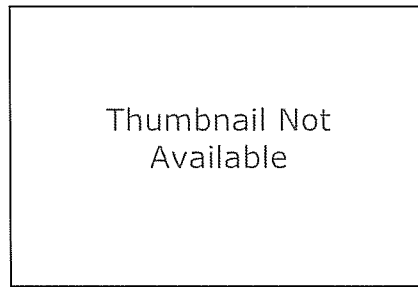


## Grand Forks - East Grand Forks MPO

### Raster Dataset



### Tags

Aerial Photography, Photography, Color Photography, Imagery, Aerial Imagery, Orthophoto, Photo, Mapping, GIS, Planning, Land Use Planning, Grand Forks, North Dakota, East Grand Forks, Minnesota, Grand Forks - East Grand Forks Metropolitan Planning Organization, MPO

### Summary

Color Orthophotos were generated for the Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO). Ortho imagery could be utilized in various applications including GIS, planning and engineering. The direct use and application of the orthophotos will be at the discretion of MPO.

### Description

Aerial imagery was acquired over the project area with a Digital Mapping Camera (DMC) on April 10, 2015. Using Airborne GPS and existing ground control, an aerial triangulation solution was created using ISAT software. From the AT solution and existing DEM, (RGB/8bit) orthophotos were generated using the InPho software suite at a 0.5' pixel resolution (0.5 GSD) in Geo-Tiff and ECW Format (Compression Ratio 20:1) with registration files. Ortho images were delivered in NAD 83/HARN 3301-North Dakota North zone State Plane Coordinates in US-Survey Feet.

### Credits

Quantum Spatial, Inc. 13400 - 68th Avenue North, Suite #100 Maple Grove, MN 55311

### Use limitations

There are no access and use limitations for this item.

### Extent

**West** -97.046344    **East** -97.033591  
**North** 47.846405    **South** 47.837819

### Scale Range

**Maximum (zoomed in)** 1:5,000  
**Minimum (zoomed out)** 1:150,000,000

### ArcGIS Metadata ►

#### Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE    imageryBaseMapsEarthCover, planningCadastre, transportation

\* CONTENT TYPE    Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION    No

PLACE KEYWORDS Grand Forks, East Grand Forks, North Dakota, Minnesota, Red River

THEME KEYWORDS Digital Orthophoto, Orthophoto, Ortho, Photo, Imagery, Aerial Photography, Images, GIS, Planning, Land Use Planning, Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO)

*Hide Topics and Keywords ▲*

## Citation ►

TITLE Grand Forks - East Grand Forks MPO

PRESENTATION FORMATS \* digital map

*Hide Citation ▲*

## Citation Contacts ►

### RESPONSIBLE PARTY

INDIVIDUAL'S NAME Teri Kouba

ORGANIZATION'S NAME Grand Forks - East Grand Forks MPO

CONTACT'S POSITION Planner

CONTACT'S ROLE resource provider

### CONTACT INFORMATION ►

#### PHONE

VOICE (218) 773-0124

#### ADDRESS

TYPE both

DELIVERY POINT 255 North Fourth Street, PO Box 5200

CITY Grand Forks

ADMINISTRATIVE AREA ND

POSTAL CODE 58206

COUNTRY UNITED STATES

E-MAIL ADDRESS terikouba@theforksmmpo.org

*Hide Contact information ▲*

*Hide Citation Contacts ▲*

## Resource Details ►

DATASET LANGUAGES \* English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE \* grid

### SPATIAL RESOLUTION

GROUND SAMPLE DISTANCE

PRECISION OF SPATIAL DATA [in\_us] (inch)

\* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.1.0.3035

CREDITS

Quantum Spatial, Inc. 13400 - 68th Avenue North, Suite #100 Maple Grove, MN 55311

ARCGIS ITEM PROPERTIES

- \* NAME Template.tif
- \* LOCATION file:///E:/FinalBigTiles\_MN/Template.tif
- \* ACCESS PROTOCOL Local Area Network

*Hide Resource Details ▲*

## Extents ►

EXTENT

DESCRIPTION

Orthophoto data is centered over the city of Grand Forks, ND and covers approximately 144 square miles. The coverage extends 12 miles (north/south) by 13 miles (east/west) with an irregular boundary on the northeast and southeast project limits.

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

- EXTENT TYPE Extent used for searching
- \* WEST LONGITUDE -97.046344
- \* EAST LONGITUDE -97.033591
- \* NORTH LATITUDE 47.846405
- \* SOUTH LATITUDE 47.837819
- \* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* WEST LONGITUDE 2816380.000000
- \* EAST LONGITUDE 2819380.000000
- \* SOUTH LATITUDE 324760.000000
- \* NORTH LATITUDE 327760.000000
- \* EXTENT CONTAINS THE RESOURCE Yes

*Hide Extents ▲*

## Resource Points of Contact ►

POINT OF CONTACT

INDIVIDUAL'S NAME Teri Kouba  
 ORGANIZATION'S NAME Grand Forks - East Grand Forks MPO  
 CONTACT'S POSITION Planner  
 CONTACT'S ROLE resource provider

CONTACT INFORMATION ►

PHONE

VOICE (218) 773-0124

ADDRESS

TYPE both  
 DELIVERY POINT 255 North Fourth Street  
 CITY Grand Forks  
 ADMINISTRATIVE AREA ND  
 POSTAL CODE 58206  
 COUNTRY UNITED STATES  
 E-MAIL ADDRESS terikouba@theforksmmpo.org

*Hide Contact information ▲*

*Hide Resource Points of Contact ▲*

## Spatial Reference ►

### ARCGIS COORDINATE SYSTEM

```

* TYPE Projected
* GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
* PROJECTION NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet
* COORDINATE REFERENCE DETAILS
  PROJECTED COORDINATE SYSTEM
    WELL-KNOWN IDENTIFIER 102720
    X ORIGIN -116784100
    Y ORIGIN -99537700
    XY SCALE 37924219.152847983
    Z ORIGIN -100000
    Z SCALE 10000
    M ORIGIN -100000
    M SCALE 10000
    XY TOLERANCE 0.0032808333333333331
    Z TOLERANCE 0.001
    M TOLERANCE 0.001
    HIGH PRECISION true
    LATESTWKID 102720
    WELL-KNOWN TEXT PROJCS
      ["NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet",GEOGCS
      ["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID
      ["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT
      ["Degree",0.0174532925199433]],PROJECTION["Lambert_Conformal_Conic"],PARAMETER
      ["False_Easting",1968500.0],PARAMETER["False_Northing",0.0],PARAMETER
      ["Central_Meridian",-100.5],PARAMETER
      ["Standard_Parallel_1",47.43333333333333],PARAMETER
      ["Standard_Parallel_2",48.73333333333333],PARAMETER["Latitude_Of_Origin",47.0],UNIT
      ["Foot_US",0.3048006096012192],AUTHORITY["ESRI",102720]]

```

### REFERENCE SYSTEM IDENTIFIER

```

* VALUE 102720
* CODESPACE ESRI
* VERSION 10.1.0

```

*Hide Spatial Reference ▲*

## Spatial Data Properties ►

### GEORECTIFIED GRID ►

```

* NUMBER OF DIMENSIONS 2

```

### AXIS DIMENSIONS PROPERTIES

```

  DIMENSION TYPE column (x-axis)
  * DIMENSION SIZE 6000
  * RESOLUTION 0.500000 Foot_US

```

### AXIS DIMENSIONS PROPERTIES

```

  DIMENSION TYPE row (y-axis)
  * DIMENSION SIZE 6000
  * RESOLUTION 0.500000 Foot_US

```

\* CELL GEOMETRY area  
 \* POINT IN PIXEL center

\* TRANSFORMATION PARAMETERS ARE AVAILABLE Yes

\* CHECK POINTS ARE AVAILABLE No

## CORNER POINTS

\* POINT 2816380.000000 324760.000000  
 \* POINT 2816380.000000 327760.000000  
 \* POINT 2819380.000000 327760.000000  
 \* POINT 2819380.000000 324760.000000

\* CENTER POINT 2817880.000000 326260.000000

*Hide Georectified Grid ▲*

## ARCGIS RASTER PROPERTIES ►

## GENERAL INFORMATION

\* PIXEL DEPTH 8  
 \* COMPRESSION TYPE None  
 \* NUMBER OF BANDS 3  
 \* RASTER FORMAT TIFF  
 \* SOURCE TYPE continuous  
 \* PIXEL TYPE unsigned integer  
 \* HAS COLORMAP No  
 \* HAS PYRAMIDS Yes

*Hide ArcGIS Raster Properties ▲*

*Hide Spatial Data Properties ▲*

**Spatial Data Content ►**

## IMAGE DESCRIPTION

\* TYPE OF INFORMATION image  
 ATTRIBUTE DESCRIBED BY CELL VALUES Color 24bit (RGB)

## BAND INFORMATION

\* DESCRIPTION Band\_1  
 UNITS  
 \* SYMBOL Foot\_US  
 \* NUMBER OF BITS PER VALUE 8

## BAND INFORMATION

\* DESCRIPTION Band\_2  
 UNITS  
 \* SYMBOL Foot\_US  
 \* NUMBER OF BITS PER VALUE 8

## BAND INFORMATION

\* DESCRIPTION Band\_3  
 UNITS  
 \* SYMBOL Foot\_US  
 \* NUMBER OF BITS PER VALUE 8

TRIANGULATION HAS BEEN PERFORMED No  
 RADIOMETRIC CALIBRATION IS AVAILABLE No  
 CAMERA CALIBRATION IS AVAILABLE No  
 FILM DISTORTION INFORMATION IS AVAILABLE No  
 LENS DISTORTION INFORMATION IS AVAILABLE No

*Hide Spatial Data Content ▲*

## Lineage ►

### LINEAGE STATEMENT

Aerial imagery was acquired over the project area with a Digital Mapping Camera (DMC) on April 10, 2015. Using Airborne GPS and existing ground control, an aerial triangulation solution was created using ISAT software. From the AT solution and existing DEM, (RGB/8bit) orthophotos were generated using the InPho software suite at a 0.5' pixel resolution (0.5 GSD) in Geo-Tif and ECW Format (Compression Ratio 20:1) with registration files. Ortho images were delivered in NAD 83/HARN 3301-North Dakota North zone State Plane Coordinates in US-Survey Feet. These images have been designed to conform to the National Map Accuracy Standards for 1"=100' orthophoto production. Reasonable care was exercised to conform to the standards of practice ordinarily used by the photogrammetric profession.

*Hide Lineage ▲*

## Distribution ►

### DISTRIBUTION FORMAT

\* NAME Raster Dataset

*Hide Distribution ▲*

## Metadata Details ►

\* METADATA LANGUAGE English (UNITED STATES)  
 \* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset  
 SCOPE NAME \* dataset

\* LAST UPDATE 2015-08-07

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
 METADATA STYLE FGDC CSDGM Metadata  
 STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2012-08-30 08:53:34  
 LAST MODIFIED IN ARCGIS FOR THE ITEM 2015-08-07 17:12:21

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
 LAST UPDATE 2015-08-07 17:12:21

*Hide Metadata Details ▲*

## Metadata Contacts ►

METADATA CONTACT

INDIVIDUAL'S NAME Teri Kouba  
ORGANIZATION'S NAME Grand Forks - East Grand Forks MPO  
CONTACT'S POSITION Planner  
CONTACT'S ROLE resource provider

CONTACT INFORMATION ►

PHONE

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E-MAIL ADDRESS terikouba@theforksmmpo.org

*Hide Contact information ▲*

*Hide Metadata Contacts ▲*

**Metadata Maintenance ►**

MAINTENANCE

UPDATE FREQUENCY as needed

*Hide Metadata Maintenance ▲*