FIFTH ANNUAL REPORT

OF THE STATE MAP ADVISORY COMMITTEE

FOR OREGON

1983

OPEN FILE REPORT O-84-1

January 1, 1983 - December 31, 1983

John D. Beaulieu, Chairman
State Map Advisory Committee

State of Oregon
Department of Geology & Mineral Industries

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EXECUTIVE SUMMARY

The purposes of the State Map Advisory Committee (Executive Orders EO-79-6 and EO-83-15) are: (1) to recognize and pursue mapping goals for Oregon, (2) to promote coordination of programs, policies, and resources with the intent of maximizing opportunities and minimizing duplication, and (3) to bring benefits of well directed mapping more effectively to the people of Oregon.

To accomplish these aims, the State Map Advisory Committee includes representation from Federal agencies, state agencies, and universities. Major accomplishments noted below are detailed in the body of this report.

1) The State Map Advisory Committee promoted effective coordination in hard copy and digital mapping through the planning and sponsorship of one full meeting of the Committee and one highly successful State/Federal Mapping Coordination Meeting in which Federal program direction was a major consideration:

   a) The National Map Division (USGS) is the lead Federal agency for mapping, and in cooperation with the Interior Digital Cartography Coordinating Committee (IDCCC) is assuming a leadership role in digital mapping. Coordination considerations were emphasized at the October 13, 1983 meeting (Item 4 of this report).

   b) The National Map Division maintains a wide variety of mapping programs of interest to the public and of significance to state map agency planning. Mutual program direction was emphasized in the February 15, 1983 meeting (Item 3 of this report).

2) Owing to volumes of new data, enhanced legislative awareness, and the need to communicate effectively with Federal data collection, digital map formats are in need of increased attention by SMAC in terms of coordination and cooperation. Actions taken to address this need include:

   a) Revision of Executive Order 79-06 in the form of Executive Order 83-15 to clarify SMAC responsibilities with respect to digital map formats.

   b) Formulation of a general statement of digital activities in state for agency reference (Item 6 of this report).

   c) A decision to treat digital data bases as a priority in 1984 and to provide increased exposure to GIS software options. A demonstration of the Map Overlay and Statistical System (MOSS) developed by the U.S. Fish and Wildlife Service was conducted for state agencies in Salem on November 17, 1983.

3) The State Map Advisory Committee pursued cooperative completion of fundamental map bases for the State through effective planning, prioritized goal setting, and consistent communication with the U.S. Geological Survey. Progress is tabulated below:

Product	Published 1979	Published 1980	Published 1981	Published 1982	Published 1983	Total Complete
7.5' topographic maps (1,827 total units)	10	46	76	50	88	1020
7.5' orthophotoquads (1,827 total units)	2	36	1492/1	154/1	113	1779
1:100,000 base maps (planimetric or topographic) (70 total units)	-	-	34	32	4	30 plan. 41 topo.
7.5' map digitized land net (1,827 total units)	-	-	367 est.	261	52	646
7.5' map digital elevation model (1,827 total units)	-	-		202 est.	40	242

1/ prepublication format

Further information is provided in the Annual Statistical Summmary (Item 8 of this report).

4) The Oregon Department of Geology and Mineral Industries continued a cooperative agreement with the U.S. Geological Survey to support a Resident Cartographer to the State of Oregon whose major tasks now include: (1) the identification and linking of mapping capabilities through cooperative agreements, (2) promotion of more effective product dissemination, (3) elimination of unnecessary duplication of effort, and (4) technical assistance in matters of mapping and coordination. His annual report is included in this report (Item 9).

5) Significant progress has been made towards completing a family of thematic maps for Oregon of a scale of 1:500,000 depicting a variety of topics for general reference. Available maps include planimetric (USGS), topographic (USGS), LANDSAT imagery (ERSAL), Geothermal (DOGAMI), Congressional Districts (USGS limited edition), and environmental (DEQ, 1978).

Maps in progress include land ownership (BLM/USGS/SMAC) and economic mineral (DOGAMI).

6) At the Sixth Regional Map Workshop (hosted by Oregon and attended by representatives of the USGS and seven western states) Oregon provided input in budget priorities, NMD realignment, resident cartographer programs, and digital activities. An unofficial summary (Item 5) is incorporated into this report.

7) A need exists for a moderately thorough brochure which describes mapping products available in various formats for the public from state and Federal agencies in Oregon. In a joint effort with SMAC agencies such a report is being prepared by the State Resident Cartographer with publication to be done by DOGAMI.

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MEETING SUMMARY

STATE/FEDERAL MAPPING COORDINATION
MEETING FOR OREGON

STATE MAP ADVISORY COMMITTEE

Room 343 State Capitol
February 15, 1983

LIST OF ATTENDEES

NAME	AFFILIATION
Harold "Butch" Fiebelman	NMD, WMC
George Shove	State Forestry Dept.
Jerry Latshaw	Soil Conservation Service
Ted Albert	Bureau of Indian Affairs
Joe Poracsky	Geography Dept. PSU
Jerry Holman	State Water Resources Dept.
Robert Peak	Corps of Engineers
Peter Stark	Univ. of Oregon - Map Library
Patricia W. Silvernall	Univ. of Oregon Library
Donald Baker	Ore Dept. of Transportation Info Systems
Tom Jackson	Bonneville Power Admin.
William Leeman	Army Corps of Engineers
Jack Herring	City of Salem
Dick Myers	State Library
Roy Ellis	U.S. Census Bureau, Seattle Regional Office
Edgar Long	National Weather Service
Jerry Beach	National Weather Service
Kenneth J. Dueker	Cntr for Urban Studies, PSU
Stuart Allan	Allan Cartography, Medford
Peter Eberhardt	McKenzie Map Services, Eugene
Paul Howard	Willamette Nat'l. Forest
Roger Crystal	USDA Forest Service - Regional Office
Fritz Ingram	Douglas County Surveyor
Dick Dodge	USDA Forest Service - Regional Office
Ed Bolke	USGS, WRD, Portland
SFC John E. Davis	Oregon Natl. Guard Reserve
Col. Dick Paynter	Oregon Natl. Guard Reserve
Scott Jackson	D.O.R. Urban & Rural Mapping Section
Bob Baker	D.O.R. Urban & Rural Mapping
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Laurie Fish	W.A.C. Corp, Eugene
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Beverly Vogt	Oregon Dept of Geology
Paul Staub	Oregon Dept of Geology
Ted Miller	Oregon Fire Dist Assn
Jack Foust	Mid Willamette Valley Council of Governments
Rudy Wellbrock	Oregon State Hwy Div
Susan Trevitt-Clark	Map Library - Univ of Oregon
Candy Morgan	Oregon State Library
William G. Loy	Univ. of Oregon, Geography
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Kenneth E. Stevens	Pacific Power & Lt.
Keith S. Walrath	Pacific Power & Lt Special Projects
William K. Mengel	USGS NMD MLMC Rolla, Mo
Glenn Ireland	USGS/State Resident Cartographer
Lewis MacArthur	Oregon Geographic Names Board
David C. Yandell	State of Oregon - Energy Mgt. Division
Mark Forbes	Nat'l Park Service - Crater Lake
Karen Sims	Corps of Engineers
John D. Beaulieu	Chairman/SMAC

I Introductions

Program Manager of the Western Mapping Center, Butch Fiebelman, and Program Manager of the Mid-Continent Office, Bill Mengel, were introduced to the group. Representatives of each of the attending agencies then introduced themselves.

II Status Assessments of Major Base Mapping Programs

1) Provisional Map (7½') Series

The National Map Program has assigned part of the mapping effort (245 quadrangles) to the Rolla, Missouri Office. For these some aerial photography will begin this summer. An internal planning map showing scheduling by the National Map Division (NMD) was distributed with the understanding that it is subject to revision.

A questionnaire distributed by Glenn Ireland previously demonstrates that the Provisional Map Series is of highest priority to both state and federal agencies (attached). The agencies expect to contribute to the effort through pre-edit review of names by the Board of Geographic Names and city boundary review by DOT (coordination to be facilitated by Glenn Ireland). It was noted that field crews contact city personnel and state highway maps as a matter of routine.

Within National Forest Service Boundaries the USFS generates maps at a scale of 1:24,000 with the emphasis on roads, and using USGS data bases where available. The production process and use of enlargements to achieve the desired map scale preclude adherence to national map accuracy standards. The Quads are updated every 2 years, use the same quad names as the USGS and rely on photos cooped in the National High Altitude Photo Program.

For the USGS Provisional Map Program it was the consesus of the committee that support be given to the internal schedule that was distributed provided that the long range deadlines for Provisional Maps (1989) and T-maps (1991) be adhered to. It was noted that T-map separates are available in some form now for those needing the material. Priorities for release of T-maps will be defined by the committee at a later time.

2) Intermediate Scale (1:100,000) Series

This series provides a valuable and widely used intermediate scale data base for a wide variety of uses and is essentially complete for Oregon. For certain specialized uses systems of categorizing planimetric data by the U.S.G.S. may not always meet all the needs of a specific use.

Among the uses of the 1:100,000 base map series discussed by the committee were the following:

a) The U.S. Soil Conservation Service uses the map in their prime farmland series.

b) BLM has published all but 7 quads in their ownership series.
c) State Forestry has adopted the series for their fire unit maps.
d) The Military finds the series convenient for operations planning, although the 7½' series is used for "close operations."
e) DOT uses the base to some extent, but may have some difficulty with road classifications.

3) Intermediate Scale AMS (1:250,000) Series

This series is a product of the Army Map Service and is not part of the USGS family of maps in terms of national map standards. Various types of revisions have been discussed.

4) State Base (1:500,000) Map

The revised edition was issued in late 1982 after participation and efforts of the committee succeeded in accelerating the production schedule.

Uses in the state include use as a base map for a Geothermal Map, the State Geology Map, a Congressional Districts Map, the RBV image (ERSAL), and others. Possible future uses may include a strategic mineral map, land ownership, a renewable energy map, and a Legislative District Map. A total of 4500 RBV maps have already sold out. Reprints are planned.

The acutal base map is available for sale through State Geology, State Water Resources, and State DOT. The 23 separates are housed in State (Glenn Ireland or DOT) for use by SMAC members, who are cautioned to make no changes in the acutal negatives.

III Status Assessments of Photography Programs

1) The National High Altitude Program has been consolidated within the USGS for a number of years and has numerous federal cooperators. Platform level is 40,000 feet and products include 1:80,000 B&W and 1:58,000 color infrared. Availability is through EROS (Sioux Falls) and ASCS (Salt Lake City) in addition to NCIC. Rapid turnarounds are available for a price.

The USGS provides line indexes for their contribution to this program.

State Forestry tends not to use this product owing to turnaround time, field crew preference, and enlargement difficulties although the 1:58,000 series shows potential for B&W enlargements and this is being pursued). The State Forestry Department has tentative plans for a 1983-84 flight project outside National Forests west of the Cascades National Forests and is seeking participants. The product will be color infrared at a scale of 1:63,000 with an 8¼" lens. Projected cost is $267/township.

WAC has coverage border to border west of range 4E (1982) at a scale of 1:31,680. The series is quarter township centered with a 6" lens and will be reflown every 2 years.

The distributed index of USGS 7½' field starts can serve as a basis for anticipating photography activity a year or two in advance of the indicated start dates in contemplation of coops. It is noted that the USFS has coverage for National Forests at 1:24,000 with an 8¼" lens. Color coverage is also available at 1:12,000. The BLM completed the Salem Sheet last year and will do the Roseburg Sheet this year with a 12" focal length.

2) The Orthophotoquad Program was pushed to provide statewide coverage and is 91% complete for Oregon in pre print form, although some urban areas are published. The program is driven by coops, but is basically not repetitive (it provides coverage on a once only basis). It was noted that some areas that have been reflown with improved resolution should be indexed.

The USFS produces orthophotos on the same quad format as the USGS with a repeat cycle of 10 years.

To a limited extent the USSCS publishes 1/3 quads at a scale of 1:24,000 or 1:20,000 as a basis for soils mapping.

State Forestry is able to use USGS orthos on flat open Timber land, but has general difficulty with images of pre-1975 vintage. Enlargements are at 1:24,000 and 1:12,000 for their purposes. Haloing and planimetric overlay enhancing are very impressive in the central Oregon area and may constitute a basis for coops in some areas by some parties. Contact George Shore.

IV <u>Long Range Planning of the National Map Division</u>

Butch Fiebelman provided general budget figures and projections along with explanations of their meaning. General trends by programs for the period 1982-1984 are as follows in the Presidents recommended budget.

- The 7½' program is holding steady.
- Revisions should be increasing but are not.
- Digital is a priority item driven by a need to incorporate this technology into the revision program, to meet other needs and to address GAO and OMB recommendations.
- The ortho program is run on a coop basis.
- Intermediate mapping will decline slightly.
- Land use mapping at a reduced level has found favor with Congress.
- EROS is now part of the NMD and is headed away from research and training towards production.
- A new Federal Land Mineral Information data base is contemplated to consolidate BLM ownership data, USGS resource data (ie CUSMAP) into a coherent mineral issue data base. A problem is the incomplete nature of the resource data base.

V Digital Mapping

1) GAO Report (GAO/R CED 83-19) cites duplication of efforts at the federal level. The USGS now has the leadership role within Interior. OMB is moving towards a coordination directive of some sort for the federal government and is also revising their A-16 directive to accommodate digital, in-house data services, and EROS.

2) USGS digital products include digital elevation modes (DEM (part of ortho process), digital line graphs (Planimetric data), and land use/land cover. Information sheets are available from Glenn Ireland.

   State DOT hopes to put a computer system in place and wishes to coordinate data bases, hardware, and software with the USGS to avoid duplication and to provide compatibility in the long term. A contact name (USGS) will be provided to DOT (Wellbrock).

3) The Census Bureau (Roy Ellis) anticipates border to border digital coverage with a planimetric and population interpretive slant by 1990. The data will key to the 7½' base and will be to national map standards. Data will be pulled from the 1:100,000 Series with Raster Scanning technology. A pilot study has demonstrated the acceptability of the program.

4) Additional Digital Efforts in Oregon include the following:

   - Salem area cadastrul reported earlier.
   - Soils by the SCS.
   - Basic resource mapping by the Bureau of Indian Affairs on 27 reservations in cooperation with USGS and US Fish and Wildlife. Mini computer access by all agency offices is the goal.
   - Digitizing all roads and trails within National Forest Boundaries by USFS by 1985 for fire fighting application and not to national map standards. A variety of DEM's from the ortho program are in the internal Fort Collins data base.
   - Traffic safety data storage by DOT with capability of "down-loading" to the counties.

VI Status Reports of Miscellaneous Topical Mapping

1) Land use/Land cover mapping is a decreasing program in the USGS which relies on cooperation. All but 5 of the 1:250,000 quads in Oregon are covered at level 1 and 2. Level 3 is provided by the cooperator. 1984 is projected completion date for the state.

2) The Oregon Water Resources Department prepares specialized land use-water use maps for river basins in the state in support of their regulatory authorities. These maps supplement available data on water rights per se. Maps are available for the Umpqua, Rogue, Klamaths, Deschutes and John Day area. Drafting is complete in six more basins. Indexes and prices are available from Jerry Holman.

3) The BLM provides land and mineral ownership maps at a scale of 1:100,000. At a scale of 500,000 a multiagency cooperative update effort is in place for which status is as follows: BLM work is 90% complete, USFS work is complete; DSL work is progressing. Contradictions in data suggest a 1984 completion as opposed to late 1983 as originally planned.

VII Data Bases, Information Services, and Emerging Issues

1) The Geographic Names Information System (GNIS) Effort taps the expertise of the Oregon Geographic Names Board, which in turn coordinates effectively with the USGS, USFS, BLM, and DOT through subcommittee membership. The GNIS effort is set up to assist the early stages of the Provisional Map Field Effort and would like to receive advance sheets and name lists in a timely fashion for this purpose. This should be of interest to the Western Mapping and Mid Continent Centers of NMD.

   The GNIS effort has completed Phase I (name lifting from USGS sources) and now is moving towards Phase II (Systematically lift names from other selected sources). Bill Loy is currently seeking suggestions for other sources.

2) The State Library NCIC Affiliate can now search EROS data on line and will soon acquire a CRT terminal for this purpose. Motion is underway to establish the U. of Oregon Map Library as a subsidiary.

   Present Activities include efforts to publicize NCIC capabilities in Agency newsletters (Contact Candy Morgan).

   State Agencies are reminded of a state law requiring submittal of agency publications and maps for inclusion in the state library system.

3) Local Applications of Digital technology include the Mid-Willamette Valley Effort for which an updating capability is viewed as a priority and the need for microcomputer accessing for small outlets is now being pursued. The system is population oriented and is capable of simulation problem solving in response to policy oriented queries. The reliance of 911 Emergency Serving on digital efforts be compatible and linked.

   Ted Miller on behalf of 248 Oregon Fire Districts indicated the communication problems that will result if local computer digital efforts are not compatible. A unified 911 System will not be possible. In response to similar types of problems project FIRESCOPE was undertaken in the L.A. area to provide a common map base for various fire districts sharing common boundaries.

   Further action will include follow-up contacts by Glenn Ireland, a meeting with the Division of Emergency Services, and a future SMAC agenda item.

4) Glenn Ireland, State Resident Cartographer is preparing a directory of map information for Oregon for state, federal, and to a limited extent possibly, local government agencies. Map products and pre print products will be indicated. A systematic appraisal of possible future cost savings coops should emerge from this effort.

OREGON
State Mapping
Advisory Committee
Percent Recommendations
NMD Programs
By Agency

STATE	7½-Minute Provisional	7½-Minute Revision	1:100,000 Quadrangle	1:100,000 County	1:250,000 Revision	1:500,000 State Map	Land Use Land Cover	Digital Elev. Model	Digital Line Graph	High Altitude Photography	Orthophoto	NCIC	PROPOSED PROGRAMS	1:50,000	Public Ownership	High Resolution Orthophoto	Large Scale Data
Energy	15	15	15		15		10			10	10					10	
Environmental Quality	30	30	10				10				20						
Fish and Wildlife	40	30	10		10		10										
Forestry	20	5	10	1	1	1	5	1	5	15	15	5		1	1	12	2
Geology & Mineral Ind.	70	10	10		5	5											
Division of Lands	10	5	20			10	4	1	10	2	10	10			10	5	3
Military	30	10	16			8	8	8	8		8			4			
Revenue	75	25															
Secretary of State	50	10		40													
Transportation	30	15	30		10			5	10								
Water Resources	15	15	20				30				20						
Pacific Power & Light	75	15			5						5						
AVERAGE PERCENT TOTALS	38%	16%	12%	3%	4%	2%	6%	1%	3%	2%	7%	1%		1%	1%	2%	1%
FEDERAL																	
Bonneville Power Admin.	25	5	15		2	5		15	5	13	5	3		7			
Bureau of Census	10	20	15	10					20		10						15
Bureau of Land Management	25	10	5		5	5				5	5				25	15	
Corps of Engineers							33				34			33			
Fish & Wildlife	30	10	20		10	5				10	5	10					
Forest Service	33							22		33	22						
Highway Administration	30	30	30		10												
Soil Conservation	30	15								20	25					10	
Water Resources	5	20	5	5	10		5	5	5	5	5	5		10	5	10	
AVERAGE PERCENT TOTALS	21%	12%	10%	2%	4%	1%	4%	5%	4%	9%	12%	2%		5%	3%	4%	2%

MEETING SUMMARY
STATE MAP ADVISORY COMMITTEE

Room 343 State Capitol
October 13, 1983

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Dick Myers	State Library
Larry Bright	Oregon Dept. of Fish & Wildlife
Dennis L. Isaacson	ERSAL-Oregon State University
Jon E. McReynolds	Lane County Surveyors Office
Rodger D. Person	Lane County Dept. of Assessment and Taxation
Robert G. Nielsen	Lane County Dept. of Assessment and Taxation
Ron Edson	City of Portland, Bureau of Street and Struct.
B. Scott Holmes	Self
Dick Mathews	DLCO
Rudy Wellbrock	Oregon State Highway Division
Martha Hansen	Oregon State Highway Division
John Price	Federal Highway Administration
Jerry Latshaw	USDA-Soil Conservation Service
Mark Walsh	USDA-Soil Conservation Service
Ted Albert	BLM-Oregon State Office
Judy Nisperos	BLM-Oreton State Office
Ray Miller	Department of Forestry
Darryl Storm	Department of Forestry
George Shore	Department of Forestry
Richard Huxley	US Fish & Wildlife Service
Michael Ogan	Metropolitan Service District
Robert Keith	Bureau of Gov. Res. - Univ. of Oregon
David C. Yandell	Ore. Emerg. Mgt. Div. 9-1-1 Program
Judith A. Farmer	City of Lake Oswego, Oregon
Claire Carder	Oregon State Parks & Recreation
Melvin G. Marcum	City of Eugene Engineering
Les Lyle	City of Eugene Engineering
Roger Crystal	USDA-Forest Service
David Lang	USDA-Forest Service
Dave True	State Lands
Joyce Erickson	State Lands

Ken Dueber	PSU Center for Urban Studies
Martin Chroust-Masin	Yamhill County Dept. of Planning & Development
Fred Miller	Oregon Dept. of Transportation
Jack Herring	City of Salem
Andrew Kinney	EPA Corvallis Env. Rec. Lab.
Andrew Herstrom	OSU Geography/EPA Corvallis
Beverly Vogt	Oregon Dept. of Geology & Mineral Industries
Paul Staub	Oregon Dept. of Geology & Mineral Industries
Chuck Schumacher	Oregon Dept. of Geology & Mineral Industries
Lewis MacArthur	Oregon Geographic Names Board
Charles Chesney	US Corps of Engineers
Karen Sims	US Corps of Engineers
Bob Bailey	LCDC
John Beaulieu	Chairman/SMAC; Deputy State Geologist

1) Updated Functions of the State Map Advisory Committee

To respond more effectively to evolving, technologies, to include additional participants since the last Executive Directive in 1979, and to provide a more effective forum for addressing upcoming natural resource map issues in state government the State Map Advisory Committee was modified in Executive Order No. EO-83-15 signed by Governor Victor Atiyeh in September. Copies of the Executive Order were distributed.

Computer mapping and manipulation by state agencies in Oregon is at a pivotal point in its development with 1) renewed interest on a broad front including the legislature, and 2) a variety of in-house talents and efforts including those of DOT, Forestry, DOE, LCDC, ERSAL and others. Future growth will probably be diffuse rather than centralized and will be within existing institutions with the emphasis on users rather than builders of map systems. In this context the coordination role of SMAC with respect to nonduplication of effort, adherence to common standards and data bases, coordinated expenditures, and maximum utilization of existing hardware, software, data, and expertise outside Oregon government is particularly significant.

Accordingly the revised Executive Order is timely and well designed to meet the needs of state agencies for the foreseeable future.

2) Computer Mapping Activities in Oregon

a) Computer coordination on a technical level:
The possible need for greater coordination of computer oriented mapping programs from a technical standpoint is evident on the basis of 1) growing computer use by local government, 2) a previous statement of need by Ted Miller of the Oregon Firefighters Association, and 3) other similar developments on a variety of fronts. The afternoon meeting (Oct. 13, 1983 @ 1:30 p.m.) was scheduled to better define the potential problem, to identify an interest to address the problem, and to present options. Options include participation in URISA, NWCAMA, a new group, or development of a mailing list. (Note: the afternoon meeting reportedly resulted in little immediate action although a mailing list was developed for future use.)

b) Senate Bill 523:
From the standpoint of mapping this bill dealing with the systematic assessment of water supply and demand in Oregon on a basin by basin basis was discussed. A proposal for the mapping elements of a pilot basin will be presented to the Water Task Force (natural resource agencies) on Tuesday, October 18, 1983. Details were not presented to the SMAC assembly.

c) Department of Transportation Computer Map Efforts:
Fred Miller, Director, expressed the desire on the part of DOT to cooperate with state agencies in the development of their capabilities. Rudy Wellbrock presented an overview of the system 1) emphasizing

that the need was first foreseen 5-6 years ago, 2) that the plan for the future is a 6-year incremental growth plan involving 32-37 workstations eventually with interactive capabilities and micro-wave tie-ins to region offices. Photogrammetry will be integrated into the system and a milepost reference system will be implemented, hopefully with a dual screen video supplement tied to road logs.

Installation hopefully will begin March 6, 1984. The RFP was circulated the first week of October. A capability to effectively utilize the digital data bases is a prerequisite to a successful bid.

d) DOE/LCDC Computer Map Plans:
With a small sum of NOAA funds DOE and LCDC are pursuing a demonstration project to show the value of computerized mapping and GIS capabilities in addressing resource management problems in the coastal zone and offshore. The effort is coordinated with DOT (c above) and contemplates use of their hardware. A joint M.O.V. is in preparation. Time frames include a consultant on board in December, a feasibility study in 3-4 months, and a completed demonstration project in approximately 9 months.

Ray Miller (Forestry) noted that coordination with agencies other than DOE, LCDC, and DOT was necessary and that formal arrangements must be made for 1) that coordination, and 2) ultimate access to the capabilities by other agencies. The effort must also be coordinated with map efforts for S.B. 523, if they materialize.

It is DOE's intent to return to SMAC with an update in February and also to get into direct contact with Forestry to benefit as fully as possible from their experiences in agency coordination and surveying resulting from GIS research efforts in recent years.

3) Activities of the National Map Division

a) Randy Olsen of the Western Regional Office of the National Map Division (Menlo Park) reported that the evolving realignment of the National Map Division was prepared as a response to a number of management considerations including a need to attract and retain professionals, the need to remain effective in the need of budget cuts, and a need to centralize certain functions in fewer areas to maintain appropriate levels of collective effort. Menlo will focus on source data functions and digitization. Production timelines with respect to Oregon are not affected.

b) In terms of program status Glenn Ireland (Resident Cartographer) reported that the 7½' program was on schedule; the orthoprogram was 97% complete and the 1:100,000 series is well on the way to completion. Progress maps were displayed on the wall for further examinations.

c) The Sixth Regional Mapping Workshop scheduled for the last week at Timberline Lodge wil be attended by representatives of seven western states and various regional and division offices of the USGS. Topics will include state evaluations of NMD programs, the Resident Cartographer activity, and the program plans of the US Geological Survey.

d) The Resident Cartographer Program for Oregon has been shifted from an Interpersonal Agreement to an M.O.V. to produce the technical adjustments (longevity) required to enable Oregon to properly address major cartographic coordination needs during the next few pivotal years in the development of Oregon's map strategy.

e) In overviewing the probable NMD Budget for FY 1984 Randy Olsen noted a steady level of funding with various internal program adjustments including an increase of digital effort ($4M in FY 83 to $8M in FY 84) under an appropriation rather than revolving fund structure. Most of the increase will be devoted to hardware procurement. Automated scanning of map separates is contemplated in the future.

With increased emphasis on digital efforts in map production at the expense of the presently employed "graphic mode" one can envisage a merging of the provisional map effort, the revision program, and the digital program.

4) Digital Activities of the National Map Division

a) The present and future leadership role of the NMD in digital mapping at the Federal level arises in part from earlier studies by those of the Office of Management and Budget and General Accounting Office outlining the need for greater coordination and coherent program direction at the Federal level. Coordination is guided by the Interior Digital Cartography Coordination Committee (IDCCC) in terms of standards, format, and shared efforts.

b) Within the NMD Digital efforts include Digital Elevation models, Digital Line Graphs, Land Use-Land Cover, and Geographic Names. With 55000 7' quads in the United States completion is slated for the late 1990s. Digitization is coop driven; five circulars presenting standards are in the publication mill.

c) With the leadership role of the NMD, the coordination of the IDCCC, the commitment to complete the U.S., the availability of coops, etc. it is now possible for state agencies to identify and to gravitate toward a digital center of gravity in developing their map strategies for the future.

d) A few major examples of digital projects include the Federal Mineral Lands Information System (NMD/Geology), the 1:100,000 transportation-hydrography joint effort with the Bureau of Census (complete by 1990), and the ongoing Image mapping efforts exemplified by the Las Vegas Sheet in which digital Landsat data was rectified to the 1:250,000 map format.

5) Miscellaneous Map Topics

a) Reporting on the Oregon Geographic Names Information System (GNIS) Lewis MacArthur reported Phase I (existing published NMD maps) is basically complete through early 1981. Input into advance Provisional Maps is provided through a small initial press run with opportunity for correction comments prior to the larger press run. Phase II contracts are under negotiation (information from additional data sources) and will be performed by the University of Oregon and the Oregon Historical Society. GNIS data bases can now be sorted by geographic area as well as topic.

b) Dennis Isaakson displayed cellular printouts of a 7½' quadrangle area with 60 plotted attributes derived or based upon 60 spectral classes. Several technological options are available for transmitting data directly with a Model 40 teletype and modern.

c) The cooperative 1:500,000 land ownership map is presently at the Denver Service Center awaiting GPO printing under contract with an 8000 count press run supplemented by a 20,000 run at 1:1,000,000. Control of the project has lagged owing to retirements.

d) The orthophoto efforts of State Forestry is no longer possible from the standpoint of costs, although cooperative efforts are still desirable according to George Shore. He also reports that enlargement of the 1:80,000 HAP products to 1:12,000 yields acceptable results from the standpoint of resolution .

A February meeting is contemplated with attention paid to DOT-GIS progress and progress or program reports by DOE, ERSAL, and others. Future meetings will be placing increased emphasis on coordination of digital map efforts through presentations, discussions of format and standards, and development of a general consensus of digital data needs and preferred opportunities for Oregon.

Sixth Regional Map Workshop

October 27, 1983

Meeting Summary Outline

1) U.S. Geological Survey Budget and Program Highlights

A) Followthrough on Fifth Regional Workshop
- 7½' series retains high priority with fixed deadline of 1989-1990.
- 25,000 metric series has been discontinued
- Complete 1:100K series is slated for after the 7½' series, but a coop with the Census Bureau may accelerate things. (hydrography and transportation)
- Resident Cartographer Program continues.
- Digital standards are now in the publication mill as requested.
- Multi-center communication is better defined.

B) Program/Budget Highlights
- Summary sheet details steady state total with reduction in primary and increase in digital in the House/Senate Conference version. Receipts for printing are now in the budget structure to offset most of the reduction in Primary Quad - Appropriation. In 1985 Primary Quad line item will be merged with revision line item to smooth out future requests.
- Digital is strongly supported by Congress as the N.M.D. leadership role matures and agencies of Interior coordinates. The cost recovery budget strategy is diminishing as a problem.
- Land use/land cover has stabilized.
- Airborne profiling of terrain system with high resolution continues and will be available for high resolution problem solving such as subsidence monitoring.

C) Realignment addresses long-range issues of overhead, management, projected workload, cost of living, etc. The net result is two full-scale centers with all capabilities (Denver, Rolla) and two additional centers (Reston, Menlo) where primary mapping in the local area is conducted. Digitizing and data acquisition will be spread evenly. This will facilitate coops and use of existing data. Phase-in schedule covers seven years.

D) Major issues of concern to the division in their long-range planning are attached and were a subject of discussion in the state caucus summarized below.

$(000)

	FY 1984 Base	FY 1984 House/Senate Conference	Δ
Primary Quad Mapping	35,950	29,000	-6,950
Modernization	3,900	3,900	-
Revision	11,100	8,100	-3,000
OQ	6,300	4,300	-2,000
Receipts for Printing and Distribution	-	8,500	+8,500
Digital Mapping	4,000	8,000	+4,000
Intermediate Scale	7,000	6,000	-1,000
Land Use/Land Cover	3,400	3,400	-
APTS	1,700	1,700	-
Small Scale and Special Mapping	2,600	2,600	-
Federal Mineral Land Info	-	1,000	+1,000
EROS	9,600	9,600	-
SLAR	3,000	1,500	-1,500
Cartographic and Geographic Info	4,000	4,000	-

2) USGS Digital Program: the highlights of the digital program were covered by Randy Olsen at the Oct. 13, 1983 Oregon SMAC meeting. The outline of his talk (attached) provided the basis for the presentation at the workshop.
   - The Scitex edit system is an Israeli textile quality control station adapted to manipulation of map displays, color combinations etc. for decisions in map generation. It has application for many map themes including geology.
   - The Federal Mineral Land Information System (FMLIS) addresses surface ownership, mineral rights, mineral occurrence, mineral potential, and surface restrictions. It is a pilot (in Oregon) GIS capability of a multidisciplinary nature using some non NMD data bases and is described on an attachment.
     (The technology developed here includes expertise that possibly can be transferred to Oregon to address the multidisciplinary requirements relating to water as specified in SB 523.)

3) State Digial Programs were presented on a state by state basis and handouts were presented. Very general summaries are as follows:

California	- Progressive budget cuts preclude a unified effort although some agencies have some special interest capabilities (transportation, coastal zone administration, forestry).
Arizona	- Applications are in computer mapping, image processing and data base management. The capability is a GIS; the posture is one of being a service bureau, but not of actually doing the service. This promites more user awareness and product sensitivity. The various data bases can be mixed and matched, tabulated by area, and output in seven color hard copy.
Washington	- Digital activities include those of the Department of Natural Resources, local governments, and private industry. The state system was installed in 1975. Numerous projects are underway. The Washington DOT system installed in September is very similar to the one being phased in in the state of Oregon.
Oregon	- The Oregon digital map effort is a dispersed system now fully coordinated through a restructured SMAC paralleling in part the functions of the Interior Digital Cartographic Coordinating Committee. A variety of capabilities is present in the state. A multiagency strategic water effort taking shape now may provide the basis for a significant measure of progress in the immediate future.
Nevada	- Digital mapping efforts in the state of Nevada are at a standstill owing to severe budget cuts. Local planning agencies display a variety of efforts relating to local needs in populated areas.
Hawaii	- Digital efforts in Hawaii are small and characterized by small scale individual agency efforts.
Idaho	- The most active element in Idaho is Boise Cascade, which contemplates $8M effort with a Comarc System for each regional office. They seem to be duplicating Federal efforts, perhaps out of ignorance of availability.

Idaho Water Resources has digital capabilities, but GIS functions are precluded by budget. Other interested agencies are Lands and Transportation.

4) Resident Cartography Program Review

Oregon - With emphasis on coops and the 7½' series the Oregon program is a success and is crucial for the next few years given the complex setting.

Nevada - The program is very successful. State funding is lacking.

Arizona - The need for an SRC is recognized and he could be put to profitable use. OQ products are an area of potential activity.

Washington - The program has been successful and will soon be a three agency cooperative effort.

Idaho - SRC experience only spans a few months; task definition is clear now and positive results are noted.

Hawaii - An SRC has been on board since July with WRD funding in part. Dividends are already seen.

SRCs yield many intengible benefits in terms of visibility for mapping, recognition of the utility of maps, and smoothing out the working relationships of map oriented agencies. The program provides good training for NMD employees.

5) State Caucus Presentation

Overview of NMD activities: The states expressed very sincere appreciation to the NMD for their close communications, commitment to complete jobs, professionalism, and sincere efforts to perform relevant services and to provide meaningful data bases in an effective and innovative manner.

Program reactions: The states expressed displeasure and lack of support for the format of the "Ohio Index." Use of the traditional format is strongly preferred on a unanimous basis. Other recommendations are as follows:

- The Provisional Map Series is top priority; more neatness in some maps is desirable.
- Completion dates for T-maps were requested.
- Long time frames for provisional maps from Rocky were clarified.
- The orthophoto program should be pursued in a coop cyclic basis possibly with color JR.
- The Intermediate Scale Map Series is attractive as a necessary replacement of the AMS Series.
- The State Base Map has many uses and clarification of the status of the series was requested.
- Revision of the 7½' series on a selective layer basis does not appear cost effective.

Various policy issues of the National Map Division were discussed.

- On 7½' revision input from the SMACs on priorities was requested.
- An appropriate level of GIS effort for NMD would be to develop basic manipulation capabilities for basic, ongoing, established, "self-supporting" federal data bases such as those of WRD and geology. The FMLIS effort fits these criteria.
- Image map efforts might include false color IR in the OQ series.
- In areas of high technology it is necessary that applications be be developed at the center level to guide users.
- Federal data bases of geographic nature should be accommodated in an NMD GIS effort.
- Landsat IV should be retrieved and retooled for relaunching as Landsat VI to provide backup for Landsat V.
- New products, custom products, and derivative products should be discouraged to assure proper attention to "block and tackle" activities.
- Fund efforts should focus on key federal agencies at the appropriate (Reston) level.
- Urban mapping needs are best met by the private sector. However, coop funds for a larger nonurban scale map (1:5000) may be available through State Depts of Transportation and Secretary of State offices with urban mapping needs.
- It should be recognized that a National Atlas is low priority and that foreign countries that have them generally do not have multiple "federal" map agencies, "state" map efforts, and an active private map sector.

6) Cyclic orthophotoquad: Miscellaneous considerations include use of color IR, use of imagery for larger scale maps in urban areas (that do not compete with the private sector) and criteria which must be met including 1) production within one year after flying, 2) a rapid return cycle of a few years, 3) acceptable scale (1:12,000 in Washington).

Format considerations include township centered vs quad centered for printed material. Cooperative efforts can be quite diverse with money, products, technology, and levels of completion going both directions. In Washington, for example, the USGS may want to receive and process Washington DNR front end material in manufacturing their quad centered orthos.

VICTOR ATIYEH
GOVERNOR

OFFICE OF THE GOVERNOR
STATE CAPITOL
SALEM 97310

October 1983

Dick Swinnerton, Chief
and Participants of Sixth
Regional Map Workshop
National Map Division
U. S. Geological Survey
345 Middlefield Road
Menlo Park, CA 94025

Greetings:

I would like to extend a warm welcome to you, to members of the U.S. Geological Survey, and to representatives of other states as you meet for the Sixth Regional Mapping Workshop in Oregon.

My office is intensely interested in the contents of the meeting, although pressing schedules preclude our attendance for more than part of the meeting. I am excited that so many issues of special interest to Oregon are on the agenda.

The State of Oregon is at a crucial point in developing its map strategy for the future. A key question for which we need an answer is the extent to which National Map Division capabilities and expertise are available to states as they develop their programs. We also need to know the utility of NMD digital data bases for our needs and the compatability of NMD digital data bases to other data sets.

While you are in Oregon I understand you will be touring the Columbia River Gorge and enjoying the facilities and scenery available at Timberline Lodge. Both are representative of some of the numerous scenic values and economic opportunities available throughout Oregon. Enjoy your stay here and hopefully you can return again for business or pleasure.

Sincerely,

Victor Atiyeh
Governor of Oregon

DIGITAL MAPPING BY STATE AGENCIES IN OREGON

Oregon agencies dealing with natural resources and related issues are not clustered into large departments, but rather are coordinated through an effective cabinet style of government involving close communication and direction with the Governor. Digital mapping efforts and progress toward geographic information systems are accordingly located within given agencies.

This arrangement assures that computer capabilities are closely linked with the on-the-ground needs of the users. The need for communication and coordination is addressed on the policy level by the Governor's office, on the technical level by the State Map Advisory Committee, on the financial and hardware level by the Data Systems Division of the Executive Department, and on the day-to-day level by a professionalism and spirit of cooperation of cartographic staff throughout the state. The State Resident Cartographer facilitates coordination in general.

The State of Oregon recognizes opportunities for coordination with Federal agencies, local agencies, other states, and private industry and aggressively pursues cooperative ventures. The place of the National Map Division in the national effort is central to our thinking.

The broad goals for Oregon include the digitization of appropriate data bases for the state. The renewed vigor of the 7½' topographic mapping in the state is fundamental to this goal and now allows contemplation of effective computerized mapping by diverse participants with renewed optimism. In Oregon the various agencies will focus their respective attention on the various layers of digital data that most directly parallels agency missions.

In the short term, the Department of Transportation is the focus of greatest activity. It is among their goals to coordinate fully with other state agencies, the U.S. Geological Survey and local government. As in the past, the activities of the State Map Advisory will be instrumental in the overall success of this effort. In the coming year general technical guidelines and goals for digital data will be formulated, existing capabilities will be tabulated, and opportunities for cooperative agreements will be defined for reference by all agencies.

The State of Oregon is at a crossroads in the development of computer capabilities to solve geographic natural resource problems. Historically efforts have been more or less unilateral on the part of individual agencies having unique opportunities in terms of funding. During the past three years most of these efforts faded as federal funding was readjusted and as the state weathered the most severe financial crises in 50 years.

A new and more enlightened approach to computer mapping characterizes the Oregon effort as we now look to the future. The State recognizes the real benefits to be realized in pursuing compatible formats and in merging State efforts with others on the private and public level including local, federal, and regional government and also including capabilities in other states.

Coordination will be a key consideration in progress towards a comprehensive geographic information capability in future years. Accordingly the State Map Advisory Committee has been given expanded responsibilities analagous to those of the Interior Digital Cartography Coordination Committee (IDCCC) at the Federal Level.

The duties and responsibilities of the State Map Advisory Committee are as follows:

a. To define and coordinate basic policies, guidelines, standards and resources of state agencies and federal agencies and assist private entities with regard to the generation of traditional and digital map products including topographic maps, imagery, and thematic maps including:

A. Maintenance of established long- and short- term goals for the timely completion of topographic base map coverage for the State of Oregon with priority on the 7'½' Series.

B. Formulation of preferred general guidelines and format standards for the generation of traditional and digital map products with the goal of promoting efficiency of map production and compatibility of map products. Included is due consideration for opportunities for cooperative map efforts.

C. Formulation of general mapping goals for the state agencies in developing mapping plans and designing projects. The goals will be consistent with agency missions and will place emphasis on practical problem solving.

D. Investigation and coordination of needs and resources with regard to remote sensing imagery data, manipulation, data reproduction hardware and software as they relate to map needs of the State of Oregon.

E. Serve as a centralized, broad-based source of technical information and advice to state agencies and task forces and private agencies regarding traditional and digital map products for Oregon. This ongoing function by representatives of the mapping community will assure consistent and comprehensive advice throughout state government.

F. Serve as a forum to share information about and promote coordination of state, federal, local government, and private map and related data production activities.

In terms of specific criteria for future growth SMAC will aim agency activities in a direction which properly considers the following factors.

1) Maximum use of NMD data bases and software. This will facilitate compatibility of individual agency efforts one to another and will allow the benefits of the activities of the IDCCC to trickle down to the state level.
2) Passive update of data bases by picking data bases that are updated by responsible agencies as a normal course of their operations.
3) Multiagency coordination at the state, federal, and local level.
4) Maximum pursuit of cost-share and data share in development of programs. Expertise of federal agencies and other states will also be aggressively utilized

The Oregon effort will emphasize remote access activities and data sharing, will preserve the individual integrity of agencies, and will be characterized by full utilization of existing institutions rather than the development of new agencies. Accordingly the systems which develop will also be more apt to be user oriented rather than system oriented. The new technologies not so fully available 5 to 10 years ago, and the realities of present day and future budgeting make this option of the preferred course of action at least for the forseeable future. It will be the responsibility of the State Map Advisory Committee, the Executive Department, and other coordinating bodies to help make this approach work.

Major current efforts underway at the state level in Oregon are briefly summarized by agency.

Agency	Activity
Transportation (DOT)	Acquisition of a $1M main frame is underway. Emphasis will be on transportation networks. Other layers will be acquired on a cooperative basis with appropriate lead agencies

Agency	Activity
Energy (DOE)	Digital data bases for the coastal zone will be acquired and manipulated to address energy impact. DOT hardware will be utilized.
Land Conservation and Development (LCDC)	Digital data bases for the coastal zone will be acquired and manipulated for planning coordination. In cooperation with DOE and DOT.
Forestry	A massive investigation and status report of State need and capabilities ended in 1981 through budget cuts. Expertise and interest continues.
Economic Development (DED)	An award winning computerized program for locating sites for industrial usage in Oregon is operational.
Water Resources (WRD)	A full scale effort to address state water needs by all natural resource agencies is underway. Overall project design is not public information. System includes contemplated full utilzation of digital data bases, NMD software, and eventual transfer of all computer capabilities and data layers to DOT facilities possibly.
Geology (DOGAMI)	Full utilization of out-of-house computer capabilities including those for geothermal resources (SMU), rock chemistry (UofO), analytical assays and manipulation (OSU), mine locations (USGS, BM), geophysics (OSU), and others. In-house capability to monitor permitting for reclamation of mined lands is under development.
Oregon State University (OSU)	Main frame computer handles wide variety of data for various piecemeal basis. Future acquisition will include ability for LANDSAT image enhancement and rationing according to some sources.

Office of the Governor
State of Oregon

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DEPT. OF GEOLOGY

EXECUTIVE ORDER NO. EO - 83 - 15

STATE MAP ADVISORY COMMITTEE

State and Federal Mapping requirements as well as private, corporate and individual land owner needs will vary on a case-by-case basis. Technology decisions forthcoming will reflect those differences. A State Map Advisory Committee can assist differing entities in their decision-making process.

IT IS ORDERED AND DIRECTED:

1. The State Map Advisory Committee is reorganized with a representative of each of the following map-making agencies, to be designated by the chief executive officer of that agency:

Department of Forestry.

Department of Revenue.

Department of Water Resources.

Department of Fish and Wildlife.

Department of Geology and Mineral Industries.

Department of Transportation.

Department of Agriculture.

Land Conservation and Development Department.

Division of State Lands.

Department of Environmental Quality.

Department of Energy.

Data Systems Division - Executive Department.

Oregon State University, Environmental Remote Sensing Application Laboratory.

2. Each of the following map-using agencies shall serve in an advisory capacity, and a representative of each shall be appointed by the chief executive officer of that agency:

University of Oregon, Geography Department.

Portland State University, Cartography Department.

Oregon State University, Cartography Department.

University of Oregon, Cartography Department.

Portland State University, Geography Department.

State Library.

3. The Resident Cartographer for the State of Oregon shall serve in an advisory capacity and shall provide information to the Committee on map products and technologies available, program coordination, and long-term map planning by the U.S. Geological Survey as the lead federal agency for conventional and digital mapping.

4. The Assistant to the Governor having primary responsibility to Natural Resource issues shall solicit the participation of the following federal agencies in the activities of the State Map Advisory Committee as requested:

U.S. Forest Service.

U.S. Bureau of Land Management.

U.S. Soil Conservation Service, Department of Agriculture.

U.S. Army Corps of Engineers.

U.S. Geological Survey (Oregon Office).

Bonneville Power Administration.

U.S. Fish and Wildlife Service.

Bureau of Indian Affairs.

In addition, advisory participation by a representative of the Association of Oregon Counties and the League of Oregon Cities will be solicited.

5. The duties and responsibilities of the State Map Advisory Committee shall be as follows:

a. To define and coordinate basic policies, guidelines, standards and resources of state agencies and federal agencies and assist private entities with regard to the generation of traditional and digital map products including topographic maps, imagery, and thematic maps including:

A. Maintenance of established long- and short- term goals for the timely completion of topographic base map coverage for the State of Oregon with priority on the 7-1/2' Series.

B. Formulation of preferred general guidelines and format standards for the generation of traditional and digital map products with the goal of promoting efficiency of map production and compatibility of map products. Included is due consideration for opportunities for cooperative map efforts.

C. Formulation of general mapping goals for the state agencies in developing mapping plans and designing projects. The goals will be consistent with agency missions and will place emphasis on practical problem solving.

D. Investigation and coordination of needs and resources with regard to remote sensing imagery data, manipulation, data reproduction hardware and software as they relate to map needs of the State of Oregon.

E. Serve as a centralized, broad-based source of technical information and advice to state agencies and task forces and private agencies regarding traditional and digital map products for Oregon. This ongoing function by representatives of the mapping community will assure consistent and comprehensive advice throughout state government.

F. Serve as a forum to share information about and promote coordination of state, federal, local government, and private map and related data production activities.

b. To represent the State of Oregon on a regional and national level in developing mapping programs affecting Oregon and to coordinate state mapping activities in Oregon with federal and private efforts. Included are:

A. Assistance in the development of a wide range of cooperative activities.

B. Prioritization of map programs and geographic regions within programs.

C. Maintenance on inventory of mapping resources available from State and Federal agencies.

c. To perform such other tasks with respect to mapping as the Governor directs.

6. Overall coordination for the activities ordered above, and the responsibility for serving as a repository for the materials prepared and accumulated by the State Map Advisory Committee, is vested in the Department of Geology and Mineral Industries.

7. The Governor shall designate the chairperson of the State Map Advisory Committee, from the staff of the Department of Geology and Mineral Industries, who shall develop the work program and meeting agendas of the Committee.

8. Executive Order EO - 79 - 06 is rescinded.

Done at Salem, Oregon, this 21st day of September, 1983.

GOVERNOR

ATTEST:

SECRETARY OF STATE

OREGON STATISTICAL SUMMARY FY 83
October 1, 1982 - August 31, 1983

PROGRAM	Total No. of Units	Completed to Date		Completed
		#	%	FY 83
NEW MAPPING	1827			
7.5-Minute Topographic Maps	1725	1020	56%	88
7.5-Minute T-maps	102	102	6%	//////////
MAP REVISION				
7.5-Minute Photorevision	//////////	//////////	//////////	0
7.5-Minute Limited Revision	//////////	//////////	//////////	0
7.5-Minute Complete Revision	//////////	//////////	//////////	0
ORTHOPHOTOQUADS				
7.5-Minute Orthophotoquad	1827	1779	97%	113
INTERMEDIATE SCALE				
1:100,000-Scale Quads Planimetric		30	43%	//////////
1:100,000-Scale Quads Topographic	70	41	59%	4
1:100,000-Scale County Plan		7	19%	0
1,100,000-Scale County Topo	36	0	0%	0
1:50,000-Scale DMA	457	0	0%	0
LAND USE AND LAND COVER SERIES				
1:100,000-Scale	65	12	18%	0
1:250,000-Scale	19	15	79%	2
SMALL SCALE & SPECIAL				
1:500,000-Scale State Base Rev.	1	//////////	//////////	0
1:250,000 Scale Revision	19	//////////	//////////	0
National Park Maps	1	//////////	//////////	0
DIGITAL PRODUCTS				
Digital Elevation Models (DEM)	1827	242	12%	40
Digital Line Graphics (DLG)	1827	//////////	//////////	//////////
Land Lines and Boundaries	1827	646	35%	52
Transportation	1827	0	0%	0
Hydrography	1827	0	0%	0

United States Department of the Interior

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State Resident Cartographer - Oregon

REPORT TO THE STATE

1983 ANNUAL REPORT

In the third year as State Resident Cartographer for Oregon, the position has grown to be a focal point of coordination. With an increase in the digital efforts in Oregon and across the nation, the State Cartographer has acted as an information source to those in the digital mapping field.

As new ventures have begun in mapping, the National Mapping Division has had to maintain a balance to see that the dedicated interests of the State are maintained. The 7½-minute quadrangle series has accelerated in Oregon with the advent of the Provisional Mapping. In this year, there were more National Mapping Division field crews in Oregon working on the 7½-minute series, than at any previous time.

Digital mapping became a focal point this year. Nationally, the Geological Survey was given the lead to set standards and to coordinate mapping among the Federal agencies. To promote the coordination among Department of The Interior agencies the Interior Digital Cartography coordinating committee (IDCCC) was formed. This committee is made up of the 14 Interior agencies which are involved in digital mapping.

The National Mapping Division has taken its role as digital mapping leader, seriously. Several publications have been released, new indixes of digital status have been inaugurated and prices of digital products have been established.

The State Cartographer has functioned as a focal point for digital pricing information, workshops of various geographic information systems were held in Salem and Portland. Documents and information dealing with digital mapping was made available through the SRC Office.

The 6th Regional Mapping Workshop was held at Timberline Lodge. This workshop was attended by each of the State Mapping Advisory Committee (SMAC) chairman from the seven western states. Also attending were Federal officials from NMD and WRD. At this workshop State priorities in traditional and digital mapping were presented to the NMD.

Two very successful SMAC meetings were held in the State Capital. The February 15th meeting was attended by 51 participants, and the October 13th meeting was attended by 53 participants. In each of these meetings representatives from the Western Mapping Center, Menlo Park, California, presented discussions relating to program management, orthophotography, and digital mapping.

This year the Governor's Executive order which defines the SMAC activities was expanded to formally include the SRC and to include the coordination of digital mapping activities within the State as a SMAC responsibility.

The following items are selected highlights in this year's SRC activities.

- A Federal Lands and Minerals pilot project was initiated and completed. Themes from various natural resource agencies' maps were digitized into a data base which allowed the national natural resource planner to make informed decisions. This Federal Lands and Information System was one of the first Geographic Information Systems (GIS) to look at problems from a National perspective.

- The Mount Hood and Vicinity USGS - NMD/WRD cooperative map neared completion. This map with one side at a 1:100,000 and the other side a 1:24,000 scale, will be used to study the water related volcanic hazards of Mount Hood and vicinity. Publication date is projected to be in the Spring of 1984.

- The National Mapping Division's Geographic Names Information System (GNIS) released a spiral-bound, two volume set of Oregon Geographic Names. This set is a compilation of all the geographic names which appeared on the topographic map series. Phase II of the GNIS was instituted which will incorporate geographic names from other map sources. The Phase II will lead to the publication of a State Names Gazeteer by the National Mapping Division.

- A U.S. Congressional District boundary map, at a scale of 1:500,000, was made as a pilot project for Oregon. This Congressional District map contained the reapportioned districts based on the 1980 census.

- A State map requirement study was completed and forwarded to NMD headquarters. This study identified the various uses of the 1:500,000 State maps and revealed a need for reprinting of the Oregon shaded relief edition.

- Information was provided to NMD field crews working within the State. This will result in more complete 7½-minute maps in a timely manner.

The State Resident Cartographer's office gained more recognition as an information source. Over 500 requests from State and Federal agencies and the public were serviced through the SRC's office.