HJR

19

FISCAL NOTE

STATE OF ALASKA
2001 LEGISLATIVE SESSION

BILL NO. HJR 19

Revision Date/Time (Note if correction) _____
Dept. Affected Natural Resources
Title Digital Orthoimagery & Elevation Data
BRU _____
Component _____
Sponsor House Resources Committee
Requester House Resources Committee
Component Serial No. _____

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY99) cost: 0.0

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

It is extimated that there will be no fical impact for this resolution.

Prepared by House Resources
Phone 465-2689
Division Legisalture
Date/Time 3/26/01 1:59 PM
Representative: REPRESENTATIVE DREW SCALZI
Date 3/26/01
REPRESENTATIVE BEVERLY MASEK

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
For further distribution information, call the Governor's Legislative Office

(Rev 10/98) 99fnform.xls/OMB

LETTERS OF ENDORSEMENT SUMMARY LIST

1. Resource Development Council for Alaska, Inc
2. Alaska Land Managers Forum
3. Arctic Power Inc.
4. Institute of the North
5. Alaska Airmen's Association, Inc.

6. Association of ANCSA Regional Corporation Presidents and CEOs, Inc.
7. NANA Corporation
8. Tanana Chiefs Conference, Inc.
9. Calista Corporation
10. Chugach Alaska Corporation
11. Bering Straits Native Corporation
12. Ahtna Inc.
13. Arctic Slope Regional Corporation.
14. Bristol Bay Native Corporation

15. State of Alaska Dept. of Natural Resources
16. State of Alaska Dept. of Community and Economic Development
17. State of Alaska Dept. of Environmental Conservation
18. State of Alaska Dept. of Fish and Game
19. State of Alaska Dept. of labor and Workforce Development
20. State of Alaska Cooperative Extension Service

21. Alyeska Pipeline Service Company
22. Phillips Alaska Inc.
23. BP Exploration (Alaska) Inc.
24. URS Corporation
25. AeroMap U.S.
26. Racal Pelagos
27. Evergreen Helicopters of Alaska, Inc.
28. GeoNorth

29. National Digital Orthophoto Program
30. US Air Force
31. Federal Aviation Administration
32. "CAPSTONE" Project
33. National Oceanic and Atmospheric Administration
34. Joint Pipeline Office
35. Corps of Engineers
36. Census Bureau
37. Environmental Protection Agency
38. US Fish and Wildlife Service
39. Bureau of Land Management

40. National Park Service
41. Bureau of Indian Affairs
42. US Forest Service
43. Alaska Soil and Water Conservation District

44. North Slope Borough
45. Municipality of Anchorage
46. Matanuska-Susitna Borough

47. The Nature Conservancy of Alaska
48. Ducks Unlimited National Office
49. Ducks Unlimited Western Regional Office
50. Sierra Club

51. Management Association for Private Photogrammetric Surveyors
52. American Society of Photogrammetry and Remote Sensing
53. Urban Regional Information Systems Association

EXCERPT FROM: ALASKA SCIENCE AND TECHNOLOGY FOUNDATION NEWSLETTER

March 2001

ASTF Invests in Project that Paves the Way for Better, More Accurate Maps of Alaska

Alaska remains the least-mapped state in the nation. For useful maps, Alaskans determine the specifications for the maps so the resulting product is useful for the many applications that Alaskans will use higher resolution images for: mining exploration, environmental monitoring, land use changes, resource assessment and others. While vendors and different government agencies propose different mapping standards, the challenge is to have both public and private users define requirements so the Alaskan end user has a product that is useful and cost effective.

At its February Board Meeting in Juneau, the ASTF Board of Directors voted to support a $20,000 project that would provide different sample products so Alaskans can better determine user requirements. ASTF is working with a number of key vendors (Aeromap, Intermap, etc.) who have competitive technologies (airborne vs. satellite, etc.) to produce a catalog of products. The catalog will help Alaskans determine appropriate mapping standards for different applications. The project will also involve the Alaska Geographic Date Committee, United States Geological Survey (USGS) and private users such as mining companies and regional corporations to take the next step in creating a consensus on the degree of resolution needed in different areas of the state. The project also will also recommend the most useful format for remote sensing data.

For information on the Alaska Science & Technology Foundation (ASTF), visit the web site at www.astf.org or call (907) 272-4333.

Sarah Erkmann
Account Coordinator
Bernholz & Graham Public Relations
3601 C Street Suite 1360
Anchorage, AK 99503
Tel: 907-561-4488
Fax: 907-563-3223
email: serkmann@gci.net
Sarah Erkmann
Account Coordinator
Bernholz & Graham Public Relations
3601 C Street Suite 1360
Anchorage, AK 99503
Tel: 907-561-4488
Fax: 907-563-3223
email: serkmann@gci.net

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1798
PHONE: (907) 465-2400
FAX: (907) 465-3886

550 WEST 7TH AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
FAX: (907) 269-8918

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

February 9, 2001

Randy Phillips
Alaska State Legislature
State Capitol (MS 3100)
Juneau, Alaska 99801-1182

Dear Senator Phillips:

Thank you for the letter on the Alaska Geographic Data Committee Orthoimagery Initiative. I appreciate your concern for federal funding of digital elevation modeling and orthoimagery efforts in Alaska. We would all like to have better topographic data and orthoimagery for Alaska.

It is my understanding that this year the U. S. Geological Survey (USGS) has included an approximately $6 MM Initiative in their federal FFY02 budget submittal to Congress for the Alaska Orthoimagery Initiative. I also understand other Interior Department agencies may supplement this request. As part of the normal federal budget process, this Initiative is now progressing through the various steps that are required of all federal budgets. DNR applauds the federal recognition of the shortcomings of topographic elevation data and orthoimagery in Alaska and we certainly support the funding effort they are making to address the issue.

This initiative is becoming a part of the President's budget and funding has already been officially requested. Endorsements will probably not affect the outcome of this initiative in the federal Office of Management and Budget one way or the other and if the Initiative reaches the Senate Appropriations Committee, I believe the chances are good that it will receive favorable consideration.

DNR supports the work that the Alaska Geologic Data Committee is doing to bring this matter to the attention of the USGS National Mapping Division at the national level.

Sincerely,

Pat Pourchot
Commissioner

Date of Committee Action: 3/26/21

The RESOURCES Committee considered: HJR 19

HOUSE JOINT RESOLUTION NO. 19 DIGITAL ORTHOIMAGERY AND ELEVATION DATA

Urging the United States Congress to pass legislation to fund the acquisition of high- resolution digital orthoimagery and digital elevation data for the entire state of Alaska.

Recommends it be replaced with _____CS_____(_____) [ ] Same Title [ ] New Title
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR_____

[ ] attach amendments
[ ] add new referral to _____ Committee
[ ] Letter of Intent _____Committee

List of Abbrev. For Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
HSS
LAA
LAW
LWF
MVA
DNR
DPS
REV
DOT
UA

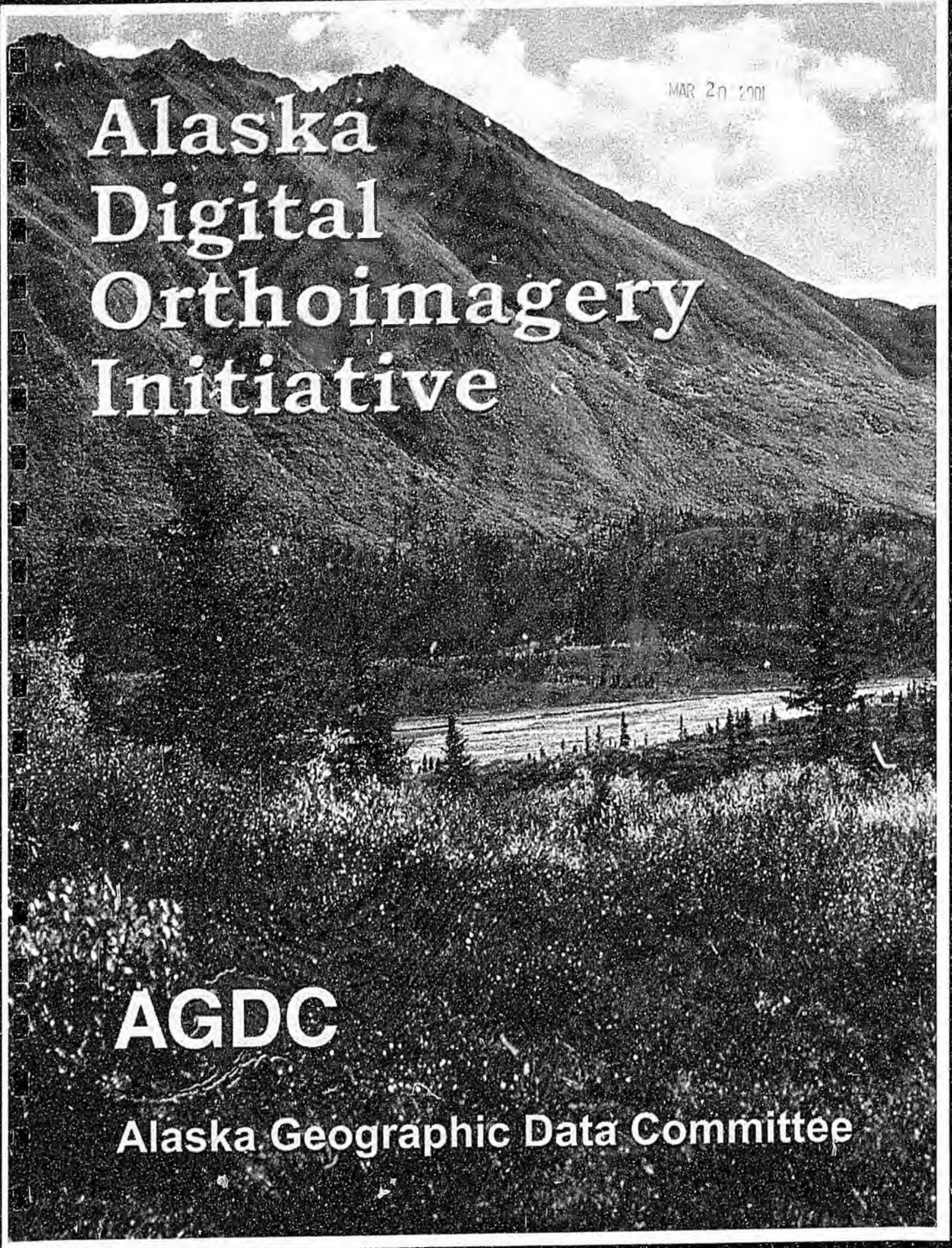
NEW FISCAL NOTES *For Chief Clerk's Office Use Only				
FN# *	List by Dept(s):	Fiscal	Indet.	Zero
	HRES			✓

PREVIOUS FISCAL NOTES				
List by Dept(s):	FN #	Fiscal	Indet.	Zero

Signing with recommendations	Printed Last Name	DP	DNP	NR	AM
	Kerttula	X			
	Fate	✓			
	Green	✓			
	Chenault	✓			
	Stutes	✓			
Chair:	SCALZI	✓			
Chair:					

MAR 20 2001

Alaska Digital Orthoimagery Initiative



AGDC

Alaska Geographic Data Committee

Table of Contents

Alaska
Geographic
Data
Committee

AGDC
Room 230
4230 University Drive
Anchorage, Alaska 99508

Introduction

The Alaska Digital Orthoimagery Initiative is a proposal to obtain funding for the acquisition of high resolution digital orthoimagery and digital elevation data for Alaska. The Initiative was developed by the Alaska Geographic Data Committee (AGDC).

The AGDC has recognized the need and value of statewide digital orthoimagery and elevation data for Alaska. The AGDC currently has 40 members representing Departments within the State of Alaska, Federal agencies, Municipalities, Boroughs, Native organizations, private enterprise, and the University of Alaska. The membership has always been on the forefront of incorporating the latest technology in its business practices. The AGDC believes reliable, current, statewide base geographic information is essential for continued economic development, livability, and public safety. Orthoimagery and elevation data are considered the foundation for the framework of base geographic data. At this time, Alaska does not have digital orthoimagery or accurate elevation data.

We feel this Initiative is critical to Alaska's future because Alaska's statewide base geographic information data is very poor. US Geological Survey (USGS) maps of Alaska are over 40 years old, do not meet National Map Accuracy Standards, and there is no existing or planned program to replace them. The most recent statewide high resolution imagery available is 20 years old and does not reflect the current Alaska landscape. This imagery was acquired through the Alaska High Altitude Aerial Photography Program and is not in digital form, a prerequisite for modern technology. It should also be noted past and present funding situations in federal and state agencies have not allowed Alaska to be a participant in the National Aerial Photography Program and the National Digital Orthophoto Program. These programs provide complete aerial photography and orthoimagery coverage for the lower forty eight states on a regular basis. Most recently, NASA's 2000 Shuttle Radar Topography Mission for producing elevation data for topographic mapping covered 80% of the world. This mission covered less than 20% (twenty percent) of Alaska because it did not map above 60 degrees north latitude.

New orthoimagery and elevation data provide common data foundation layers which would show current conditions and trends on the Alaska landscape. They are the layers from which many types of geographic information are extracted and to which many types are registered. These layers will allow Alaska agencies, Native corporations and private organizations to better utilize GIS technology to aid in responsible decision-making.

The Initiative is composed of an executive summary and tabs. The executive summary provides an overview of the proposal and the tabs provide specific examples and more detailed information.

The Alaska Digital Orthoimagery Initiative is a product of the Alaska Geographic Data Committee. Any questions concerning the Initiative may be directed to the following individuals:

Mark Shasby
Co-Chairperson, Alaska Geographic Data Committee
(907) 786-7022 or shasby@usgs.gov

Richard McMahon
Co-Chairperson, Alaska Geographic Data Committee
(907) 269-8836 or richard_mcmahon@dnr.state.ak.us

Gust C. Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
(907) 271-5545 or gust_panos@ak.blm.gov

AGDC Co-Chairs

Mark Shasby

Richard McMahon

Digital Orthoimagery Subcommittee Chairperson

Gust Panos

Executive Summary

Goal:
Obtain funding to acquire digital orthoimagery and elevation data for Alaska (**Tab 1**) and have these data available on the Internet via the Alaska Geographic Data Committee for use by Alaska agencies, Native organizations, the private sector, and the public (**Tab 2**).

Need:
Alaska agencies, Native organizations, and the private sector are involved in analyzing and responding to critical issues including; disaster response and hazard prevention, land conveyance, resource exploration and development, legal access and public safety, public use and resource assessment, and community and economic development (**Tab 3**). These organizations have a recurring need for high quality, current, digital base map data. Orthoimagery and elevation data are essential to providing digital base maps for geospatial decision making. Orthoimagery is geometrically corrected photography of the earth's surface and digital elevation data represents the shape of the earth's surface. These data types are recognized as the foundation layers for all digital base map data (**Tab 4**). Alaska lacks orthoimagery and accurate digital elevation data.

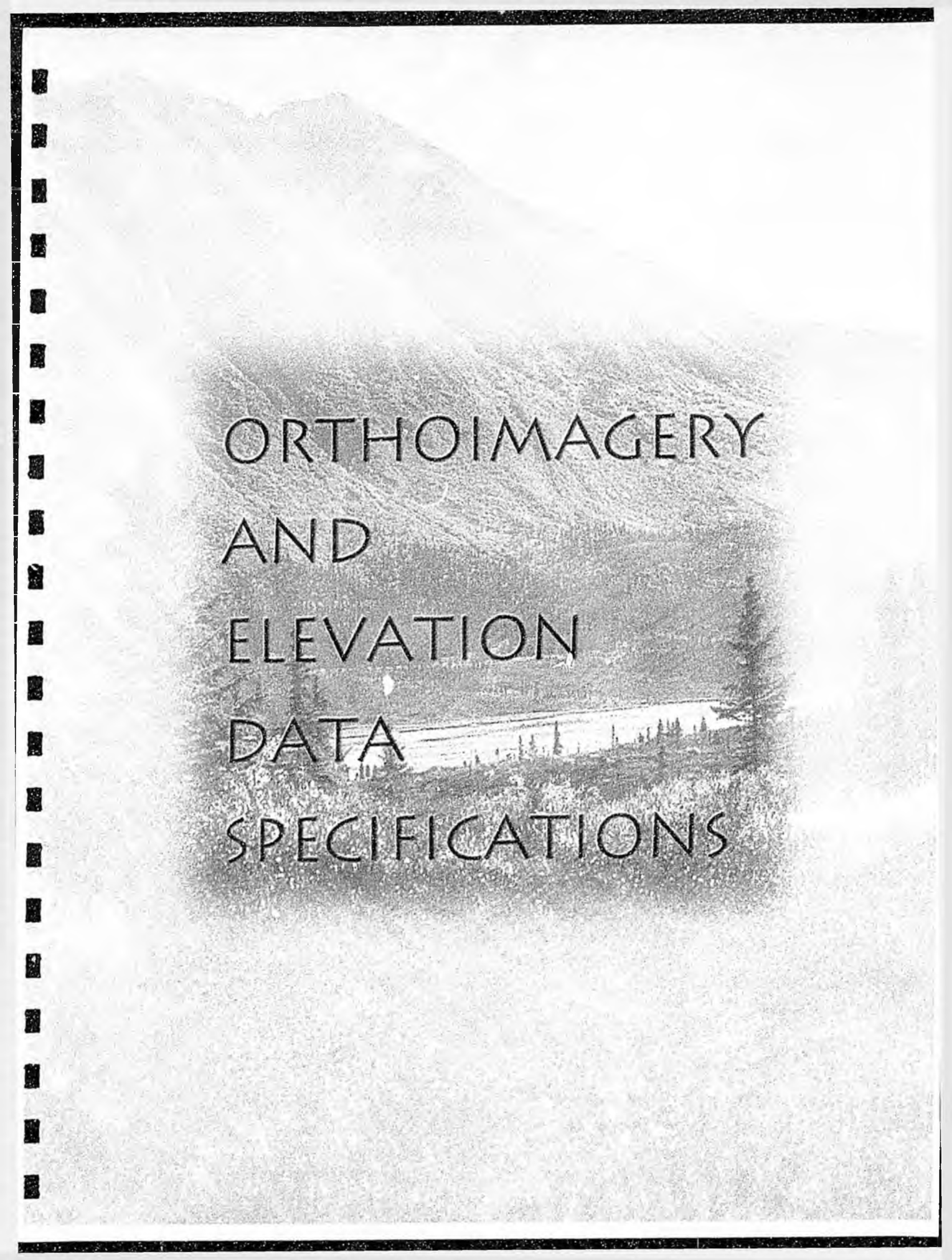
Justification:
US Geological Survey (USGS) maps of Alaska are over 40 years old and do not meet National Map Accuracy Standards. The most current statewide high resolution imagery is 20 years old. Neither reflect Alaska's current landscape and neither are in digital form. They both have very limited usefulness as base map data because of their age and form (**Tab 5**). Alaska does not have digital orthoimagery or accurate digital elevation data base layers which reflect the current Alaska landscape or on which base map data can be built. This request would provide orthoimagery and accurate elevation data for Alaska.

Time frame and Cost:
This Initiative provides for a four year program to collect orthoimagery and elevation data. Production would begin in 2002 and be completed in 2006. Access to this data, via the Internet, will begin once products are available. Estimated cost for acquisition and production, applied over the estimated four year life of the project, is a total $100 million dollars or $25 million dollars a year (**Tab 6**).

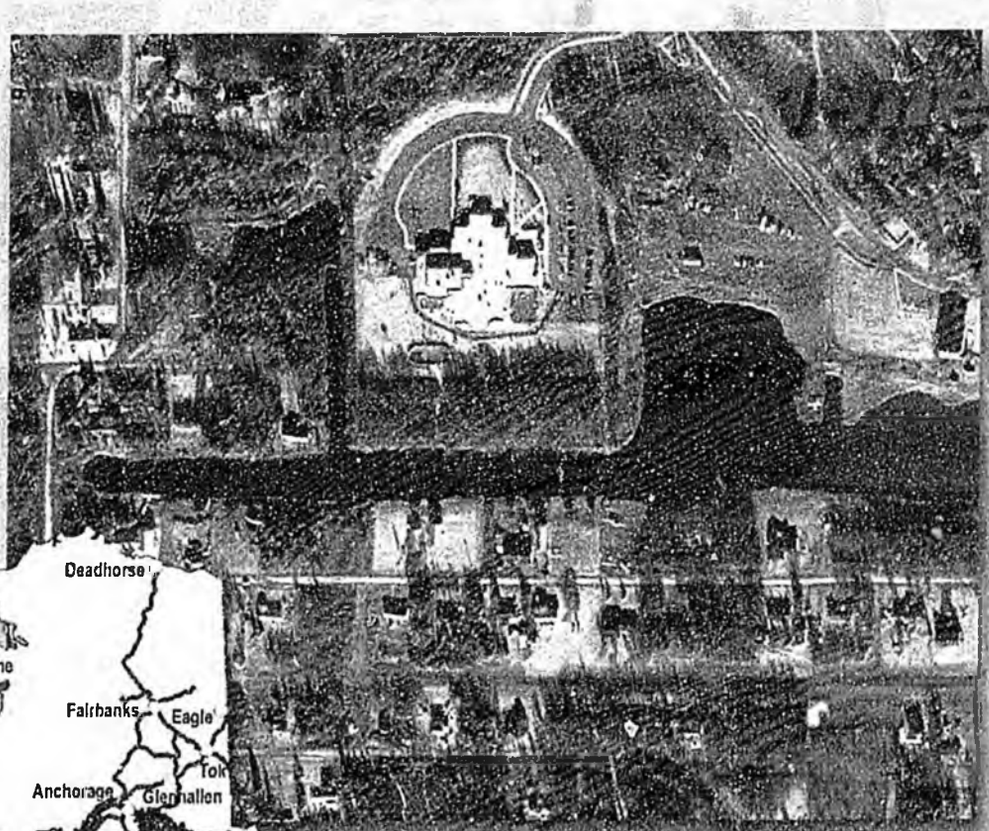
Acquisition Method and Data Access:
Acquisition and production of orthoimagery and elevation data will be done via contract with the private sector. US Geological Survey will administer the contract. Internet access will be managed through the Alaska Geographic Data Committee Clearinghouse and EROS Data Center (**Tab 7**).

Endorsements:
This Initiative is widely endorsed throughout Alaska. Thirty eight (38) organizations have provided letters of endorsement (**Tab 8**).

ORTHOIMAGERY AND ELEVATION DATA SPECIFICATIONS



Statewide Coverage



Coverage
Transportation Corridors
Urban Areas

Digital Orthoimagery

Digital orthoimagery is a georeferenced image prepared from aerial photography or other remotely sensed data in which sensor distortions are removed, so it is geometrically correct.

Orthoimagery combines the image characteristics of aerial photography with the geometric qualities of a map.

Specifications

5-meter resolution

- ✓ Statewide coverage
- ✓ Quarter-quad format
- ✓ Color-Infrared Imagery
- ✓ Meets National Map Accuracy Standards
- ✓ North American Datum 1983

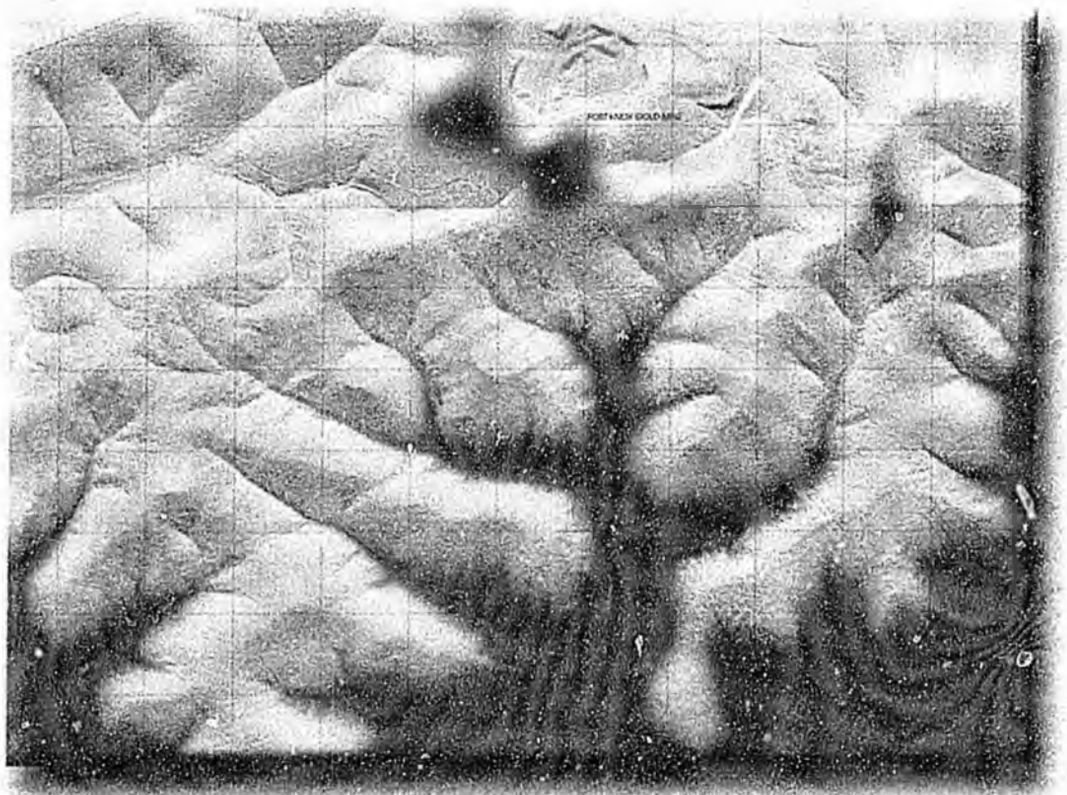
1-meter resolution

- ✓ Urbanized areas, Native villages, major transportation corridors and the Trans-Alaska Pipeline
- ✓ Color-Infrared Imagery
- ✓ Quarter-quad format
- ✓ Meets National Map Accuracy Standards
- ✓ North American Datum 1983

EXISTING

Elevation data from existing USGS 1:63,360 topographic map.

PROPOSED



Example of proposed elevation data derived from radar technology of 1:25,000 topographic map.

Elevation in meters

140 255 370 472 575 610 730

Digital Elevation Data

Digital elevation data is an array of elevation values representing the shape of the earth's surface. Digital elevation data is a required component for the production of digital orthoimagery.

Existing elevation data for Alaska is coarse and inaccurate. This data is not adequate to produce the proposed orthoimagery. The Initiative will result in a dense, accurate elevation data set.

Specifications

30-meter postings
7-meter vertical accuracy
1983 North American Datum

Uses of digital elevation data:

- ✓ Geometric corrections for orthoimagery
- ✓ Derive topographic information

*aspect *slope *contours
*drainage *landform *solar insolation
*watersheds

Alaska Digital Orthoimagery Initiative Product Profile

Digital Orthoimagery

Digital orthoimagery is a geo-referenced image which combines the characteristics of digital imagery with the geometric qualities of a traditional line map. Digital orthoimagery is derived from raw image data and digital elevation data by computer processing which removes any image displacements or distortions due to the sensor system, its orientation, and the earth's surface. For example, digital orthoimagery can be derived from conventional aerial photography systems, digital camera systems, airborne scanners, or satellite systems. Similar to traditional line maps, digital orthoimagery meets National Mapping Accuracy Standards (NMAS).

Image resolution and spectral characteristics are the primary parameters affecting the utility of imagery. For Alaska, 5-meter ground sample distance (GSD) is the most practical for statewide coverage. In addition to statewide 5-meter GSD data, the proposal calls for 1-meter GSD digital orthoimagery for all urban areas, 224 Native villages, all transportation corridors, and the TransAlaska Pipeline. The imagery will be color-infrared. Snow cover, vegetation, sun angle, and cloud cover are factors which affect the utility of the imagery and are taken into consideration during the image acquisition stage. The imagery collection will be during leaf-on, snow-free (except in permanent snow areas), and near cloud-free seasons over several years.

Image coverage is the next most important characteristic affecting image utility. For given image resolution, the land coverage of a particular image affects file size and has both practical limitations and user convenience requirements. Alaska digital orthoimagery will be formatted to one-quarter of the 1:63,360-scale maps; nominally 7.5 minutes, and meeting NMAS for 1:24,000-scale products.

Map projections, datums, and coordinate systems are the other characteristics affecting the utility of digital orthoimagery data. For consistent statewide coverage, the digital orthoimagery will be projected to the Universal Transverse Mercator (UTM) projection, using the North American Datum of 1983 (NAD 83), and metric units. Image file format affects user ease in using the data in a particular geographic information system, image processing system, or application program. Alaska digital orthoimagery will be archived in native format; however, Alaska data users can have the digital orthoimagery formatted GeoTIFF, if desired.

Digital Elevation Data

Digital elevation data is an array of elevation values representing the shape of the earth's surface. Elevation data is required in the production of digital orthoimagery. It is used for the necessary geometric corrections of the imagery. Existing digital elevation data in Alaska is derived from the contours on US Geological Survey Topographic maps. This data is not of sufficient density or accuracy to meet production specifications for the proposed digital orthoimagery.

The minimum specifications required for digital elevation data to meet the proposed orthoimagery requirements is 30-meter postings with 7-meter vertical accuracy. This data will

be cast on the Universal Transverse Mercator projection system and referenced to the North American 1983 Datum. Elevation data meeting these specifications does not exist for Alaska and will have to be collected. Radar technology will be employed to capture and process elevation data. Cloud cover and sun angle will not affect the collection of this data. The distribution format for the digital elevation data will use the Spatial Data Transfer Standard (SDTS) format. The SDTS format is designed to transfer data complete with the data attributes.

Metadata

Finally, metadata affects both current use and future use of geospatial data. Metadata provides data users with a means to assess the process used to derive the data, data lineage, data quality, and other factors which affect the appropriateness of the data for a particular application. Digital orthoimagery and digital elevation data developed under the Alaska Digital Orthoimagery Initiative will have metadata that meets Federal Geographic Data Committee (FGDC) metadata standards.

In summary, the specifications for the Alaska Digital Orthoimagery Initiative is for statewide coverage with 5-meter resolution imagery and 1-meter resolution data in urban areas, over 224 Native villages, along major transportation corridors, and the TransAlaska Pipeline. The digital orthoimagery will be color-infrared, based on Alaska quarter-quad coverage and projected to UTM and NAD 83 in metric units. In addition, the digital orthoimagery will meet NMAS and have standard USGS headers which meet FGDC metadata standards. The digital orthoimagery will be available in GeoTIFF file format. Statewide coverage requires approximately 11,900 Alaska quarter-quads. The State will also be completely mapped with digital elevation data. Digital elevation data is required for the production of digital orthoimagery. The digital elevation data will be 30-meter postings with 7-meter vertical accuracy and will be cast on the Universal Transverse Mercator projection system and referenced to the North American 1983 Datum.

Management Oversight

The National Digital Orthophoto Program Steering Committee has provided program and technical guidance for the National Digital Orthophoto Program. Management oversight of the Alaska Digital Orthoimagery Initiative will be provided by this steering committee through representation of the Alaska Geographic Data Committee.

Production Strategy

The US Geological Survey has been responsible for executing the National Digital Orthophoto Program since its inception. The majority of the production has been performed by the private sector through architect-engineer contracts. Firms selected for these contracts have been based on professional qualifications, specialized experience, capacity to perform, and past performance. Contract monitoring and quality assessment has been performed by in-house personnel. Possible

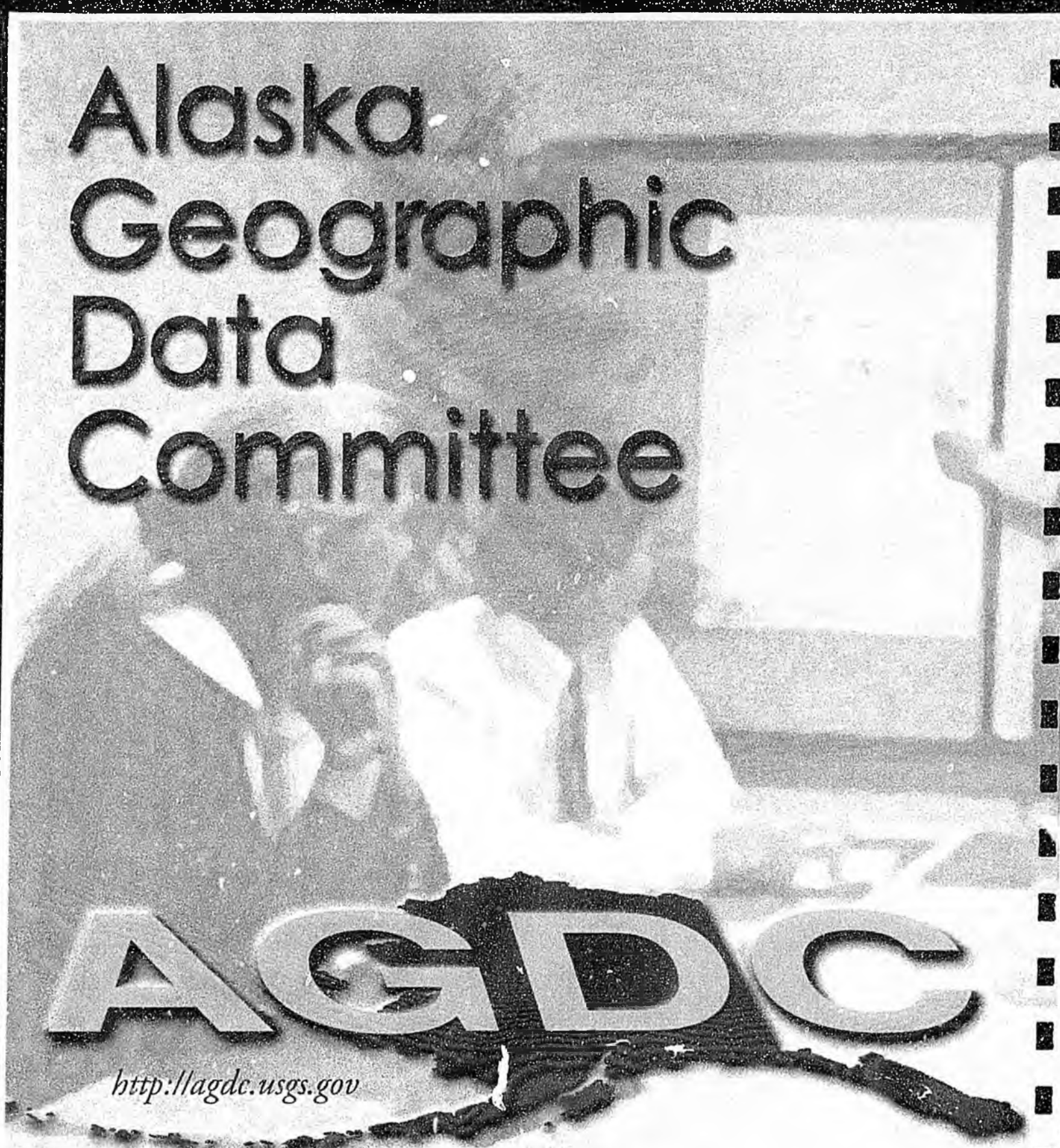
contracting scenarios for the Alaska Digital Orthoimagery Initiative include: 1) Use the current DOQ contract, 2) Use the soon-to-be awarded Cartographic Services Contract, and 3) Award a new and separate contract for the acquisition of Alaska digital orthoimagery

Public Domain Data

The data produced through the proposed Alaska Digital Orthoimagery Initiative will be in the public domain, free of any licensing restrictions, and will be available to all government agencies as well as the general public at the cost of reproduction.


ALASKA
GEOGRAPHIC
DATA
COMMITTEE

Alaska Geographic Data Committee



Membership

State Departments - Community and Economic Development - Natural Resources - Fish & Game - Environmental Conservation - Labor and Workforce Development - University of Alaska -Transportation and Public Facilities - ***Boroughs/Municipalities*** - North Slope Borough - Kodiak Island - Haines - Kenai Peninsula - Matanuska-Susitna - Anchorage - ***Native Organizations*** - Arctic Slope Native Association, Ltd - Association of Village Council Presidents - ***Non Government*** - ABR - AeroMap US - AK Remote Sensing and Cartographic Services - BP Exploration - ESRI, AK - GeoNorth - Resource Data, Inc.

The Alaska Geographic Data Committee (AGDC) was formed in 1993. It currently has 40 members representing State of Alaska departments, Federal agencies, Municipalities, Boroughs, Native organizations, private enterprise, and the University of Alaska. The purpose of the AGDC is to provide statewide leadership for surveying, mapping and related spatial data coordination. The AGDC's overall objective is to:

- ✓ **build geographic information partnerships in Alaska**
- ✓ **leverage resources**
- ✓ **promote the visions and goals of the National Spatial Data Infrastructure**
- ✓ **serve as the technical advisory committee to the Alaska Land Managers Forum**

Federal Agencies - US Geological Survey - Bureau of Land Management - National Park Service - Fish & Wildlife Service - Bureau Of Indian Affairs - Minerals Management Service Environmental Policy & Compliance - Environmental Protection Agency -Forest Service - Natural Resources Conservation Service - National Oceanic & Atmospheric Administration National Weather Service - Federal Aviation Administration - Federal Highway Administration Coast Guard - Department of Defense - US Army Corps of Engineers - US Air Force

THE ALASKA GEOGRAPHIC DATA COMMITTEE

In October 1990, the Office of Management and Budget issued a revised Circular A-16, "Coordination of Surveying, Mapping, and Related Spatial Data Activities." The goals of the Circular were to develop a national digital geographic information resource, to reduce duplication, to reduce the expense of developing geographic data, and to increase the benefits of using available data by ensuring coordination of Federal agency geographic data activities. The Circular also established an interagency committee, the Federal Geographic Data Committee (FGDC), to promote the coordinated development, use, sharing, and dissemination of geographic data categories. The Circular assigned to Federal agencies the responsibilities of leading coordination activities for 10 categories of data. Agency responsibilities include providing government-wide leadership in developing data standards, assisting information and data exchange, and coordinating data collection.

Presidential Executive Order 12906 of April 1994 recognized a critical national need for improved means for finding and sharing geographic data. This document called for the establishment of a coordinated National Spatial Data Infrastructure (NSDI) "to support public and private sector applications of geospatial data in such areas as transportation, community development, agriculture, emergency response, environmental management and information technology." The NSDI was seen as part of the evolving National Information Infrastructure which would provide citizen access to essential government information and thus strengthen the democratic process. The NSDI encompasses policies, standards, and procedures for organizations to cooperatively produce and share geographic data. The Federal agencies that make up the FGDC are developing the NSDI in cooperation with organizations from state, local and tribal governments, the academic community, and the private sector.

In response to these major initiatives at the national level, Federal and state agencies in Alaska with interests in surveying and mapping came together in 1993 and organized themselves as the Alaska Geographic Data Committee (AGDC). The AGDC was formally recognized as the Alaska cooperating group of the FGDC in early 1996. The purpose of the Alaska Geographic DataCommittee is to provide statewide leadership for surveying, mapping, and related spatial data coordination as well as serve as a forum for: (1) Coordination of spatial data development projects; (2) Development of coordinated methodologies for implementing standards and policies; and (3) Review and response to Federal Geographic Data Committee initiatives. The overall objective is to build geographic information partnerships among all institutions within Alaska to coordinate programs, leverage resources, and jointly promote the vision and goals of the NSDI. The AGDC serves as the technical advisory committee to the Alaska Land Managers Forum on all matters related to surveying, mapping, and geospatial data.

Since its establishment, the AGDC has continued to add to its membership base by adding representation from all sectors of the Federal government, state and local government, Native organizations, as well as Universities and private industry. (See Membership List). The AGDC is organized into a number of Working Groups and Subcommittees that have responsibility for specific themes of information, as well as activities that cut across themes such as Data Management and Data Clearinghouses. The Orthoimagery Subcommittee of the AGDC has been responsible for developing the Orthoimagery Initiative for the entire AGDC membership.

Membership List:

FEDERAL AGENCIES

U.S. Department of the Interior:
- U.S. Geological Survey, Alaska
- Bureau of Land Management, Alaska State Office
- U.S. National Park Service, Alaska Field Office
- U.S. Fish and Wildlife Service, Region 7 - Alaska
- Bureau of Indian Affairs, Juneau Area Office
- Minerals Management Service, Alaska OCS Region
- Office of Environmental Policy and Compliance - Alaska

U.S. Department of Agriculture
- U.S. Forest Service Alaska Region
- U.S. Forest Service, Pacific Northwest Research Station, Anchorage Forest Sciences Laboratory
- Natural Resources Conservation Service, Alaska State Office

U.S. Department of Commerce
- NOAA, Office of Coast Survey
- National Weather Service, Alaska Region

U.S. Department of Transportation
- Federal Aviation Administration Alaska Region
- Federal Highway Administration
- U.S. Coast Guard 17th District

U.S. Department of Defense
- U.S. Army, Corps of Engineers, Alaska District
- U.S. Air Force

U.S. Environmental Protection Agency. Region 10, Alaska Operations Office

ALASKA STATE AGENCIES
- Department of Community and Economic Development
- Department of Environmental Conservation
- Department of Fish and Game
- Department of Labor and Workforce Development
- Department of Natural Resources
- Department of Transportation and Public Facilities
- University of Alaska

BOROUGHS/MUNICIPALITIES

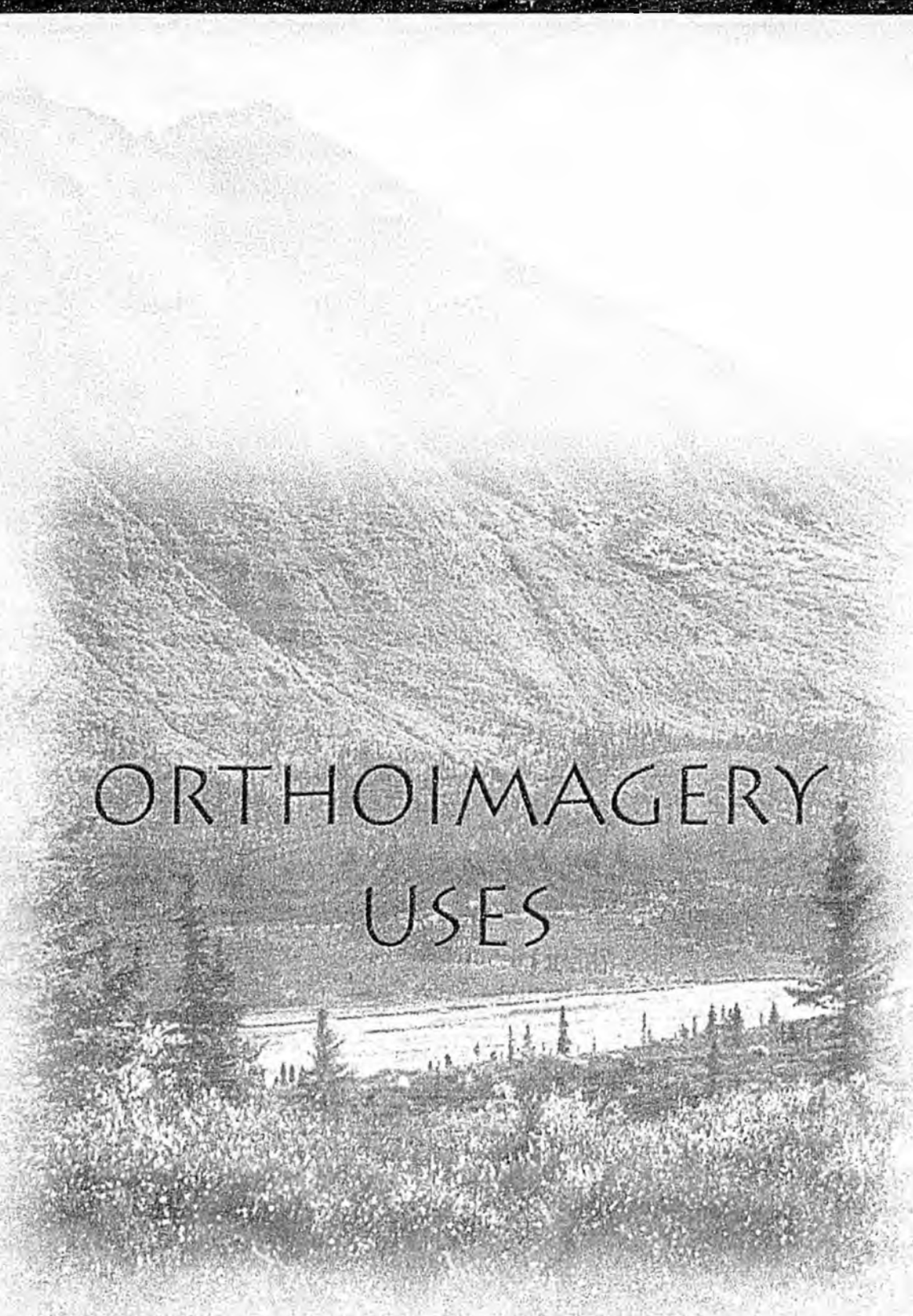
Haines Borough
Kenai Peninsula Borough
Kodiak Island Borough
Matanuska- Susitna Borough
Municipality of Anchorage
North Slope Borough

NON-GOVERNMENTAL ORGANIZATIONS

ABR, Inc.
AeroMap U.S.
Alaska Remote Sensing and Cartographic Services
BP Exploration (Alaska) Inc.
Environmental Systems Research Institute (ESRI)
ESRI Alaska Regional Office
Resource Data Inc.
Geo North, Inc

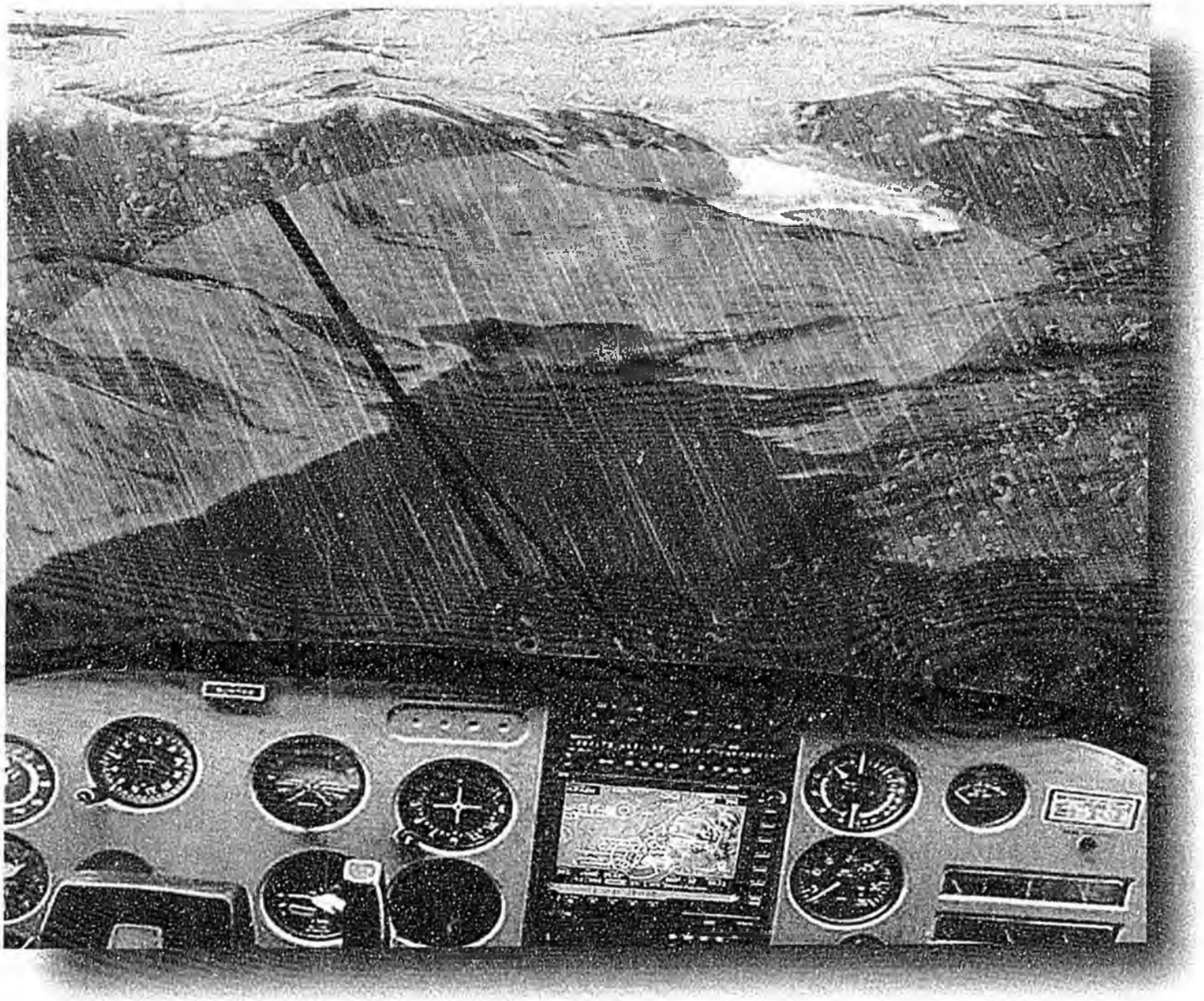
NATIVE ALASKAN ORGANIZATIONS

Arctic Slope Native Association, Limited
Association of Village Council Presidents



ORTHOIMAGERY USES

Aviation Safety



Advanced Avionics

MX-20 Multi-Function Display

GX-60 GPS/Comm

Precise aircraft positioning via accurate moving map display yielding significant increase in aviation safety.

Infrastructure Development

Aviation is a key element in Alaska's future economic growth. The FAA Alaska Region is providing leadership to improve aviation safety, air traffic control innovation, and infrastructure development. Orthoimagery and accurate elevation data will provide valuable information for this effort.

Orthoimagery serves as a reference tool for:

- Increased safety via CAPSTONE technology utilizing more accurate data
- Accurate chart publications for both VFR and IFR flight
- Lower instrument approach minima equals more arrivals/departures
- Planning information for airport location and development
- Airspace management and traffic modeling
- Planning/zoning to protect existing and future arrival/departure routes
- Accurately locate towers, power lines, and other aircraft obstructions
- Provide military area charting and routes for military and civilian traffic de-confliction

Disaster Response

Orthoimagery Map

Burned Area Boundary

Access Trails

Natural Fire Barrier

Hazard Prevention

Fire is a natural part of the Alaskan ecosystem and fire management is fundamental to the protection and enhancement of human values, wildlife habitat, and ecosystem integrity.

Wildfires burn an average of 978,000 acres a year. Suppression response is based on statewide fire management plans. Prescribed fire plans for fuel hazard reduction and wildlife enhancement are now common practices. Both plans require accurate and up-to-date information provided by orthoimagery.

Orthoimagery serves as a reference source to:

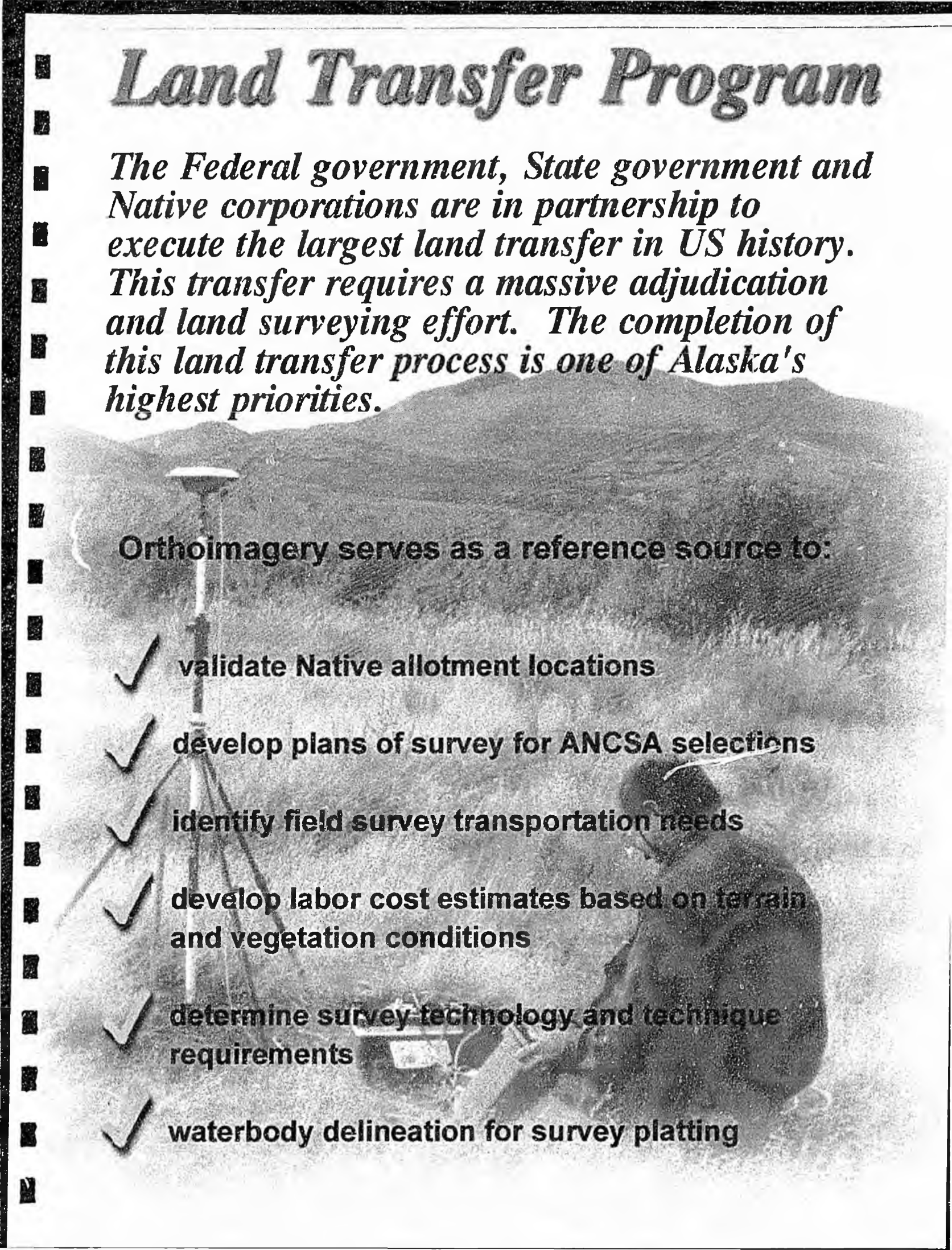
- ✓ assess fuel types and changes in surface features
- ✓ identify resource habitat to assess the level of fire suppression efforts necessary
- ✓ strategically plan prescribed fire burns
- ✓ locate natural fire barriers for staging areas and crew placement
- ✓ pinpoint viable evacuation routes
- ✓ identify and plan relocation of village landfills for fire prevention

Orthoimagery Map

- Hydrography
- Survey Monuments
- Native Allotments
- Trails
- ANCSA Selection Boundary

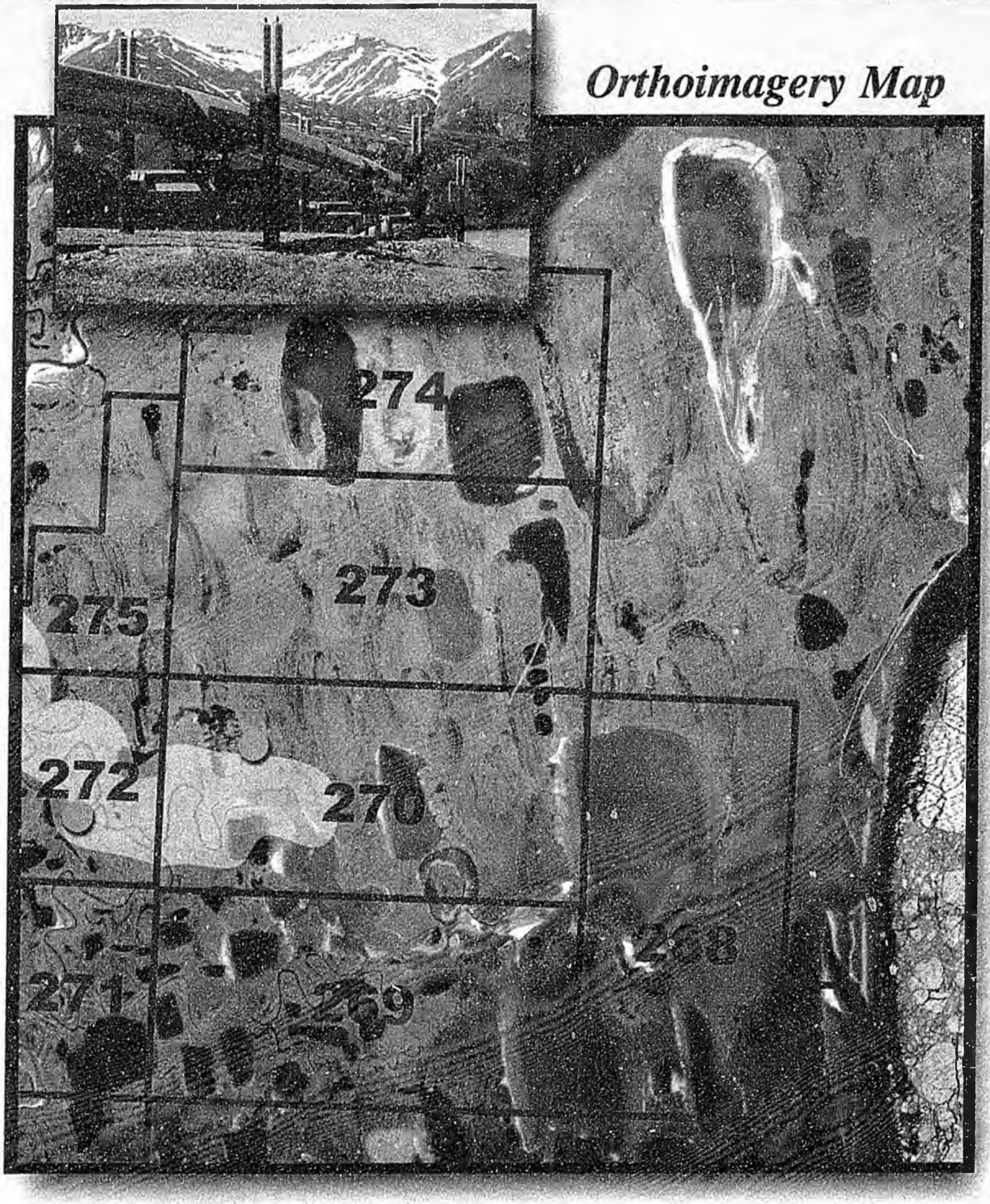
Land Transfer Program

The Federal government, State government and Native corporations are in partnership to execute the largest land transfer in US history. This transfer requires a massive adjudication and land surveying effort. The completion of this land transfer process is one of Alaska's highest priorities.



Orthoimagery serves as a reference source to:

- ✓ validate Native allotment locations
- ✓ develop plans of survey for ANCSA selections
- ✓ identify field survey transportation needs
- ✓ develop labor cost estimates based on terrain and vegetation conditions
- ✓ determine survey technology and technique requirements
- ✓ waterbody delineation for survey platting


Orthoimagery Map
274
273
275
272
270
271
269
268
Oil and gas lease tracts
Sensitive area consultation
Ecological monitoring location

Resource Exploration and Development

Development of Alaska's natural resources has been key to the state's economic vitality. Future resource exploration and development must be based on the best available information. Ortho-imagery provides valuable information about the landscape and the environment.

Uses of Orthoimagery in oil field development

- ✓ Lease boundary locations
- ✓ Hydrologic basin delineation
- ✓ Routing for ice roads
- ✓ Water sources for ice road construction
- ✓ Location for infrastructure facilities
- ✓ Base for sensitive habitat locations
- ✓ Location sites for ecological monitoring
- ✓ Communication tool for public meetings

Legal Access

Orthoimagery Map

Native Corporation Land

Natural Hazard

Proposed Easement

Alternate Route Easement

Native Allotment

Public Land

Proposed Easement

Existing Easement

Public Safety

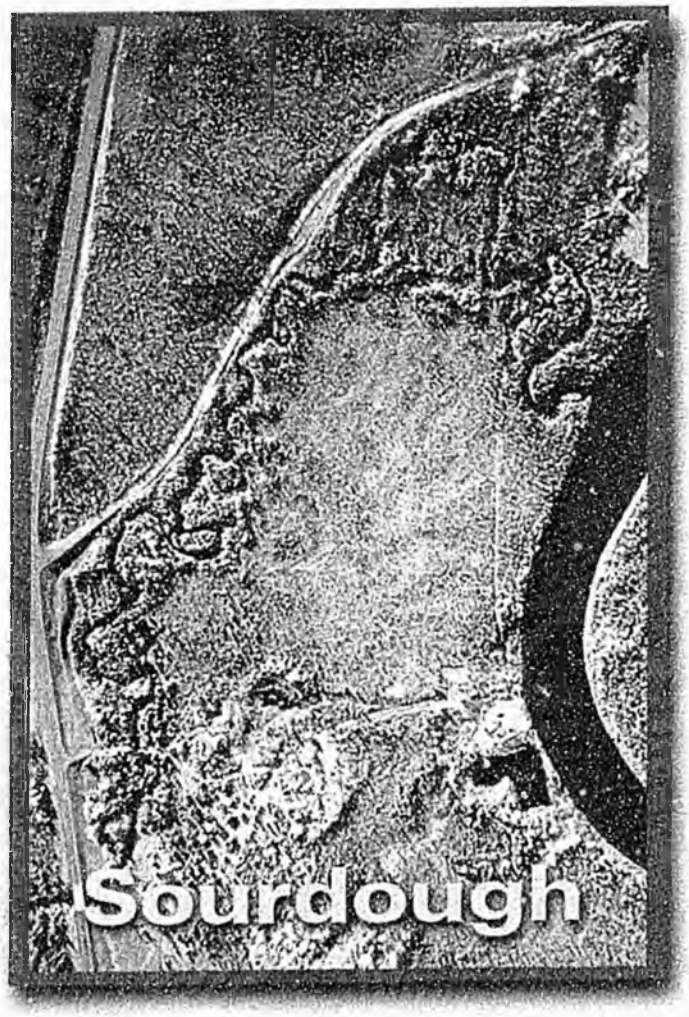
Public easements provide access to major waterways and to Federal, State, and Municipal lands. These easements cross Native lands and must be well-planned and managed. There are 3,000 public easements in Alaska.

Orthoimagery serves as a reference tool for:

- ✓ Identifying conflicts between easements and land ownership
- ✓ Rerouting of existing easements because of public safety concerns
- ✓ Easement improvement, maintenance, and marking
- ✓ Minimum impact of easements in environmentally sensitive areas
- ✓ Identifying discrepancies between locations of reserved easements to actual trails

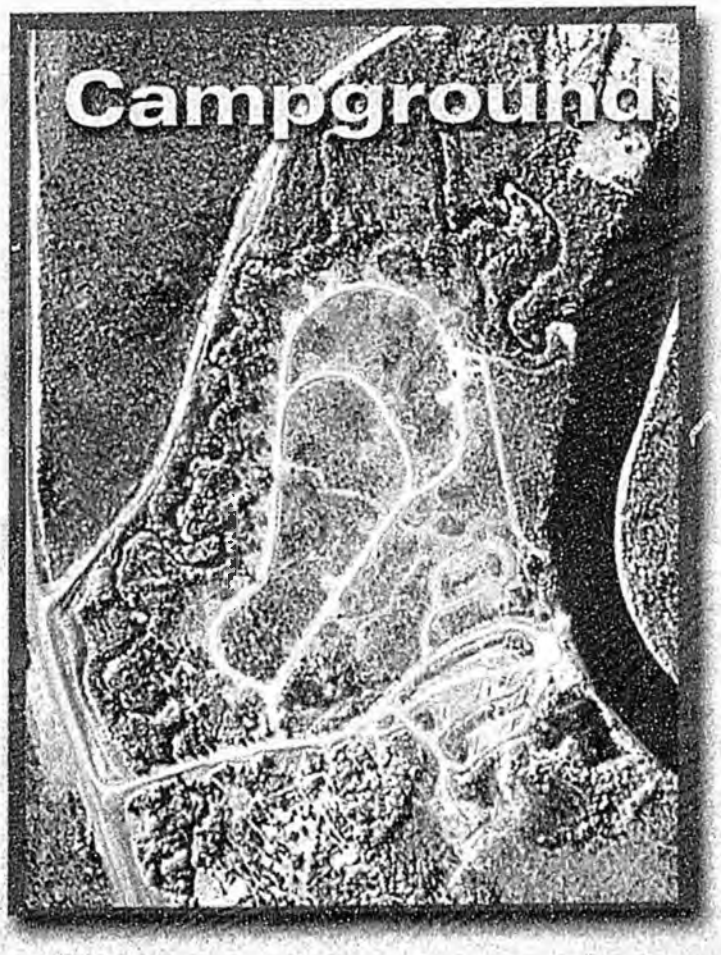
Public Use

Orthoimagery Map



September 1990

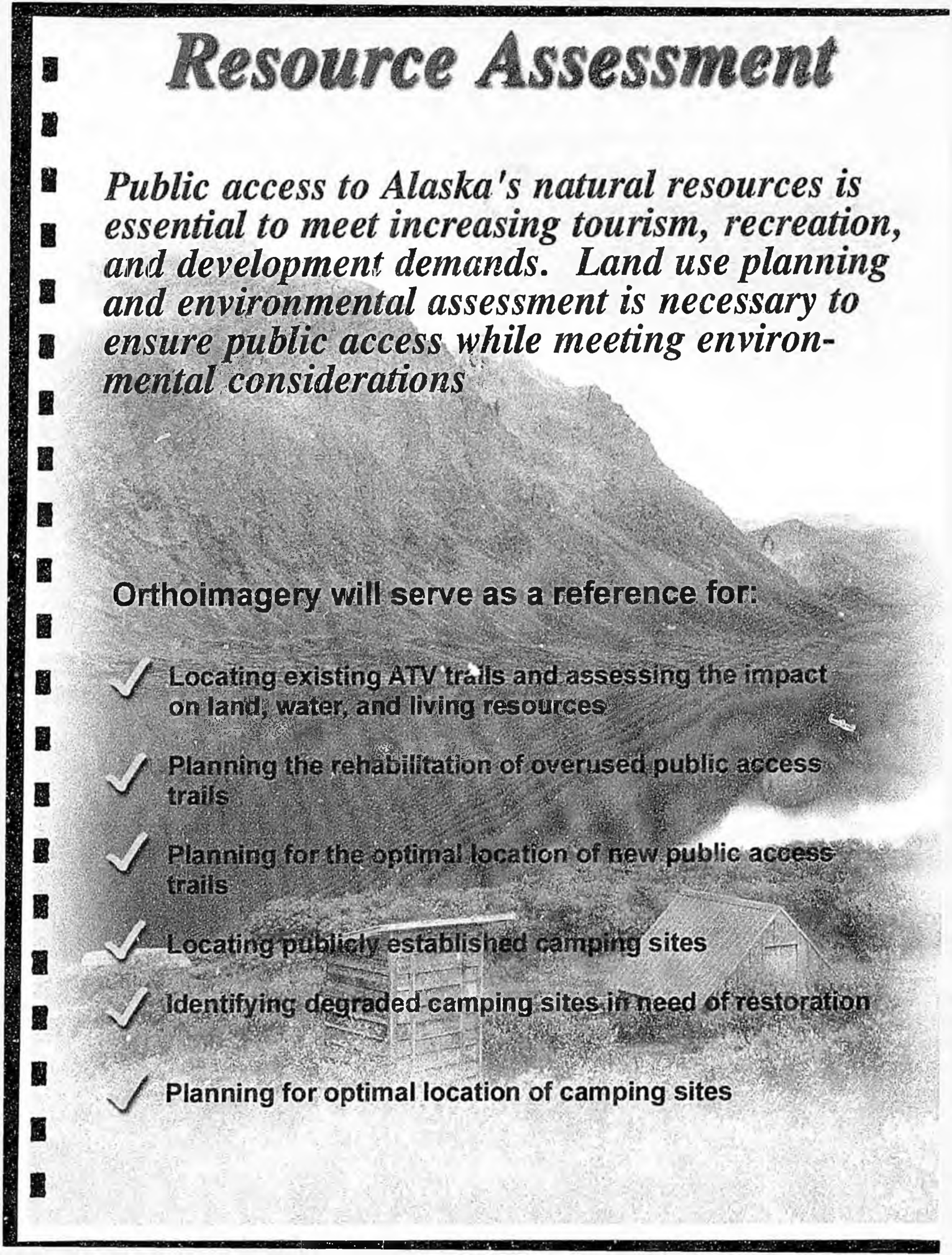
Orthoimagery Map



August 1998

Resource Assessment

Public access to Alaska's natural resources is essential to meet increasing tourism, recreation, and development demands. Land use planning and environmental assessment is necessary to ensure public access while meeting environmental considerations



Orthoimagery will serve as a reference for:

- ✓ Locating existing ATV trails and assessing the impact on land, water, and living resources
- ✓ Planning the rehabilitation of overused public access trails
- ✓ Planning for the optimal location of new public access trails
- ✓ Locating publicly established camping sites
- ✓ Identifying degraded camping sites in need of restoration
- ✓ Planning for optimal location of camping sites

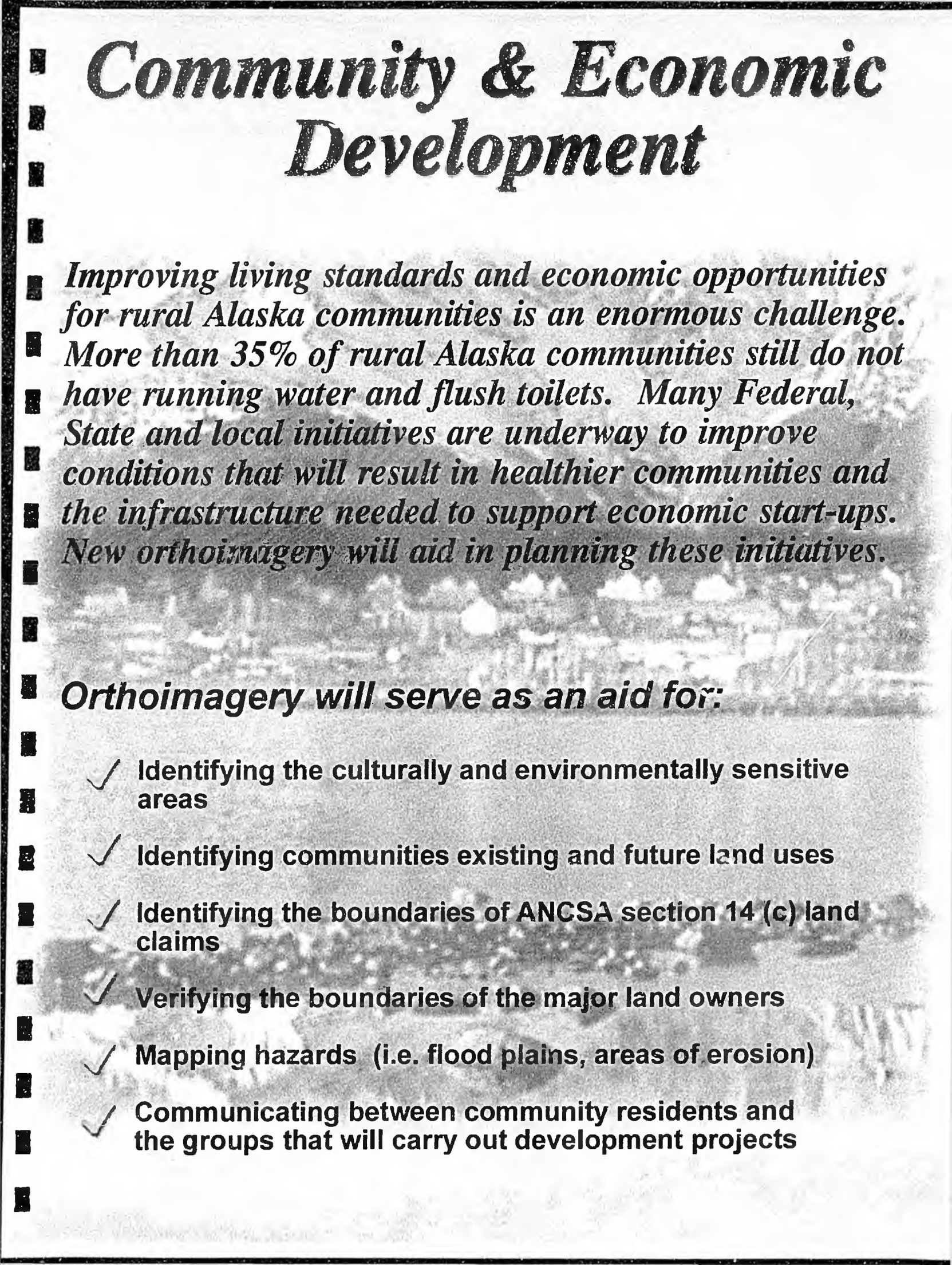
Orthoimagery Map

Buckland Area Use Map

- Salmon Fishing
- Winter Fishing
- Boat Parking
- Berry Picking

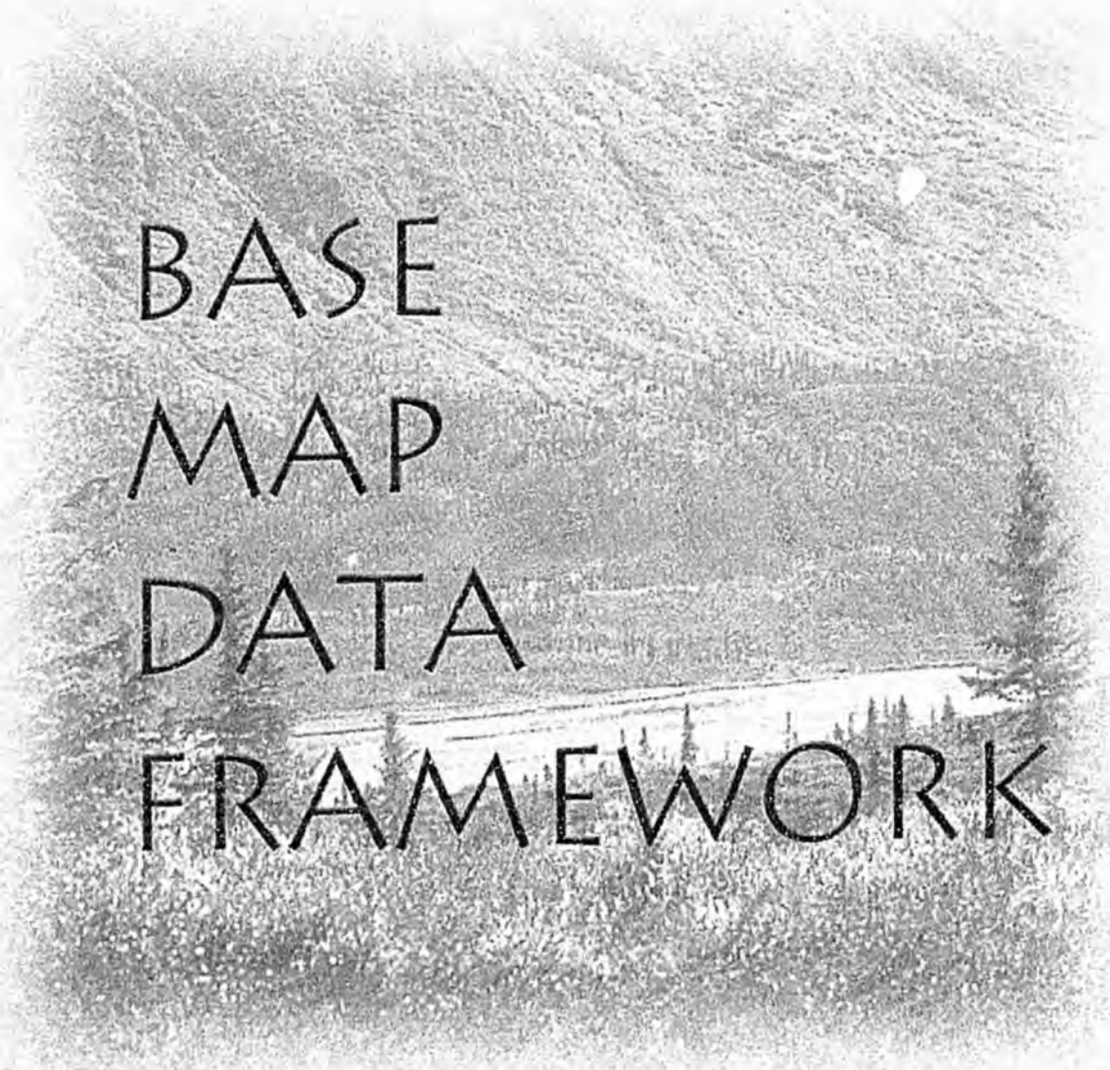
Community & Economic Development

Improving living standards and economic opportunities for rural Alaska communities is an enormous challenge. More than 35% of rural Alaska communities still do not have running water and flush toilets. Many Federal, State and local initiatives are underway to improve conditions that will result in healthier communities and the infrastructure needed to support economic start-ups. New orthoimagery will aid in planning these initiatives.



Orthoimagery will serve as an aid for:

- ✓ Identifying the culturally and environmentally sensitive areas
- ✓ Identifying communities existing and future land uses
- ✓ Identifying the boundaries of ANCSA section 14 (c) land claims
- ✓ Verifying the boundaries of the major land owners
- ✓ Mapping hazards (i.e. flood plains, areas of erosion)
- ✓ Communicating between community residents and the groups that will carry out development projects

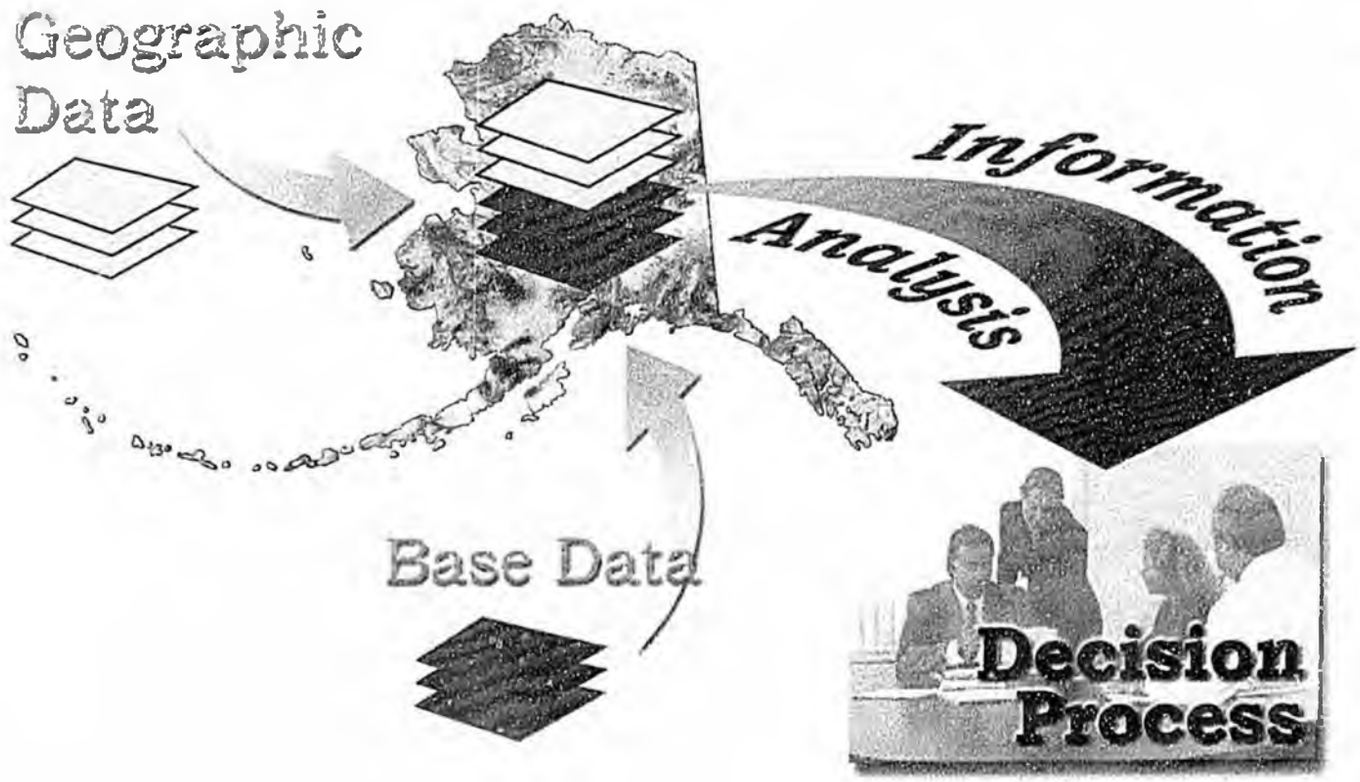

BASE
MAP
DATA
FRAMEWORK

Digital geographic data is essential for managing and developing Alaska resources. Alaska has a recurring need for a framework of high quality, current digital map data. Base map data layers provide a "framework of data you can trust." There are eight base map data layers comprising the base data framework. Orthoimagery is recognized as the foundation layer for digital base map data framework. the framework provides:

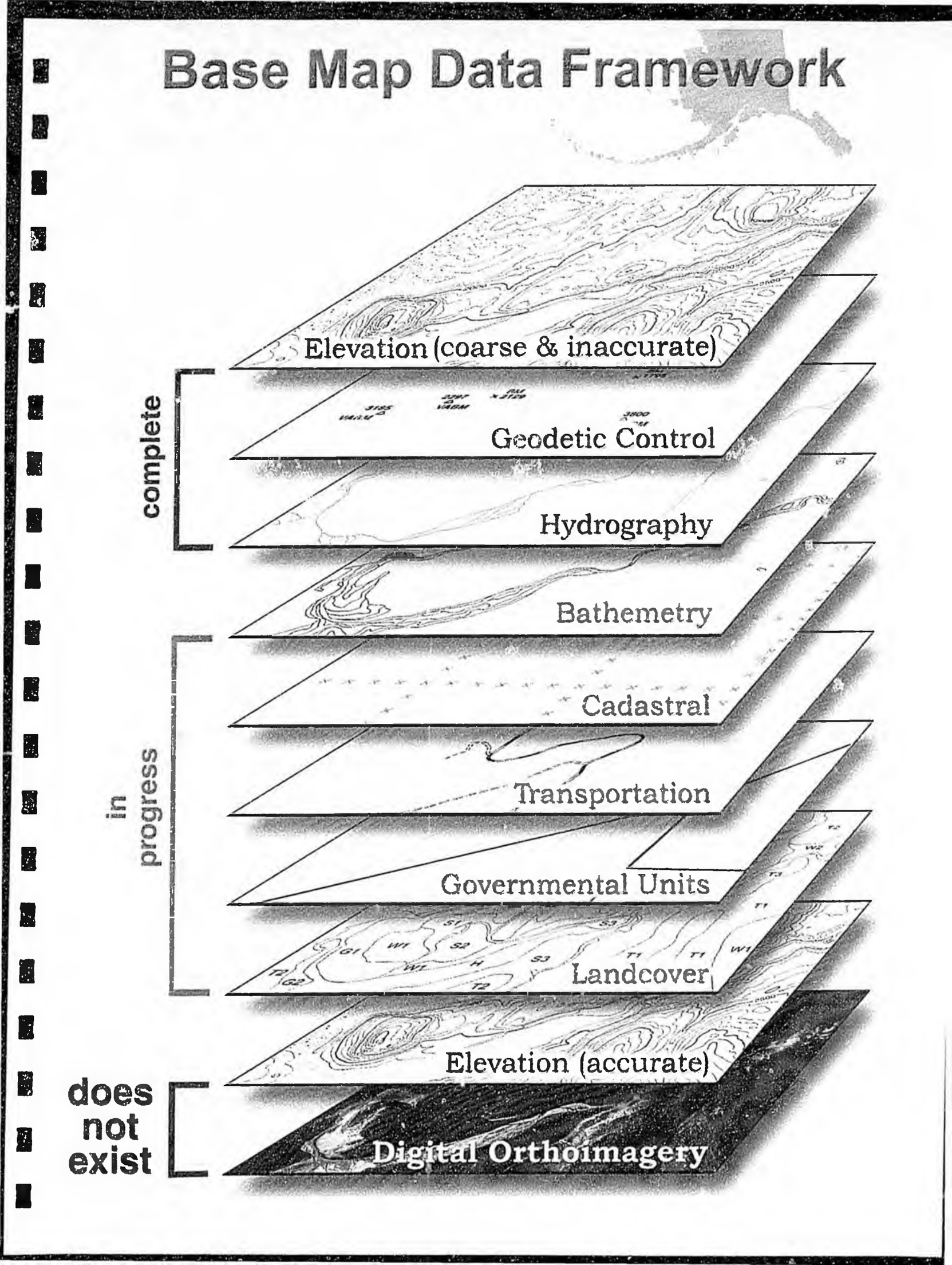
- ✓ base data that can be used in numerous applications
- ✓ a base to which users can add or attach specific geographic information
- ✓ a reference source for accurately registering and extracting geographic data
- ✓ a reference map for displaying the location and the results of an analysis of other data

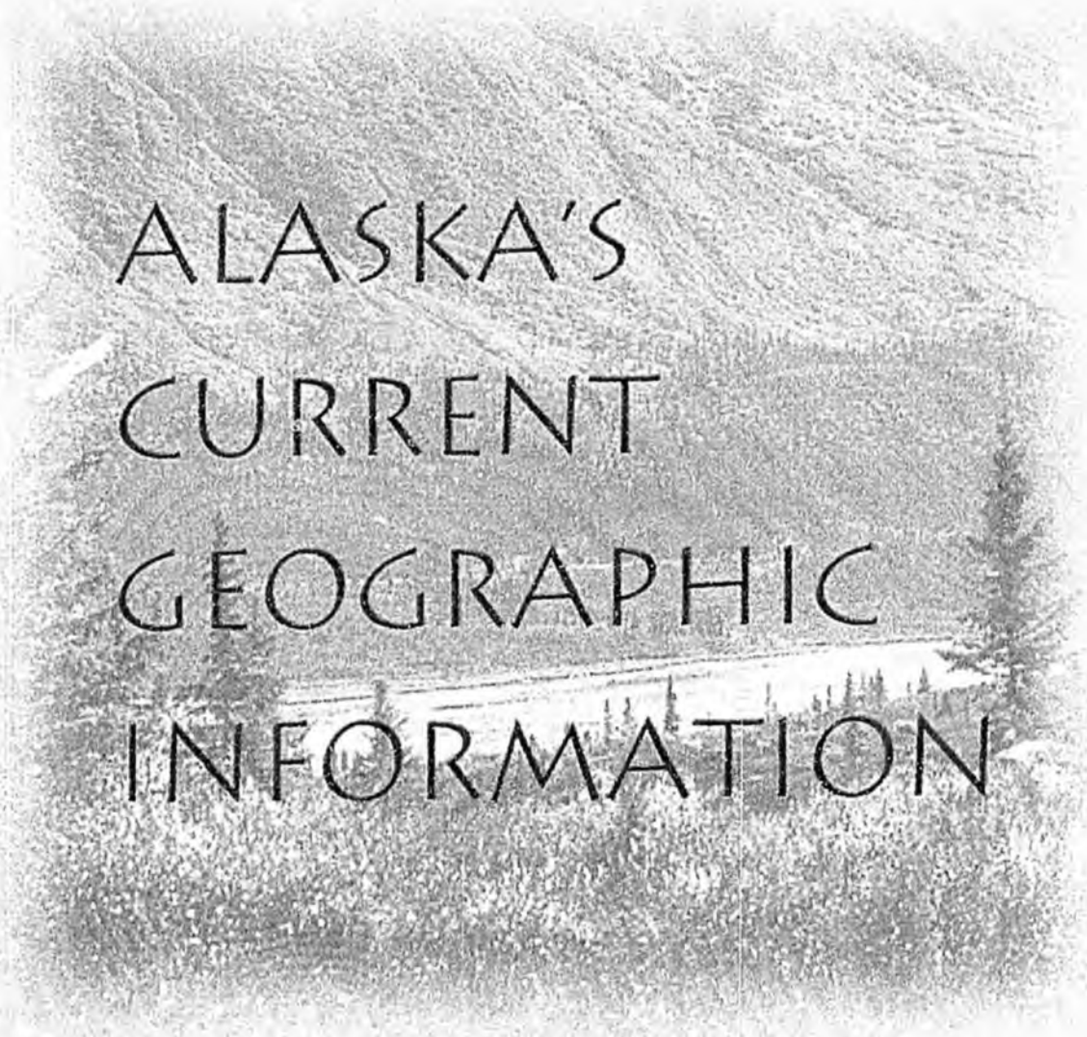
Alaska currently has elevation (coarse and inaccurate), hydrography, and geodetic control in statewide digital coverage. Cadastral, transportation, and governmental units are being built.

Alaska does not have the digital orthoimagery base layer or an accurate digital elevation layer.

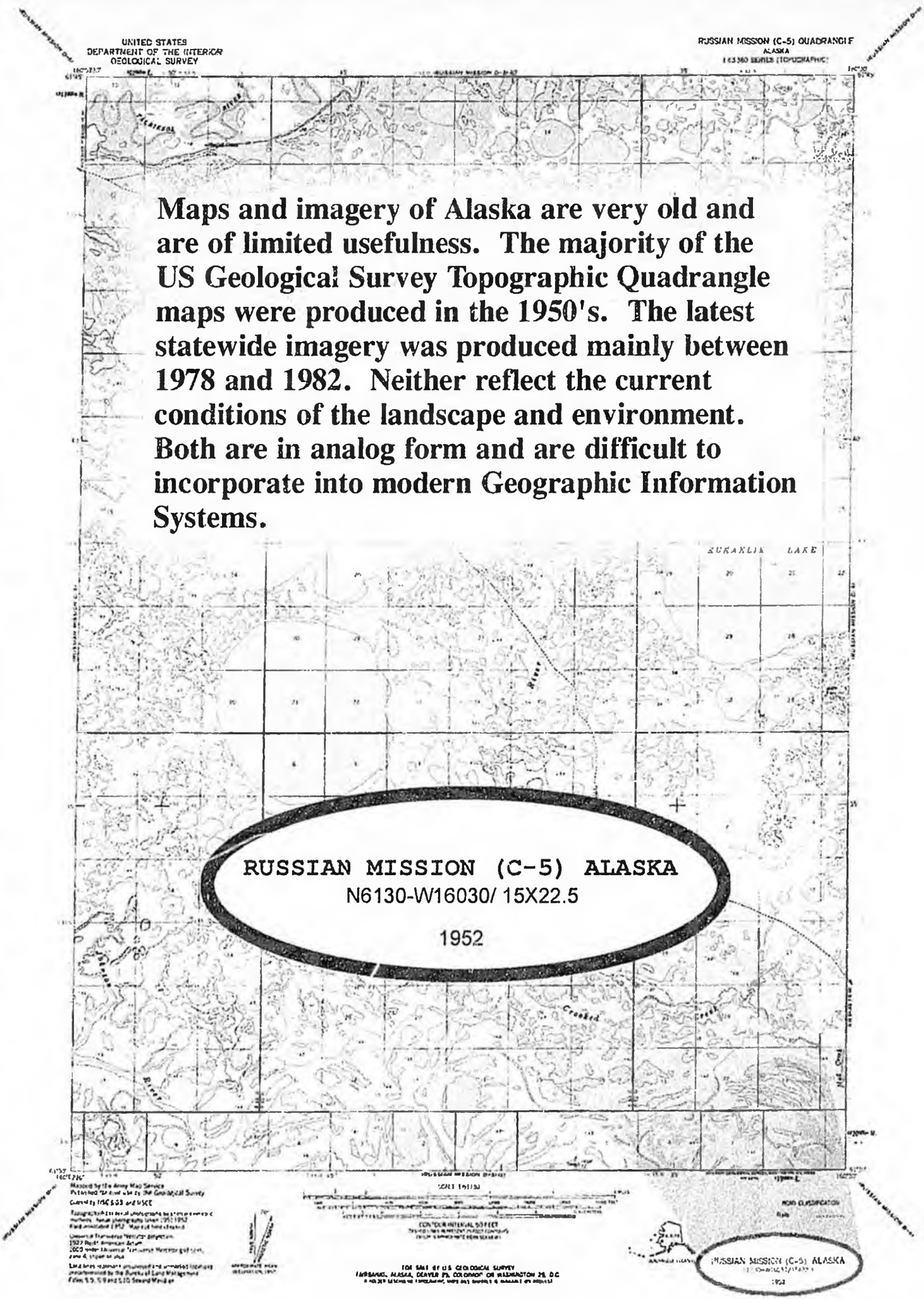


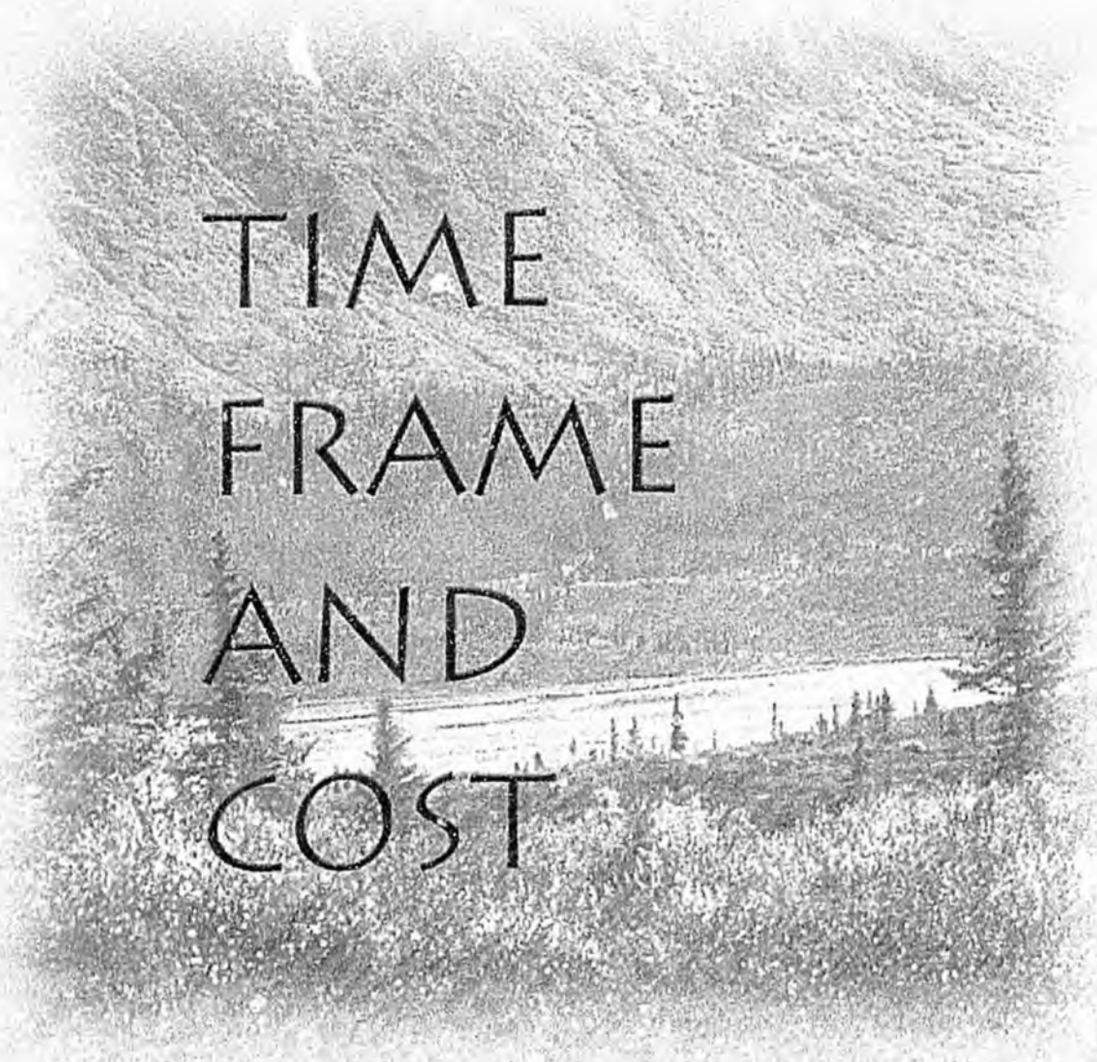
Base Map Data Framework



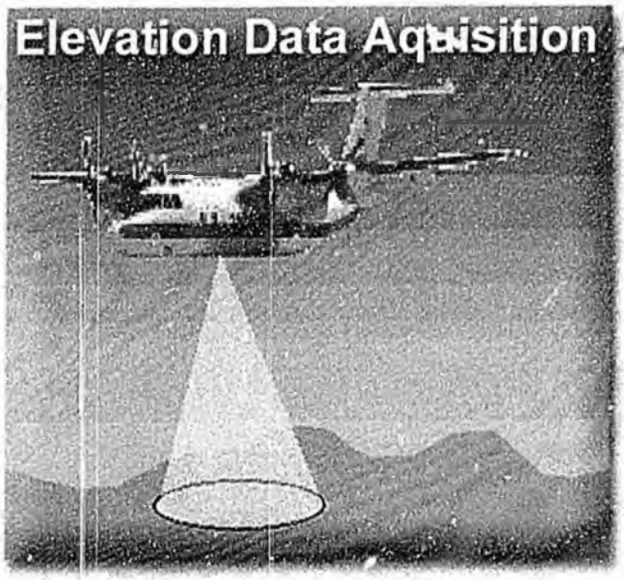

ALASKA'S
CURRENT
GEOGRAPHIC
INFORMATION

The 1978 and 1999 images of Fairbanks are illustrations of change. New digital orthoimagery would reflect the current landscape and environment and would allow for the easy integration into modern Geographic Information Systems.


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
RUSSIAN MISSION (C-5) QUADRANGLE
ALASKA
1:63360 SERIES (TOPOGRAPHIC)
Maps and imagery of Alaska are very old and are of limited usefulness. The majority of the US Geological Survey Topographic Quadrangle maps were produced in the 1950's. The latest statewide imagery was produced mainly between 1978 and 1982. Neither reflect the current conditions of the landscape and environment. Both are in analog form and are difficult to incorporate into modern Geographic Information Systems.
RUSSIAN MISSION (C-5) ALASKA
N6130-W16030/ 15X22.5
1952
RUSSIAN MISSION (C-5) ALASKA
1952

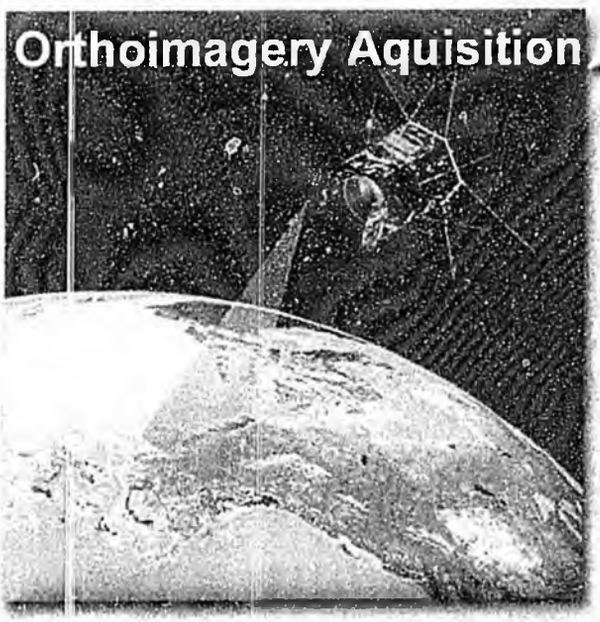

TIME
FRAME
AND
COST

Data Aquisition Costs



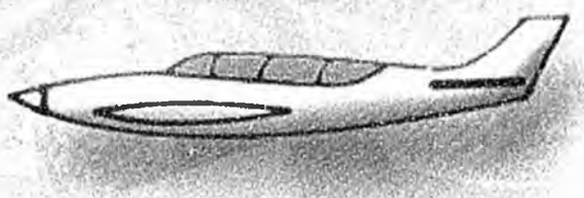
60 Million

Radar Derived Elevation Data



40 Million

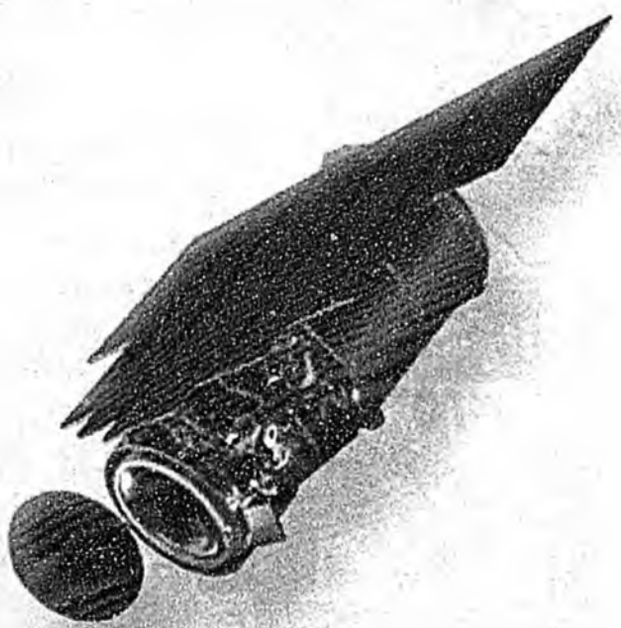
Project Timeline



Radar Derived Elevation Data

2002 2003 2004 2005

*Projected Timeline of Project



Orthoimagery

2002 2003 2004 2005 2006

*Projected Timeline of Project


DATA
ACCESS

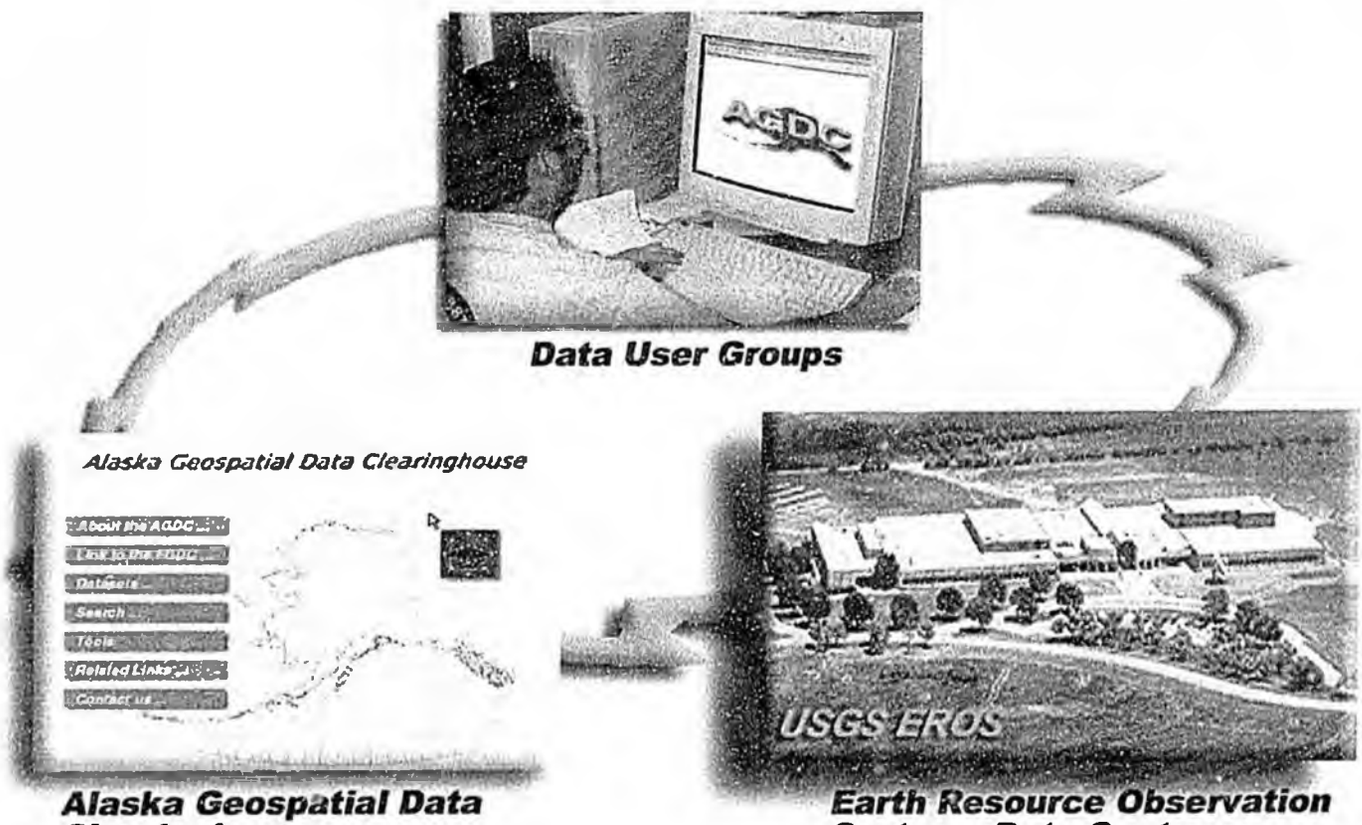
Data Management

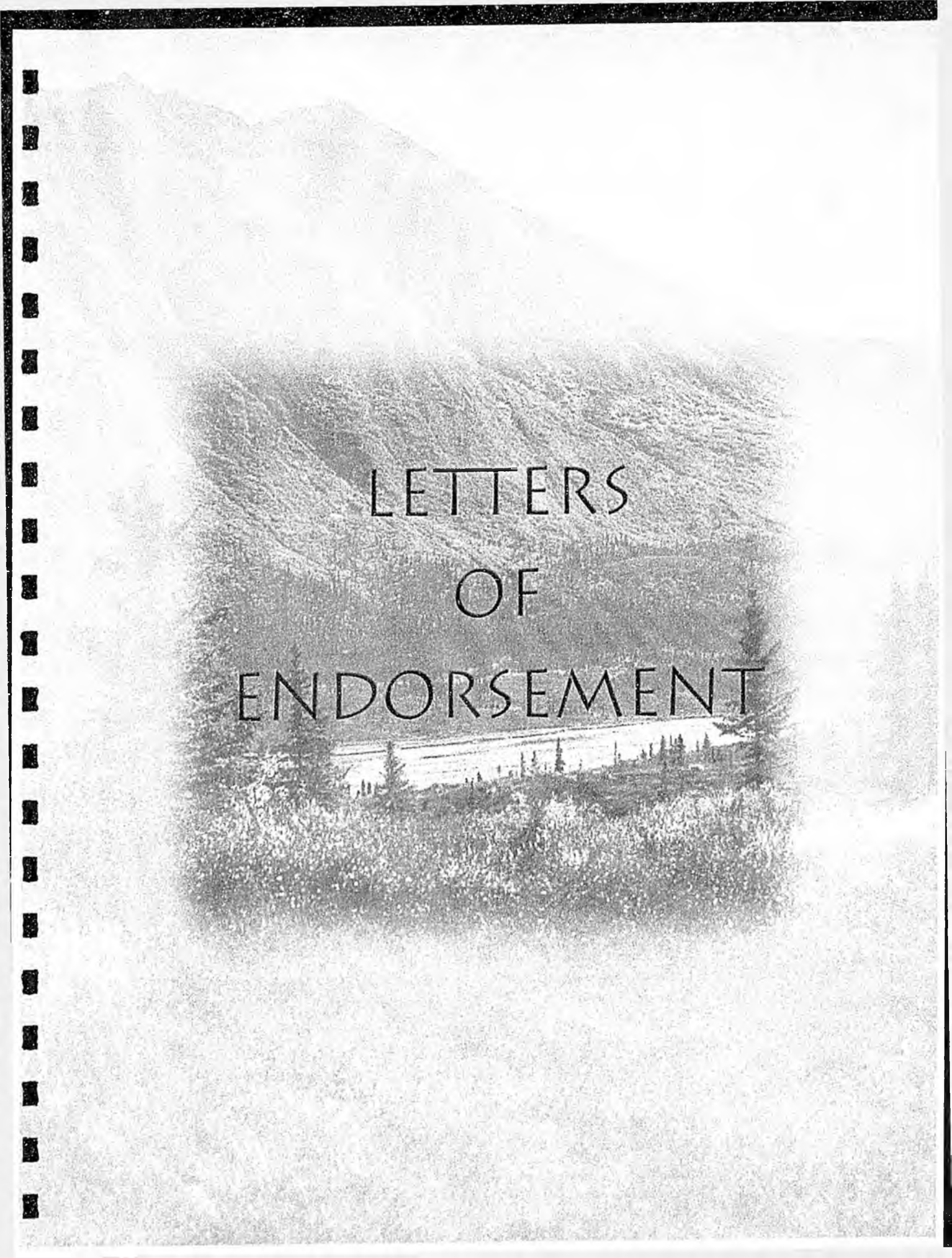
The Alaska Geospatial Data Clearinghouse Network

One of the objectives of the Alaska Geographic Data Committee (AGDC) is to build geographic information partnerships among its membership. This primary goal strives to provide for a nationally consistent and cost effective means to share geospatial data at all levels of government and industry. In support of this vision, the AGDC has developed and is promoting an Internet-based network of clearinghouse nodes which are linked together to form the Alaska Geospatial Data Clearinghouse.

The Clearinghouse will be the initial focal point where data users can access the digital orthoimagery and elevation data produced by the Initiative. The primary archive site for this digital data will be the USGS' Earth Resources Observation System (EROS) Data Center in Sioux Falls, South Dakota.

The AGDC is investigating potential use of the Supercomputer Facility at the University of Alaska, Fairbanks, to act as the in-state repository. This would provide real-time access and long-term management of the data as well as promote utilization of a unique Alaskan capability and would provide an important, secondary data archive site in addition to the EROS Data Center.




LETTERS
OF
ENDORSEMENT

LETTERS OF ENDORSEMENT SUMMARY

1. Resource Development Council for Alaska, Inc.
2. Alaska Land Managers Forum
3. Arctic Power
4. Institute of the North
5. Alaska Airmen's Association., Inc.
6. Association of ANCSA Regional Corporation Presidents and CEO's. Inc.
7. Tanana Chiefs Conference, Inc.
8. Calista Corporation
9. Chugach Alaska Corporation
10. Bering Straits Native Corporation
11. Ahtna Inc.
12. Arctic Slope Regional Corporation.
13. Bristol Bay Native Corporation
14. NANA Regional Corporation
15. Alyeska Pipeline Service Company
16. Phillips Alaska Inc.
17. BP Exploration (Alaska) Inc.
18. URS Corporation
19. AeroMap U.S.
20. Racal Pelagos
21. Evergreen Helicopters of Alaska, Inc.
22. GeoNorth
23. State of Alaska Dept. of Environmental Conservation
24. State of Alaska Dept. of Community and Economic Development
25. State of Alaska Dept. of Labor and Workforce Development
26. State of Alaska Dept. of Natural Resources
27. State of Alaska Dept. of Fish and Game
28. State of Alaska Dept. of Transportation
29. Alaska Cooperative Extension, University of Alaska Fairbanks
30. National Digital Orthophoto Program
31. Department of the Army
32. US Air Force
33. Environmental Protection Agency
34. Federal Aviation Administration
35. FAA 'CAPSTONE' Program
36. National Oceanic and Atmospheric Administration
37. Census Bureau
38. National Park Service
39. Bureau of Indian Affairs
40. Bureau of Land Management
41. US Fish and Wildlife Service
42. Joint Pipeline Office
43. US Forest Service
44. Alaska Soil and Water Conservation District
45. North Slope Borough
46. Matanuska-Susitna Borough
47. Municipality of Anchorage
48. The Nature Conservancy of Alaska
49. Ducks Unlimited National Office
50. Ducks Unlimited Western Regional Office
51. Sierra Club
52. Management Association for Private Photogrammetric Surveyors
53. American Society of Photogrammetry and Remote Sensing
54. Urban Regional Information Systems Association

Resource Development Council
for Alaska, Inc.

121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503-2035
(907) 276-0700 Fax: (907) 276-3887 e-mail: Resources@akrdc.org

Founded 1975

EXECUTIVE DIRECTOR
Kenneth J. Freeman

2000-2001 EXECUTIVE COMMITTEE
Robert B. Stiles, President
Charles W. Johnson, Sr. Vice President
Mark Hanley, Vice President
Uwe L. Gross, Secretary
Stanley T. Foo, Treasurer
Allen Bingham
Charlie Boddy
James F. Branch
Charles D. Brower
Marilyn Crockett
Dennis Egan
Mano Frey
Paul S. Glavinovich
Ryan Lance
David F. MacDowell
Stephanie Madsen
Kirk McGee
H. Raymond Measles
David J. Parish
Elizabeth Rensch
Thyes J. Shaub
Scott L. Thorson

DIRECTORS
Irene A. Anderson
Dale Bagley
John A. Barnes
Richard E. Barrett
William Brophy
Frank M. Brown
Al Burch
Bruce Bustamante
Richard Cattanach
James L. Cloud
David C. Cobb
Stephen M. Connelly
Jeffry J. Cook
Larry Daniels
George L. Erickson
Lori Eussen
Jeffrey Y. Foley
Donald S. Follows
Ronald A. Gelbrich
John K. Handeland
Joseph R. Henri
Jim Jansen
Erling T. Johansen
John Key
Paul Laird
Pete Leathard
Brian J. Lettich
Robert W. Loescher
David L. Matthews
David McCambridge
William McLaughlin
Frank E. McQueary
James Mery
Wesley P. Nason
Bernard Nidowicz
John K. Norman
R. Michael O'Neill
Sarah H. Palin
Robert J. Pawlowski
Gail Phillips
William E. Pierce
Debbie Reinwand
John A.L. Renso
Dennis Roper
Jerome Selby
Patrick R. Smith
John L. Sturgeon
Cliff R. Taro
Rupert G. Tart, Jr.
Barry D. Thomson
Lon Trotter
Vincent Tutiakoff, Sr.
Nancy B. Usera
J.C. Wingfield
George P. Wuerch
Eric P. Yould

HONORARY DIRECTORS
Paula P. Easley
Phil R. Holdsworth
Rocky Miller
George R. Schmidt
William R. Wood

EX-OFFICIO MEMBERS
Senator Ted Stevens
Senator Frank Murkowski
Congressman Don Young
Governor Tony Knowles

June 21, 2000

Mr. Gust Panos
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, #13
Anchorage, AK 99513

Dear Mr. Panos:

The Resource Development Council (RDC) would like to express its strong support for the Alaska Digital Orthoimagery Initiative. RDC believes it will be very beneficial to acquire high resolution imagery of Alaska.

RDC is a statewide membership-funded organization working on behalf of Alaska's basic industries -- oil and gas, mining, timber, fishing and tourism. RDC's membership also includes sectors which support Alaska industry, such as construction, labor and other technical service providers, individuals, Native corporations and local communities.

Many of our members recognize the need and value of digital imagery in Alaska. Reliable, current and base geographic data is a prerequisite for economic and resource development. It is also a public safety consideration. RDC considers orthoimagery as the foundation for the framework of base geographic data.

Since Alaska does not have digital orthoimagery at this time, RDC fully supports the Initiative's goal to obtain funding from Congress to acquire complete digital orthoimagery and digital evaluation data coverage of Alaska.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL
for Alaska, Inc.

Carl Portman
Deputy Director

ALASKA LAND MANAGERS FORUM

Federal Co-Chair
Marilyn Heiman
Special Asst. to the Secretary
U.S. Dept. of the Interior
1689 C Street, Suite 100
Anchorage, AK 99501-5151
Tel 907.271.5485
Fax 907.271.4102

State Co-Chair
Fran Ulmer
Lieutenant Governor
State of Alaska
PO Box 110015
Juneau, AK 99811-0015
Tel 907.465.3522
Fax 907.465.5400

Native Co-Chair
Nelson Angapak, Sr.
Vice President
Alaska Federation of
Natives, Inc.
1577 C Street, Suite 300
Anchorage, AK 99501
Tel 907.274.3611
Fax 907.276.7989

Federal Members
U.S. Department of the Interior
Bureau of Indian Affairs
Bureau of Land Management
National Park Service
Fish and Wildlife Service
USDA Forest Service

State Members
Lieutenant Governor
Division of Governmental Coordination
Dept. of Community & Economic Development
Dept. of Environmental Conservation
Dept. of Fish and Game
Dept. of Natural Resources
Dept. of Transportation & Public Facilities

Native Representatives
Alaska Federation of Natives
Alaska Inter-Tribal Council

June 27, 2000

Mr. Gust Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, suite #13
Anchorage, Alaska 99513-7599

Subject: Letter of Endorsement

Dear Mr. Panos:

The Alaska Land Managers Forum is pleased to endorse the Alaska Digital Orthoimagery Initiative sponsored by the Alaska Geographic Data Committee. The Forum members applaud the collaborative work that public agencies have undertaken to bring this proposal forward.

The Alaska Land Managers Forum is a coalition of senior level federal, state, and Native land managers. The development of digital information systems and the open sharing of electronic databases are one of the target areas for the Forum. We have benefited in the past from briefings and projects completed by the Alaska Geographic Data Committee and view this proposal as an important advancement toward our goals of providing all land managers with the information resources they need to achieve their missions effectively and efficiently.

Digital geographic information is now a business standard for Native organizations and local, state, and federal governments. Orthoimagery and elevation models provide the foundation layers for representing complex land management issues. This project would deliver both of these essential basemap themes to Alaska for use in the Geographic Information Systems of all Forum members.

We recognize the common problems faced by a lack of geographic information, and the high costs of acquisition. Existing paper maps and statewide aerial photography are decades old and not fully reliable. This initiative would apply national mapping standards to Alaska. New remote sensing technologies now offer Alaska the means to overcome the obstacles created by a lack of on-the-ground control points. These technologies create a tangible means for meeting national mapping standards, both in scale and accuracy, for Alaska.

We understand that the coterminous states have recently had digital orthoimagery provided to them through national programs but these programs have so far not included Alaska. We seek to extend the benefits of these programs to Alaska. The products from this initiative will improve our land management capabilities, benefiting resource development and conservation, public access and safety, recreation, emergency response to wild fire and other natural disasters, management of transportation corridors, community development, and environmental assessments and permitting.

The spirit and purpose in which the Alaska Digital Orthoimagery Initiative was assembled certainly parallels the spirit of the Alaska Land Managers Forum. We believe the Alaska Digital Orthoimagery Initiative is needed and we offer our full endorsement of the project.

Sincerely,

Fran Ulmer

Lieutenant Governor Fran Ulmer
State Co-Chair

Marilyn Heiman

Marilyn Heiman, Special Assistant to the Secretary of the Interior
Federal Co-Chair

Nelson Angapak Sr., Vice President, Alaska Federation of Natives
Native Co-Chair

ANWR:
JOBS AND ENERGY
FOR AMERICA

ARCTIC POWER
1049 West 5th Avenue, Suite 102
Anchorage, Alaska 99501
(907) 274-2697
Fax (907) 274-2706
http://www.anwr.org

203 Maryland Avenue, N.E.
Washington, D.C. 20002
(202) 544-6355
(202) 544-6655
Fax (202) 544-5763
http://www.anwr.org

Gust C. Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
222 West 7th Ave Box 13
Anchorage, Alaska 99513-7599

Dear Mr. Panos,

Arctic Power would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The use of current and reliable geographic information has become a business standard in the private sector as well as in the government. This initiative will provide an effective means for improving the quality of statewide geographic information through high-resolution digital orthoimagery and enhanced elevation data. We recognize the incredible value of orthoimagery and elevation data. They form the foundation layer in a framework of geographic information that is necessary to develop and manage the resources of Alaska.

Alaska's U.S. Geological Survey topographic maps are over forty years old, do not meet National Map Accuracy Standards, and there is no existing or planned program to update or replace them. The most recent statewide imagery is over 20 years. These major sources of information do not represent the changing landscape or the current conditions in Alaska. We believe the new digital orthoimagery and digital elevation data provided by the Initiative would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee is commended for fostering partnerships and determining the needs among Native Corporations, local, state, and federal agencies, and the private sector. Arctic Power recognizes the Initiative will increase knowledge about Alaska's resources and environment thereby reducing uncertainty, allowing the nation and Alaska to make more competent decisions, and enjoy greater benefits.

Best Regards,

Cam Toohey, Executive Director
Arctic Power

INSTITUTE OF THE NORTH
ALASKA PACIFIC UNIVERSITY
POST OFFICE BOX 101700
ANCHORAGE, AK 99510-1700

907-343-2400 TEL
907-343-2211 FAX
inorth@alaska.net EMAIL
www.institutenorth.org

WALTER J. HICKEL
FOUNDER
MEAD TREADWELL
MANAGING DIRECTOR

February 26, 2001

Mr. Gust C. Panos, Chairperson
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West Seventh Avenue #13
Anchorage, AK 99513-7599

Dear Mr. Panos:

The Alaska Geographic Data Committee was formed during my last term as Governor, and we encouraged state agencies to participate. As founder of Institute of the North, a research and teaching think-tank based at Alaska Pacific University, I continue to see the need for up-to-date baseline geographic data of Alaska. I enthusiastically endorse your efforts with the Alaska Digital Orthoimagery Initiative.

The Institute of the North has numerous programs that would benefit greatly from this Initiative. The Institute offers for-credit courses at APU that focus on resource management, commonly owned lands (state, federal and Native), and northern geographic and strategic issues. As host to the Alaska Geographic Alliance, the Institute trains K-12 teachers in the use of Geographic Information Systems (GIS) and has recently produced the GIS-based interactive CD-ROM, "Alaska in Maps."

The relative absence of state of the art geospacial data on Alaska confounds our efforts to provide thorough policy and academic materials.

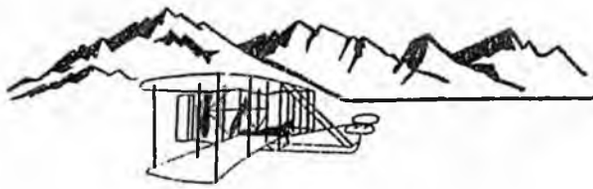
I applaud the Alaska Geographic Data Committee for developing a proposal to obtain funding for the acquisition of high-resolution digital orthoimagery and digital elevation data for Alaska. I also support the AGDC's contention that reliable, current, statewide base demographics information is essential for continued economic development, livability, and public safety.

With best regards.

Sincerely,

Walter J. Hickel

Walter J. Hickel
Founder



ALASKA AIRMEN'S ASSOCIATION., INC.

February 22, 2001

Mr. Gust C. Panos
Chair, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
Bureau of Land Management
222 West 7th Avenue, #13
Anchorage, AK. 99513

Dear Mr. Panos:

The Alaska Airmen's Association is the biggest Alaskan aviation organization, with over 1,200 member Statewide, committed to the safety and enhancement of general aviation in the State.

Our first reaction to your proposal was one of enthusiasm. It is about time that maps reflect the advance in technology. As safety devises, pilots are using more advanced digital displays in the cockpits of their aircraft. Unfortunately, many of these displays show terrain based surveys carried out over 40 years ago.

In an age when aviators are concerned that most aircraft accidents are due to Controlled Flight Into Terrain (CFIT), it is paramount that maps and displays be as accurate as possible. Recently, I flew a Cessna 152 in VFR, from Independence, Kansas to Anchorage, Alaska. I became painfully aware of the lack of update on the maps, especially when flying through the remote parts of British Columbia and from Haines Junction to Anchorage. Railways were depicted where there was no longer railways. Easily and readily identifiable objects from small towns to mines, and even airports were missing from the maps.

While great strides have been made in the Instrument Flight Rules (IFR) arena, little has been done for the Visual Flight Rules (VFR) pilot. Capstone offers great promise but even that has a terrain display that does not match the maps. This can cause confusion. As we move into an era where ground based avionics will soon be phased out, it is even more important that our maps reflect what satellites will display in the future. In a State where the only realistic mode of transportation and lifeline to most villages is by air, the use of aircraft is essential.

The Alaska Airmen's association wholeheartedly supports your project and look forward to the publication of the results that will be a large factor in safe navigation for the general aviator in Alaska. We feel sure that the updated maps will also be a factc for limiting or slowing the phenomenal increase in Insurance rates for Alaskan Aviation and reduce the loss of life and equipment.

Sincerely,

Felix M. Maguire, Director
Government and Legislative Affairs, AAAI.

Association of ANCSA Regional Corporation Presidents & CEOs, Inc.

PO Box 92829
Anchorage, AK 99509-2829
Ph: (907) 265-4519 Fax: (907) 265-4528

February 5, 2001

Gus Panos, Chairman
Digital Orthoimagery Subcommittee
BLM (AK 924)
222 W. 7th Avenue, Box 13
Anchorage, AK 99513

Dear Mr. Panos:

On behalf of the members of this Association, please add our endorsement to the Alaska Digital Orthoimagery Initiative. Because of the Alaska Native Corporations' entitlement to more than 40 million acres of land, the use of current and reliable geographic information is critical to the operation of our businesses as we conserve and develop our resource assets.

Alaska's USGS topographic maps are based on 1950's photography. Taking that into consideration along with the fact that this state is seen as potentially rich in resources, we believe it is crucial to have updated mapping technology available. New digital orthoimagery would go a long way towards curing the critical shortage of reliable geographic information in Alaska.

We would also like to commend you for pulling together support from both the private and public sectors for this important initiative. Your listing of the broad-based support for the project recognizes that the need for this product is great. Thank you for the opportunity to lend our voice.

Sincerely,

Vicki A. Otte
Executive Director

TANANA CHIEFS CONFERENCE, INC.

122 FIRST AVENUE, SUITE 600
FAIRBANKS, ALASKA 99701-4897
PHONE 907/452-8251 • FAX 907/459-3850

April 17, 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The Tanana Chiefs Conference would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The use of current and reliable geographic information has become a business standard in the Native community as we employ Geographic Information System (GIS) technology to our daily business practices. We consider orthoimagery as the foundation layer in a framework of geographic information necessary for us to fully utilize GIS. Infrastructure development at the village level and natural resource management at the regional level will be greatly enhanced with orthoimagery. It is the layer from which many types of geographic information is extracted as well as registered.

Alaska's U.S. Geological Topographic maps are forty years old and available statewide aerial photography is twenty years old. These two major sources of base geographic information do not represent the changing landscape and do not provide adequate support to the Native community needs. We feel new digital orthoimagery would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) is commended for fostering partnerships and determining the common needs among Native corporations, local, state, and federal agencies, and the private sector. The Alaska Digital Orthoimagery Initiative is a result of the AGDC's work. The Initiative will not only help the Native Community, it will help all of Alaska. We believe the Initiative is of great value and we provide it our full endorsement.

Sincerely,

TANANA CHIEFS CONFERENCE, Inc.

Perry R. Ahsogeak
Director
Community & Natural Resources

Calista Corporation

301 Calista Court, Suite A • Anchorage, AK 99518-3028 • (907) 279-5516 • Facsimile (907) 272-5060 • www.calistacorp.com

May 11, 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

Calista Corporation lends its endorsement to the Alaska Digital Orthoimagery Initiative. Two years ago we implemented Geographic Information System (GIS) technology in our Land and Natural Resources Department and rely on it to perform all land management functions. The availability of orthoimagery will greatly improve our options for base maps, geologic interpretation and the land selection process.

Currently we rely on low-resolution digital elevation models and digital raster graphic products scanned from out dated USGS topographic maps. We are excited about the prospect of having more current and more accurate registered aerial photographic images.

We commend the Alaska Geographic Data Committee (AGDC) for fostering partnerships and determining the common needs for digital products among Native Corporations, local, state and federal agencies, and the private sector. We support continued efforts and progress along these lines.

Sincerely,

Jeffrey Y. Foley
Senior Exploration Geologist

Chugach Alaska
CORPORATION

May 15, 2000

Mr. Gust Panos
Digital Orthoimagery Subcommittee Chairperson
AGDC
Room 230
University Drive
Anchorage, AK 99508

Dear Mr. Panos,

I am writing to express my support for the Alaska Radar Mapping and Digital Orthoimage Initiative. Chugach Alaska Corporation (CAC) is one of the twelve regional Native Corporations created by the Alaska Native Claims Settlement Act of 1971 (ANCSA). These twelve corporations were conveyed approximately 44 million acres of land in Alaska to help insure financial independence through development of those lands. Chugach Alaska Corporation believes this initiative will provide accurate, high-resolution data that will help aid us in planning and managing our lands in the most efficient manner.

At present, our mapping standards in Alaska are the USGS 1:63360 and 1:250000 quadrangles. These maps were compiled in the 1950's and completed in the 1970's. They do not meet National Map Accuracy Standards and any data gleaned from these maps will propagate the inherent inaccuracies contained within them. At this time all of the twelve Native Corporations formed under ANCSA are using Geographic Information Systems as a proprietary tool for managing our land base. We need to have accurate base maps to provide us with the necessary information to manage these lands. An accurate Digital Elevation Model (DEM) is the first step in preparing highly accurate maps statewide. We believe the Alaska Radar Mapping and Digital Orthoimage Initiative will provide the necessary information to achieve these goals in a prompt and economical manner.

Sincerely,

B. Uhart

Barney Uhart
President, CEO
Chugach Alaska Corporation

560 East 34th Avenue Suite 200 Anchorage, Alaska 99503-4196 Phone 907-563-8866 Fax 907-563-8402

Bering Straits Native Corporation

BOARD OF DIRECTORS RESOLUTION

RESOLUTION NUMBER 5-19-00-06

A RESOLUTION IN SUPPORT OF THE ALASKA DIGITAL ORTHOIMAGERY INITIATIVE

WHEREAS, the Alaska Geographic Data Committee (AGDC) is proposing the Alaska Digital Orthoimagery Initiative, the goal of which is to obtain funding to acquire digital orthoimagery of Alaska and have the imagery available via the Internet,

AND WHEREAS, the imagery will be on a five (5) meter resolution throughout the State of Alaska, with selected areas, including Native Villages and transportation corridors to a one (1) meter resolution,

AND WHEREAS, Bering Straits Native Corporation (BSNC), its member Village Corporations are the largest private land owners on the Seward Peninsula, owning over two million acres, . the imagery will provide BSNC and its Village Corporations the management tools necessary to make informed decisions through the analysis of digital orthoimagery to carry out planned resource exploration and development, assess existing land uses and plan for future uses,

AND WHEREAS, the imagery will provide government agencies the reference tools necessary to expedite the land transfer program within the State of Alaska, including validating Native allotment locations, develop plans for survey of ANCSA lands, identify optimal location of public access needs, identify easement conflicts and the rehabilitation of over used public access trails reserved through Native lands,

AND WHEREAS, current maps and imagery in Alaska are outdated and of limited usefulness. USGS topographic maps are nearly fifty years old and imagery throughout the state of Alaska was produced in the late 1970's and early 1980's,

AND WHEREAS, current technological advances within Geographic Information Systems (GIS) will make the digital orthoimagery the most important base layer of information that will be available to all users of GIS technology.

NOW THEREFORE BE IT RESOLVED, that the Bering Straits Native Corporation Board of Directors fully support the Digital Orthoimagery Initiative and request the Congress of the United States to fund this important initiative for the benefit of the State of Alaska and the Nation.

Passed at a meeting held: 5-19-00
Date

ATTEST: ____________________
Secretary

P.O. Box 1008 • Nome, Alaska 99762 • (907) 443-5252 • FAX (907) 443-2985

AHTNA

INCORPORATED

May 31, 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Panos,

Ahtna, Inc. would like to inform you of our endorsement of the Alaska Orthoimagery Initiative.

Ahtna has many areas in our various business lines as well as our land management area that would benefit greatly from this Initiative.

Ahtna has recently employed a Geographic Information System (GIS) to better manage our daily business activities. We were amazed to discover that the information we are building our system on is very outdated. The USGS topographic maps are roughly 40 years old, the aerial photography, if available, is twenty years old and the digital elevation data is inaccurate and coarse.

We believe that this new digital orthoimagery and digital elevation data would go a long ways toward providing the framework necessary for our geographic information. The base data provides the geographic information to build our other data layers on to register the data and to perform data analysis.

The Alaska Geographic Data Committee (AGDC) has done an excellent job of identifying the needs of the various government agencies and the private sector, including the Native corporations. The Alaska Digital Orthoimagery Initiative will greatly benefit Ahtna, Inc. and Alaska, and we provide it our full support.

Sincerely,

Victoria Precie

GIS/IS Manager

1760 Abbott Rd. • Anchorage, AK 99507
Phone: (907) 522-3638 • Fax: (907) 522-6228

Anchorage Office • 301 Arctic Slope Avenue • Suite 300 • Anchorage • Alaska • 99518-3035 • (907) 349-2369 • FAX (907) 349-5476 • 1-800-770-2772

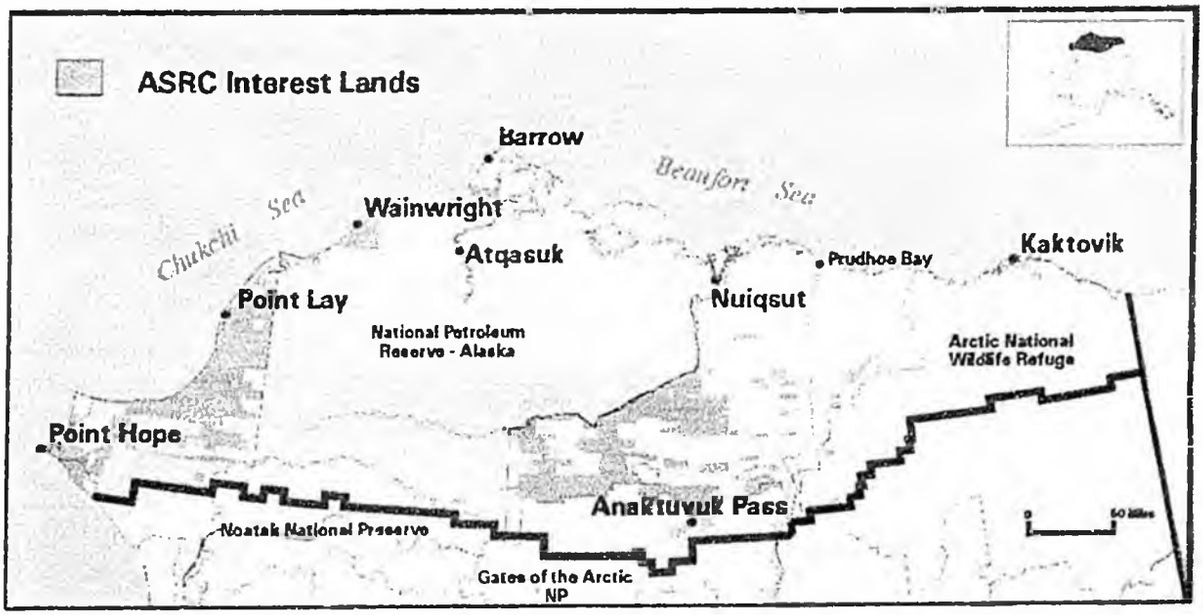
arctic slope
regional corp.

5/22/2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

As one of the largest private landholders in the State of Alaska, Arctic Slope Regional Corporation (ASRC) fully supports the Alaska Digital Orthoimagery Initiative. ASRC uses Geographic Information System (GIS) technology to manage our five million acre land base on the remote North Slope of Alaska. Area-wide Digital Orthoimagery would be a critical new base layer used to tie our resource database to a single high quality common base layer.



In our region, the U.S. Geological Survey maps that are currently available are in desperate need of updating. This new project would be a giant step towards gaining the current data we need in our area to properly manage our lands.

Corporate Headquarters • P.O. Box 129 • Barrow • Alaska • 99723-0129 • (907) 852-8533 or (907) 852-8633 • FAX (907) 852-5733

Our high priority area would be what we call the Western Arctic. (The area from Point Lay to Point Hope and over to the National Petroleum Reserve - Alaska) This area provides the highest potential for resource development and therefore employment for our local population.

Infrastructure development at the village level and natural resource management at the regional level will be greatly enhanced with the addition on this Digital Orthoimagery. We believe the Initiative will be of great benefit to ASRC and we provide it our full endorsement.

Sincerely,

Erik Kenning
Land Department
Arctic Slope Regional Corporation

Bristol Bay
Native Corporation *Enriching Our Native Way of Life*
800 Cordova Street, Suite 200 / Anchorage, Alaska 99501-6299 / (907) 278-3602 / fax (907) 276-3924

June 20, 2000

Gus Panos, Chair
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue #13
Anchorage, AK 99513-7599

Subject: **BBNC's Support for the AGDC's Alaska Digital Orthoimagery Initiative**

Dear Mr. Panos:

Thank you for the opportunity to partner with the broad spectrum of private and public sector representatives who recognize that Alaska is being left out of the national mapping system. Our current maps are based on Korean War era data, don't meet national standards, and are increasingly inadequate for resource management decision-making.

Alaska's statewide aerial photo base, which is also dated, contains many coverage-holidays that could be remedied by utilizing current technology. Bristol Bay Native Corporation (BBNC) commends the broad-based Alaska Geographic Data Committee for recognizing these problems and crafting the specifications for a solution.

Since 1992, BBNC has been constructing AutoCAD base maps for each of our 29 Bristol Bay villages. We identified 3 "Phases" in this effort: Phase I shows the topography around a particular village and the respective ANCSA village corporation's land selections and conveyances; Phase II incorporates the third-party inholdings (e.g., Native allotments, town sites, and ANCSA 14(c) reconveyances); and Phase III assimilates Phases I and II into a geographical information system (GIS).

All 29 of our villages have completed Phase II, and 8 have (or soon will have) completed Phase III. We believe that, if and when it becomes available, orthoimagery should make a valuable addition to our GIS's. Though ANCSA corporations were chartered to be for-profit corporations,

most of them have been trying to strike a balance between profitable natural-resource management and cultural resource preservation (including subsistence). New and improved orthoimagery data should help immensely with these dual efforts.

We appreciate the opportunity to weigh in on the matter. If you have any questions, please call me at 265-7831.

Sincerely,

Tom Hawkins

Tom Hawkins
Sr. Vice-President & COO

NANA Regional Corporation

P.O. BOX 49 / KOTZEBUE, ALASKA 99752 / (907) 442-3301 / FAX (907) 442-2866

INUPIAT ILITQUSIAT

With guidance and support from Elders, I teach my children these Inupiaq Values:

Respect for Elders

Knowledge of Language

Love for Children

Knowledge of Family Tree

Respect for Others

Responsibility to Tribe

Respect for Nature

Hunter Success

Domestic Skills

Family Roles

Sharing

Cooperation

Humility

Avoid Conflict

Hard Work

Humor

Spirituality

February 26, 2001

Mr. Gust Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, Suite #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The NANA Regional Corporation would like to lend its support and endorsement to the Alaska Digital Orthoimagery Initiative. Having current and reliable geographic information is very important for infrastructure development for the 11 villages in the NANA region and to carry out natural resource management throughout the Northwest Arctic region.

Having new digital orthoimagery would greatly enhance our Geographic Information System and provide critical updates to U.S. Geographic topographic maps that are over forty years old and statewide aerial photography, which is twenty years old. We need to have accurate base maps to effectively manage our lands.

Thank you again for this opportunity to submit this letter in support of the committee and the Alaska Digital Orthoimagery Initiative.

Sincerely,

Charlie A. Curtis
President and CEO

Alyeska pipeline SERVICE COMPANY

1835 SOUTH BRAGAW STREET ANCHORAGE, ALASKA 99512 TELEPHONE (907) 278-1611 FAX 265-6611

June 22, 2000

APSC Ltr No. 00-15932

Gust C. Panos
Chair, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Ave, #13
Anchorage, AK 99513-7599

Dear Mr. Panos,

The Alyeska Pipeline Service Company would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The availability of current, reliable geographic information would enhance our management of the TransAlaska Pipeline and our Oil Spill Contingency Plan. While we do not currently employ Geographic Information System (GIS) technology to gather, display and analyze information, we recognize its importance as a planning, analysis and communication tool. We consider accurate orthoimagery and digital elevation data to be the foundation layers necessary for us to fully utilize GIS.

Alaska's U.S.Geological topographic maps are over forty years old with no plan to update or replace them. Further, these maps are not orthoreferenced making them difficult to incorporate with today's precision data gathered using GPS. The existence of accurate, common base layers that data can be extracted from and registered to is critical to the success of any GIS system. We believe the updated data provided by the Digital Orthoimagery Initiative will significantly improve the reliability of geographic information essential to the management of both public and private assets along the TransAlaska Pipeline.

The Alaska Geographic Data Committee (AGDC) is commended for its outreach efforts in fostering partnerships and determining common needs among the private sector, Native Corporations, and local, state and federal agencies. We believe the Initiative is of great value to the State of Alaska and its citizens and we provide it our full endorsement.

Respectfully,

Robert I. Shoaf
Vice President
JPO Relations

PHILLIPS Alaska, Inc.
A Subsidiary of PHILLIPS PETROLEUM COMPANY

P.O. BOX 100360
ANCHORAGE, ALASKA 99510-0360

June 8, 2000

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
Bureau of Land Management
U. S. Department of the Interior
222 West Seventh Avenue, #13
Anchorage, AK 99513-7599

Subject: Alaska Digital Orthoimagery Initiative

Dear Mr. Panos:

On behalf of Phillips Alaska, Inc., I am please to add my endorsement to the Alaska Digital Orthoimagery Initiative. We believe the proposed product developed by the Alaska Geographic Data Committee (AGDC) would be of significant benefit to the residents and industry within Alaska.

We are actively involved in the exploration and development of oil and gas resources within the Alaska North Slope and Cook Inlet regions. To achieve our objective in a cost effective and environmentally sensitive manner, we depend upon access to accurate and up-to-date topographic, hydrological and land usage maps. Because of the size and remoteness of Alaska, it is currently not possible to refer to publicly available maps covering the entire state in the detail we would prefer. The proposed project would certainly assist in our business of responsible, resource development upon which the State and residents depend.

Phillips Alaska, Inc. fully supports the efforts of AGDC to secure the federal funding necessary for the Alaska Digital Orthoimagery Initiative. We look forward to the approval of this project.

Sincerely,

Michael A. Richter
Vice President
Exploration and Land

BP EXPLORATION

BP Exploration (Alaska) Inc.
900 East Benson Boulevard
P.O. Box 196612
Anchorage, Alaska 99519-6612
(907) 561-5111

May 22, 2000

Gust Panos, Chairman
Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
4230 University Drive, Suite 230
Anchorage, AK 99508

Dear Mr. Panos:

I am pleased to add my endorsement to the Alaska Digital Orthoimagery Initiative. As you know, BPXA is engaged in the business of responsible exploration and development of Alaska's North Slope oil and gas resources. In this context, we are constantly in need of the most accurate mapping data available to provide the basis for ongoing exploration and development decisions (e.g. drillpads, ice roads, pipelines, etc.). Existing orthoimagery on the North Slope is generally of poor quality, out-of-date, and does not meet national map accuracy standards. Our understanding is that the Alaska Digital Orthoimagery Initiative would help resolve this situation by providing new statewide high-resolution digital satellite imagery in full compliance with the national map accuracy standards.

I applaud and strongly support efforts by the Alaska Geographic Data Committee to secure the federal funding necessary for the Alaska Digital Orthoimagery Initiative to complete a new comprehensive statewide digital orthoimagery data base that can be used and relied upon by both public and private interests.

Sincerely yours,

F. X. O'K

F.X. O'Keefe
Business Unit Leader,
Alaska Exploration

URS

May 24, 2000

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Panos,

URS Corporation's Alaska office would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The use of current and reliable geographic information has become an important part of our business operations. We consider orthoimagery to be a foundation layer in the framework of geographic information necessary for the utilization of geographic information system analyses.

Alaska's United States Geological Topographic maps are forty years old and statewide aerial photography is variable in age. These two major sources of base geographic information do not adequately represent the changing landscape in Alaska. New digital orthoimagery would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Committee's Initiative will help the private sector, Native communities, and local, state, and federal agencies. We believe the Initiative is of great value and provide it our full endorsement.

Sincerely,

Joyce Bowers

Joyce Bowers
Biologist

URS Corporation
3501 Denali Street, Suite 101
Anchorage, AK 99503-4039
Tel: 907.561.1020
Fax: 907.563.3198

AEROMAP U.S.

INTERNATIONAL PHOTOGRAMMETRIC CONSULTANTS

May 22, 2000

Mr. Gust Panos
Digital Orthoimagery Subcommittee Chairperson
AGDC
Room 230
University Drive
Anchorage, Alaska 99508

Dear Mr. Panos:

We at AeroMap would like to express our genuine support for the Alaska Digital Orthoimage Initiative. AeroMap U.S. is a private mapping firm in Alaska with a 40-year history of service to Federal, State, and Municipal agencies as well as private surveyors, engineers and planners working to build new infrastructure in Alaska. In addition, our clients include large and small mining companies, oil and gas developers, and land and timber managers all across the state.

AeroMap uses USGS quad maps for planning to make new maps of higher resolution and accuracy. We have relied upon the 1:63,360 15-minute quadrangle series maps since we began business 40 years ago. Though they have served us well, these maps are seriously outdated. In some locations, it becomes very challenging to locate oneself on a map due to changes that have occurred, yet we must plan new photography missions and new mapping based upon this "best available" geographic information.

This Initiative represents the best plan for updating and upgrading resolution and reliability of the basic planning maps for the entire state. While other states have enjoyed the accuracy and reliability of larger scale maps for many years, Alaska has had to struggle with small-scale maps that do not even meet the National Map Accuracy Standards. It is time that we have decent maps to use for the reasonable development of resources that are relied upon by the entire nation.

Very truly yours

AeroMap U.S.

Robert M. Schweitzer, PLS/C
Vice President

2014 MERRILL FIELD DRIVE • ANCHORAGE, ALASKA • 99501-4116 • (907) 272-4495 • FAX (907) 274-3265

Racal Pelagos, Inc.
911 West 8th Avenue, Suite 208
Anchorage, AK 99501
Telephone: (907) 258-1799
Fax: (907) 258-3422

Racal Pelagos, Inc.
5434 Ruffin Road
San Diego, CA 92123
Telephone: (858) 292-8922
Fax: (858) 292-5308

June 2, 2000

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W 7th Avenue, Box 13
Anchorage, Alaska 99513

Dear Gust:

I am writing to endorse the Alaska Digital Orthoimagery Initiative as drafted by the Alaska Geographic Data Committee. This initiative can provide an effective means for improving the quality of statewide land based mapping through high-resolution digital orthoimagery and enhanced digital elevation data. As a past member of the Alaska Geographic Data Committee, I appreciate the needs for accurate orthoimagery and digital elevation data to meet public and private applications. Now, as a member of the private sector, I support the efficacy of having access to publicly accessible up-to-date digital mapping information for project planning and management in Alaska. I also appreciate that the magnitude of this project will require close cooperation and contracting with the private sector.

Racal Pelagos, Inc. is an internationally affiliated surveying and mapping firm with long-term contracts in Alaska. These contracts require completing projects that merge with existing maps. Often, because of the age of existing data, complexities in geo-referencing, and datum shifts, joining new surveys with old data results in additional work. The Alaska Digital Orthoimagery Initiative provides an approach to resolve the land-side challenges and increase efficiency.

Thank you for recognizing Racal Pelagos, Inc. endorsement of the Alaska Digital Orthoimagery Initiative. If I can answer any questions, please contact me at 907-259-1799.

Sincerely,

Robert J. Pawlowski
Alaska Manager Business Development

RACAL

EVERGREEN HELICOPTERS OF ALASKA, INC.
1935 Merrill Field Drive • Anchorage, AK 99501-4119 USA
Phone (907) 276-2454 • Fax (907) 279-6816

June 23, 2000

Mr. Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, AK 99513-7599

RE: Alaska Digital Orthoimagery Initiative

Dear Mr. Panos:

Evergreen Helicopters of Alaska, Inc. (EHA) appreciates the opportunity to provide this letter of support for the efforts of the Alaska Geographic Data Committee, and particularly the overall concept and technical standards that are essential parts of its Alaska Digital Orthoimagery Initiative.

EHA has been a supplier of fixed and rotary wing platform solutions to the geophysical, survey and mapping industries in Alaska since 1963. During our 37 years in this business, we have seen steady, but incremental improvements both in technology and in data collected/mapping produced. However, as a consumer of mapping products in Alaska., we see a definite need for significantly more mapping products showing more and better imagery and elevation data.

Based on the imagery and elevation objectives of the Alaska Digital Orthoimagery Initiative, there will be significant improvements in maps of Alaska. Such data and products will improve the efficiency and safety of conducting transportation, trade and commerce in the state. This is especially important to EHA's many bush and Alaska Native customers.

As an active part of one the industries in Alaska supporting mapping data acquisition, interpretation, analysis and production, EHA stands ready, willing and able to perform the work that needs to be done to achieve the objectives of the Initiative.

Again, thank you for this opportunity to submit tjhis letter in support of the Committee and the Alaska Digital Orthoimagery Initiative.

Sincerely,

Greg Thies
Director of Marketing
EHA

GEONORTH
INTERNET · GIS · DATABASE

2121 Abbott Road
Suite 202
Anchorage, Alaska 99507

Tel: 907 677 1500
Fax: 907 677 1502
www.geonorth.com

Value through integration and innovation

March 1, 2001

Gust C. Panos
Chairman, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, Box 13
Anchorage, AK 99513

Dear Mr. Panos:

GeoNorth is happy to lend its endorsement to the Alaska Digital Orthoimagery Initiative. As a longtime Alaska GIS firm, GeoNorth understands the importance of accurate and timely Geographic data - including digital orthoimagery.

Alaska's U.S. Geological Survey topographic maps are over forty years old and are based on 1950's technology. The advancements in orthoimagery technology over the last few years now make it feasible to provide up to date, high quality, digital orthoimagery and elevation data to all statewide users of GIS data.

GeoNorth is an avid user of Alaska GIS data as many of our projects involve incorporating this data into our applications and commercial products. We are very pleased that the Digital Orthoimagery Subcommittee recognizes this as a priority. The benefit of this Initiative will be shared by all the citizens of Alaska including those individuals and agencies interested in economic development, natural resource management, and environmental and habitat research.

AGDC is to be commended for fostering partnerships among Alaska GIS stakeholders including Native Corporations, State and Federal Agencies, Local and Municipal government, and the private sector.

Again, I am pleased offer our endorsement for this Initiative and we would be happy to assist the subcommittee in any way we can.

Sincerely,

GeoNorth, LLC.

Brian Minster
President

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

410 Willoughby Ave., Ste 105
Juneau, AK 99801-1795
PHONE: (907) 465-5065
FAX: (907) 465-5070
http://www.state.ak.us/dec/

February 7, 2001

The Honorable Randy Phillips
Alaska State Senate
State Capitol. Room 103
Juneau. AK 99801

Dear Senator Phillips:

I was surprised by the suggestion in your January 22, 2001 letter that progress on the federal funding proposal for the Alaska Digital Orthoimagery Initiative is "stagnant due to lack of written support from the Department." The Department of Environmental Conservation has expressed its support of the Alaska Digital Orthoimagery Initiative as a member of the Alaska Geographic Data Committee that sponsored the Initiative. DEC is also a member of the Alaska Land Managers Forum which wrote a letter of support last summer signed by Lieutenant Governor Fran Ulmer on behalf of all state members (attached).

Until your letter, no one related to the project had contacted me or requested an additional, individual letter of support beyond that which we have already provided. I have taken your letter as such a request and will send a letter restating our support.

Sincerely,

Michele Brown
Commissioner

cc: Gust C. Panos

Healthy People, Healthy Environment

Tony Knowles, Governor

Alaska Department of Community and Economic Development

Office of the Commissioner
550 W. 7th Avenue, Suite 1770 • Anchorage, Alaska 99501-3510
Telephone: (907) 269-8100 • Fax: (907) 269-8127
Website: www.dced.state.ak.us

February 9, 2001

Mr. Gust Panos, Chairperson
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West Seventh Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Panos:

The Department of Community and Economic Development (DCED) would like to express its support for the Alaska Digital Orthoimagery Initiative. DCED believes that there are many private and public sector benefits to be realized with the creation of the new imagery.

The DCED's overall mission is to promote healthy economies and strong communities. Reliable and current base mapping is an important element to economic and resource development. The imagery would also provide benefits for community development and public safety.

The Alaska Geographic Data Committee (AGDC) has done a great job in fostering partnerships among State and Federal agencies that compile and manage geographic information for Alaska. As every year goes by we believe that the AGDC and its member agencies and groups continue to improve the coordination and wise use of resources to assemble geographic information that can be shared amongst private and public sector users.

We agree that the Alaska Digital Orthoimagery is an important step in improving the base of Alaska's mapping information and as such support federal funding to make this initiative possible.

Sincerely

Deborah B. Sedwick

Deborah B. Sedwick
Commissioner

STATE OF ALASKA

Department of Labor and Workforce Development

OFFICE OF THE COMMISSIONER

Tony Knowles, Governor

P.O. Box 21149
Juneau, AK 99802-1149
Phone: (907) 465-2700
Fax: (907) 465-2784

January 29, 2001

Gust C. Panos, Chairperson
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. Seventh Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Panos:

The U.S. Geological Survey has identified the Alaska Digital Orthoimagery Initiative as a high priority.

The Alaska Department of Labor and Workforce Development is the cooperative state representative with the U.S. Census Bureau for census geography. As such, we agree that this is a vital first step to improving the accuracy of Alaska maps and support federal funding to make this initiative possible.

Sincerely,

Ed Flanagan, Commissioner

cc: Senator Randy Phillips
Christopher Miller, Chief, Research and Analysis
Paul Brooks, Aeromap

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

☑ 400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FAX: (907) 465-3886

☐ 550 WEST 7TH AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
FAX: (907) 269-8918

February 9, 2001

Randy Phillips
Alaska State Legislature
State Capitol (MS 3100)
Juneau, Alaska 99801-1182

Dear Senator Phillips:

Thank you for the letter on the Alaska Geographic Data Committee Orthoimagery Initiative. I appreciate your concern for federal funding of digital elevation modeling and orthoimagery efforts in Alaska. We would all like to have better topographic data and orthoimagery for Alaska.

It is my understanding that this year the U. S. Geological Survey (USGS) has included an approximately $6 MM Initiative in their federal FFY02 budget submittal to Congress for the Alaska Orthoimagery Initiative. I also understand other Interior Department agencies may supplement this request. As part of the normal federal budget process, this Initiative is now progressing through the various steps that are required of all federal budgets. DNR applauds the federal recognition of the shortcomings of topographic elevation data and orthoimagery in Alaska and we certainly support the funding effort they are making to address the issue.

This initiative is becoming a part of the President's budget and funding has already been officially requested. Endorsements will probably not affect the outcome of this initiative in the federal Office of Management and Budget one way or the other and if the Initiative reaches the Senate Appropriations Committee, I believe the chances are good that it will receive favorable consideration.

DNR supports the work that the Alaska Geologic Data Committee is doing to bring this matter to the attention of the USGS National Mapping Division at the national level.

Sincerely,

Pat Pourchot
Commissioner

RECEIVED
FEB 14
SSD / LAND RECORDS
INFORMATION SECTION

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF FISH AND GAME

HABITAT AND RESTORATION DIVISION

P.O. BOX 25526
JUNEAU ALASKA 99802-5526
PHONE: (907) 465-4105/4125
FAX: (907) 465-4759

February 23, 2001

Mr. Gus Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
Bureau of Land Management–AK924
222 West 7th. Ave., Box 13
Anchorage, AK 99513

Dear Mr. Panos:

Re: Support for Alaska Digital Orthoimagery Initiative

I wish to commend you for your effort on the Alaska Digital Orthoimagery Initiative. We believe this Alaska Geographic Data Committee (AGDC) undertaking will contribute immensely to a wide spectrum of Alaskan agencies seeking to use both geographic and cartographic information.

Our need for orthoimagery maps is statewide, and continues to grow. We view the initiative as a step in a very positive direction. The Alaska Department of Fish and Game (ADF&G) has benefited enormously from the overlays and analyses of electronic maps, and can derive many potential benefits from the orthoimagery map layers. Within the Division of Habitat and Restoration we have a continual need to monitor and protect our fish-bearing streams, assess and plan for the restoration of habitat, and mitigate other impacts to fish habitat. Any future production of the orthoimagery maps should greatly enhance the planning and decision-making ability of our management staff.

Please accept this letter as a strong affirmation of support for your mapping initiative.

Sincerely,

Ken Taylor
Director

cc: Rob Bosworth, ADF&G/CO
Frank Wallis, ADF&G/H&R
Tim Haverland, ADF&G/CF

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

3132 CHANNEL DRIVE
JUNEAU, ALASKA 99801-7898

TEXT: (907) 465-3652
FAX: (907) 586-8365
PHONE: (907) 465-3900

March 12, 2001

Mr. Panos, Chairperson
Digital Orthoimagery
Alaska Geographic Data Committee
Bureau of Land Management – AK924
222 West 7th Ave., Box 13
Anchorage, AK 99513

Dear Mr. Panos:

Please accept this letter as the Department of Transportation and Public Facilities endorsement and full support for the Alaska Digital Orthoimagery Initiative. The Department feels that a project of this type and scope is long overdue, and the obvious benefits to us as well as other federal, state, local and private agencies are apparent.

We have recognized Alaska's lack of base data and continually find ourselves frustrated by the data that is available due to its age or form. We have put a considerable amount of effort and funding into various projects throughout the years in an effort to alleviate the state's lack of data. These efforts, although useful, either fell short or stalled due to funding and support or they were a piece mill patch to a statewide shortcoming. Your efforts and those of the Alaska Geographic Data Committee (AGDC), should be commended for bringing together the different agencies around the state, identifying the need, and developing and proposing a solution for data acquisition. Recently we have committed to a multiyear collection and maintenance effort of the transportation infrastructure and features using Differential Global Positioning Systems (DGPS). The Digital Orthoimagery Initiative would greatly enhance and compliment our DGPS effort and assist us in our data processing. The product of this Initiative would benefit numerous divisions and sections throughout the department and assist staff in our efforts to meet our goals of improving the quality of life for Alaskans by cost effectively providing, operating and maintaining safe, environmentally sound and reliable transportation systems and public facilities.

We feel that the new Digital Orthoimagery Initiative is a necessary and crucial step in the direction of alleviating the shortage or lack of current and accurate Geographic Information for Alaska. It will also serve as an effort in providing Alaska the kind of digital coverage and standards of base data enjoyed by the rest of the nation. It is an important and effective step in improving the quality of statewide data and again we offer you our strong affirmation of support for this Initiative.

Sincerely,

Joseph L. Perkins, P.E.
Commissioner

cc: Senator Randy Phillips, Alaska State Legislature

25A – T34LH

January 29, 2001

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, #13
Anchorage, Alaska 99513-7599

RE: Endorsement of Alaska Digital Orthoimagery Initiative

Alaska Cooperative Extension
COLLEGE OF RURAL ALASKA • UNIVERSITY OF ALASKA FAIRBANKS

Palmer Research Center
533 E. Fireweed Avenue
Palmer, Alaska 99645
(907) 746-9459 • FAX: (907) 746-2677

Dear Mr. Panos:

The 4-H Fisheries and Natural Resource Program associated with the University of Alaska Fairbanks Cooperative Extension Service is pleased to endorse the Alaska Digital Orthoimagery Initiative. Our program works with over 60 rural communities in Alaska teaching science and math literacy to K-12 students using in-classroom salmon incubators. Students become aware of a wide variety of natural resource issues including watershed management, fisheries biology, aquaculture and water quality during the yearlong project. A familiarization and use of maps is incorporated into the natural resource project. Most of the schools use existing mapping data currently available in Alaska which tends to be very dated and often cost-prohibited and variable in scale.

We would be eager to employ the new statewide high-resolution digital satellite imagery that ADOI promises to our partner schools. We endorse your efforts to secure the federal funding necessary to make this happen.

Please keep us informed of your efforts and success so that we can forward this important new way of viewing and teaching about Alaskan landscapes to rural Alaskan teachers.

Sincerely,

Peter J. Stortz

PETER J. STORTZ
Extension 4-H Fisheries, Natural Resource &
Youth Development Specialist

National Digital Orthophoto Program
Bureau of Land Management
Farm Services Agency
Federal Emergency Management Agency
Natural Resources Conservation Service
National States Geographic Information Council
U.S. Forest Service
U.S. Geological Survey

March 16, 2000

Mr. Gust C. Panos
Chairperson, Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
4230 University Drive
Room 230
Anchorage, Alaska 99508

Dear Mr. Panos:

On behalf of the National Digital Orthophoto Program (NDOP) Steering Committee, I'm writing to let you know the Steering Committee endorses the Alaska Digital Orthoimagery Initiative. The initiative would provide a long-needed base map for statewide use by government agencies, native villages and the general public. This initiative complements the Steering Committee's work of fostering partnerships for acquiring digital orthoimagery, expanding the use of geodata, and providing common standards and technical direction.

The use of current and reliable geographic information has become a business standard in local, state, and federal government agencies as well as in the private sector. Orthoimagery is the foundation layer in a framework of geographic information which is necessary to manage and develop resources responsibly. It is the layer from which many types of geographic information are extracted as well as geo-referenced to a location on the ground.

An excellent overview of the Alaska Initiative was presented to the NDOP Committee on January 26, 2000 at our meeting in Austin, Texas. It became very apparent from the presentation that Alaska would greatly benefit from statewide digital orthoimagery coverage. Alaska's US Geological topographic maps are forty years old , and statewide aerial photography is twenty years old. These two major sources of base geographic information do not represent the changing landscape, or provide adequate support to Alaska's major programs. We are in agreement new digital orthoimagery would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) is commended for promoting partnerships, and determining the common needs among local, state, and federal agencies, Native corporations, and the private sector. The Alaska Digital Orthoimagery Initiative is a result of the AGDC's cooperative work. The spirit and purpose in which the Alaska Digital Orthoimagery Initiative was assembled certainly parallels the spirit of the NDOP Steering Committee.

The NDOP Steering Committee strongly believes the Alaska Digital Orthoimagery Initiative is warranted and we provide it our full endorsement. The committee wishes AGDC success in moving forward with this initiative, and extends an invitation to provide assistance if needed.

George Rohaley

Best Regards,
George Rohaley
Presiding NDOP Chairperson
USDA, Natural Resources Conservation Service

CC: Ed Harne, Bureau of Land Management
Glenn Bethel, Farm Services Agency
John Gambel, Federal Emergency Management Agency
Ted Koch, National States Geographic Information Council
Bill Belton, U.S. Forest Service
Dick Kleckner, U.S. Geological Survey

DEPARTMENT OF THE ARMY
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS
WATERWAYS EXPERIMENT STATION, 3909 HALLS FERRY ROAD
VICKSBURG, MISSISSIPPI 39180-6199

REPLY TO
ATTENTION OF

CEERD-RV-Z 12 June 2000

COASTAL AND HYDRAULICS LABORATORY
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

COLD REGIONS RESEARCH AND ENGINEERING LABORATORY
72 Lyme Road
Hanover, NH 03755-1290

CONSTRUCTION ENGINEERING RESEARCH LABORATORY
P.O. Box 9005
Champaign, IL 61826-9005

ENVIRONMENTAL LABORATORY
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

GEOTECHNICAL LABORATORY
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

INFORMATION TECHNOLOGY LABORATORY
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

STRUCTURES LABORATORY
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

TOPOGRAPHIC ENGINEERING CENTER
7701 Telegraph Road
Alexandria, VA 22315-3864

Mr. Gust Panos
Chairman, Digital Orthoimagery Subcommittee
Alaska Geographical Data Committee
Bureau of Land Management
222 W. 7th Avenue, #13
Anchorage, AK 99513

Subject: Alaska Digital Orthoimagery Initiative

Dear Mr. Panos:

We fully support the initiative to acquire high-resolution digital imagery of the State of Alaska as developed by the Alaska Geographical Data Committee (AGDC), on which the U.S. Army Corps of Engineers, Alaska District is a member. The goal of the initiative is to acquire digital imagery of the entire state at a minimum of 5-m resolution, and, for specific areas, 1-m resolution. This imagery will be made available to interested parties through the USGS and the University of Alaska Supercomputing Center.

The Cold Regions Research and Engineering Laboratory, one of the seven laboratories constituting the Corps of Engineers Engineering Research and Development Center (ERDC), is an active participant in many projects in Alaska through our offices in Fairbanks, Anchorage, as well as through our main laboratory in Hanover, NH. The availability of current orthoimagery data would greatly enhance our ability to perform our mission in Alaska. We anticipate significant benefits to our research and engineering programs, whether in the environmental arena, or on properties of snow, ice, and frozen ground, and whether for Civil Works or defense related projects from the type of data that is envisioned. The acquisition of high resolution digital imagery of Alaska will also be extremely useful to the projects of the Corps of Engineers Remote Sensing/GIS Center located at our main laboratory (POC: Mr. Andrew Bruzewicz). Finally, it will enhance our capability of supporting the Alaska District, Corps of Engineers, in their mission.

Again, let me express our full support for this initiative as we look forward to utilizing this valuable scientific and planning resource when it becomes available in the near future.

Sincerely,

Barbara J. Sotirin, PhD
Director
Cold Regions Research &
Engineering Laboratory

Cc: Jerry Zuspan, CEPOA-EN-ES-SY

DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

JUN 9 2000

Lieutenant General Thomas R. Case
Commander, Eleventh Air Force
9480 Pease Ave Ste 101
Elmendorf AFB AK 99506-2100

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W 7th Avenue
Anchorage AK 99513-7599

Dear Mr. Panos

On behalf of the Eleventh Air Force, I fully endorse the Alaska Digital Orthoimagery initiative. This initiative would provide a long-needed geographical map for statewide use by government agencies, native villages, and the general public. Furthermore, this initiative would foster interagency communication by providing a single fixed reference map for integrating independent programs.

Current and reliable geographic information is beneficial for the development of military exercises. Knowledge of terrain allows military planners to develop more effective and realistic training exercises. It also assists us in infrastructure development and enhances our management of natural resources. Furthermore, Alaskans will significantly benefit from statewide digital orthoimagery coverage. This initiative will be useful in planning for community expansion and recreational enhancement.

I appreciate the effort the Alaska Geographic Data Committee (AGDC) has directed toward promoting partnerships between governmental agencies, native tribes and corporations, and the private sector. The Alaska Digital Orthoimagery initiative is a result of the AGDC's cooperative effort. We support continued efforts and progress in this initiative.

Sincerely

Thomas R. Case

THOMAS R. CASE
Lieutenant General, USAF
Commander

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 23, 2000

OFFICE OF
WATER

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The EPA American Indian Environmental Office has a responsibility to develop a baseline characterization of environmental conditions for Alaska Tribes and native villages. Presently 134 of the 227 federally recognized Tribes and Villages in Alaska are receiving General Assistance Program (GAP) grants from our office, administrated through the EPA Region 10 Anchorage Operations Office in your building. We anticipate that even more Alaska Tribes will receive grants in FY 2001. GAP grants provide funding to help Tribes develop the capacity to manage and implement environmental programs.

As Tribes in Alaska develop their environmental capacity, baseline information on the present quality of their environment becomes extremely important for management and prioritization decisions. We believe your acquisition of Digital Orthophoto coverages for Alaska can be a valuable contribution to our tribal efforts. We would like to establish a formal link with the Alaska Geographic Data Committee, to explore development of a tribal component to your activities which could target and provide services to Tribes as they become active in environmental and resource management activities. You will be hearing soon from our Baseline Assessment Coordinator, Dr. Ed Liu, about our interest in the Alaska Geographic Data Committee.

Sincerely,

Ben Smith, Acting Deputy Director
American Indian Environmental Office

U.S. Department
of Transportation
Federal Aviation
Administration

Office of the Regional Administrator
Alaskan Region

222 West 7th Avenue, #14
Anchorage, AK 99513-7587
Phone: (907) 271-5645
Fax: (907) 271-5113

May 30, 2000

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The Federal Aviation Administration (FAA), Alaskan Region, is pleased to endorse the concept of the Alaska Digital Orthoimagery Initiative. The FAA has many areas of responsibility across Alaska and the use of current and reliable geographic information has become a necessity as we move to capitalize our facilities and our daily business practices. Orthoimagery provides a foundation for establishment of an up-to-date system for tracking transportation facilities including airports and airways.

Currently, the U.S. Geological Survey (USGS) is not planning to update their topological maps or aerial photos for Alaska. Existing maps and photos are between twenty to forty years old, and do not provide the level of information necessary for planning and supporting FAA programs and projects within Alaska. Orthoimagery, which can be used to generate accurate topological maps, would alleviate these problems. Unfortunately, FAA has not received and does not anticipate receiving funding that could be used in support of this project.

The Alaska Geographic Data Committee is commended for the effort it has put into identifying the effected community and working with them to develop a viable solution that will aid Federal, State, local, Native, and private sector entities. We expect great benefits for FAA, and the Alaskan community, from this effort, and we provide our full endorsement.

Sincerely,

Patrick N. Poe
Regional Administrator

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Regional Administrator
Alaskan Region

222 West 7th Avenue, #14
Anchorage, AK 99513-7587
Phone: (907) 271-5645
Fax: (907) 271-5113

January 3, 2001

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
Bureau of Land Management
222 W. 7th Ave., #13
Anchorage, AK 99513

Dear Mr. Panos:

The *CAPSTONE* program wholeheartedly endorses the Alaska Digital Orthoimagery Initiative. Aviation is critical to transportation in Alaska where airway facilities are scattered rather randomly across the expanse of Alaska in support of the aviation community. Unfortunately, the highway system in Alaska is not similarly distributed. With only about 38,400 square miles covered by connecting highways, about 586,000 square miles has no interconnecting road system at all. In actuality, only 6% - 7% of the state is on connecting roads (and far less in the same area on the rail system). The remainder, 93% - 94%, is reached by air. The data generated by your project will be of significant use for aviation interests throughout the Alaska. Ultimately, applying data from this survey will translate to the basic ingredient urgently needed by Alaska's aviation community: increased flight safety and efficiency for all users.

CAPSTONE is tasked to explore, test and prove emerging technology that is designed to lead the aviation industry and air traffic control into the 21st century. This program relies extensively on existing survey data to test new technology - using survey data gathered 40 years ago results in significant penalties in the application of this new technology in order to insure program application safety. With updated, accurate and certified survey information, instrument approach procedures, enroute 'moving map' technology, and minimum altitudes throughout the state will all be able to be refined to more accurate standards. Accurate terrain data means more accurate obstacle clearance when weather conditions require instrument flight in the clouds. This coupled with the technologies the *CAPSTONE* is currently exploring will result in the key goal: increased safety for the aviation community in Alaska.

Your mapping initiative has *CAPSTONE* support. The benefits to aviation in Alaska will be both immediate and far-reaching. We look forward to the day when we have accurate survey data to marry with the latest in aviation technology.

Sincerely,

John R. Hallinan
Capstone Program Manager, AAL-1S

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Coastal Services Center
2234 South Hobson Avenue
Charleston, South Carolina 29405-2413

December 21, 2000

Mr. Gust C. Panos
Chairperson, Digital Othoimagery Subcommittee
Alaska Geographic Data Committee
4230 University Drive, Room 230
Anchorage, AK 99508

Dear Mr. Panos:

On behalf of the National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center (Center), I would like to express our support for the Alaska Digital Orthoimagery Initiative. This Initiative will allow for the production of high-resolution digital orthoimagery and digital elevation data representative of the current landscape throughout the entire state of Alaska. This type of geographic information is imperative for addressing land use, natural hazards, and resource management issues, which are also areas of interest to the Coastal Services Center.

The Coastal Services Center's mission is to foster and sustain the environmental and economic well-being of the nation's coasts by linking people, information, and technology. We are committed to bringing dependable information, technology, and services to the coastal resource management community. The Center is presently a partner in over 100 ongoing projects around the country, including Alaska, focused on resolving site specific coastal issues. Reliable digital geographic and spatial information are at the foundation of the services and tools we offer, and the Center recognizes the demand for such data in Alaska.

Please accept the Center's full endorsement of the Alaska Digital Orthoimagery Initiative. We are enthusiastic about the prospect of new geospatial data being generated for Alaska and commend the Alaska Geographic Data Committee for it efforts in putting forth this Initiative.

Sincerely,

Anne H. Miglarese
Branch Chief
Coastal Information Services

UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

APR 0 3 2000

Mr. Gust C. Panos
Chairperson for the Digital Orthoimagery Subcommittee
Alaska Geographic Data Committee
4230 University Drive, Room 230
Anchorage, AK 99508

Dear Mr. Panos:

The U.S. Census Bureau applauds the Alaska Digital Orthoimagery Initiative. As you know, the Topologically Integrated Geographic Encoding and Referencing (TIGER) System, is the U.S. Census Bureau's geospatial data base used to support the collection and tabulation of data from censuses and statistical surveys. Roads, boundaries, and other information in the TIGER data base are updated using tribal, state, and local geospatial information provided to the U.S. Census Bureau by those who are willing to work in partnership.

Alaska provides unique challenges for statistical activities due to its widely dispersed population, limited transportation network, and its large land area. When the U.S. Census Bureau built the TIGER data base during the early 1980s, there was no single, highly accurate source available to create the Alaska feature network. Although Alaska state and local geospatial information was used to update the TIGER data base in preparation for Census 2000, it was a labor intensive process. The benefits of having orthoimagery for Alaska certainly will help alleviate this problem as all geospatial information for Alaska migrates to the same accurate coordinates based on the digital orthoimagery positioning. Having multiple partners on the same coordinate base paves the way for simple digital file exchange for participation in U.S. Census Bureau programs, such as those for voting district and census tract delineation. Alaska tribal, state, and local agencies will be able to contribute to the update and maintenance of the TIGER data base in a timely fashion without duplication of effort.

The U.S. Census Bureau endorses the Alaska Digital Orthoimagery Initiative and commends the Alaska Geographic Data Committee. The outreach efforts associated with this initiative and coordination with the Alaska Native corporations, boroughs, state, and federal agencies will help meet a broad spectrum of needs.

Sincerely,

ROBERT W. MARX
Chief, Geography Division

United States Department of the Interior

NATIONAL PARK SERVICE
2525 Gambell Street, Room 107
Anchorage, Alaska 99503-2892

IN REPLY REFER TO:

MAY 2 4 2000

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The National Park Service, Alaska Regional Office (NPS) would like to endorse the Alaska Digital Orthoimagery Initiative. The NPS is responsible for 16 units in Alaska which total over 54.5 million acres. The staff that manages these Parks, Preserves, Monuments, and Wild and Scenic Rivers along with the visiting public would benefit greatly from the Initiative.

We have an established program that brings Geographic Information System (GIS) technology to NPS managers and technical staff. The availability and use of current and reliable geographic information is an absolute necessity for NPS in order to carry out its mission. We consider orthoimagery and digital elevation data as one of the foundation layers in a framework of geographic information necessary for us to fully utilize GIS. This core layer of data would be used to extract many types of geographic information and register new data.

Alaska's US Geological Topographic maps are forty years old, available aerial photography is twenty years old, and current digital elevation data is coarse and inaccurate. These major sources of base geographic information do not represent the changing landscape or the current conditions. There are currently no plans in the future to update and replace US Geological Survey maps, obtain new imagery or generate new digital elevation data for Alaska. We believe new digital orthoimagery and digital elevation data provided by the Digital Orthoimagery Initiative would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) has been a key player in fostering partnerships and determining the common needs among the private sector, Native corporations, local, State, and Federal agencies. The AGDC is commended for its efforts. We believe the Initiative will be of great benefit to NPS and Alaska and we provide it our full endorsement.

Sincerely,

Robert D. Barbee
Regional Director

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

Alaska Region
P.O. Box 25520
Juneau, Alaska 99802-5520

May 30, 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The Bureau of Indian Affairs, Alaska Regional Office (BIA) would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The BIA has several areas of responsibility in Alaska that could benefit from the Initiative. Our main land management responsibility is to help Alaska Natives owning restricted land, i.e. Native allotments and restricted townsite lots, to manage those lands. This includes acquisition and disposal of the property, extraction of natural resources, leasing and permitting, granting of rights-of-way, etc. There are over 13,000 Native allotment parcels and 4,000 restricted townsite lots, covering 1.3 million acres.

We are beginning to incorporate Geographic Information System (GIS) technology into our daily business practices. The use of current and reliable geographic information will certainly enhance our ability to fulfill our trust responsibility to Alaska Natives owning restricted land. BIA would use GIS to gather, display and analyze geographic information to assist in our management responsibilities.

The Alaska Geographic Data Committee (AGDC) has done and excellent job in fostering partnerships and determining the common needs among the private sector, Native corporations, local, state, and federal agencies. The AGDC is commended for its efforts. We believe the Initiative will be of great benefit to BIA and our clients in Alaska and we provide it our full endorsement.

Sincerely,

Niles C. Cesar
Regional Director

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ALASKA STATE OFFICE
222 W. 7th Avenue, #13
ANCHORAGE, ALASKA 99513-7599

MAY 23 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The Bureau of Land Management, Alaska State Office (BLM) would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. BLM has many areas of responsibility in Alaska which could benefit from the Initiative. The main areas of responsibility are:

- collaboratively managing land and uses for 87 million acres of land,
- surveying and conveying over 144 million acres of land to the State of Alaska, native corporations, and individuals, and
- providing a secure, accessible storehouse for public land and resource records.

We are incorporating Geographic Information System (GIS) technology into our daily business practices. The use of current and reliable geographic information is an absolute necessity for BLM in order to carry out its mission. BLM uses GIS to gather, display and analyze geographic information to assist in our management responsibilities. We consider orthoimagery and digital elevation data as the foundation layers in a framework of geographic information necessary for us to fully utilize GIS. These are the layers of data from which many types of geographic information is extracted from, registered to and analyzed with.

Alaska's US Geological Topographic maps are forty years old, available aerial photography is twenty years old, and current digital elevation data is coarse and inaccurate. These major sources of base geographic information do not represent the changing landscape or the current conditions. There are currently no existing or future plans to update and replace US Geological Survey maps, obtain new imagery, or generate new digital elevation data for Alaska. We believe new digital orthoimagery and digital elevation data provided by the Digital Orthoimagery Initiative would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) has done an excellent job in fostering partnerships and determining the common needs among the private sector, Native corporations, local, state, and federal agencies. The AGDC is commended for its efforts. We believe the Initiative will be of great benefit to BLM and Alaska and we provide our full endorsement.

Sincerely,

Francis R. Cherry, Jr.
State Director

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Rd.
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

IRM

JUN 2 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Dear Mr. Panos:

The Fish and Wildlife Service, Region 7 (FWS) would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. FWS has many areas of responsibility in Alaska which could benefit from the Initiative. The main areas of responsibility are:

- Managing land and uses for 78 million acres of National Wildlife Refuge land,
- Statewide authority over trust wildlife species and their habitats,
- Statewide management of subsistance hunting and fishing on all federally owned land,
- Management of marine mammals.

We are incorporating Geographic Information System (GIS) technology into our daily business practices. The use of current and reliable geographic information is an absolute necessity for FWS in order to carry out its mission. FWS uses GIS to gather, display and analyze geographic information to assist in our management responsibilities. We consider orthoimagery and digital elevation data as the foundation layers in a framework of geographic information necessary for us to fully utilize GIS. These are the layers of data from which many types of geographic information is extracted from, registered to and analyzed with.

Alaska's US Geological Topographic maps are forty years old and some were never made, available aerial photography is twenty years old where it exists, and current digital elevation data is coarse and inaccurate. These major sources of base geographic information do not represent the changing landscape or the current conditions. There are currently no plans in the future to update and replace US Geological Survey maps, obtain new imagery or generate new digital elevation data for Alaska. We believe new digital orthoimagery and digital elevation data provided by the Digital Orthoimagery Initiative would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) has done and excellent job in fostering partnerships and determining the common needs among the private sector, Native corporations, local, state, and federal agencies. The AGDC is commended for its efforts. We believe the Initiative will be of great benefit to FWS and Alaska and we provide it our full endorsement.

for David B. Allen
Regional Director - Region 7
U.S. Fish and Wildlife Service

JOINT PIPELINE OFFICE

411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501
(907) 271-5070/271-4336
FAX # (907) 272-0690

November 17, 2000

Letter No.: 00-070-DW
File No.: (51) 1.3
(51) 1.9
(53) 1
DD.: N/A

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, Box 13
Anchorage, AK 99513

Re: Alaska Digital Orthoimagery Initiative

Dear Mr. Panos:

The Joint Pipeline Office would like to add our endorsement to the Orthoimagery Initiative. The Joint Pipeline Office is a consortium of State and Federal agencies that oversee the Trans-Alaska Pipeline System (TAPS) and other Alaskan pipelines in the best interest of the people of the nation and the State of Alaska. We work with the oil and gas industry to achieve safe operation, environmental protection, pipeline integrity and regulatory compliance.

Our consortium members recognize the need and value of having digital orthoimagery available along areas such as the Trans-Alaskan Pipeline System, in order to increase our ability to conduct oversight of the pipeline corridor. We request you prioritize obtaining orthoimagery for 1) Trans-Alaska Pipeline Corridor (2 miles either side center line); 2) proposed ANGTS route Delta Junction to US/Canadian Border; 3) North Slope oil/gas development 40 mile area Kaktovik to Barrow; 4) Fairbanks to Kenai along the highway. Digital orthoimagery would be a valuable in oversight planning of North Slope Oil/Gas development and proposed Natural Gas pipelines.

We fully support the Initiative's goal of obtaining funding to acquire digital orthoimagery and elevation data for Alaska and having the data available in the future for Alaskan agencies as well as Native organizations, the private sector and the public.

Sincerely,

Jerry Brossia
Authorized Officer

William G. Britt, Jr.
State Pipeline Coordinator

United States Department of Agriculture | Forest Service | Alaska Region | P.O. Box 21628 Juneau, AK 99802-1628

File Code: 7140

Date: JUN 2 2000

Gust C. Panos
Chairperson
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W 7th Avenue #13
Anchorage, AK 99513-7599

Dear Mr. Panos:

The USDA Forest Service, Alaska Region would like to add our endorsement to the Alaska Digital Orthoimagery Initiative. Since 1998, the Alaska Region has implemented an aggressive program to acquire Digital Orthophoto Quads (DOQ's) over National Forest System lands. DOQ's provide an invaluable data set for monitoring field activities, measuring impacts and communicating activities to our publics.

The key advantage of using DOQ's in conjunction with daily fieldwork is having the product georeferenced. This enables us to extract map coordinates from the DOQ to use in Global Positioning System (GPS) units, as well as overlay data collected by GPS directly onto the DOQ.

This initiative will resolve two mapping shortfalls that exist over Forest Service managed lands in Alaska. First, adjoining land owners do not have the same level of data (DOQ's) that exist over Forest Service lands; and second, the statewide digital elevation data is old and lacks resolution to meet today's technologies. Statewide DOQ coverage would provide the same level of data to all lands managed by the federal, state, local and native corporations. This level of data is critical when managing fire suppression, emergency response disasters and bug kill infestation on a statewide base.

The Alaska Geographic Data Committee has proven to be an ideal forum for the pubic, private sector corporations, native corporations, state and federal agencies to share and promote mapping data projects. This initiative will benefit all Alaska and the Alaska Region of the Forest Service fully supports your efforts.

Sincerely,

For

RICK D. CABLES
Regional Forester

Printed on Recycled Paper

Alaska Soil and Water Conservation District

949 E. 36th Avenue, Suite 400
Anchorage, Alaska 99508

e-mail: akdistrict@customcpu.com
www.customcpu.com/akdistrict

Phone: 907 271-3424
Fax 907 271-3951

Mr. Gust C. Panos
BLM AK 924
222 West 7th Avenue, Box 13
Anchorage, AK 99513

May 1, 2000

Dear Mr. Panos,

As the district coordinator for the Alaska Soil and Water Conservation District, I am responsible for coordinating conservation efforts across Alaska's most remote and rural terrain. The Alaska District works with individual landowners to develop conservation plans tailored to their specific needs. We also maintain partnership with state and federal agencies to sponsor conservation research.

The Alaska Soil and Water Conservation District contains over 331 million acres. In terms of covering that much ground, accurate and dependable geographic information is essential. The present lack of reliable, current and statewide orthoimagery for Alaska creates a massive stumbling block for conservation planning and research efforts in Alaska.

Orthoimagery dated prior to mining, timber harvests and urbanization are not very useful for developing new management practices that address issues these activities create. Most orthoimagery of the state is at least 20 years old. Much change has come to Alaska's landscape since that time. These changes are not represented.

In addition, large coverage gaps result in areas for which no data is available. This is a problem not only due to missing information, but because it impedes the compilation of field research data. Digitized field data allows researchers to tap the power of GIS applications for spatial data analysis. However, synthesizing field data in digital format becomes extremely time consuming without a consistent digital database to serve as the foundation. Large-scale images of the entire state are often not at an appropriate scale for study areas such as Aleutian Islands. Digitized orthoimagery would provide a current and consistent foundation to support field data.

The creation of a current, state-wide orthoimagery database would help conservation efforts in regards to both research and landowner planning. The Alaska Soil and Water Conservation District strongly supports the Alaska Digital Orthoimagery Initiative. Alaskan residents should have access to the same type of geographic data as the Lower 48—the data that will help them conserve and protect Alaska's resources.

Sincerely,

Rachel Morse

Rachel Morse
District Coordinator

NORTH SLOPE BOROUGH

PLANNING DEPARTMENT
P.O. Box 69
Barrow, Alaska 99723

Phone: 907-852-2611
907-852-0320
Fax: 907-852-0322

Rex A. Okakok, Sr., Planning Director

May 9, 2000

Gust C. Panos
BLM Chief of Mapping Sciences
Alaska Geographic Data Committee
222 W. 7th Avenue, #13
Anchorage, Alaska 99513-7599

Subject: Alaska Digitial Orthoimagery Initiative

Dear Mr. Panos:

The North Slope Borough (NSB) Department of Planning and Community Services. Geographic Information System (GIS) would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. The NSB has many areas of responsibility that would benefit from this initiative, including land selections; native allotments; resource exploration and development; resource assessment; cultural preservation; permitting and zoning; search and rescue; community planning; watershed protection and coastal management. GIS products are used by Borough employees every day to make land management decisions. For this reason current and reliable geographic information is an absolute necessity for the NSB to carry out its mission.

The acquisition of 1 meter resolution imagery for the North Slope villages and the Hall Road transportation corridor would enhance our planning and management capabilities. The acquisition of 5 meter resolution imagery for the Resource Development District would be invaluable for addressing permitting and zoning issues. The NSB applauds the efforts of the Alaska Data and Geographic Committee for striving to build current statewide databases that meet National Accuracy Standards.

Sincerely,

Allison Graves
GIS System Analyst

CC: Rex A. Okakok, Sr. Planning Director
CC: Sheldon Adams, Deputy Director Land Management

Matanuska-Susitna Borough
Office of Information Technology

June 12, 2000

Mr. Gus Panos
Bureau of Land Management
U.S. Department of the Interior
1675 C. Street
Anchorage, Alaska 99501

Dear Mr. Panos:

The Matanuska-Susitna Borough enthusiastically supports AGDC's efforts to obtain digital imagery. Current and more detailed digital imagery would allow the Borough to provide better service to our citizens as well as be more accurate in our planning and public works duties. In addition, the digital imagery would allow the Borough to respond more effectively to natural and human-made emergencies. As short list of some of the projects that we could use more accurate digital information include the following.

- Land Use Planning
- Site Selection Analysis
- Trails Identification
- Transportation Planning
- Damage Assessment Mapping
- Watershed Identification
- Parcel Access for Addressing
- Road Alignment Mapping
- Evacuation Routing
- Vegetation/Open Space
- Potential Hazards i.e. fault lines

Presently our limited photography is outdated and incomplete and we are in great need of more detailed and current imagery and we support your efforts to obtain this vital information. Please let me know if you need any other information.

Sincerely,

John Duffy
Assistant Borough Manager

Municipality of Anchorage

P.O. Box 196650
Anchorage, Alaska 99519-6650
Telephone: (907) 343-6887
Fax: (907) 343-6810
http://www.ci.anchorage.ak.us

Rick Mystrom, Mayor

DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS

26 May 2000

Mr. Gus C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue
Anchorage, Alaska 99513-7599

RE: Endorsement of Alaska Digital Orthoimagery Initiative

Dear Mr. Panos:

The Municipality of Anchorage lends it's endorsement to the Alaska Digital Orthoimagery Initiative. The Municipality of Anchorage is one of the nation's pioneering GIS sites, and utilizes orthoimagery extensively in many aspects of our GIS. We currently use two and ten foot pixel orthophotography of 1996 vintage. We would like to be able to annually acquire this orthoimagery, but the cost has been prohibitive. It is our hope that the Initiative will allow urban centers such as Anchorage to obtain this level of orthoimagery at reasonable cost.

Orthoimagery is a critical component of any GIS, but in particular an urban GIS. Some examples of how the MOA uses orthoimagery are as follows:

- emergency management and response.
- comprehensive planning and land use studies.
- fire and police dispatch.
- fire hazard determinations (wildfire).
- utility infrastructure mapping ,
- heritage land bank management

These are but a few of the application areas. I should mention that we also are in the process of obtaining high resolution satellite imagery as a test of this new technology for our uses. We are very excited about the promise that satellite imagery holds not only as an orthoimagery base, but for remote sensing purposes as well.

We commend the AGDC for fostering partnerships, and for coordinating needs such as these with us. We encourage a continued effort in partnerships. This, in my view, is a necessity in times of shrinking resources.

Sincerely,

Charles E. Barnwell
GIS Manager

The Nature Conservancy OF ALASKA

421 West First Avenue,
Suite 200
Anchorage, Alaska 99501
TEL (907) 276-3133
FAX (907) 276-2584

International Headquarters
Arlington, Virginia

June 2, 2000

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, Suite 13
Anchorage, AK 99513-7599

Dear Mr. Panos:

The Nature Conservancy is pleased to lend its endorsement to the Alaska Digital Orthoimagery Initiative (ADOI). The Nature Conservancy utilizes available mapping data to provide a basis for identifying important sites for the conservation of species and natural communities. This information helps us efficiently identify priorities for conservation throughout Alaska.

Mapping data currently in existence for the state of Alaska is often cost-prohibitive, variable in scale, and significantly out-of-date. We understand that the ADOI would help resolve this situation by providing new statewide high-resolution digital satellite imagery in full compliance with national map accuracy standards.

The Nature Conservancy strongly supports efforts by the Alaska Geographic Data Committee (AGDC) to secure the federal funding necessary for the Alaska Digital Orthoimagery Initiative. AGDC has been instrumental in fostering partnerships and determining the common needs within the private sector, Native corporations, and local, state and federal agencies. We commend AGDC for fostering partnerships, and encourage a continued effort in such partnerships. We believe that the ADOI will be of great benefit to public and private interests throughout Alaska, and provide it our full support.

Sincerely,

T. David Banks
Director of Science & Stewardship

DUCKS UNLIMITED INC.

NATIONAL HEADQUARTERS
One Waterfowl Way
Memphis, TN 38120-2351
(901) 758-3825 FAX: (901) 758-3850

President
Julius F. Wall
Clinton, Missouri

Chairman of the Board
Gene M. Henry
McFarland, Wisconsin

Executive Vice President
D. A. (Don) Young
Memphis, Tennessee

First Vice President
L. J. Mayeux, M.D.
Marksville, Louisiana

Treasurer
W. Bruce Lewis
Natchez, Mississippi

President,
Wetlands America Trust, Inc.
James C. Kennedy
Atlanta, Georgia

Senior Vice Presidents
Doug Brechele
Warren, Michigan

Jared D. Brown
Clearwater, Florida

William Colvin
Pearson, Louisiana

Wickham Corwin
Fargo, North Dakota

Stephen G. Denkers
Ogden, Utah

James F. Dodd, III
New Castle, Delaware

Harley Hansen
Yakima, Washington

James Hulbert
Longview, Washington

Richard S. Johnson
Richmond, Virginia

Paul Makarevich
Wampum, Pennsylvania

Lowell Mohler
Jefferson City, Missouri

Jill Olsen
Denver, Colorado

Paul (Skip) Selman
Florence, Kentucky

Michael Simpson
Pittsburg, Kansas

Steve Tonso
Center, Colorado

Barry E. Wood
Truman, Arkansas

Secretary
Michael J. Brooks
St. Louis, Missouri

Executive Secretary
Bill R. Willsey
Memphis, Tennessee

May 18, 2000

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, # 13
Anchorage, AK 99513-7599

Dear Mr. Panos:

Ducks Unlimited Inc. would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. Ducks Unlimited Inc. (DU) Western Regional Office and the Bureau of Land Management have been cooperatively mapping wetlands and associated uplands in Alaska using remote sensing and geographic information system (GIS) technologies since 1988. Landsat Thematic Mapper (TM) satellite imagery is the primary source for this mapping effort, however, we very strongly rely on aerial photography, digital elevation models, and other high-resolution data sets to resolve areas of confusion or to assist us with the accuracy assessment process. Aerial photography is available for much of Alaska, but is highly variable in scale and typically outdated which generally limits its usefulness for assisting us with determining earth cover over large regional areas. The use of current and reliable geographic information is an absolute necessity for DU in order to carry out our projects. We consider orthoimagery and digital elevation data as the best solution to develop a statewide framework of geographic information necessary for us to fully utilize GIS for our mapping efforts.

Alaska's US Geological Topographic maps are forty years old, available aerial photography is twenty years old and current digital elevation data is coarse and inaccurate. These major sources of base geographic information do not represent the changing landscape or the current conditions. According to the Alaska Geographic Data Committee, there are currently no plans to update and replace US Geological Survey Maps, obtain new imagery or generate new digital elevation data for Alaska. We believe that new digital orthoimagery and digital elevation data provided by the Digital Orthoimagery Initiative would alleviate the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) has been instrumental in fostering partnerships and determining the common needs among the private sector, Native corporations, and local, state, and federal agencies. The Alaska Digital Orthoimagery is a result of the AGDC's work. We believe the initiative will be of great benefit to DU's Earth Cover Mapping work in Alaska and we provide it our full endorsement.

Sincerely,

Dick Kempka
GIS Director

DUCKS UNLIMITED, INC.
WESTERN REGIONAL OFFICE
3074 Gold Canal Drive
Rancho Cordova, California 95670-6116
(916) 852-2000
(916) 852-2200 Fax

DUCKS UNLIMITED INC.

May 17, 2000

Gust Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 W. 7th Avenue, # 13
Anchorage, AK 99513-7599

Dear Mr. Panos:

Ducks Unlimited Inc., Western Regional Office, would like to lend its endorsement to the Alaska Digital Orthoimagery Initiative. Ducks Unlimited Inc. (DU) and the Bureau of Land Management have been cooperatively mapping wetlands and associated uplands in Alaska using remote sensing and geographic information system (GIS) technologies since 1988. Landsat Thematic Mapper (TM) satellite imagery is the primary source for this mapping effort, however, we very strongly rely on aerial photography, digital elevation models, and other high-resolution data sets to resolve areas of confusion or to assist us with the accuracy assessment process. Aerial photography is available for much of Alaska, but is highly variable in scale and typically outdated which generally limits its usefulness for assisting us with determining earth cover over large regional areas. The use of current and reliable geographic information is an absolute necessity for DU in order to carry out our projects. We consider orthoimagery and digital elevation data as the best solution to develop a statewide framework of geographic information necessary for us to fully utilize GIS for our mapping efforts.

Alaska's US Geological Topographic maps are forty years old, available aerial photography is twenty years old and current digital elevation data is coarse and inaccurate. These major sources of base geographic information do not represent the changing landscape or the current conditions. According to the Alaska Geographic Data Committee, there are currently no plans to update and replace US Geological Survey Maps, obtain new imagery or generate new digital elevation data for Alaska. We believe that new digital orthoimagery and digital elevation data provided by the Digital Orthoimagery Initiative would alleviate the critical shortage of current and reliable geographic information in Alaska.

The Alaska Geographic Data Committee (AGDC) has been instrumental in fostering partnerships and determining the common needs among the private sector, Native corporations, and local, state, and federal agencies. The Alaska Digital Orthoimagery is a result of the AGDC's work. We believe the initiative will be of great benefit to DU's Earth Cover Mapping work in Alaska and we provide it our full endorsement.

Sincerely,

Beate Sterrenberg
GIS Manager

cc: Ron Stromstad –Director of Operations

SIERRA CLUB
FOUNDED 1892

Alaska Field Office **201 Barrow Street, Suite 101** **Anchorage, AK 99501**
TEL: (907) 276-4048 FAX: (907) 258-6807 nw-ak.field@sierraclub.org

June 2, 2000

Mr. Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222W. 7th Avenue, #13
Anchorage, AK 99513

Dear Mr. Panos:

The Alaska Chapter of the Sierra Club is pleased to support the Alaska Digital Orthoimagery Initiative.

Existing USGS maps of this state, now forty to fifty years old, do not accurately portray existing conditions. Updated maps and computer data based on the latest satellite imagery and other advanced mapping technology is clearly in the public interest.

For the Sierra Club and other environmental organizations, up-to-date, high-resolution maps would be valuable in, for example, checking land status; considering proposed developments, associated roads, and other transportation facilities; establishing boundaries for proposed protected areas, and evaluating proposed land management plans.

Members of the Chapter who enjoy visiting remote areas of Alaska would be grateful to have the most accurate maps possible. It is conceivable that hitherto unknown landscape features and routes may be revealed through the application of advanced mapping techniques as proposed by the Orthoimagery Initiative.

We encourage the Digital Orthoimagery Subcommittee to actively pursue Congressional funding for the Initiative, and we stand ready to testify in support of such funding. Please keep us informed as you move forward with your proposal.

Sincerely,
Jack Hession
Jack Hession
Alaska Representative

Management Association
for Private
Photogrammetric Surveyors

June 27, 2000

Mr. Gust C. Panos, Chairman
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West Seventh Ave., Suite 13
Anchorage, AK 99513
FAX (907) 271-4549

Dear Mr. Panos:

The Management Association for Private Photogrammetric Surveyors (MAPPS0 is a national trade association of more than 140 private companies engaged in photogrammetry, remote sensing and related spatial data technologies. MAPPS has worked closely with Congress and Federal agencies to expand the use of GIS and related data in government programs. We have strongly supported the National Digital Orthophoto Program (NDOP), the National Aerial Photography Program (NAPP) and related activities.

MAPPS supports the objective of creating new, accurate geospatial data in Alaska through contracting with our member firms. MAPPS member firms offer proven technology including airborne radar for generating high accuracy digital terrain models, as well as aerial photography and satellite remote sensing data for orthoimages. MAPPS has member firms in Alaska and throughout the U.S. who are well qualified to provide the geospatial data needed by government agencies for a variety of programs, applications and solutions.

An Alaska Digital Orthophoto Initiative should include quality geospatial data based on a solid foundation of control and digital terrain models.

Alaska is the least-mapped State in the country, and its citizens deserve to have at least the same quality of geographic information as is available to other Americans. We believe there is a need to have quality geospatial data available for wise development of Alaska's natural resources, as well as management of the State's vast environmental holdings, for the benefit of State and the Nation, and for future generations of Americans.

MAPPS has worked closely with Alaska's congressional delegation in the past on mapping issues and will support funding requests for production of geospatial data that will be contracted out. We commend you for this initiative and look forward to working with you in a public-private partnership to make it a reality.

Sincerely,

John M. Palatiello

John M. Palatiello, Executive Director
1760 Reston Parkway, Suite 515, Reston, Virginia 20190
P (703) 787-6996 F (703) 787-7550 E info@mapps.org www.mapps.org

asprs
THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

May 16, 2000

Mr. Gust Panos
Digital Orthoimagery Subcommittee Chairperson
Alaska Geographic Data Committee
4230 University Drive, Suite 230
Anchorage, AK 99508

Dear Mr. Panos

The Alaska Region of the American Society of Photogrammetry and Remote Sensing (ASPRS), supports the Alaska Geographic Data Committee's (AGDC) Alaska Digital Orthoimagery Initiative. The mission of ASPRS, the Imaging and Geospatial Information Society, is to advance the knowledge and improve the understanding of the mapping sciences and to promote the responsible applications of photogrammetry, remote sensing, geographic information systems (GIS), and supporting technologies. The ASPRS Alaska Region has 85 members that are actively working in the fields of photogrammetry, remote sensing, and GIS in the private, public, and academic sectors of the community. The undersigned officers of the Alaska Region of ASPRS are in full agreement that the AGDC digital orthoimagery initiative would go far in alleviating the critical shortage of current and reliable geographic information in Alaska.

At present, the USGS 1:63,360 and 1:250,000 scale quadrangles are the mapping standard for the State of Alaska. Most of these topographic maps are more than forty years old and available statewide aerial photography is twenty or more years old. The USGS topographic maps do not meet National Map Accuracy Standards (NMAS) and any data produced from these maps will propagate the inherent inaccuracies contained within them. Orthoimagery is considered the foundation layer in a framework of geographic information, and is the layer from which many other types of geographic information are extracted as well as registered. With the new high-resolution satellite imaging and other photogrammetric and remote sensing technologies, the AGDC Digital Orthoimagery Initiative is now economically feasible. We the undersigned, support the AGDC Initiative to produce statewide digital orthoimagery products that comply with NMAS.

Sincerely,

Paul D. Brooks
National Director
ASPRS Alaska Region

Howard Earl
President
ASPRS Alaska Region

Robert Haus
Vice-President
ASPRS Alaska Region

Jeff Yates
2nd Vice-President
ASPRS Alaska Region

John Koltun
Region Director
ASPRS Alaska Region

Gregory Durocher
Treasurer/Secretary
ASPRS Alaska Region

Shari George
Region Director
ASPRS Alaska Region

URISA-Alaska Chapter
PMB 124
2440 East Tudor Road
Anchorage, Alaska 99507-1185

Urban and Regional Information Systems Association

May 18, 2000

Gust C. Panos
Chairperson, Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Ave #13
Anchorage, Alaska 99513

Dear Mr. Panos:

On behalf of the Urban and Regional Information Systems Association of Alaska (URISA), I'm writing to lend our support to the Alaska Digital Orthoimagery Initiative. It is my belief the Initiative would provide a much needed imagery base for statewide use in the public and private arenas. The use of current and reliable geographic information has become essential as our members employ Geographic Information Systems (GIS) into their daily business practices. The imagery proposed by the Initiative will provide the foundation from which many types of geographic information can be derived as well as registered to.

Available orthoimagery covering Alaska is not in a digital form, it is of poor quality, and out of date. This along with the U.S.G.S. Topographic maps which were made in the 1950s is about all that's available statewide. These two sources of geographic information are not adequate for Alaska's needs. New digital orthoimagery is essential for filling this gap in geographic information.

URISA commends the Alaska Geographic Data Committee for taking this first step and for having the foresight to see a need and then figure out how to fill in the gaps. URISA supports and endorses your continued efforts in this direction.

Sincerely,

John Sroufe
President, URISA

FAIRBANKS GOLD MINING, INC.

a subsidiary of

KINROSS GOLD CORP.

FORT KNOX MINE

March 9. 2001

Mr. Gust Panos
Digital Orthophoto Subcommittee
Alaska Geographic Data Committee
222 West 7th Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Panos:

Fairbanks Gold would like to add its endorsement of the Alaska Digital Orthoimagery Initiative. Fairbanks Gold Mining Inc. and its parent, Kinross Gold, are involved in mining and gold exploration in the state of Alaska. I think the high quality orthoimagery and DEM coverage of Alaska would be of great benefit to the mineral exploration industry.

As an industry, we are relying more and more upon GIS compilations of available geological, geophysical, and land-status data for definition of exploration targets. Besides in-house data, we must incorporate data provided by various state and federal agencies. GIS databases provide the means for integrating all of the diverse sources of information. As a base, these compilations require the high quality DEM coverage that will be made available as a result of this initiative. The existing coverage is at too broad of a scale to be of much use in this effort.

I appreciate the efforts the committee has made towards promotion of the Alaska Digital Orthoimagery Initiative, which will be of use to such a broad spectrum of resource-based businesses, research groups, state and federal regulatory agencies, and native corporations.

Sincerely,

Robert P. Morrell
Senior Geologist

P.O. Box 73726 • #1 Fort Knox Road • Fairbanks, Alaska 99707-3726 USA
Telephone: (907) 488-4653 • Facsimile: (907) 490-2290