

Identification_Information:

Citation:

Citation_Information:

Originator: Mandli Communications, Inc.

Publication_Date: 1/28/2005

Title: AllIslands_1_28_2005

Geospatial_Data_Presentation_Form: vector digital data

Online_Linkage:

\\LARRYSLAP\C\Hawaii\ShapeFiles\OurBaseMaps

\ProjectedUTM\AllIslands_1_28_2005.shp

Description:

Abstract:

Data collected as part of the 2003-2004 Hawaii DOT photolog project. GPS points were collected at 500 points per mile in each direction. The two directions of a road were run through a centerlining algorithm to produce one centerlined trace running in the cardinal direction. The data was then projected to UTM Zone 4N meters.

Purpose:

The data in this map is used to update the current data set to fix recent road realignments and generally provide a data set with increased accuracy.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1/28/2005

Currentness_Reference: publication date

Status:

Progress: Complete

Maintenance_and_Update_Frequency: As needed

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -159.780860

East_Bounding_Coordinate: -154.757404

North_Bounding_Coordinate: 22.228112

South_Bounding_Coordinate: 18.897858

Keywords:

Theme:

Theme_Keyword: Hawaiian Islands

Theme_Keyword: road base map

Place:

Place_Keyword: State of Hawaii

Place_Keyword: Main Hawaiian Islands

Place_Keyword: Kauai

Place_Keyword: Oahu

Place_Keyword: Molokai

Place_Keyword: Lanai

Place_Keyword: Maui

Place_Keyword: Hawaii

Access_Constraints: None

Use_Constraints:

There are no expressed warranties associated with the release of these databases. Specifically, no warranty is made that the GIS data or any subsequent updates will be error free and no warranty is made regarding the positional or thematic accuracy of the GIS data. The GIS data and any features it depicts do not represent or confer any legal rights, privileges, benefits, boundaries or claims of any kind.

The State of Hawaii encourages GIS data users to verify the suitability of the data before use. Please report any discrepancies or errors found to Highways Division.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Larry Mattke

Contact_Organization: Mandli Communications, Inc.

Contact_Position: GIS Manager

Contact_Voice_Telephone: 608-835-3500

Contact_Facsimile_Telephone: 608-835-7891

Contact_Electronic_Mail_Address: lmattke@mandli.com

Hours_of_Service: 8:30am - 5:00pm CST/CDT

Data_Set_Credit: State of Hawaii, Highways

Native_Data_Set_Environment:

Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 2;
ESRI ArcCatalog 8.2.0.700

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Good - Attribute accuracy verified using existing data

Completeness_Report: Complete for main hawaiian islands

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report: Accurate within 1-5 meters RMS horizontal and vertical.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report: Accurate within 1-5 meters RMS horizontal and vertical

Lineage:

Process_Step:

Process_Description:

Data collected as part of the 2003-2004 Hawaii DOT photolog project.

The GPS/ Inertial Device used for data gathering collected data according to the WGS 84 ellipsoid. Dual GPS antennas and receivers were used to gain positional accuracy. Real time differential correction was applied to all data using an OmniStar South American satellite subscription. The elevation (altitude) values are in reference to the GEOID99 ellipsoid. Values listed are approximately 18-19 m higher than the sea level elevation, with the actual difference depending on the lat/long position. This concept is explained at the GEOID99 web site: <<http://www.ngs.noaa.gov/GEOID/GEOID99/>>.

The device assigned a GPS point every half second (2 Hz). Images were collected at 500 points per mile in each direction. GPS points are assigned to each image using linear interpolation along the collected 2 Hz points.

In areas of low satellite visibility, the inertial system continued to produce accurate data points, based on gyro and DMI data. The positional accuracy during a 60 second GPS outage is < 1.5 m RMS. True heading and pitch/roll accuracy of the unit are both < 0.02 deg for real-time DGPS.

The two directions of a road were run through a centerlining algorithm to produce one centerlined trace running in the cardinal direction. The route ends were adjusted to eliminate intersections gaps and overshoots. The data was then projected to UTM Zone 4N meters.

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String
Point_and_Vector_Object_Count: 830

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Planar:

Grid_Coordinate_System:

Grid_Coordinate_System_Name: Universal Transverse
Mercator

Universal_Transverse_Mercator:

UTM_Zone_Number: 4

Transverse_Mercator:

Scale_Factor_at_Central_Meridian:

0.999600

Longitude_of_Central_Meridian:

-159.000000

Latitude_of_Projection_Origin: 0.000000

False_Easting: 500000.000000

False_Northing: 0.000000

Planar_Coordinate_Information:

Planar_Coordinate_Encoding_Method: coordinate pair

Coordinate_Representation:

Abscissa_Resolution: 0.001024

Ordinate_Resolution: 0.001024

Planar_Distance_Units: meters

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: AllIslands_1_28_2005

Attribute:

Attribute_Label: FID

Attribute_Definition: Internal feature number.

Attribute_Definition_Source: ESRI

Attribute_Domain_Values:

Unrepresentable_Domain:

Sequential unique whole numbers that are
automatically generated.

Attribute:

Attribute_Label: Shape

Attribute_Definition: Feature geometry.

Attribute_Definition_Source: ESRI

Attribute_Domain_Values:
Unrepresentable_Domain: Coordinates defining the
features.

Attribute:
Attribute_Label: ROUTE_NAME

Attribute:
Attribute_Label: ISLAND

Attribute:
Attribute_Label: ROUTE

Attribute:
Attribute_Label: OWNERSHIP

Attribute:
Attribute_Label: BMP

Attribute:
Attribute_Label: EMP

Attribute:
Attribute_Label: TLENGTH

Overview_Description:

Distribution_Information:
Resource_Description: Centerline Road Coverage
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Transfer_Size: 14.082

Metadata_Reference_Information:
Metadata_Date: 20050324
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: Mandli Communications, Inc.
Contact_Person: Larry Mattke
Contact_Position: GIS Manager
Contact_Address:
Address_Type: mailing and physical address
Address: 535 Oakwood Drive
City: Oregon
State_or_Province: WI
Postal_Code: 53575
Country: USA
Contact_Voice_Telephone: 608-835-3500
Contact_Facsimile_Telephone: 608-835-7891
Contact_Electronic_Mail_Address: lmattke@mandli.com
Hours_of_Service: 8:30 am - 5:00 pm CST/CDT
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: <<http://www.esri.com/metadata/esriprof80.html>>

Profile_Name: ESRI Metadata Profile

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