GIS Best Practices in Montana
February 26, 2009

Background

It is the mission of MAGIP to "foster technical cooperation and promote the development of sound policy and practices that will support the efficient and effective use of geographic information systems". With this in mind, the MAGIP Technical Committee met at the 2008 MAGIP Fall Technical Session in Great Falls to discuss best practices for GIS. The objective of the meeting was to identify, document and outline a process for adoption and endorsement of GIS best practices in Montana. The Technical Committee recognizes that a set of formalized best practices will not only encourage the use of standards but will make it easier to share data and save GIS practitioners work and time.

It is important to note that adoption of a best practice is not a mandate for its use nor is a best practice applicable to every situation. Best practices simply represent efficient and effective ways to accomplish many common tasks that have been tested and proven by a community. Only in the instance where a best practice is a standard (e.g: metadata in the GIS Portal or persistent identifiers in many of the framework datasets) is it required and enforced. However, by committing to using best practices one acknowledges the benefits of standards to one's organization and the larger user community.

The best practices that were identified by the Technical Committee do not represent all possible best practices. At this time, the Technical Committee chose to focus on the most common standards in Montana, many of which are already in use, to advance as best practices and anticipates the advancement of best practices will be an ongoing effort.

At the February 19th meeting of the MAGIP Board of Directors, the following best practices were approved:

1. **Metadata** – the proposed GIS Portal metadata standard
   http://gisportal.mt.gov/metadata/portal_metadata_standard.html
2. **Persistent Identifiers** – the current persistent unique identifiers that are implemented in some of the MSDI Framework layers
   http://giscoordination.mt.gov/critical_infra/PersistentIDs.pdf
3. **Spatial Reference System** – Montana State Plane NAD 83 HARN meters (the projection file *NAD 1983 HARN StatePlane Montana FIPS 2500* in ESRI products) based on http://data.opi.state.mt.us/bills/mca_toc/70_22_2.htm

Recommendation

The MAGIP Board of Directors recommends the above best practices be endorsed by the Montana Land Information Advisory Council (MLIAC). MLIAC endorsement does not mandate the use of the above best practices or imply that they are applicable to every situation.