IMPORTANT NOTE! If the LiDAR data products you're looking are not in the maps.wustl.edu / mo_lidar_data directory then it is either not available for public access yet - is in the pipeline to be posted - or potentially, has not been flown yet. We are not holding data back at either MSDIS or the Partner Node site at Washington University.

If this is your first experience with LiDAR data you might want to check out the MGISAC's whitepaper on LiDAR here:

http://www.mgisac.org/uploads/DataDevelopment/lidar_white_paper.pdf

As you can see from the data listed below the map in the white paper is out of date!

Cole_Callaway_Osage

Most of this data is for Jefferson City and the surrounding area. There are portions of Cole, Callaway and Osage counties as well.

Cass

This folder contains only the Cass County DEM - 1.2192m - UTM15N83 – in a TIF format.

Clay

This folder has data for Clay County. Data are Transverse Mercator, State Plane, NAD 83. Clay is West Zone . The z units are feet NAVD88.

ESRI_shp folder has shapefiles of the project boundaries by county and the tile schemes. The tiles are 10,000 ft x 10,000 ft arbitrary and sequentially numbered.

Metadata folder has project general metadata for two of the formats – the DTMs and the LAS (explained below).

Each county has data folders for DTM and LAS, e.g. **Clay_DTMgrids** and **Clay_LAS.**

The DTMgrids are 1m cell size, ESRI 32 bit floating-point grids made from bare-earth only LiDAR mass points and hydro-flattening and hydro-enforcement breaklines. I do not have the full specs for the breaklines – need to know when streams went from single line to double line breaklines, minimum water body size for flattening, if culverts, bridges and dam pipe outlets were blown back, etc.

The LAS folders (e.g. **Clay_LAS**)are all LiDAR returns in LAS v 1.0, classified to 1=unclassified and 2=ground.

Clay has full-county 1m ESRI Grids mosaics – e.g. folder name **Clay_mosaics**. Also in the mosaics folder are hillshades made from the 1m DTM grid mosaic.

Clay has terrain geodatabases in the **terrain_geodatabases** folder. Terrains are an alternative ESRI mass points/breaklines data format. These contain bare-earth mass points, breaklines and the project boundary merged into a county-wide file geodatabase. They are ArcGIS 9.3 version file geodatabases.

Howell

This Howell County folder currently contains data collected for the City of West Plains only. There are 2010 aerial photos, contour datasets, LiDAR data sets of 10' bare earth models in UTM15 NAD83 and a .PDF of the LiDAR coverage of the area.

Jasper

This Jasper County folder currently contains an RMSE spreadsheet of the project raster mosaics, Joplin BE mosaics and a folder called Jasper Photoscience which contains data on tile layouts, Classified LAS, and Breakline Shapefile, a deliverable listing, a Raster DEM, an LAS Analysis and – finally – a project transmittal .PDF.

Lafayette_Saline_Carroll_Chariton

This folder contains data for Lafayette, Saline, Chariton and Carroll counties. The data are Transverse Mercator, UTM, NAD83 Zone 15 and the z units are meters NAVD88.

These data were broken into 3 areas for staged delivery. **Misc_shape_files** folder has shapefiles showing the areas and tiles, which are quarter-quarter quads and full quad mosaics. In this dataset, metadata .xml files are file-specific and are embedded in the various folders. For data that are mosaics of other tiling schema they did not repeat the metadata.
The folder **survey_data** has control points and reports regarding data accuracy assessments.

The data are in folders by area under the folder **Missouri_fourcounty.** For example,

Missouri_fourcounty
       area1

For each area, the data have the following folders and formats:

be_esri_grids_qqquads Bare Earth 1m ESRI Grid DTMs in quarter-quarter quad tiles, hydro-enforced with breaklines. The breaklines flattened waterbodies greater than 1 ac in size, single lined streams that could be detected in the LiDAR up to 2m in width, then were double-lined, and major culverts and bridges removed.

be_esi_grids_quads - same as above, mosaiced to quads

DTM_LAS – LAS mass point files for bare earth points only and breaklines as mass points. LAS v 1.1. Classified 2=ground and 12=breaklines

LAS – all returns mass points, classified as 2=ground and 5=all other points.

This project also included simultaneously flown orthophotos, 1ft pixel size. They were delivered in 3 formats, ECW, Geotif and MrSID.
Each corresponding imagery format has a folder of data, e.g. **Imagery_ECW**, **Imagery_GeoTifs** and **Imagery_MrSIDs.** The MrSIDs are quad mosaics while the other two formats are in quarter-quarter quads.

Finally, included is a **Hillshade_ECW** contains a mosaic of the be grids for the area presented in a .ecw image format.

Linn_Sullivan_Warren

This folder has data for Linn, part of Sullivan and Warren counties. Data are Transverse Mercator, UTM, NAD83, Zone 15 with z units in meters NAVD88.
This data has file-specific metadata, but it is separated into a **Metadata** folder rather than embedded with the data. **Shapefiles** folder has shapefiles of project areas and tiles which are quarter-quarter quads and quad mosaics. The **Reports** folder has data about survey control and quality assessments of the data.

The LiDAR data are divided into folders by county, data format type and processing blocks – e.g.

LiDAR_data
    grid
        Linn_Sullivan
            block1
containing bare earth hydro-enforced DTM, 1m ESRI GRID files, 32-bit floating point

LiDAR_data
    LAS
        Linn_Sullivan
            qq_quad
containing all mass points in LAS v 1.1, classified 1=unclassified 2=ground

Montgomery

This folder contains Montgomery County data LAS and GRID files.

Platte

This folder has data for Platte County. All data are Transverse Mercator, State Plane, NAD 83. Platte is West Zone. The z units are feet NAVD88.

ESRI_shp folder has shapefiles of the project boundaries by county and the tile schemes. The tiles are 10,000 ft x 10,000 ft arbitrary and sequentially numbered.

Metadata folder has project general metadata for two of the formats – the DTMs and the LAS (explained below).

Each county has data folders for DTM and LAS, e.g. **Platte_DTMgrids** and **Platte_LAS.**

The DTMgrids are 1m cell size, ESRI 32 bit floating-point grids made from bare-earth only LiDAR mass points and hydro-flattening and hydro-enforcement breaklines. I do not have the full specs for the breaklines – need to know when streams went from single line to double line breaklines, minimum water body size for flattening, if culverts, bridges and dam pipe outlets were blown back, etc.

The LAS folders (e.g. **Platte_LAS**)are all LiDAR returns in LAS v 1.0, classified to 1=unclassified and 2=ground.

Platte has full-county 1m ESRI Grids mosaics – e.g. folder name **Platte_mosaics**. Also in the mosaics folder are hillshades made from the 1m DTM grid mosaic.

Platte also has terrain geodatabases in the **terrain_geodatabases** folder. Terrains are an alternative ESRI mass points/breaklines data format. These contain bare-earth mass points, breaklines and the project boundary merged into a county-wide file geodatabase. They are ArcGIS 9.3 version file geodatabases.

Reprocessed Bare Earth Models

This folder contains bare earth models modified by the USDS for functionality purposes. A summary of USDA modifications made to bare-earth elevation models from various LiDAR projects:

1. If in another projection, data were re-projected to UTM NAD83 meters, local zone
2. If vertical units were feet, they were converted to meters
3. Tiles were merged to have fewer files to deal with.

These changes were made ONLY to the bare-earth elevation models and corresponding index files.

Scott

This folder has data for Scott County. All data are Transverse Mercator, State Plane, NAD 83. Scott is East Zone. The z units are feet NAVD88.

ESRI_shp folder has shapefiles of the project boundaries by county and the tile schemes. The tiles are 10,000 ft x 10,000 ft arbitrary and sequentially numbered.

Metadata folder has project general metadata for two of the formats – the DTMs and the LAS (explained below).

Each county has data folders for DTM and LAS, e.g. **Scott_DTMgrids** and **Scott_LAS.**

The DTMgrids are 1m cell size, ESRI 32 bit floating-point grids made from bare-earth only LiDAR mass points and hydro-flattening and hydro-enforcement breaklines. I do not have the full specs for the breaklines – need to know when streams went from single line to double line breaklines, minimum water body size for flattening, if culverts, bridges and dam pipe outlets were blown back, etc.

The LAS folders (e.g. **Scott_LAS**) are all LiDAR returns in LAS v 1.0, classified to 1=unclassified and 2=ground.

St Charles

Contains data for St. Charles Co. Data are Transverse Mercator, UTM NAD83, State Plane Zone East. Z units are feet NAVD88.
Shp has tiles shapefiles that are 10,000x10,000ft tiles. **Metadata** has project general metadata files.

Data are in folders by data format. **Ascii_Ground** contains x,y,z files of bare earth mass points; **Ascii_Unclassified** has all mass points in x,y,z with no classification (such as ground, non-ground). **ESRI_grids** contains 1m bare-earth hydro-enforced DTMs (unknown specs on hydro enforcement).
LAS contains all mass point in LAS v1.0 with 1=unclassified and 2=ground.

St Louis (partial)

Contains data for part of St. Louis Co. Data are Transverse Mercator, UTM NAD83, State Plane Zone East. Z units are feet NAVD88.
Shp has tiles shapefiles that are 10,000x10,000ft tiles. **Metadata** has project general metadata files.

Data are in folders by data format. **Ascii_Ground** contains x,y,z files of bare earth mass points; **Ascii_Unclassified** has all mass points in x,y,z with no classification (such as ground, non-ground). **ESRI_grids** contains 1m bare-earth hydro-enforced DTMs (unknown specs on hydro enforcement).
LAS contains all mass point in LAS v1.0 with 1=unclassified and 2=ground.

Stone

This folder contains data for Stone County, MO. The following sub-folders are within it:
Survey Report.pdf
Classified LAS

Delivery Listing 07292010 .log
Hydro Breaklines
Hydro Enforced Raster DEM
Hydro Flat Raster DEM
Intensity Images
LiDAR Project Report
Metadata
Project Transmittal.pdf
Raw Flightlines
Supporting Documentation

Taney

These data are TIF DEMs_1m_UTM_NAD1983.