FIRST ANNUAL REPORT

OF THE STATE MAP ADVISORY COUNCIL

FOR OREGON

1987

OPEN-FILE REPORT 0-88-1

July 11, 1987 - December 31, 1987

John D. Beaulieu, Chairman Executive Board - State Map Advisory Council

> Paul Staub, Chairman Oregon Mapping Committee

George Beard, Chairman Oregon Geographic Information Systems Committee

> Ken Dueker, Chairman Oregon Land Records Committee

State of Oregon Department of Geology & Mineral Industries 910 State Office Building Portland, Oregon

CONTENTS

Page

_

.

Executive Summary	1
Executive Board	3
Membership	4
Meeting Summaries	6
	13
Diegon Geographic intoimacion bybeemb committeeter	
Membership	14
Meeting Summaries	16
Oregon Mapping Committee	17
Membership	18
Meeting Summaries	20
Oregon Land Records Committee	23
	24
Membership	
Meeting Summaries	26
Appendix A - Executive Order EO-87-11	35
Appendix B - Draft Goals and Objectives	39
Appendix C - Guidelines for Cooperation	43
Appendix D - Meeting Summary of State Map	
Advisory Committee, April 30, 1987	47
Advisory Committee, April 30, 1987	.,

EXECUTIVE SUMMARY

- On July 11, 1987 the State Map Advisory Council was created by Executive Order 87-11 superseding all pre-existing mapping and geographic information systems coordination committees at the state level. Purposes of the Council are to promote strategic planning, resolve technology and policy issues, provide for technical assistance and coordination, and to foster cooperation. These will be accomplished through emphasis on policy issues, long term planning, statewide scope of efforts and networking of resources. The Council consists of an Executive Board, the Oregon Mapping Committee, the Oregon Geographic Information System Committee and the Oregon Land Records Committee.
- 2) The Council defined its relation to other agencies and organizations in state government in the meeting of August 7, 1987. The committee has no direct decisionmaking authority over agencies, but rather influences decisionmaking within agencies and facilitates coordination between agencies. The Executive Department Data Systems Division relies heavily on the committee in evaluating mapping and GIS initiatives by agencies.
- 3) The Council is considering draft goals (Appendix B), draft guidelines for cooperation (Appendix C), and the five to ten year technical mission statements of state agencies with regard to Geographic Information Systems and map data development. The Executive Board has heard presentations on offshore management data connected to Senate Bill 630 (meeting of 11-18-87), and water basin planning (meeting of 11-18-87). Informally, it also has influenced various agency acquisitions of hardware.
- 4) On the technical level the three committees have dealt with a variety of technical issues. The Oregon Mapping Committee is focusing efforts on standards and statewide map products. It has also heard a presentation of Senate Bill 630 and is evaluating broad goals for the Council. The Land Records Committee is placing emphasis on cadastral issues and goal definition. It also is focusing on the various aspects of an address directory for the State of Oregon. The Oregon Geographic Information System Committee is emphasizing project coordination and proper goal development. It has heard presentations on Senate Bill 630. Summaries of all meetings are provided in this report.

- 5) Representatives of the committees have participated in the activities of a variety of other committees in which mapping and GIS efforts are a major concern. The chairman of the Oregon Mapping Committee attended the annual Regional Meeting of the IDCCC sponsored by the U.S. Department of the Interior. The chairman of the Executive Board attended the Tenth Regional Western Mapping Conference and emphasized the need for additional meaningful coordination and cooperation in Oregon through pilot projects and possible minor restructuring or reassignment of workload. The State Map Advisory Council is participating in the early stages of development of the Management Oversight Committee and Land Information System Network being developed by federal agencies in the states of Oregon and Washington.
- 6) Progress has been made on the development of a matrix of state agency and federal agency areas of responsibilities with regard to GIS and map development. With a properly constructed matrix state agencies can better plan areas of individual attention and can better define their coordination efforts. A properly structured matrix can promote proper allocation of responsibilities, can help agencies avoid duplication, and can be used to identify areas in need of greater attention as state agencies give increasing attention to the architecture of a network GIS system for the State of Oregon.

EXECUTIVE BOARD

.

F

Membership Meeting Summaries

-

State Map Advisory Council Executive Board

.

I.

Name	State Agencies	Phone	
John D. Beaulieu	Oregon Deparment of Geology and Mineral Industries 910 State Office Building Portland, Oregon 97201	(503) 229-5580	
Michael Weland	Oregon Department of Fish and Wildlife 506 SW Mill St. Portland, Oregon 97201	(503) 229-5433	
Eldon Hout	Department of Land Conservation and Developmen 1175 Court St., NE Salem, OR 97310	(503) 373-0061 t	
Hal Sawyer	Department of Environmental Quality 811 SW 6th Portland, Oregon 97204	(503) 229-5776	
Nancy Rockwell	Oregon Department of Energy 625 Marion Street, NE Salem, Oregon 97310	(503) 378-6063	
Janet Neuman	Natural Resources Section Division of State Lands 1600 State Street Salem, Oregon 97310	(503) 378-3805	
Dave Stere	Department of Forestry 2600 State Street Salem, Oregon 97310	(503) 378-5387	
John Borden	Water Resources Department 3850 Portland Rd., NE Salem, Oregon 97310	(503) 378-8218	
Don Adams	Department of Transportation Assistant St. Hwy. Engineer Administrative Branch 102 Transportation Bldg. Salem, Oregon 97310	(503) 378-6516	

-

(503) 378-3161 Data Systems Division Gerald Schmitz Executive Dept. 155 Cottage Street N.E. Salem, Oregon 97310 Federal Agencies (Non Voting) (503) 230-4633 Surveys and Maps William Young, ext. 4633 Bonneville Power Administration Chief PO Box 3621 ETRP Portland, Oregon 97208 (415) 329-4254 National Map Division-USGS Dick Swinnerton, 345 Middlefield Rd. MS 531 Chief Menlo Park, California 94025 (503) 231-6251 Bureau of Land Management Paul Vetterick PO Box 2965 Portland, Oregon 97208 (503) 221-3627 John Butruille U.S. Forest Service PO Box 3623 Portland, Oregon 97208 Local Government (Non Voting) (503) 585-8351 William Penhollow Association of Oregon Counties PO Box 12729 Salem, Oregon 97309 (503) 687-5010 City Manager Michael Gleason 777 Pearl St., Rm 105 Eugene, Oregon 97401 Committee Chairs Oregon Department of Geology Paul Staub and Mineral Industries 910 State Office Bldg. Portland, Oregon 97201-5528 Data Systems George Beard Executive Department 155 Cottage Street NE Salem, Oregon 97310 Center for Urban Studies Ken Dueker Portland State University P.O. Box 751 Portland, Oregon 97207



Department of Geology and Mineral Industries ADMINISTRATIVE OFFICE

910 STATE OFFICE BLDG., 1400 SW 5th AVE., PORTLAND, OR 97201-5528 PHONE (503) 229-5580

MEETING SUMMARY EXECUTIVE BOARD State Map Advisory Council

Friday, August 7, 1987

Attendees

Name

Affiliation

Dave Stere Eldon Hout Mike Weland James McIntosh (for Janet Neuman) Rick Bastash (for John Borden) Bill Young Harold Sawyer Nancy Rockwell Dick Swinnerton Don Adams Patrick H. Geehan (for Paul Vetterick) George Beard (for Gerald Schmitz) John D. Beaulieu

Dept. of Forestry DLCD ODFW Division of State Lands WRD Bonneville Power Admin. DEQ ODOE

USGS ODOT US Bureau Land Management

Exec

Chairman/SMAC Ore. Dept. Geology and Mineral Industries

Not in Attendance

Michael Gleason (excused) John Butrille (excused) William Penhollow Eugene US Forest Service Assoc. Oregon Counties

1) Identity and direction of State Map Advisory Council

Earlier state attempts to coordinate mapping, GIS development, and land records were reviewed. Development of Executive Order 87-11 was described. The focus of activity for the Executive Board and Council will be to emphasize state needs defined by agency mission and policy statements,



to focus attention on strategic opportunities and to recognize that the State Map Advisory Council is the map/GIS coordination mechanism for state agencies in Oregon.

2) Formal action on proposed chairpersons and members committees

After brief discussion the following individuals were chosen by unanimous vote to be chairmen of the respective committees. Kenneth Dueker-Oregon Land Records Committee, Gary Waltenbaugh-Geographic Information System Committee, Paul Staub-Oregon Mapping Committee.

Membership of the three committees had been discussed previously with the prospective chairpersons in an attempt to accelerate the coordination process in Oregon. After some discussion and a few revisions, the submitted list of members by each chairman was accepted. Revised mailing lists will be distributed to board members and to chairpersons.

3) Overview of networking strategy

The relationship of the Oregon State Map Advisory Council to other coordinating bodies was described. These include the Federal Management Oversight Committee in Oregon and Washington, the Interior Digital Cartographic Coordinating Committee, federal agencies viewed individually, local agencies, the Water Management Group, the Offshore Management Group erected under Senate Bill 630, and the US Geological Survey. Earlier summary documents of revision needs for Oregon, offshore mapping needs for Oregon, and digital mapping needs for Oregon devised by representatives of state agencies under the State Map Advisory Committee were described. These documents can provide a basis for pursuing cooperative efforts and agency GIS/mapping/and land records activities.

4) Draft Goals

Draft goals for the State Map Advisory Committee and the other three committees were described and distributed. It was decided that an appropriate level of generalization goals should be formally accepted by the board and pursued by the committees. Members of the Executive Board were invited to submit modifications. Members of committees will also be invited to submit modifications.

Several timely, cooperative projects were briefly described. These include a possible GIS effort in conjunction with the designation of the Columbia River Gorge Scenic Area, the joint BLM/USGS/DOT/Forestry/other pilot GIS project in the central Coast Range, offshore mapping activities, and the 7 1/2' topographic quadrangle effort of the past decade.

5) <u>Future Actions</u>

Future actions of the State Map Advisory Council specifically will include: generation of a consolidated brief agency need statement with a five to ten year time frame, clarification of goals, identification of cooperative activities of large scale, definition and possible pursuit of appropriate legislative action in the next legislative session, proper interface with the functions of the Data System Division of the Executive Department, interaction with committees, proper networking on an ongoing basis with other coordination bodies, and a meeting of the chairperson with the chairs of the respective committees.



Department of Geology and Mineral Industries ADMINISTRATIVE OFFICE

910 STATE OFFICE BLDG., 1400 SW 5th AVE., PORTLAND, OR 97201-5528 PHONE (503) 229-5580

MEETING SUMMARY EXECUTIVE BOARD

State Map Advisory Council

Wednesday, November 18, 1987

Attendees

Name

Paul Staub

Scott E. Smith Nancy Rockwell Dick Swinnerton Don Adams Ray Miller Eldon Hout Glenn Ireland Jack Herring Janet Neuman Mike Gleason Sam Fischer Mary Grainey John Borden Don Pearson Jerry Schmitz Mike Weland John Beaulieu

Department of Geology & Mineral Industries (Oregon Map Committee) Oregon Department of Energy Department of Energy U.S.G.S.-Menlo Park **Highway Division** Department of Forestry Department of Land Conservation & Development State Resident Cartographer-U.S.G.S./ORE GLADS Mapping Project-City of Salem-Marion County Division of State Lands City Manager City of Eugene U.S. Forest Service-Portland Department of Water Resources Department of Water Resources Bureau of Land Management-Portland Executive Department-Info. Systems Div. Department of Fish & Wildlife Department of Geology & Mineral Industries

Affiliation

Not in attendance

William Penhollow (excused) Hal Sawyer Ken Dueker (excused)

Association of Oregon Counties Department of Environmental Quality PSU-(Oregon Land Records Committee)



INTRODUCTIONS

Information was distributed on Information Technology 2000, a talk to be presented by Dr. Pat Manatee of IBM, who will discuss trends in image processing and geoprocessing in Hearing Room F of the State Capitol on December 3. Also distributed was a letter and attached forms from Willamette Science and Technology Center (WISTEC) soliciting participation in a map exhibit to be held from March 5 through June 12, 1988. Agencies were invited to respond on an individual basis.

VACANT CHAIRS

Concepts relating to filling of vacant committee chairs were distributed in memo form. Major considerations are that replacements should be consistent with the direction of the State Map Advisory Council, open, fair and balanced. These considerations can be difficult to reconcile with workload and quarterly meeting scheduled by the Executive Board. Regarding the existing vacancy, it was decided that specific discussion would be readdressed later in the meeting after members had more opportunity to think about the issue and possible nominations.

REPORTS -

GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

Scott Smith summarized activity of the Oregon Geographic Information System Committee and noted that main functions had been to identify goals and strategies with a fresh new look. Written material had been submitted to the chair of the Executive Board earlier.

MAP COMMITTEE

Paul Staub reported for the Oregon Map Committee and noted that major areas of involvement include – completion of the $7\frac{1}{2}$ ' topographic series, establishment of standards (truth in advertising), addressing local map needs, and exploration data exchange formats.

LAND RECORDS COMMITTEE

A report from the Oregon Lands Records Committee was not heard. Ken Dueker is currently on sabbatical in the mid West.

REGIONAL MAP COMMITTEE

John Beaulieu summarized the results of the Tenth Western Regional Map Coordination meeting and distributed copies of the caucus recommendations to the National Map Division.

GOALS

Three drafts of possible draft goals were discussed. They included the initial draft distributed earlier, a draft developed by the GIS committee, a new draft developed by John Beaulieu in response to comments from the GIS committee. The drafts were distributed for orientation purposes. The November 18 Draft of Mission and Goals for the State Map Advisory Council (developed by the GIS committee and generally restating the functions as put forth in the Executive Order) was unanimously adopted as the Mission and Goal statement for the Executive Board.

Committee chairs will be directed to develop goals, objectives, and tasks pertinent to the respective committees using the various draft documents now available. John Beaulieu will call a joint meeting of the chairs to accomplish this task.

GUIDELINES

In response to an earlier request, concepts for draft guidelines were also distributed. It was noted that the guidelines ultimately could serve as directives to state agencies in the development of large GIS/Mapping/Land Records projects or programs. The guidelines focus on methods of communication and coordination to assure strategic project development and avoidance of duplication. John Beaulieu will assemble available drafts into a single simple draft statement for consideration at the next meeting.

LONG TERM PLANNING

Long term direction of the committee was discussed. After goals, guidelines, and matrix of agency activities are developed to everybody's satisfaction the committees and agencies can use these documents as firm footing in developing agency and interagency plans and schedules to complete or pursue mapping and GIS needs for the state. Ultimately, the architecture of the state effort will have to be addressed. This is properly a province of the State Map Advisory Council, but it is too early to make firm recommendations at this time. Copies of brief agency 5-10 year GIS needs were distributed.

A matrix or grid of agency activities in terms of base maps, thematic layers, and GIS capability was distributed for the sole purpose of soliciting additional comments and corrections. The effort proved to be very fruitful. Additional clarity most certainly will be needed particularly in the area of hardware, technology, and expertise. Comments by agencies are to be submitted to John Beaulieu by December 15. A redrafted grid will be prepared for the next meeting of the Executive Board, which will probably occur in mid February.

STATE GIS EFFORTS -

OFFSHORE MANAGEMENT

State GIS efforts for offshore management were highlighted by Eldon Hout of LCDC as he described the Senate Bill 630 effort. The state position with regard to offshore resource development was described. In future meetings Executive Board and committees will be dealing with various aspects of the data collection for Senate Bill 630 in an effort to facilitate and assist the staff work of the Senate Bill 630 Task Force.

BASIN PLANNING

John Borden of the Water Resources Department briefly summarized the planning of basins by his department. He noted that there was component of the effort dedicated to statewide issues and that GIS applications were not being applied to all basin efforts owing to workload considerations. Internal reorganization has provided the manpower and expertise to focus GIS efforts on the basin process. An acceptable public land survey system data swap on a $7\frac{1}{2}$ 'scale with the UGSS is actively sought and should occur before mid 1988.

CHAIRPERSON FOR GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

The subject of a new chairperson for the Geographic Information System Committee was discussed. Numerous nominations were presented and the policy implications of each were discussed. These include the desirability or lack of desirability of having federal chairpersons, of having natural resource agency people assuming the workload, and the possibility of agency persons losing equality in GIS working discussion if they were chairpersons. George Beard of the Executive Department was unanimously approved as the new chairperson of the GIS committee. His talents as a facilitator and interest in the subject were prime considerations.

xm:smac11-23

OREGON GEOGRAPHIC INFORMATION SYSTEMS COMMITTEE

.

-

Membership Meeting Summary

GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

Name Address Scott Smith Oregon Department of Energy 625 Marion Street NE Salem, Oregon 97310 James McIntosh/ Division of State Lands Pam Wiley 1600 State Street Salem, OR 97310 TBA Department of Fish and Wildlife 506 S.W. Mill Portland, OR 97201 Bob Bailey Department of Land Conservation and Development Room 530 320 S.W. Stark Portland, OR 97204 Carl Gryzbowski Executive Department 155 Cottage Street N.E. Salem, OR 97310 Rick Bostash Water Resources Dept. 3850 Portland Road NE Salem, OR 97310 Dennis Scofield Department of Transportation Transportation Bldg. Salem, OR 97310 Ray Miller Department of Forestry 2600 State Street Salem, OR 97310 Richard Keppler Department of Environmental Quality 811 S.W. 6th Portland, OR 97204 Michael Seber Department of Revenue 955 Center St. N.E. Salem, OR 97310

Federal Agencies (Ex Officio)

.

Bob Wright

Bureau of Land Management PO Box 2965 Portland, OR 97208

Doug Niebert

Water Resource Division 847 N.E. 19th Street Suite 300 Portland, OR 97232



Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

To: GIS Committee members

From: Carl Grzybowski

Subject: Minutes of 10/29/87 meeting

The next meeting of the GIS Committee is Friday, November 13 at 9:30 to noon at the Department of Energy.

In attendence:

Gary Waltenbaugh	ODOE	378-8327
Scott Smith	ODOE	378-4163
Lisa Blackburn	BLM	230-7535
Kyler Diershaw	USGS	213-2298
Larry Bright	ODFW	229-5463
Mary Grainey	OWRD	378-3066
Ray Miller	DOF	378-5033
Rick Bastasch	OWRD	378-8131
Pam Wiley	DOSL	378-3806
Harold Sawyer	DEQ	229-5776
John Beaulieu	DG	229-5580
Irv Iverson	DOR	378-3381
Carl Grzybowski	EXEC	378-4126

John reviewed the background and purpose of the SMAC Executive Order and informed the group that a matrix is being developed to identify agency responsibilities.

Harold Sawyer provided status on DEQ organizational changes and new programs.

Lisa Blackburn presented a memorandum of understanding for establishing the Northwest Land Information System (LIS) Network.

The group discussed the draft goal statement presented by John Beaulieu. Many of the 12 interrelated goals were considered projects. A sub-group was formed to identify goals for the GIS committee, review them at the 11/10/87 IGIW meeting and present them at our next meeting.

OREGON MAPPING COMMITTEE

.

-

Membership Meeting Summary

OREGON MAPPING COMMITTEE

Name

Dave Ringheisen Mapping & Mileage Control Mgr.

Mary Grainey Data Entry Supervisor

Irv Iverson Maint & Graphics Eng.

Scott Smith Geographic Info Sys. Mgr.

George Shore Graphics Mgr.

Lewis McArthur Chairman, Interim Comm.

Richard Keppler Construction Graphics Spec.

Dave Yandell Mgr., Communications/911 Program

A. John Kimerling Associate Professor

State Agencies Addresses

Department of Trans. 135 Transportation Bldg. Room 22 Salem, OR 97310 (503) 378-6256

Water Resources Dept. 3850 Portland Rd., NE Salem, OR 97310 (503) 378-3739

Department of Revenue 955 Center St. NE Salem, OR 97310 (503) 378-3381

Dept. of Energy 625 Marion St. NE Salem, OR 97310 (503) 378-4163

Dept. of Forestry 2600 State St. Salem, OR 97310 (503) 378-2504

Oregon Board of Geographic Names 4154 SW Tualatin Portland, OR 97201 (503) 222-1213

Dept. of Environmental Quality 811 SW 6th Ave. Portland, OR 97204

Emergency Mgmt. Division 43 Capitol Bldg. Salem, OR 97310 (503) 373-7457

Dept. of Geography Oregon State University Corvallis, OR 97331 (503) 754-3141

Federal Agencies

Bob Klaver Land Services GIS Coordinator Bureau of Indian Affairs PO Box 3785 Portland, OR 97208 (503) 231-6931 Glenn Ireland U.S. Geological Survey 847 N.E. 19th Ave. Portland, OR 97232 State Resident Cartographer (503) 231-2019 Tom Jackson Bonneville Power Administration PO Box 3621 Portland, OR 97208 (503) 230-5591 Roger Crystal U.S. Forest Service PO Box 3623 Portland, OR 97208 (503) 221-4165 Doug Niebert Water Resources Division

847 NE 19th Ave. Suite 300 Portland, OR 97232 (503) 231-2075

Bureau of Land Management PO Box 2965 Portland, OR 97208 (503) 231-6887

Cartographer

Supervisor, Cartography

Pacific NW GIS Coordinator

Ted Albert Chief of Cartographic Section



Department of Geology and Mineral Industries ADMINISTRATIVE OFFICE

910 STATE OFFICE BLDG., 1400 SW 5th AVE., PORTLAND, OR 97201-5528 PHONE (503) 229-5580

OREGON MAPPING COMMITTEE

Summary of October 22, 1987 meeting

Attendees

Name	Affiliation
Scott Smith	Department of Energy
Bruce Fisher (for Niebert)	USGS/Water Resources Division
Rudy Wellbrock	Department of Transportation
Dave Ringeisen	Department of Transportation
Tom Jackson	Bonneville Power Administration
Jeff Weber	Dept. of Land Conservation and Dev.
David Yandell	Emergency Management Division
Irv Iverson	Department of Revenue
Dick Dodge (for Crystal)	U.S. Forest Service
Mary Grainey	Department of Water Resources
Lewis McArthur	Oregon Geographic Names Board
Ted Albert	U.S. Bureau of Land Management
George Shore	Department of Forestry
Glenn Ireland	USGS/NMD
Robert Bailey	Dept. of Land Conservation and Dev.
Paul Staub	Dept of Geology and Mineral Ind.

Not presentJon KimerlingOregon State UniversityBob KlaverU.S. Bureau of Indian AffairsAgency representative for Dept.of Environmental Quality

A description of the effort and rationale leading to the reorganization of SMAC was provided to the committee. Some criteria for effective map and GIS coordination were described with comments of how these were woven into development of Executive Order 87-11.

At this early stage of the reorganized SMAC, the committee chair determined that a review of the draft SMAC goals should drive the first meeting discussions. Time did not allow for review of all twelve goals.

1. Completion of the 7 1/2' topographic series for Oregon

The 7 1/2' series for Oregon is still on track for hardcopy completion in 1990. Glenn Ireland, state resident cartographer (SRC), distributed the new two part (index and catalog) listing



of topographic maps for Oregon. ODOT will continue producing the 1:1,000,000 index sheet at a nominal charge.

With completion of the 7 1/2' series scheduled, discussion moved to revision and digital format efforts. With respect to revision, the SRC emphasized that the committee and SMAC in general need to make their needs heard loud and clear in prioritizing the revision effort by NMD. Consensus was that the committee should provide direction in this effort.

With respect to the production of digital line graphs by USGS, there was strong expression from the committee that the production of hardcopy maps should not be delayed or impacted. The reason being the difficulty of utilizing DLGs (i.e. tailoring the data to individual need) vs. agencies digitizing the 7 1/2' sheets directly in format(s) readily useable.

The Oregon Department of Water Resources is planning a digitizing effort of 7 1/2' series and hopes to be able to contribute digital data to NMD. In this context a copy of "Guidelines for Acceptance of Digital Cartographic Data into the National Digital Cartographic Data Base (NDCDB)" was distributed to the committee. These guidelines aim to encourage cooperative efforts between NMD and other federal, state, and local agencies in the production and sharing of digital data.

Goal 10. Map standards

The chair queried committee members on what standards they used. The U.S. Forest Service will try to meet NMD standards but presently not actively developing them. Oregon Department of Water Resources would like to meet NMD standards and contribute and exchange digital data with NMD. U.S. Bureau of Land Management are developing standards as they proceed. BLM is not committed to the NDCDB but rather to a geographic coordinate data base (GCDB). BLM is coordinating with USFW for relevant thematic layers.

The SRC gave a brief history of the parallel national standards development of FICCDC and the Moellering effort from the academic realm. These two efforts are presently being merged and refined and will be submitted as a Federal Information Processing Standard (FIPS). The SRC went on to describe how the federal standards will be tested in a multiagency pilot project in Oregon known as the northwest L.I.S. network. This multiagency effort will facilitate comparison of data development efforts and testing of the data exchange standard 'spatial data transformation specifications' (SDTS).

The map standards goal was affirmed by the committee -- that SMAC should generate coherent direction toward commonly recognized standards. Further that the committee should serve as a clearinghouse and initiate discussion and dissemination of standards documents as they are developed.

Goal 12 Offshore maps

Bob Bailey of Oregon DLCD provided background information on his agency's coordination and planning efforts in coastal management. He then directed his comments to S.B. 630, providing a summary of the bill and its mandates. Bailey wishes to establish a database framework that other agencies involved in coastal work can add to in the future. A working map was displayed with various thematic data portrayed. The chair suggested the database cross the shoreline if possible to provide continuity on and offshore. Currently, most datasets end on either side of the shoreline.

ODOT stated that a corridor study of highway 101 is planned and may be of use in the SB 630 data effort.

Lew McArthur described the offshore feature names situation. There is a problem in that the Domestic Names Committee is responsible onshore and an international group presides over naming features in international waters. With the 200 mile Exclusive Economic Zone (EEZ) established, McArthur recommends the domestic group and policies apply to the EEZ. McArthur suggested a committee subgroup should look into this names problem.

Finally, in relation to offshore base mapping, the SRC stated that SMAC should comment on and support the NMD/NOAA hydrographic program. The committee should provide updates on this effort periodically.

Goal 4 Large Scale Mapping

David Yandell described the need for standards pertaining to large scale mapping as an aid to emergency services and evacuation, etc. Certain aspects of this are being treated by the Land Records Committee in discussion of a standard addressing system for Oregon. Development and adoption of such a system is needed statewide as counties need a mandate.

Universal map referencing systems were discussed and it was suggested that a standardized system should be developed by the committee. As a minimum, the committee should be a forum for members to familiarize themselves with the various systems in use and determine the viability of various agencies exchanging the systems digitally.

Goal 7 Digital data index

Scott Smith presented a history of an indexing effort to list Oregon government agencies and their hardware, software, digital data, and whom to contact within the agency. This is an effort of the GIS committee.

Another index of digital data and equipment is underway by Dave Ringeisen of ODOT. This index will be published in hardcopy form vs. the GIS committee's index which is planned to be online.

OREGON LAND RECORDS COMMITTEE

.

-

Membership Meeting Summaries

LAND RECORDS COMMITTEE

•

MEMBERS

-

Robert Swank, Asso. Director	Lane Council of Governments 125 E. Third Ave. Eugene, Oregon 97401	(503) 687-4435
Jeff Kern County Surveyor	Jefferson County c/o 1030 NW Newport Ave. Bend, Oregon 97701	(503) 389-4736
C.R. Sheffield Director	Multnomah County Dept. of Assessment and Taxation 610 SW Alder Room 315 Portland, OR 97205	(503) 248-3345
Alan Slipher	LANDATA Inc. 200 SW Market Suite 104 Portland, OR 97201	(503) 226-7169
Jack Herring Project Manager	GLADS 555 Liberty St. SE Room 110 Salem, OR 97301	(503) 588-6511
Keith Lawton	Data Services Manager Metropolitan Service Dist. 2000 SW First Ave. Portland, OR 97201	(503) 221-1646
Earl Burkholder Geodetic Engineer	Oregon Institute of Technology 3201 Campus Drive Klamath Falls, Oregon 97601-8801	(503) 882-6321 ext. 472
Charles Pearson County Surveyor	Washington County 150 N. First Ave. Hillsboro, Oregon 97124	(503) 640-3405
Edward Sipp Consultant	Star Rt. 77-22 Tranquility Drive Banks, OR 97106	(503) 324-6934
Dave Yandell	Emergency Management Division 43 State Capitol Salem, OR 97310	(503) 378-4124
James Kenney	Department of Revenue 955 Center St., NE Salem, OR 97310	(503) 378-8218

Liaison Persons

۶

Janet Lundeen	Oregon Asso. of Co. Engineers & Surveyers c/o Douglas County Room 205 Justice Bldg. Roseburg, OR 97470	(503) 440-4278
George Strawn	Oregon Dept. of Trans. Transportation Building Salem, OR 97310	(503) 378-3487
Lyle Riggers	Oregon State Geodetic Advisor Oregon Dept. of Trans. Transportation Bldg. Salem, OR 97310	(503) 378-6513
Rich Carson Manager	Industrial Properties Section Economic Devel. Dept. 595 Cottage St. NE Salem, OR 97310	(503) 373-1231 ext. 207
Mike Magnus	Oregon Title Ins. Co. 1515 SW Fifth Ave. Suite 105 Portland, OR 97201	(503) 220-0015
Kim Worrell County Assessor	Yamhill County Assessors Office Fifth and Evans, Room 135 McMinnville, OR 97128	(503) 472-9387
Bob DeViney	Bureau of Land Management 825 NE Multnomah Portland, OR 97208	(503) 231-2178

.

_

OREGON LAND INFORMATION ADVISORY COMMITTEE LAND RECORDS SUBCOMMITTEE <u>MINUTES</u>

AUGUST 19, 1987

Present: Dueker, Lundeen (for Ingram), Herring, Kern, Swank, Strawn, Sipp, Burkholder

Not Present: Kenney, Sheffield, Lawton, Magnus, Worrell, Pearson, Slipher

Guests: Lyle Riggers, NGS; Beaulieu

The meeting was called to order by Chair Dueker. The minutes of the June 23, 1987 meeting were approved.

There were a number of announcements:

- Dueker and Swank discussed activities at the URISA conference. Of particular interest was the paper in volume 2 of the proceedings on map accuracy, the paper presented by Dueker on OLIAC, the session on state initiatives in land records, and a request for information from Manatee County Florida. The exhibit hall was interesting with new start up firms for data conversion and front ends to Autocad.
- 2. Several upcoming conferences were discussed, the Western ASPRS/ACSM in Reno in October and the GIS Conference in San Francisco in October.

Dueker introduced John Beaulieu, Deputy Director of DOGAMI and the new Chair of the State Map Advisory Council, who described the status of the Executive Order that created the new State Map Advisory Council. The Council includes an Oregon Land Records Committee. Dueker has been appointed Chair of the Committee and the most of the members of the OLIAC Land Records Subcommittee will be appointed to the new Committee. The twelve person maximum members will necessitate appointment of some persons as liaison persons to agencies or to associations. Beaulieu indicated the Committee would have considerable freedom to pursue its own agenda. There was discussion of the goals and objectives statement produced by the OLIAC subcommittee on Land Records and the draft Goals Statement of the State Map Advisory Council. An early activity of both groups will be to incorporate our statement into the Goals Statement for the Council.

The Address Directory/Library concept was disussed again. Beaulieu asked about the relationship the Firescope locational system. Dueker responded by indicating that local officials find Firescope to be a single -purpose system that is not well integrated with local land records. The problems associated with mandating rural addressing and address libraries in each county requires the strong support of the Association of Oregon Counties. Bob Swank and Dave Yandell were appointed as a subcommitee to develop a Briefing Paper that can be used to gain support for the concept and for development of policy and legislation, if needed.

A revised paper on Subdivions/Partioning Requirements by Chuck Pearson was distributed for discussion. The paper identifies the need for: 1) densification of geodetic control if surveyors are to be required to use state plane coordinates, 2) provision for shortplats to obviate the need for legal description based on divisions of the PLSS, and 3) the need for standards for monument densities in rural, suburban and urban areas. Discussion of the paper focused on: 1) problems with requiring all partitions be "surveyed and monumented", 2)the ambiguity of whether a right-of-way taking creates partitions that would be subjected to the survey and monumented requirement. These and other comments are to be directed to Chuck Pearson and he will revise the paper again for the next meeting to reflect the concerns raised. After we reach agreement on the issues the paper will be converted to proposed legislation and we will seek the support of affected interest groups and the Council.

The goals and objectives for the new committee were discussed. No changes were made. We will work to incorporate it into the Council's Goal Statement.

The script for a videotape on land information in Oregon was discussed. Discussion of the script brought out that the intended audience needs to be better defined. Lundeen provided examples of potential GIS applications from the recent forest fire fighting in Douglas County. These are vivid examples that could be part of a videotape. It was suggested that separate videotapes could be developed around different themes -- public safety, economic development and land records modernization. But would this dilute the concept of a multipurpose land information system? Dueker will draft another script for consideration at the next meeting. The Committee's sponsorship of pilot projects to test guidelines, to promote technology transfer, and to demonstrate good practice was discussed. Discussion indicated difficulty in carrying out this concept. The Committee would find it difficult to undertake an active involvement in a project. The Committee functions best in provided a forum for exchange of information and by that means can provide leadership with local practice and legislation and funding to enable thing to get done.

Dueker reported on the project at Portland State for the International Association of Assessing Officers on Implementation Paths for developing a cadastral layer. This will be on the agenda for the September meeting.

Burkholder distributed material on GPS technology.

The next meeting was scheduled for September 30 in Salem. MARK YOUR CALENDAR!

OREGON LAND LAND RECORDS COMMITTEE

MINUTES

September 30, 1987

Present: Dueker, Lundeen, Herring, Swank, Strawn, Sipp, Iverson, Pearson, Slipher, Riggers, Yandell (for Myra Lee), Stern, Proffitt

Not Present: Lawton, Magnus, Worrell, Kern , Burkholder, Carson

The meeting was called to order by Chair Dueker. A new member Charles Stern, County Clerk of Yamhill County was introduced.

There were a number of announcements:

- 1.The following changes in committee composition: Janet Lundeen is a liaison person for OACES Rich Carson is a liaison person for Econ Devel Dept Sue Proffitt is now a liaison person to IRD Irv Iverson has replaced Jim Kenney for Revenue Bob Sheffield has retired from Multnomah Co. and resigned from the Committee
- 2. Janet Lundeen distributed a list of Local Mapping System Installations that she compiled in her investigation of systems. She also described the effort of Douglas County to convert the Calma tapes of the cadastral layer produced by DOR. Southeast Wisconsin Regional Planning Commission has successfully converted Calma tapes to the Deltamap GIS.
- 3. Concern was expressed about the possible precedent setting of sole source procurement of mapping systems by the City of Portland and Multhomah County. Both sides of the issue were discussed. The reason for sole source procurement was to avoid costly conversion of data from one format to another. Others felt that vendors should be given the opportunity to provide solutions to the conversion problem and a broader array of systems considered. Generally, dependence on a single vendor is not desirable.

- 4. Lyle Riggers annouced a new position to receive and log coordinate data for new geodetic control points. He was asked to make sure the County Surveyors receive the information.
- Jack Herring noted that Burlington Northern is using GPS to redefine its right-of-way from Portland to Medford.

The Tract Index/ Address Directory concept was disussed again. The forest fires in SW Oregon provide new urgency and public support for improved dispatching of emergency services. Unambiguous rural addresses are essential. Janet Lundeen provided a description of the problems encountered with manual methods in responding to the need to evacuate residents in the vicinity of the Bland Mountain fire in Douglas County. Dave Yandell expressed the interest of the Emergency dispatching, but for other applications of interest to this Committee. He also described the concern of the traffic safety program in uniform locational referencing. He then described possible financial sources to design and implement systems.

Another revised paper on Subdivisons/Partioning Requirements by Chuck Pearson was distributed for discussion. The paper addresses concerns raised by George Strawn that partial ROW takings not be interpreted as partitions. He added a section describing Short Plats. Comments are to be directed to Chuck Pearson and he will revise the paper again for the next meeting. After we reach agreement on the issues the paper will be converted to proposed legislation and we will seek the support of affected interest groups and the Council.

Allan Slipher gave a presentation on privatization issues in land records modernization. He described the work of his company, Landata, the parent company, Steward Technical Services, and a sister company, United Mapping Services. There appears to be a number of innovative services provided by the private sector. He also showed two videos that provided ideas for the video we wish to produce.

There was not sufficient time to hear the presentation on Implementation Paths to the cadastral layer. It was posponed to the November meeting. The next meeting was scheduled. November 3 in Salem. MARK YOUR CALENDAR!

OREGON LAND LAND RECORDS COMMITTEE

MINUTES

November 3, 1987

Present: Dueker, Lundeen, Herring, Swank, Strawn, Tverson, Slipher, Kern, Riggers, Murray (for Myra Lee), Ireland, Kent (for Devinney), Holsted (for Lawton)

Not Present: Magnus, Worrell, Burkholder, Carson, Sipp, Pearson, Stern, Proffitt

Guests: Osburn Shaw, Linn County; Randy Kaatz, CADD Contractors

The meeting was called to order by Chair Dueker. Tim Kent, representing a new liaison person Robert Devinney of BLM was introduced.

There were a number of announcements:

- Janet Lundeen reported on the recent GIS conference held in San Francisco.
- 2. Ken Dueker circulated several items for information purposes.
- Glenn Ireland announced the availability of an index of maps and photos.

The Tract Index/ Address Directory concept was disussed again. Dueker described discussions with Yandell and Oregon State University, which identified a new requiement for locational coding of data -- locating traffic accidents. Dueker is trying to obtain funding from Emergency Services and Traffic Safety for a study of the technical alnd plo/icy issues of implementing the Tract Index/Address Directory concept. It was mentioned that 911 does not respect county boundaries, which will require coordination if the Address Directory were to be a County function. The U.S. Postal Service is making available in digital form a complete listing of addresses.

Discussion of Subdivisons/Partioning Requirements was posponed due to the absence of Chuck Pearson.

Bob Swank described a videotape produced by LCOG, parts of which might be of use to the Committee in preparing a video to explain our activities and objectives. He also provided two other tapes that might provide input to our video effort. One is a marketing tape from Synercom and the other is one prepared by LCOG to communicate road finance needs to the state Transportation Commission. Janet Lundeen, Jack Herring and Ken Dueker will preview these tapes for possible use at our next meeting.

The Committee is experiencing problems with proceeding on Pilot Projects. Without a staff the Committee cannot provide on-going technical assistance. Alternatives were discussed:

1. To improve communications an updated roster of the Committee will be provided to the editor of the <u>Oregon Cursor</u>,

2. The State Library has phase 1 of the Data Index operational. It can be accessed by modem (371-0427),

 To change the objective of the Pilot Projects initiative to more specific efforts and approach state and federal agencies for financial participation, as is being done with the Tract Index/ Address Directory project,

3. To shift the emphasis to a reactive mode and provide comment and review of local plans and draft solicitations; this implies a letter from the Council to all state and local agencies describing the activities and assistance of all committees of the Council, and

4. To work with the Council on a request for staff for the Committees to develop plans and policies for data sharing and system improvements.

Dueker made a presentation of a paper prepared for the International Association of Assessing Officers on Implementation Paths to the Cadastral Layer. Copies of the paper will be distributed after it is published in the <u>Property Tax Journal</u>.

Discussion of progress on implementation of the recommendations of the Briefing Paper on Geodetic Control and Monument Densification was posponed to the January meeting.

Dueker distributed a draft of a report to the Council on the relationship of

local government land records modernization to state and federal mapping and analysis programs and geographic information systems. A number of suggestions were made and a revised draft is attached. Additional comments are invited. We need to clarify our relationship to the other committees and to the Council.

The next meeting was scheduled for January 13 in Salem. This is now changed to **January 6**. MARK YOUR CALENDAR!

APPENDIX A

•

.

. .

Executive Order EO-87-11

_






1

EXECUTIVE ORDER NO. EO - 87 - 11

STATE MAP ADVISORY COUNCIL

Oregon State Government uses mapping, geographic information systems, and land records to manage its resources. Optimal use of these technologies requires leadership and statewide focus.

IT IS ORDERED AND DIRECTED:

The State Map Advisory Council is created to improve the quality, access, and utility of Oregon's land information systems. Information about land includes the location of resources and activities such as water, transportation facilities, economic activities, and population. Systems of land information exist to capture, store, analyze, and display land data in map or numeric form.

1. PURPOSE

The purposes of the Council are to foster cooperation among agencies and governments within Oregon that use land information systems, and to direct interagency and intergovernmental projects that involve these systems.

The Council shall advise the Governor on issues, problems, and opportunities concerning the use of Oregon's land information.

The Council's primary functions include:

- a. <u>Strategic Planning</u>--Identifying statewide issues involving land information and recommending policies, goals, strategies, opportunities, and priorities for the development and use of land information systems.
- b. <u>Resolve Policy and Technical Issues</u>-Assisting in translating policy directives into consistent data and system requirements.
- c. <u>Technical Assistance and Coordination</u>--Recommending standards and procedures for acquisition and use of land information systems. Serving as a clearinghouse for exchange of programs, resources, experiences, and referral of experts.
- d. <u>Fostering Interagency and Intergovernmental Cooperation</u>--Providing a forum for communication, problem solving, and sharing of resources.



EXECUTIVE ORDER NO. EO - 87 - 11 (Continued)

2. MEMBERSHIP

The State Map Advisory Council is made up of an Executive Board and three working committees.

The Executive Board consists of up to ten voting members who shall be appointed by the Governor from State agencies that create and use land information. The Governor may also appoint up to six nonvoting members from Federal agencies, county government, and city government that create and use Oregon land information. Executive Board members serve at the Governor's pleasure.

3. COUNCIL CHAIR

The Chairperson of the Executive Board shall be selected by the Governor from the Executive Board membership. The Chairperson may represent the state in regional and national groups concerned with land information systems.

4. COMMITTEES

To achieve the primary functions of the Council, the Executive Board may establish ad hoc work groups, as needed, and shall form the following standing committees:

a. Oregon Geographic Information Systems Committee

The Executive Board shall select a chair of the Oregon Geographic Information Systems Committee. The Committee Chair shall nominate for membership up to ten representatives from state agencies, plus up to four nonvoting federal and local representatives who use or plan to use geographic information systems. The Executive Board shall confirm nominees for membership on the Geographic Information System Committee. This committee shall advise the Executive Board on geographic information issues, problems, and opportunities.

b. Oregon Mapping Committee

The Executive Board shall select a chair of the Oregon Mapping Committee. The Committee Chair shall nominate for membership up to 15 representatives from state agencies, federal, and local governments that use or plan to use base mapping records. The Executive Board shall confirm nominees for membership on the Mapping Committee. This committee shall advise the Executive Board on mapping issues, problems, and opportunities.





EXECUTIVE ORDER NO. EO - 87 - 11 (Continued)

4. COMMITTEES

c. Oregon Land Records Committee

The Executive Board shall select a chair of the Oregon Land Records Committee. The Committee Chair shall nominate for membership up to 12 representatives from state agencies, federal, and local governments that use or plan to use cadastral records. The Executive Board shall confirm nominees for membership on the Land Records Committee. This committee shall advise the Executive Board on land records issues, problems, and opportunities.

5. MEETINGS

The Executive Board and its committees shall meet at the call, of their respective chairpersons. A simple majority is required to conduct Board and committee business.

6. STAFF SUPPORT

Staff assistance for the Council and its committees is provided by participating state agencies.

7. COMPENSATION

Members of the Council shall receive no compensation for their services.

8. Executive Order EO 83-15 is rescinded.

Done at Salem, Oregon, this 11th day of July , 1987.



Attest:

Deputy Secretary of State

APPENDIX B

.

-

Goals and Objectives (Draft)

_

STATE MAP ADVISORY COUNCIL

MISSION

(From purpose in Executive Order)

Foster cooperation among agencies and governments within Oregon that use land information systems, and to direct interagency and intergovernmental projects that involve these systems.

GOALS

(From primary functions in Executive Order)

Identify statewide issues involving land information and recommend policies, goals, strategies, opportunities and priorities for the development and use of land information systems.

Resolve policy and technical issues and assist in translating policy directives into consistent data and system requirements.

Provide technical assistance and coordination by recommending standards and procedures for acquisition and use of land information systems, as well as, serve as a clearinghouse for exchange of programs, resources, experiences and referral of experts.

Foster interagency and intergovermental cooperation by providing a forum for communication, problem solving, and sharing of resources.

OBJECTIVES

Oregon Map Advisory Committee

To focus GIS and mapping efforts on policy needs of government.

To serve as an efficient clearinghouse of information in map and GIS development and use.

To promote commonly recognized standards in map and GIS use.

To define and promote a coherent GIS and mapping effort for the state.

To promote the completion of the 7.5' topographic series on a statewide basis in hard copy and digital form.

To define and promote an appropriate revision strategy for the 7.5' topographic series in Oregon.

To promote the completion of the 1:100,000 series for Oregon in the areas of transportation, hydrography, elevation, and land net.

To define and promote a process for **moving standard map product** data downward into large scale local maps

To promote uniform and strategic collection and use of geodetic control data.

To provide necessary thematic maps on a statewide basis.

To provide for the adoption of NAD 83 as the reference for mapping in Oregon.

To promote a strategy of addressing suitable to the diverse needs of state and local government.

Oregon Geographic Information System Committee

To focus GIS and mapping efforts on policy needs of government.

To resolve technical issues in LIS development.

To serve as an efficient clearinghouse of information in map and GIS development and use.

To define and promote a coherent GIS and mapping effort for the state.

To define and promote a unified Land Information System architecture for the state.

To integrate emerging technology into state GIS and mapping efforts.

To maintain a cooperative digital index specific to area and scale.

To promote the use of realtime imagery as an integral component of Oregon's LIS effort.

-41-

Oregon Land Records Committee

To resolve technical issues in LIS development.

To integrate emerging technology into state GIS and mapping efforts.

To define and promote a unified Land Information System architecture for the state.

To define and promote a process for aggregating large state local map data upward into standard map products.

To promote a strategy of addressing suitable to the diverse needs of state and local government.

To promote uniform and strategic collection and use of geodetic control data.

APPENDIX C

Guidelines for Cooperation

GUIDELINES FOR GIS COOPERATION

The goals, guidelines, and agency matrix establish the framework with which agencies can most effectively coordinate their GIS activities.

Progress towards a coherent GIS capability in Oregon has been hindered in large part by lack of confidence by budgeters in the coordination aspects of the individual efforts of various agencies and also by lack of information or common strategy on the part of agencies in developing their individual efforts.

A framework which enables agencies to identify and strategically address major coordination opportunities is needed. Such a framework can also display to the budgeters the extent to which coordination has actively been pursued. Using the framework we can work towards a coherent GIS capability in Oregon which meets program needs and which maximizes strategic cooperation.

In working towards cooperation, the focus has to be on mid term to long term efforts. Project by project coordination is often hindered by incompatibility of details in individual project design, short deadlines, or limitations of geographic scope. By looking beyond individual projects and focusing on program direction agencies can give greater attention to actual program needs, standards, recognition of lead agencies, geographic scope, and compatible scheduling.

It is possible using the goals, guidelines, and grid to identify several generic questions that can be used to identify the level of cooperation inherent in a given project. The concepts can also be used to formulate cooperation strategies for given projects in their formative stages. Some questions are as follows:

- 1) Does the project or program generally conform to the goals?
- 2) Does the project or program reasonably conform to the guidelines?
- 3) Have the potential cooperators been identified from the grid?
- 4) Is there reasonable coordination and cooperation with the potential cooperators? Have appropriate presentations been made to the pertinent committees of SMAC?
- 5) If there is not reasonable coordination or cooperation, have opportunities for removing structural and technological barriers been aggressively pursued?
- 6) Does the agency given proper attention to the expectations of other agencies with regard to the work it proposes to do?
- 7) Is the level of effort to develop reasonable cooperation proportional to the size of the project geographically and in time?

- 8) Are large purchases with GIS potentials conditioned on successful shakedown demonstration of transferability of geographic data layers to other agencies reasonable to be expected to want access to the data?
- 9) The first option for the development of general base layers shall be strategic cooperation with the appropriate federal agencies.
- 10) Thematic layers generally ideally shall be developed on a statewide basis by the appropriate lead state agency preferably in cooperation with appropriate federal or local agencies.
- 11) Is the project a product of reasonable vertical communication within the agency consistent and is there consistent agency treatment of the topic?

xm:gis11-19

APPENDIX D

.

.

Meeting Summary State Map Advisory Committee April 30, 1987



Department of Geology and Mineral Industries ADMINISTRATIVE OFFICE

910 STATE OFFICE BLDG., 1400 SW 5th AVE., PORTLAND, OR 97201-5528 PHONE (503) 229-5580

State Map Advisory Committee Meeting Summary Thursday, April 30, 1987 Salem, Oregon

Attendees

Name

Dick Swinnerton Paul Needham Gary Waltenbaugh Ken Dueker David Ringeisen Dick Myers Jerry Lafshaw Dick Dodge Roger Crystal Ted Albert Peter Eberhardt Peter Stark Keith Walrath Rogert Sandstedt Jack Herring Col. G.J.R. Paynter 1 Lt. John E. Davis Barbara Portwood Gerry Duvall Howard B. Mellors Robert S. Coates Raymond R. Haag Steven F. Wojahn Edward Sipp Ken Vogeney Carl Grzybowski Allen F. Agnew Richard Huxley Pete McDowell Lyle Riggers Terry Felkerson Bill Kaiser Terry Moye Irv Iverson

Affiliation

U.S.G.S. - Menlo Park, CA U.S.G.S. - Reston, VA Ore. Dept. of Energy, Salem Center for Urban Studies, P.S.U. Ore. Dept. of Trans., Mapping State Library U.S.D.A. - Soil Conserv. Service U.S.D.A. - Forest Service U.S.D.A. - Forest Service Bureau of Land Management - Portland Willamette National Forest - Eugene University of Oregon Pacific Power & Light Portland Dept. of Transp. City of Salem - Glads Project U.S.A.F. Aux., OANGRES, EM CAP - ORNG Res Cavenham Forest Industries - Portland Cavenham Forest Industries Cavenham Forest Industries Inc. - Portland Pacific Power & Light Pacific Power & Light Pacific Power & Light AMIS NW Oregon Emerg. Mgt. Division Exec. Dept. Info. Sys. Div. Oregon State University - Geology U.S. Fish & Wildlife Service Benton County - Public Works National Geodetic Survey U.S.G.S. - M.C.M.C. U.S.G.S. - N.M.D. - Vancouver, WA U.S.G.S. - Grants Pass, OR Oreg. Dept. of Revenue



Name

Affiliation

Vivienne Torgeson Charles R. Price John Vezmar Mark Neuhaus Paul Staub Beverly Vogt Alan Holsted Ted Miller Larry Bright Scott Smith George Shore Bud Roberts Rudy Wellbrock Tom Jackson Bill Young Jane Neuman Pam Wiley John D. Beaulieu

Oregon Water Resources City of Portland - Fire Bureau Chd. Assoc. - Woodburn, OR Oregon Dept. of Geology Oregon Dept. of Geology Oregon Dept. of Geology Metropolitan Service District Oregon Fire District Director Oregon Dept. of Fish & Wildlife Oregon Dept. of Energy Oregon Dept. of Forestry City of Beaverton Oregon State Hwy Div. Bonneville Power Admin. Bonneville Power Admin. Division of State Lands Division of State Lands Oregon Dept. of Geology/ SMAC Chairman

1) Revised state mapping efforts for Oregon -

Map and GIS activities by Oregon state agencies in recent years have experienced several trends which now require treatment. One trend is that the entire activity has continued to expand in size and variety so that now local land records, GIS activities, traditional maps, and digital maps all constitute a conversation of greater and greater complexity. A second trend is that a variety of structural attempts have come into play to deal with this complexity. These include workshops, lead agency activities of a temporary nature, ongoing activities of SMAC, creation of OLIAC, and a variety of lesser activities such as newsletters. A third trend is that all of the mapping and technological coordination efforts are experiencing a less and less affective linkage with policy direction and commitments within various agencies.

Recognizing the need to better direct coherent action with regard to expanded activities, to simplify the splintered structural approaches, and to link all mapping and GIS efforts to policy directions, the new administration wishes to consolidate the various efforts into one effective mechanism. Accordingly, the State Map Advisory Committee is now being structured in a draft Executive Order. The general marching orders are to simplify all the processes, to preserve all of the good things that are being done in all of the existing processes, and to link activities to policy commitments in a more effective fashion. Efforts have been underway for several months to draft an appropriate Executive Order. Major participants have been: Ken Dueker, Gary Waltenbaugh, the Executive Department, and John Beaulieu, each bringing to the conversation individual expertise and experience for prior activities in the area. When the Executive Order is complete and distributed, motion then will be made towards forming new committees, developing new agendas, creating more effective communication with policy individuals in the agencies, and developing and pursuing long term goals of fundamental nature for mapping, GIS work, and Land Records work.

2) <u>New federal cooperative projects in western Oregon</u> -

Federal agencies in Oregon have been experiencing similar difficulties in their mapping. The efforts are getting more complex and more expansive. There is also a need to better link the efforts to major policy questions, deadlines, and priorities. Accordingly, conversations in the state are grativitating towards to creation of a management oversight committee for federal agencies in western Oregon and possibly Washington or even Idaho. Major actors are: The U.S. Forest Service, the Bureau of Land Management, and the U.S. Geological Survey. The State would also have a seat on the committee. Other federal agencies might include: SCS and Bonneville Power.

Interlocking membership between SMAC (which will continue to have federal participation) and the Federal Management Oversight Committee (which will include some state participation) will ideally give Oregon a uniquely affective means of coordinating mapping activities. There will also be a need to create a similar linkage between state and federal mapping on the one hand, and local land records activities on the other. The Lands Records Committee component of the revised State Map Advisory Committee will probably be the focus of this refined communication structure with local government.

Currently a GIS oriented mapping project in western Oregon involving B.L.M., U.S.F.S., and U.S.G.S. (and also State Department of Forestry and Oregon Department of Transportation) is in the formative stages. Conceptually, the project will involve intentional duplication of data base development, so that the exchangeability of agency data bases might be rigorously studied. Data base exchange formats (FGEF) hopefully will also be part of the investigation.

3) Federal digital water project -

Joint efforts between the U.S.G.S. Water Resources Division, Bonneville Power, and the Oregon Water Resources Department in the creation of a hydrographic data layer in the northwest continues. Major components are the stream reach classification system of the E.P.A., the 1:100,000 (census project), hydrographic data layer of the U.S.G.S., and the edge matching expertise of the U.S.G.S.-W.R.D. (Portland office). There is growing affection for a multi-state coordination effort in some areas owing to the uniform data needs and interests by federal agencies in this particular project. Gary Waltenbaugh reasoned that the Management Oversight Committee described above should ideally include participation by Oregon, Washington, and Idaho. The data bases developed in this project should be of particular value to the Oregon Department of Fish and Wildlife, the Water Resources Department and LCDC. The data will be stored tabularly on data base III, but hopefully also will be available graphically. The data also will be integrated with the Geographic Names Information System to enable data call up on the basis of names as well as coordinates.

4) U.S. Geological Survey selected overviews -

The National High Altitude Photo Program dependent on cooperative funding is in a period of rapid transition which involves redesign of technical components, a handout with details was provided. The photography yields one meter resolution in general on the ground.

The Oregon Map Index Catalogue will be available in May and will include a single sheet topo index either at the time of the printing or at the time of later revisions (ODOT presently maintains a one sheet index on an interim computerized basis).

The revision of maps within the U.S.G.S. is governed primarily by budget, state needs and present condition of maps. State input will be solicited on the priorities of 1:100,000 blocks of maps and also on maps within the high priority 1:100,000 blocks.

Federal cooperation in digital mapping and GIS activities includes: Newsletters, scoping papers, hardware acquisition, cooperative data exchange, guidelines and other activities. Guidelines for non-U.S.G.S. National Data Catalogue Data Base Data Entry have been developed and will be distributed. The Department of the Interior has succeeded in getting large price breaks for member agencies by buying hardware in bulk.

The U.S. Department of the Interior is pursuing a digital service contract through the BLM with Denver being the lead. The contract will be in effect in January 1988 and will address base and thematic (with less rigorous standards) data.

Development of the NAD 83 world model yields systematic and nonsystematic errors in location on various map series of the U.S.G.S. and all maps based on these map series. Errors are on the order of .16 inch on the 24,000 series, .04 inch on the 100,000 series and .016 inch of the 1:250,000 series. These translate to errors of two or three hundred feet in the longitude locations in Oregon and 60 feet in the latitude locations. There are no easy conversions to UTM or state plane coordinate owing to lack of order to the errors. In dealing with corrections, there are four options. These include: 1) Adding of accurate ticks to the edge of existing maps (this does little for public land survey system errors or for the user), 2) adding slivers to the sides of existing maps to square off against accurate relocation of latitude and longitude (this is difficult and would cost .25 billion dollars), 3) remapping (this would yield patchwork results for years and would cost several billion dollars), 4) regridding and relabeling (this in effect would be a moving of the cross hairs on the maps, it would cost \$15 million but this funding has not been identified). The Survey is presently in a pilot project mode; comments are solicited, the future is unclear. It is clear, however, that NAD 27 will not be maintained and some sort of transition is essential.

The role of the U.S.G.S. in multipurpose cadastre is unclear. Ideally, motion should begin towards an interlocking family of maps to provide feedback from various mapping communities into various other map groups. There is no national mapping series at a scale appropriate for the discussion of multipurpose cadastre, however. Scale is a problem by approximately one order of magnitude. Federal activity seems to be focusing on the development of federal geodetic control committee, the development of standards, and the pursuit of pilot projects to guide and assist other entities in their multipurpose cadastre activities. The federal role then is to add some order to the discussion which will be largely taking place at a more local level. Emphasis will be on education, guidelines and standards.

5) Agency activities -

Glenn Ireland USGS, reported that the Shaded Relief Maps on the wall were produced by the Geologic Division in Flagstaff for the DMA as an aid to the MX Missle Siting Program. (These maps are not standard product, but a demonstration of the use of the 1:250,000-scale digital terrain data.) Severa1 participants mentioned during the day that this format could be considered as a replacement to the out-of-print Oregon Shaded Relief Map. The 1:500,000-scale hypsometric map of Oregon produced by Raven Maps and Images of Medford also was discussed. This map used the USGS state base. The slope and aspect maps were produced by EROS Data Center were discussed. These maps used a DEM to determine five classes of slope and four directions of aspect. The map information brochure would be completed in a couple of months. This brochure has not been revised since 1980.

Glenn Ireland and Dick Swinnerton described the economic analysis which is currently being conducted by the NMD. This analysis has been requested by the Office of Management and Budget to determine the State and Federal Agencies' requirements in a revision program. This particular activity will receive attention by the revised State Map Advisory Committee in the future years. The remainder of the 15-minute quadrangles in Oregon are in some stage of conversion to the $7\frac{1}{2}$ minute series. Field work will be completed by 1988. Publication will be completed in 1990.

Bill Kaiser described the Portland Revision Project in which 1:12,000-scale orthos would be used in the field completion phase. Dick Swinnerton reported that the NMD is researching the use of digital orthophotos.

Dick Paynter, Oregon National Guard Reserve, described a need to have township, range and section line delineation on the Federal Aviation Agency charts to aid in search and rescue operations. Coordinates provided by ground teams to aircraft are nearly always in the township, range and section format. The pilots need some way of referencing to the Public Land Survey System as they fly the aircraft.

Rudy Wellbrock, ODOT described the city and county maps which his agency has been producing through Intergraph System. Data is being provided to cities and counties on a floppy disk for PC use. The revision data comes from several sources including State and local fire bureaus.

Dave Ringeisen, ODOT, described the Digital Index which the State Library is producing. This Digital Index will be on line through the Library system in a couple of months. This index will have contact names, data themes and approximate scale. A phase II index is being planned which will give the location of the data and more exact information.

George Shore, ODOF, said that they were producing 1:100,000-scale Forest Protection Maps with single line roads, using heavier line weight than the USGS compilation.

Ted Albert, BLM, described the Western Oregon mapping effort over BLM lands at 1:4,800-scale. As part of this project, section corner locations are being projected with a set of state plane coordinates.

Peter Eberhardt, Willamette NF, described a grid cell data base which contains 50 layers of data. This functions as the data base for a GIS.

Dick Myers, Oregon State Library, said that the Federal Depository Maps were being entered into the Library Referencing System. References concerning these maps can be obtained in real time through user friendly software.

Roger Crystal, USFS, described the GIS efforts on the Siuslaw NF. This forest is one of seven across the country involved in a test of GIS capability. A project was described to map the 277,000 acres of the Columbia Gorge National Recreation Area. This area will be mapped with line maps and orthophotos by March 1988. Vivian Torgeson, OWRD, described the Basin Maps produced by the agency. Currently the Umatilla and Summer Lake Basins are under study. The Willamette Basin study will begin next summer.

Lyle Riggers, NGS, mentioned that first order level crews would be running levels along Highways 101 and Interstate 5 to complete the National Network.