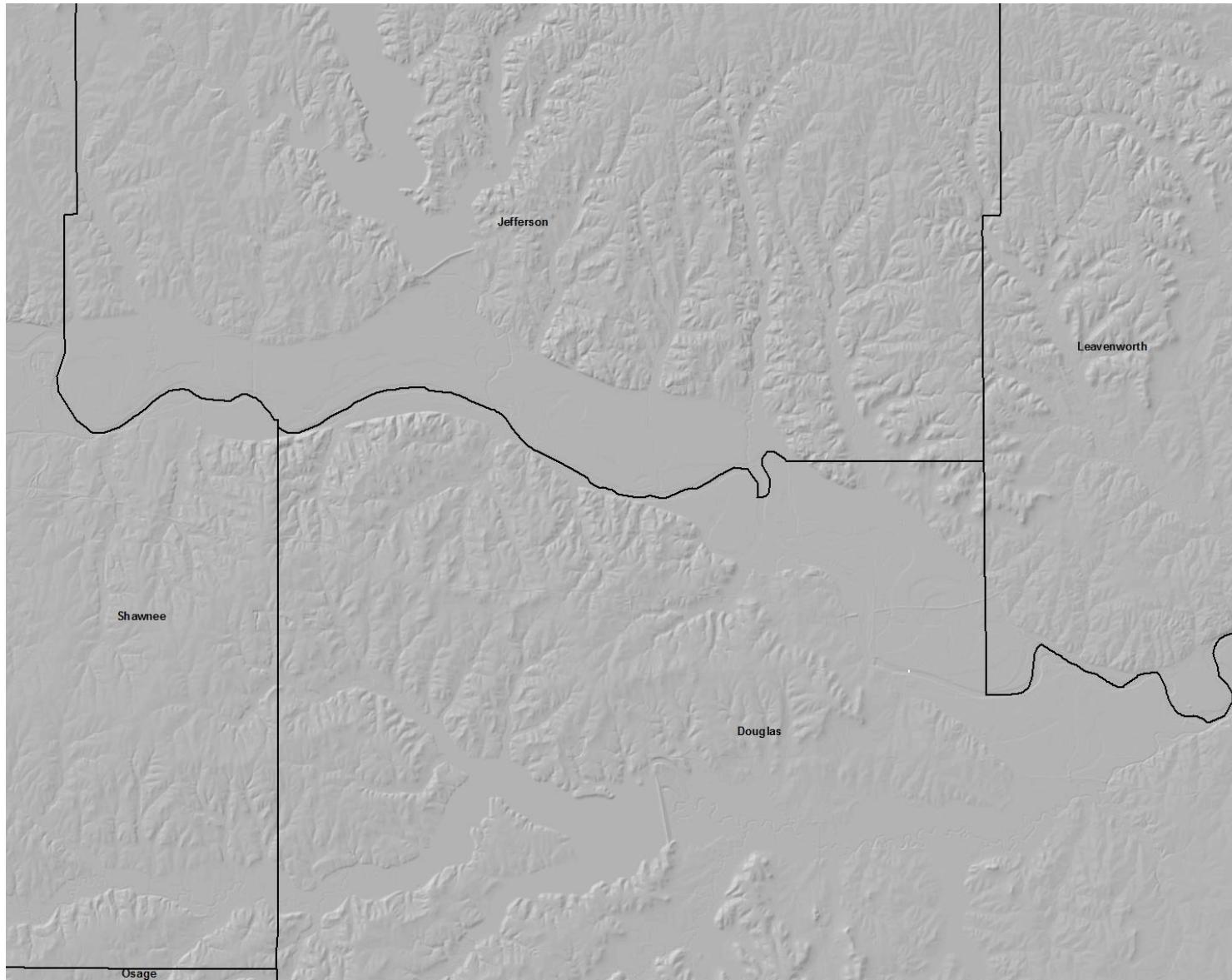
HOW TO ACQUIRE LiDAR DATA FROM DASC

LiDAR Mosaic Dataset in Projection WebMercator in Feet



HOW TO ACQUIRE LiDAR DATA FROM DASC

LiDAR Mosaic Dataset Hillshade



QUESTIONS?

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