**Green\_Routes**

**Shapefile**

**Tags**

**Texas State University, ADA, Green Routes, ADA guidelines, 5% slope**

**Summary**

Shapefile contains all routes that are characterized by a slope that does not exceed 5% at any point and are limited to the Texas State University Campus.

**Description**

**1: Time Period:**

03/2014 - 05/2014

**1.1: Time Period of Content:**

Slopes were recorded from LiDAR points acquired from Dr. Jennifer Jensen in March 2014. Routes were formally mapped and inspected in April 2014

**1.2: Progress:**

Complete. All displayed routes are currently present and accessible as they appear.

**2: Theme Keyword:**

ADA, Americans with Disabilities Act, Accessibility, Wheel Chair Accessible

**2.1: Place Keywords:**

Texas State University, San Marcos, Texas, Hays County, TX, Central Texas

**3: Point of Contact:**

Dr. Alberto Giordano, Texas State University Department of Geography

**3.1: Data Set Credit:**

Logan Hayner, Cody Johnson, Kathleen Andrews, P. Kennedy McMinn - Texas State University Geography Department

**4: Native Data:**

ArcMap 10.1

**4.1: Attribute Accuracy:**

All routes were physically and visually examined and check to ensure the accuracy of the location and slope

**4.2: Positional Accuracy:**

All routes are locationally accurate. These were physically inspected to ensure locational accuracy.

**4.3: Process Contact:**

Dr. Alberto Giordano

**4.4: Spacial Reference:**

Projected Coordinate System: NAD\_1983\_StatePlane\_Texas\_South\_Central\_FIPS\_4204\_Feet

Projection: Lambert\_Conformal\_Conic

False\_Easting: 1968500.00000000

False\_Northing: 13123333.33333333

Central\_Meridian: -99.00000000

Standard\_Parallel\_1: 28.38333333

Standard\_Parallel\_2: 30.28333333

Latitude\_Of\_Origin: 27.83333333

Linear Unit: Foot\_US

Geographic Coordinate System: GCS\_North\_American\_1983

Datum: D\_North\_American\_1983

Prime Meridian: Greenwich

Angular Unit: Degree

**4.5: Direct Spatial Reference Method:**

Vector Data Set

**Credits**

Geo 4427 Spring 2014 GeoTex Logan Hayner Kathleen Andrews P. Kennedy McMinn Cody Johnson Instructor - Dr. Giordano Lab Instructor - Ryan Schuermann

**Use limitations**

There are no access and use limitations for this item.

**Extent**

West -97.953687 East -97.937374

North 29.891762 South 29.886146

**Scale Range**

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

**yellowRoutes**

**Shapefile**

**Thumbnail Not Available**

**Tags**

There are no tags for this item.

**Summary**

These are the portions of the Texas State University wheelchair routes where the slope was between 5 percent and 10 percent. The data created from point elevation data collected via GPS in the field and hand measurements (using iPhone slope app) of the slope of each sidewalk ramp.

**Description**

**Section 1: Identification**

**1.1: Originator**

• This data was developed for the Texas State Office of Disability Services by GeoTex. GEO 4427 Spring 2014, Team: Logan Hayner, Kathleen Andrews, Kennedy McMinn, Cody Johnston. Instructor: Dr. Alberto Girodano. Lab Instructor: Ryan Schuermann

**1.2: Publication Date**

• 2014-05-02

**1.3: Title**

• Final Network Analysis of ADA Acessible Routes across the Texas State University Campus

**1.4: Online Linkage**

• http://www.geosites.evans.txstate.edu/g4427/S14/geotex/index.html

**1.5.1: Abstract**

• These are the portions of the Texas State University wheelchair routes where the slope was between 5 percent and 10 percent. The data created from point elevation data collected via GPS in the field and hand measurements (using iPhone slope app) of the slope of each sidewalk ramp. Format: ArcMap shapefileGeographic Coverage: San Marcos, TX; Texas State University main campusTime period: Collected - 3-31-14 thru 4-24-14

**1.5.2: Supplemental Information**

• Must be added to map document with green and red routes to be usable/understandable.

**1.6: Time Period of Content**

• Collected: 3-31-14 thru 4-24-14Distributed/Presented/Published: 5-2-14

**1.7.1: Theme Keyword**

• location, 013transportation, 018

**1.7.2: Place Keyword**

• City: San MarcosState: TexasCounty: HaysDescription: Texas State University main campus

**1.7.3: Temporal Keyword**

• Present day

**1.8: Access Constraints**

• Available for use by any and all persons or organizations

**1.9: Point of Contact**

• GeoTex. Specifically, Logan Hayner or Cody Johnston

**1.10: Data Set Credit**

• GPS data collection: Logan Hayner, Cody Johnston, Kathleen Andrews, Kennedy McMinn Slope measurements: Kathleen AndrewsRoute drawing/ArcMap analysis: Logan Hayner, Cody JohnstonClients/Supervisors: Robert Stafford (Texas State GIS department), Dr. Alberto Giordano (Texas State Department of Geography

**1.11: Native Data Set Environment**

• Software: ArcGIS version 10.1Operating system: Microsoft Windows 7 and above

**Section 2: Data Quality**

**2.1: Attribute Accuracy Report**

• Elevation was collected via GPS, from which slope measurements between each GPS point were calculated. These calculations were verified by hand measurements of slope (with iPhone slope app) and compared to the slope raster SMlasd-bare-HR.tif

**2.2: Logical Consistency Report**

• Data inconsistencies were checked via field methods mentioned in section 2.1. Elevation measurements were compared to DEM and GoogleEarth elevation data to identify any outliers. Logical inconsistencies were tested and confirmed via manual slope measurements in the field.

**2.3: Completeness Report**

• Routes were only drawn from GPS points and slopes collected between the limits of: West - Blanco Hall; East - JCK; North - Student Health Center; South - San Jacinto Hall

**2.4: Positional Accuracy Report**

• Horizontal (x,y) accuracy was verified and rectified by overlaying GPS points with detailed sidewalk, surface, and building data. Vertical (elevation) accuracy was verified with DEM, LiDAR elevation, and GoogleEarth data.

**2.5: Process Step**

• Stages of processing:

1) GPS point collection

2) Manual slope verification

3) Positional Accuracy verification/assessment

4) Route drawing

**2.6: Process Contact**

• Logan Hayner

**Section 3: Spatial Data Organization**

**3.1: Indirect Spatial Reference**

• GNIS: 1347608

• FIPS: 4204

**3.2: Direct Spatial Reference Method**

• Vector

**Section 4: Spatial Reference**

**4.1: Horizontal Coordinate System Definition**

• Projected Coordinate System: NAD\_1983\_StatePlane\_Texas\_South\_Central\_FIPS\_4204\_Feet

**4.2: Planar Distance Units**

• US\_Feet

**Section 5: Entity and Attributes**

**5.1: Overview Description**

• Each route consists of a vector line colored 'yellow' for slopes with a degree between 3-5 (5%-10%).

**Section 6: Distribution Information**

**6.1: Distributor Contact**

• Authors: GeoTex;

Point of Contact: Dr. Alberto Giordano (ag22@txstate.edu)

• Client: Robert Stafford ( rs22@txstate.edu )

• Distributors: Texas State University Office of Disability Services ( ods@txstate.edu ; 512.245.3451 )

**Section 7: Metadata Reference**

**7.1: Metadata Date**

• 4-30-14

**7.2: Metadata Contact**

• Logan Hayner: lh1343@txstate.edu

**7.3: Metadata Standard Name**

**•** Content Standard for Digital Geospatial Metadata

**7.4: Metadata Standard Version**

• As of April 2014: FGDC-STD-001-1998

**Credits**

GeoTex. GEO 4427 Spring 2014, Team: Logan Hayner, Kathleen Andrews, Kennedy McMinn, Cody Johnston. Instructor: Dr. Alberto Girodano. Lab Instructor: Ryan Schuermann

**Use limitations**

There are no access and use limitations for this item.

**Extent**

West -97.953201 East -97.939043

North 29.891463 South 29.886219

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

**redRoutes**

**Shapefile**

**Tags**

Texas State University, San Marcos, Texas, TX, Texas State ADA, ADA, Americans with Disabilities Act, routes, red routes, ramp, ramp slope, over 10 percent slope, slope greater than 10 percent, 10%

**Summary**

This shapefile contains ramps with over 10% slope on the Texas State University campus in San Marcos, Texas as of April 2014. This data was gathered by GeoTex for the purpose of creating a map of handicap accessible routes on the Texas State campus.

**Description**

**1: Citation**

**1.1: Originator**

Created by GeoTex for GEO4427 Spring 2014

This data was developed by GeoTex for Robert Stafford of the Texas State GIS department and the Texas State University ADA.

**1.2: Online Linkage**

http://www.geosites.evans.txstate.edu/g4427/S14/geotex/index.html

**1.3: Publication\_Date**

2014/05/02

**2: Abstract**

Content: Shapefile contains data for ramps with over 10% slope

Data Type: Shapefile Feature Class

Geometry Type: Line

Geographyc Coverage: Texas State University, San Marcos, Texas

Time period of content: 2014/03/26 - 2014/05/02

GeoTex began compiling field data on ramp location and slope in March and delivered the data in May.

**2.1: Accuracy**

GeoTex used a GARMIN etrex VISTA HCx handheld GPS to gather point location data of ramps, and used the Theodolite app for iPhone and the Compass app for iPhone. As we used multiple devices to check data in the field, we are confident all location and slope data is accurate.

This shapefile contains only the ramp portions with slope exceeding 10%.

**2.2: Use Constraints**

Must read and fully comprehend the metadata prior to data use.

Acknowledgement of GeoTex as the originator when using the data set as a source.

Data should not be used beyond the limits of the source scale.

The data set is NOT a survey document and should not be utilized as such.

**2.3: Spatial Reference**

Projected Coordinate System: NAD\_1983\_StatePlane\_Texas\_South\_Central\_FIPS\_4204\_Feet

Projection: Lambert\_Conformal\_Conic

False\_Easting: 1968500.00000000

False\_Northing: 13123333.33333333

Central\_Meridian: -99.00000000

Standard\_Parallel\_1: 28.38333333

Standard\_Parallel\_2: 30.28333333

Latitude\_Of\_Origin: 27.83333333

Linear Unit: Foot\_US

Geographic Coordinate System: GCS\_North\_American\_1983

Datum: D\_North\_American\_1983

Prime Meridian: Greenwich

Angular Unit: Degree

Texas State University, San Marcos, Texas

2014/03/26 - 2014/05/02

**3: Metadata Reference**

Metadata completed 2014/05/01

Point of Contact for All Inquiries

Dr. Alberto Giordano (ag22@txstate.edu)

Geography Department, Texas State University, San Marcos, Texas

**Credits**

Created by GeoTex for GEO4427 Spring 2014

Cody Johnson, Project Manager

Kathleen Andrews, Assistant Project Manager

Logan Hayner, GIS Analyst

Kennedy McMinn, GIS Analyst

Dr. Alberto Giordano, GIS Professor

Ryan Schuermann, Lab Instructor

**Use limitations**

There are no access and use limitations for this item.

**Extent**

West -97.951965 East -97.939577

North 29.890825 South 29.886365

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

**finalslope**

**Raster Dataset**

**Summary**

This is a slope map of the Texas State University campus and surrounding areas.

**Description**

**Section 1: Identification**

**1.1 Originator:** Logan Hayner

**1.2 Publication date:** April 28, 2014

**1.3 Title:** slopeposter2

**1.4 Abstract:** This is a GIS data set that depicts the slope on and around the Texas State University campus. .

**1.5 Time period of content:** This content was developed in April of 2014

**1.6: Place keyword:** San Marcos, Texas

**1.7 Use Constraints:**This map is to be used only as a reference of the general slope of Texas State University's campus.

**1.8 Data set credit:** The Texas State Department of Geography, Jennifer Jensen, Logan Hayner, Kathleen Andrews, Kennedy McMann, and Cody Johnston

**Section 2: Data Quality**

**2.0 Completeness report:** This data set strictly includes a general depiction of slope. It contains all that it claims to.

**2.1 Process step:** This map was created by running the slope tool in arc map based on elevation.

**2.2 Process contact:** Logan Hayner

**Section 3: Spatial Data Organization**

**3.0 Direct spatial reference method:** Raster

**Section 4: Spatial Reference**

**4.1 Horizontal coordinate system:** D\_North\_American\_1983

**N**AD\_1983\_Texas\_Central\_FIPS\_4203\_Feet

**4.2 Planar distance units:** Feet

**Section 5: Entity and Attributes**

**5.1 Attribute domain values:** Range domain- 0-100%

**5.2 Overview description:**The "High" value of 443.448 is equivalent to 100% slope where as the "Low" value of 0 is equivalent to 0% slope. The numbers represent a change in elevation, and the colors represent the slope based on these changes in elevation. E.g. Low: 0 feet of change=0% slope. Red=0% & green=100% slope.

**Section 6: Distribution Information**

**6.1 Ditributor contact:** GeoTex

**6.2 Distribution Liability:** This map is meant only as a representation of slope, and should not be used as anything other than a visual representation. GeoTex can not be sure of the accuracy of this map. Therefore, If the data is incomplete, incorrect, or misused in any way GeoTex claims no liability.

**Section 7: Metadata Reference**

**7.1 Metadata date:** April 30, 2014

**7.2 Metadata contact:** Cody Johnston

**7.3 Metadata use constraints:** This metadata is not to be used for anything other than reviewing the map that it is in reference to. I claim no liability for the use of the metadata outside of that.

**Credits**

There are no credits for this item.

**Use limitations**

There are no access and use limitations for this item.

**Extent**

West -97.957178 East -97.933645

North 29.893201 South 29.882985

**Scale Range**

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000