Authoritative Data

Historically, the term Authoritative Data (AD) has been tossed around the geospatial community for many years, however the definition and the delineation of any specific attributes of (AD) is lacking and/or unclear. The Oregon Geographic Information Council (OGIC) asked the GIS Program Leaders (GPL) group to provide for a discussion and definition, guidance and consensus of the term AD, and then report back with their findings.

Authoritative Data has many implied meanings in the GIS community, and generally the term is used when people are searching for geospatial data. In addition it is also important to consider other related terms such as Authoritative Data Source, as well as other equally relevant terms that often arise when discussing authoritative data. Listed below is a definition of the term as well as few other equally relevant terms that often arise when discussing authoritative data (see figure 1.).

Definitions:

Authoritative Data – Officially recognized data that can be certified and are provided by an authoritative source. Authoritative Data generally falls into a couple categories:

- ✓ Rational Authority Government agencies are by default the "authoritative" sources for data or services that they produce or have statutory responsibility for. Example: USGS datasets (Hydro and elevation), FEMA (floodplain) datasets, NRCS datasets (soils), Framework (Fed, State, Local) Datasets – datasets based on Standards and vetting process.
- ✓ Expert (scientific) datasets defined in terms of the various professions under which the standards and methodology for data are created. Example: Volunteered GIS information as imagery and information analysis, datasets provide by academia, studies conducted as recognized think tanks.

Authoritative Source – An entity that is authorized, by a legal authority to develop or manage data for a specific business purpose. The data this entity creates are authoritative data. An organization or department within an authoritative source is typically charged with the collection and maintenance of the data (custodial steward).

Authorization – The result of an act by legislative or executive body that declares or identifies an agency or organization as an authoritative source.

Certified Data – Datasets that are created for a specific purpose and have been vetted by an authorized entity.

Data Steward and Trusted Data - A service provider, or agency that publish data from a number of authoritative sources. These dataset are "trusted" because there is an "official process" for compiling the datasets and the datasets currency and attributes are known and well documented. In addition, Metadata is provided and formatted into a standardized form, and any linkages to the originating source are provided.

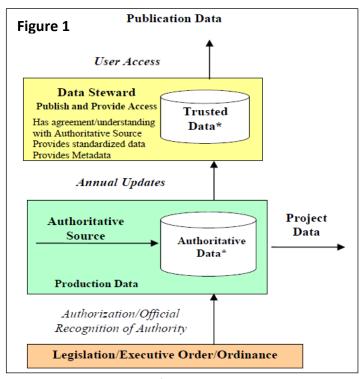


Figure 1 is an illustration of the relationships between the defined terms.

**Definitions and Illustration have been modified from the original source documents. (FGDC Subcommittee for Cadastral Data, 2008, pp. 1-2), (U.S. Department of Homeland Security) and (Stage, 2009).

Conclusion

While there are varied interpretation of the definition and forms of AD, the purpose here was to provide for a clear definition of the term, along with any supporting information, and then forwarded along the any findings to OGIC for their formal review and comments. Through this formalized approach we can be assured that the subject matter has been properly vetted through the appropriate governance structure insuring a reduction of data redundancy and acceptance within the Oregon geospatial community.

References

FGDC Subcommittee for Cadastral Data. (2008). *Authority and Authoritative Sources: Clarification of Terms and Concepts for Cadastral Data.* Reston, VA: Federal Geographic Data Committee.

Stage, D. (2009). Authority and Authoritative Data: A Clarification of Terms and Concepts. Fair & Equitable, 13-16.

U.S. Department of Homeland Security. (n.d.). *Geospatial Concept of Operations*. Washington D.C. Retrieved November 2015, from https://www.geoplatform.gov/geoconops-home