Alaska/Arctic Geospatial Data Clearinghouse Network
The Vision: *Real time geospatial data access for Alaska and the Arctic*
Realized through: *Network Based Geodata and Geoprocessing Tools for Alaska and the Arctic*
Geospatial Decision Support

- Supporting scientific investigations and decision support through distributed access of geographically referenced data

- Investigators will be able to overlay data from different sources without regard to the storage location or internal format of the data
Online display and analysis of data from distributed sources
Where we are now…..
Alaska Geospatial Data Clearinghouse

• Alaska Geospatial Data Clearinghouse
• The Alaska gateway to the National Spatial Data Infrastructure (NSDI) clearinghouse network
• An Alaska Clearinghouse node supporting Federal, State, Local, and private “geospatial” data providers and users in Alaska
• Over 12,000 FGDC Metadata Records indexed and searchable through the NSDI clearinghouse network
• Over 100 Gigabytes of Alaska based data available for download
NSDI Clearinghouse Network

- Over 180 geospatial clearinghouse servers now registered, approximately half are international
- Six gateways provide common regional access to the clearinghouse network
- Searches FGDC format metadata records
Current Clearinghouse

- Clearinghouse allows discovery of spatial data through metadata entries on many servers
- One entry per accessible data set or theme
- Many servers can be searched at the same time
- Clearinghouse points to data via URL “Online_Linkage”
- Data are made available via http or ftp
Clearinghouse and OpenGIS

- Clearinghouse has been a useful exercise in helping people get to GIS data

- An increasing proportion of our users are not GIS-literate and need map interfaces
Where we are going…..

• Work with the Alaska geospatial data community to build and serve web mapping enabled databases
• Cooperate with the FGDC and the OpenGIS consortium in Web Mapping test bed project
Open GIS

- Developing common specifications for access to and use of Interoperable GIS
- Web Enabled Mapping and Analysis
- “The ability to share heterogeneous geodata and geoprocessing resources transparently in a networked environment.”
Sharing Geodata within and between Information Communities

Network computing resources with OpenGIS interfaces

- Government
- Natural Resources & Agriculture
- Business Logistics
- Utilities
- Municipal Services
- Cadastre
- Civil Engineering
- Transportation
New Models for Geodata Access

Integrated View

Queries extract data from diverse sources

Common interfaces enable interoperability

Catalog View

Internet

Data Vendor

City Agency

State Agency

Fed. Agency

Clearinghouse

Parcels
Roads
Images
Boundaries
...

Catalog that indexes data, similar to WWW’s html search engines

Data
Metadata
Data
Metadata
Data
Metadata
Data
Metadata
Alaska/Arctic Geospatial Data Clearinghouse Network

- Enhancing access to geospatial data and tools using the most current advanced commercial and public domain software tools

- Partnering with state, local government, native groups and private industry to leverage resources

- High speed network access

- Following and promoting national standards

- Positioned to realize the full potential of OpenGIS