

Idaho Technology Authority (ITA)

ENTERPRISE STANDARDS – S4000 INFORMATION AND DATA

Category: S4210 – SINGLE ZONE COORDINATE SYSTEM FOR GIS DATA

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I. DEFINITIONS

See ITA Guideline [G105](#) (ITA Glossary of Terms) for definitions.

II. RATIONALE

GIS data for statewide coverage is best represented by a single-zone system. Idaho State Plane Coordinate System divides Idaho into three zones. Under the UTM system, Idaho is bisected into two zones. IDTM projects the State in a single zone. IDTM was implemented with a horizontal datum of NAD27 (North American Datum of 1927). North American Datum of 1983 (NAD83) is based on a more accurate earth-model than is NAD27 and its modernization. NAD83 is more compatible with modern survey methods, which use the Global Positioning System (GPS).

III. APPROVED STANDARD(S)

1. [Projection Name](#) – Idaho Transverse Mercator NAD83 (IDTM83);
2. [Units](#) – Meters;
3. [Datum](#) – NAD83;
4. [Vertical Datum](#) – NAVD88;
5. [Scale Factor](#) – .99960;

6. Central Meridian – -114°00'00”;
7. Latitude of Origin – 42°00'00”;
8. False Easting – 2500000; and
9. False Northing – 1200000.

IV. APPROVED PRODUCT(S)

There are no approved products for this standard.

V. JUSTIFICATION

IDTM was developed for use in Idaho to have the whole State under one projection for statewide data. Using the NAD83 datum supports consistency with: 1) federal, local, and tribal partners; 2) original intent of the IDTM projection; and 3) geometric improvements in the NAD83 datum. The False Northing and False Easting parameters were chosen so as to 1) avoid confusion between IDTM and IDTM83 coordinates, and 2) avoid confusion between the projections' respective False Northing and False Easting coordinates.

VI. TECHNICAL AND IMPLEMENTATION CONSIDERATIONS

IDTM has been in use in Idaho using NAD27 Datum since 1994. GIS data using the IDTM projection with the NAD27 datum will need to be “re-projected” to convert to the new projection parameters of IDTM83. It is the preferred projection for data exchange, and is appropriate for statewide applications.

VII. EMERGING TRENDS AND ARCHITECTURAL DIRECTIONS

There are no emerging trends and architectural directions for this standard.

VIII. PROCEDURE REFERENCE

ITA Standard S4210 (Single Zone Coordinate System for GIS Data) used on the State of Idaho's Wide Area Network (WAN) must comply with ITA Policy [P1070](#) (Geographic Information Systems (GIS)).

IX. REVIEW CYCLE

Twelve (12) Months

X. CONTACT INFORMATION

For more information, contact the ITA Staff at (208) 605-4064.

REVISION HISTORY

- 5/6/19 – Removed individual definitions and replaced with reference to ITA Guideline G105 (ITA Glossary of Terms)
- 7/01/13 – Changed “ITRMC” to “ITA”.
- 2/2/11 – Title changed from “Projection”, also 4000 group title changed from “GIS (Geographic Information Systems) Data”
- 6/16/09 – Added Approved Products, Emerging Trends and Architectural Directions, and Procedure Reference to this standard and deleted Timeline.
- 3/7/07 – Review cycle adjusted to 12 months.

Effective Date: July 20, 2005