SECOND ANNUAL REPORT

OF THE STATE MAP ADVISORY COUNCIL

FOR OREGON

1988

OPEN-FILE REPORT 0-89-1

January 1, 1988 - December 31, 1988

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
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GOVERNOR

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EXECUTIVE SUMMARY

1. **The State Map Advisory Council facilitated coordination of GIS activities, mapping activities, and land record activities of state and local government through the work of four committees:** the Executive Board, the Oregon Map Advisory Committee, the Oregon Geographic Information System Committee, and the Oregon Land Records Committee. All committees have federal, state, and local participation. Minutes of the meetings comprise the bulk of this report. Membership lists are provided in Appendix F. The Cursor Newsletter issued by the Water Resources Department is a semi-official news release of the activities of the agencies participating in SMAC.

2. **The State Map Advisory Council coordinated activities of state and local government with parallel activities of the federal government.** Participation included attendance at meetings of the Northwest Land Information System Network co-chaired by BLM and the USGS, participation at the 11th Regional Western Mapping Conference by the chairman of the Oregon Mapping Committee in Tucson, Arizona, in November, and sponsorship of a local, state, and federal open house of GIS and mapping activities in May in Salem. A display of GIS capabilities was also presented to legislators and other officials in December.

3. **The joint activities of the committees focused efforts during the year on the definition of goals, architecture (relating various components of map and GIS activities to the goals), the concept of GIS service center, and other long term planning efforts.** Emphasis was on state need and strategic planning. The concept of placing a service center in the Executive Department was rejected by Natural Resource Agency directors. However, the concept of promoting a service center in the Department of Energy was uniformly supported.

4. **The State Map Advisory Council prioritized state agency acquisition requests** being forwarded by agencies to the legislative assembly as part of the budget process. The prioritizing process also included development of a statement of strategic cooperation. Both are included here as part of Appendix E.

5. **Major technical mapping activities were pursued.** They included development of an inventory of installed data bases, input into the USGS revision process for 7½ min. quadrangles, development of input for the A-16 mapping process of the federal government, participation in the lower Umpqua cooperative GIS project, completion of a map brochure, and continued discussion of standards as they relate to the production of maps.

6. **Major activities relating to Geographic Information Systems were pursued.** They included ongoing coordination of projects, development of specific language for the architecture of GIS and maps statement for Oregon (adopted as Appendix C), development of a brochure of GIS capabilities of state agencies, and continued attention to standards in GIS activities and digital data as they relate to project efficiency and state need.

7. **Major activities relating to Oregon Land Records were pursued.** They included continued pursuit of densification of geodetic control data throughout Oregon (including coordination with federal agencies), continued pursuit of a multi-purpose cadaster, evolving recognition that severing of the tract index from the cadaster probably is the practical way to go, and continued pursuit of a unified address file for common use by all parties in need of this kind of data.

JDB:ch

smac/execsumm

Meeting Summaries

Executive Board

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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Thursday, February 25, 1988

Attendees

NAME	AFFILIATION
Bob Royer	Oregon Highway Division
Rudy Wellbrock	Oregon Highway Division
Dick Swinnerton	USGS-Menlo Park, CA
Robert J. Rivers	BLM-Portland
Samuel D. Fischer	US Forest Service-Portland
Nancy Rockwell	Oregon Department of Energy
Ken Dueker	Portland State University
Janet Neuman	Division of State Lands
Glenn Ireland	USGS-State Cartographer
Dave Stere	Department of Forestry-Salem
Harold Sawyer	Dept. of Environmental Quality
Jeffrey Weber	Dept. of Land Conservation and Development
Jerry Schmitz	Executive Department
Bill Penhollow	Water Resources Department
John Beaulieu	Department of Geology and Mineral Industries
Jim Carlson for Mike Gleason	Lane Council of Governments for City of Eugene
George Beard	Executive Department

1) REPORTS

1a) LAND RECORDS COMMITTEE

Chairman Ken Dueker emphasized that the Oregon Land Records Committee focuses much of its efforts on the interface between state and local automated data activity. He updated the members with membership changes and reviewed mission and goals to clarify the role the committee.

1b) MISSION

He noted the need to add the following language: "To coordinate State Land information policy and programs that affect local government".

Ken provided a draft letter to possibly be signed by the Governor and sent to local government officials to explain the role of his committee. He noted the need that his committee had for increased visibility. The technical discussion that followed focused on geodetic control points, orthophotos, and addressing systems.

1c) GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

George Beard indicated that he was impressed with the members and the work of the committee he chairs. He reviewed missions and goals for the Executive Board and also distributed project priorities for 88-89 and indicated more information on specific deadlines and memberships would be distributed later. He indicated that the Geographic Information System Committee had adopted the GIS working group as a subcommittee and would assimilate and expand the role of the Cursor Newsletter. He noted that the relationship with the Executive Department authority needed further clarification at a later time.

In discussion, the idea was developed that further balancing is needed regarding the specialization of the various committees, the specific membership, and the scheduling of meetings to make workload as manageable as possible on members. The need for local input into GIS activities was raised by Bill Penhollow. This concept lead to an amendment of the GIS goals later in the meeting.

In additional discussion the idea was developed that the parceling of workload between committees will be an area of ongoing clarification. The emphasis should be on who takes the lead in certain areas and on defining the specific tasks to be pursued rather than on erecting fences between committees and arbitrarily limiting certain subjects to certain committees only.

1d) OREGON MAP COMMITTEE

In the absence of Paul Staub, John Beaulieu briefly summarized the major activities of the Oregon Map Committee. He indicated for Paul Staub that the goals to be presented later under a separate agenda item had been reviewed and refined by the committee. He indicated also that in terms of data quality and standards it was important that the Oregon Map Committee track federal and professional discussions in the area of data quality and standards. In this way if state agencies should wish to use data from other sources at a later time, they will have preserved that option by observing commonly recognized data standards and quality conventions. Finally, a "show and tell" session involving mappers, GIS individuals, and local land records individuals seems to be shaping up for late April. John indicated that Paul would be coordinating this evolving effort with other committee chairs and that co-sponsorship was probable.

Glenn Ireland briefly described the transition of the USGS topographic map program out of initial map production and into an ongoing scheduled revision cycle. It is important that Oregon merge into this cycle and provide meaningful recommendations that can be easily considered for programming by the National Map Program. The Oregon Map Committee is working on this effort.

2) ACTION ITEMS

2a) GOALS

The goals for the State Map Advisory Council and its four committees were briefly reviewed and the history of their development was summarized. The history involve two earlier drafts plus directive by the Board for further refinement by the committees. The draft presented to the committee was the result of those efforts. Modifications of substance rather than semantics were solicited. The

modifications included a request by Ken Dueker for the additional mission statement for the Land Records Committee to be included and also a request by Bill Penhollow for the concept of local government to be integrated into the mission statement of the Geographic Information Committee. Specific language was provided for both amendments by the sponsors.

It was moved by John Borden that all of the goals with the two amendments be adopted. The motion was seconded and passed. Updated copies of the mission and goals will be distributed.

2b) GUIDELINES

Draft guidelines were presented which would promote interagency cooperation and lack of duplication. Nancy Rockwell pointed out that adoption of the guidelines by themselves might lead to the impression that agencies following the guidelines had a "green light" to develop their own GIS systems when in fact a broader view of state need would suggest that this was not always desirable. This concern was uniformly shared by the committee. The ideas was further developed that guidelines are a good idea, but should not be developed in isolation of a broader policy perspective for the development of GIS capability in Oregon.

In recognition of the need to develop this higher level strategy in advance of guidelines the discussion moved into the next agenda item that of developing a procedure for addressing architecture for a GIS capability in Oregon.

2c) SUBCOMMITTEE TO DEAL WITH GIS ARCHITECTURE

For the purpose of guiding GIS development, coordinating specific GIS activities, and developing a better capability to deal with budget questions, it was generally agreed to that some sort of policy level strategic statement was needed from the State Map Advisory Council in general. Whereas present state policy seems to be one of letting the agencies go it alone with minimal resource support, it was evident to the group that a more focused state policy is needed to guide resource investment and to meet the policy needs of natural resource agencies. Chairman John Beaulieu noted for the committee that the state effort is falling short of state perceptions or expectations in terms of meeting policy needs.

The structure of a committee was discussed and various options were forwarded. A subcommittee of the Executive Board was established with the directive of addressing the GIS questions provided in the handout within the context of the mission and goals of the State Map Advisory Council. A report will be developed within two months. The committee will pick its own chairperson. Membership was selected to emphasize input on the following issues or activities. 1) Ongoing policy level GIS applications in Oregon; 2) Federal interface; 3) Local interface, and; 4) Balance between agencies. Membership includes Nancy Rockwell, Hal Sawyer, John Borden, Ken Dueker, George Beard, and Mike Weland. The subcommittee is invited to consult members and chairpersons of various committees of SMAC on technical issues. The GIS Committee will be of greatest service in areas of image processing, project accessibility with feds, service center concept development, data storage, data sharing, data applications, and installed capabilities in state government. The major input of the Land Records Committee will along the lines of cadastral mapping and local accessibility to the system. The Oregon Map Committee will be of most benefit in addressing issues of thematic data layers and map standards.

3) STATE GIS EFFORTS

The Oregon Water GIS effort was briefly described in part by John Borden. He described procedures for completing the land net Oregon off the 7½' topographic series and indicated that digitizing had been done in part off of paper sheets. He described the quality control check process instituted within the Department and indicated that the goal was to develop quality control at a level equal to or greater than DLG 3 of the National Map Division.

Various aspects of the data collection element of the offshore management process coordinated by LCDC in response to Senate Bill 630 were described by Jeff Weber who was substituting for Eldon Hout. He indicated that the interim plan will be followed by a final plan for which more thorough treatment of data will be required. In discussion, he described various other data layers which he has been involved with most recently.

/dg
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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Tuesday, April 26, 1988

Attendees

NAME	AFFILIATION
Dennis Moonier	US Forest Service
Paul Staub	Oregon Dept. of Geology
Harold Fiebelman	USGS
Harold Sawyer	Dept. of Environmental Quality
Nancy Rockwell	Dept. of Energy
Ken Dueker	Portland State University
Paul Verterick	Bureau of Land Management
Jerry Schmitz	Executive Department
George Beard	Executive Department
Dave Stere	Forestry Department
Joyce Wescott	Dept. of State Lands
Tim Murray	Bonneville Power Administration
Jim Carlson for Mike Gleason	L-COG for City of Eugene
John Borden	Oregon Water Resources Dept.
Eldon Hout	Land Conservation & Development
Glenn Ireland	State Resident Cartographer
Dave Yandell	Emergency Services Division
Bill Penhollow	Assoc. of Oregon Counties
Don Adams	Oregon Highway Division
Eric Carlson	League of Oregon Cities
Roland Casad	Budget & Management
John Beaulieu	Oregon Dept. of Geology & Mineral Industries Chairman/SMAC

I. REPORTS

Reports were given for the Geographic Information System Committee, the Oregon Mapping Committee, and the Oregon Land Records Committee.

1) For the GIS committee, George Beard reported that a survey of current state GIS capabilities had been completed as part of the study for GIS architecture. He noted that he would present the results later in the meeting.

2) For the Oregon Mapping Committee, Paul Staub noted changes in membership and presented three major activities.

The USGS intends to have completed all topographic mapping in Oregon by 1990 and to have digitized all such maps by the year 2000. His committee recently completed state of Oregon recommendations for the revision cycle on the topographic maps and priorities for digitizing the maps. Much of the detail was provided by earlier reports of the State Map Advisory Committee.

The Oregon Mapping Committee will co-sponsor with the GIS Committee and Oregon Land Records Committee a poster session on May 26, in which agencies can discuss current projects.

In the area of offshore names Lewis McCarthur continues to refine a proper role for the state of Oregon and may have recommendations for action at a later date.

3) The Oregon Land Records Committee has been addressing street address registers, geodetic control, and the need for greater publicity for the committee.

Regarding street address registers, the various multipurpose aspects of this database are being addressed cooperatively, through enhanced 911 activities, traffic safety input, and the activities of the Division of Emergency Services. Down the road the ability of the state of Oregon to link address registers with state databases and management interest will be a powerful tool for both local and state government.

In studying the Geodetic control issue, the committee notes that BLM has an adjustment procedure for gradual improvement of their cadastral layer. The Portland Water Bureau is going to NAD83, which raises coordination issues since they are one of the first agencies to do so as a matter of policy.

Because the Land Records Committee involves local government and so many entities, it is difficult for it to receive the recognition that is necessary to work effectively. Currently, a letter to be mailed by the Governor is being drafted. This letter should help clarify the role of the committee and to give it more visibility.

ACTION ITEMS

The major concern of the committee was progress on the architecture statement being developed by the subcommittee of the Executive Board in cooperation with the various committees of the State Map Advisory Council. Placing the activity in a long-term context Chairman, John Beaulieu, noted that it is Phase III of a series of activities for SMAC. The Phases are: 1) original organization and statement of purpose; 2) clarification of goals and objectives; 3) definition of architecture; 4) input into the budget process; 5) development of a data initiative; and 6) implementation of the plan including such issues as personnel. He also asked that in evaluating architecture members consider trends in technology, trends in personnel training, ranges of options with regard to proximity to user, local access, coordination, and the budget process.

George (Robostaff) Beard proceeded to describe a survey of the base installation of the state of Oregon for GIS. The survey of base installations was distributed and requires no lengthy elaboration here. George stated that the data led him to conclude that "never had so few done so much for so many with so little." Applications were summarized both for the current biennium and the 1989-91 biennium. It is important that evaluations of the currently installed base be measured against future as well as prevent need.

George Beard walked the committee through the five goals of architecture for general orientation purposes, then addressed each goal individually. He specifically stated that it would be best to stay out of the strategies until the goals had been agreed upon, and that we could then discuss the strategies at the next meeting with those sideboards in mind. This strategy proved to be very effective. The following comments are not a complete representation of conversations which followed, but do give the flavor of the meeting. The results of the meeting are integrated into the next draft of the architecture statement which is being circulated with this meeting summary (attached).

Under the data architecture goal it was noted that data is a broader issue than "data for GIS application." Emphasis should be placed also on the mutual usability of the database.

There was some discussion as to which types of concepts belonged in the goals and in which types belonged in the strategies. Generally, the committee addressed strategy concepts only to the extent that it served the purpose of clarifying the goal conversation. It was noted that ultimately data needs must be addressed with recognition a data administrative function rather than overly specific language in goals and strategies. The exact identity of a data administrative function was left unresolved.

It was also noted that with regard to lead agencies and their responsibilities for given data sets there will be circumstances when other agencies have slightly different requirements. This will require clear understanding as to responsibilities, standards, etc. These types of topics are largely the province of the Oregon Mapping Committee.

A concept of lead agency for a specialized data set requires two understandings. First, other agencies should use the set without developing "counterfeit" sets of their own, and second, the lead agency is obligated to provide a mutually usable data set in its area of lead responsibility.

Goal 2 on Information Architecture, and Goal 3 on Application Architecture, and Goal 4 on Applications were generally acceptable to the committee after clarification.

The budget process requires that this document be in place by mid-July to be helpful. For the next meeting for the Executive Board, George Beard will rewrite the goals (attached) to address input by the committee. At the next meeting of the Executive Board strategies will be discussed. Members were invited to submit comments on strategies to George in writing. It may be necessary for the Executive Board to craft an interim budget recommendation statement for early use in the budget process. It was also noted that agencies have to know the direction in which the recommendations are going so that they can prepare internal budget initiatives that are not unnecessarily inconsistent with the later conclusions of the Executive Board. The next meeting will be May 17 from 1 - 4:00 pm in the State Capital.

/dg
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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Tuesday, May 17, 1988

Attendees

NAME	AFFILIATION
Becki Barker	Emergency Management Division
Myra T. Lee	" " "
David C. Yandell	" " "
George Beard	Executive Department
Paul Staub	Geology; Oregon Mapping Comm.
Don Adams	ODOT
Mike Weland	DDFW
Nancy Rockwell	ODOE
Don Pearson	BLM
Save Stere	Forestry
John Beaulieu	Geology; SMAC/Chairman
Excused	
Janet Neumann	State Lands
Ken Dueker	Land Records Committee
Hal Sawyer	DEQ
Dick Swinnerton	USGS - NMD

The only agenda topic was the continued discussion of the draft regarding architecture. George Beard distributed a May 16, 1988, draft to complement the May 2, 1988, draft.

The results of the meeting were integrated into a later draft for further consideration. That draft is attached to these brief minutes.

George started by indicating a desire to conclude the discussion by the end of this month. Attention of the Committee was focused on strategies rather than goals, which were basically agreed upon during the last meeting.

Most changes were of the magnitude of editorial, refinement, or subtle enhancement. No major changes were proposed.

Because management architecture has not been dealt with thoroughly at any previous meeting, it was approached at a philosophical level, however.

The concept of data administration function was uniformly adhered to, but details as to the nature of that function were not thoroughly investigated. Other major concepts included the utility of a service group and the overview authority of the State Map Advisory Council. Don Pearson of BLM was particularly helpful in his discussions of data administrator as it relates to his agency. It was noted that the data administration function operates at both the policy and operational level. Data issues are in need of timely decisions but must be well informed and in conformance with the policies of the State Map Advisory Council.

With the general discussion as a guide, George Beard volunteered to put into writing a trial balloon regarding management architecture. That material is incorporated as a part of the draft attached to this summary.

The next meeting is scheduled for June 2nd, from 9 AM to 12 PM, hopefully in Room 257 of the State Capitol. An agenda will be distributed.

JDB:ch

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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Thursday, June 2, 1988

Attendees

Name	Affiliation
Dave Stere	Dept. of Forestry
Don Pearson	Bureau of Land Mgmt.
George Beard	Executive Department
Glenn Ireland	USGS-National Map Div.
Don Adams	Highway Division
Jerry Schmitz	Executive Department
Ken Dueker	Chairman, Land Records
Paul Staub	Chairman, Mapping Comm.
Scott Smith	Dept. of Energy
Mike Weland	Dept. of Fish & Wildlife
John Beaulieu	Chairman, SMAC

Excused

Michael Gleason
Jim Carlson
Bill Penhollow
Eldon Hout

General discussion first focused on the concepts 1) that there should be some formal recognition of the final architecture statement; 2) various decision packages must be forwarded quickly if any are to be considered; 3) the Governor's office should be made aware of the architecture statement; and 4) concerns of various agencies must be realistically addressed. The example was given that the Department of Revenue might be concerned that policy direction of the Committee could impede on-going work with local government. In general discussion that followed, it was clear that implementation of policies by SMAC must be sensitive to the practical aspects of agency on-going activities and agency needs. Negotiation and sharing of information should be the

first option in working together. It was also agreed, however, that exceptions of entire agency operations to the policies of SMAC would not be acceptable.

With regard to the acceptance process of the architecture statements, it was agreed that the Committee (Executive Board) should approve the architecture statement at the present meeting (June 2, 1988) with the proviso that modifications would be considered at a convenient later date. Members and chairpersons of committees are encouraged to circulate the accepted architecture statement (attached) to their members and other interested parties. It was anticipated that most future discussion probably would be on specific implementation steps rather than the broad goals and general strategies. Implementation steps will be a subject of much attention at later Board and Committee meetings.

Regarding management architecture, the discussion opened with George Beard retracing the various steps in the evolution of the service center concept, the data administrator concept, and the program facilitation fund concept. In the discussion that followed, implementation steps and general strategies were initially mixed together, thus hindering progress. It was agreed to address strategy-level concepts first.

Without prejudice with regard to location, timing, dollar amounts, or priorities, the Committee agreed to the following concepts to be included as elements of the strategy for management architecture.

1. Propose and implement a Program Facilitation Fund for data.

2. Propose a Data Administrator function which would report to the State Map Advisory Council regardless of work location.

3. Propose and implement a user-sensitive Service Center that would be largely cost reimbursement supported and that would not displace specialized capabilities better suited to individual agencies.

It was agreed that the Data Administrator function and the Service Center should be co-located. It was further agreed that the decision packages for these three concepts would be developed by George Beard working cooperatively with Scott Smith, Rich Bastasch, Dave Ringeisen, and Mike Weland. The decision package concepts will be discussed at the next State Map Advisory Council Executive Board meeting.

Various scenarios of legislative response to the architecture plan were contemplated. Major elements of the discussion included the need to address agency program needs in legislative discussions, to plan at the program level, to introduce the concepts to the legislature early, and to demonstrate credibility later.

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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Thursday, June 24, 1988

Attendees

NAME	AFFILIATION
Wayne Elven	Bureau of Land Mgmt.
Ken Dueker	Land Records Committee
Paul Staub	Geology: Oregon Mapping
Glenn Ireland	USGS - NMD
George Beard	Executive Department
Mike Zanon	Water Resources Dept.
Scott Smith	Energy Department
Nancy Rockwell	Energy Department
Jeff Kroft	State Lands
Lloyd Chapman	DLCD
Pam Wiley	State Lands
Dave Stere	Forestry
Harold Sawyer	Environmental Quality
John Beaulieu	Geology; SMAC/Chairman

Excused

Jerry Schmitz
Eldon Hout

The purpose for the meeting, as stated in the agenda, was to take final action on key decision package concepts coming out of earlier meetings and proceeding from earlier discussions on goals and strategies.

George Beard introduced the topic and stated that interviews had been conducted with staff of BLM, BPA and Wah Chang. He also stated that work was done as a committee with key individuals as suggested in the previous Executive Board meeting. George distributed and briefly described a written proposal to the State Map Advisory Council for a GIS Service Center and Data Administration program.

A variety of issues were raised and discussed candidly. In a constructive vein, it was noted that equipment from DOE would require reasonable cash out as part of a plan to move the existing Service Center. It was also noted that the implied costs in the distributed draft were very high. At first glance, Nancy Rockwell indicated from her experience that the figures as presented would not be saleable in her view and that more work in the area of cost was definitely needed.

In other comments, it was noted that treatment of data layers on the last page of the draft was in its present form inadequate. Availability of shelf data, opportunities to leverage funding, priorities, and the decision-making process for expending any available funds were not described in the draft. The monetary figures presented were misleading in terms of acquisition of data layers.

An additional concept that was forwarded early for discussion was the need to clarify the manner in which individual agency activities would relate to this broader effort that was being proposed. At one extreme one could envisage agencies not being allowed to do anything else. At another extreme, one could envisage agencies doing whatever they wanted, regardless of the GIS Service Center and Data Administration program.

It is important that agencies, legislators, and others understand the relationship between agency activities and centralized activities. Simply stated, centralized activities will be pursued in those areas where it is most beneficial. Specialized agency activities will continue where it is most beneficial. It will be incumbent upon the centralized activities to best serve the agencies as a whole and it will be incumbent upon agencies to structure and rationalize their individual activities in a manner that avoids duplication and draws the greatest benefit from the centralized activities.

Any proposals for funding by individual agencies most assuredly should clearly spell out the relationship of the agency activity to the decision packages being proposed.

With regard to the cost issues raised earlier by Nancy Rockwell, several fundamental concepts were clarified by the group. Any significant expenditure would be reviewed basically by the State Map Advisory Council and therefore would be a coordinated user-sensitive effort. It would also be possible to appear before Legislative overview committees to keep them informed. Use of State money for leveraging additional resources ideally would be a basic component of any expenditure. The State effort would be aimed at state-wide problems and thus would be different than the more localized topical efforts noted to date.

It was noted that any intelligent conversation on state-wide GIS efforts must focus not on a piecemeal comparison of existing capabilities and traditions, but rather, must focus on State program-level needs that would be best serviced by a consolidated GIS activity. When one considers the unmet needs in such high priority areas as water management, offshore planning, and forest planning, one then appreciates the need for a meaningful commitment to GIS activities that is outside the grasp of any single agency. One also appreciates the fact that existing topical efforts by individual agencies are not adequate to meet the need and do not constitute a meaningful measure of effort in determining appropriate cost.

Other matters in which the cost estimate can be brought into proper perspective include emphasizing leverage, focusing on priorities, specifically stating contemplated offsets (such as a negative decision package within DOE), presenting accurate numbers, and distinguishing between general funds and other funds.

The Chair introduced the motion below and requested that the motion be made by a member of the committee, if there were no further discussion and if there were no objections.

It was moved by Lloyd Chapman, LCDC, that, "the Executive Board endorse the entire proposal provided by George Beard, provided there be further refinement in the language to properly display

a. Funding structure distinguishing between general fund and other fund.

b. Opportunities for leverage to resources and activities.

c. Offsets that will be part of the package in State government.

d. Proper emphasis on state-wide program need to give proper perspective to the proposal.

e. The fact that the proposal is a consolidated proposal endorsed by all involved State agencies.

f. Administration of technical decision-making by the State Map Advisory Council, including its committees.

g. Deemphasis of individual data layers and network proposals on the program facilitation page with corresponding increase in emphasis on the manner in which such a fund would be managed and overseen and used to attract leverage.

h. Emphasis on the centralized node aspect of the Center rather than on any preemptive implications.

i. Proper cross-referencing to the earlier goal and strategy statements of the architecture draft.

j. Emphasis again that the program facilitation fund would be properly managed."

The motion was seconded by Hal Sawyer of DEQ.

There was additional discussion for the purpose of clarification. It was noted that the decision package would be carried forward by the Executive Department in the general manner provided by State of Oregon budgeting procedures.

It was noted that the motion included the idea the the Executive Department would be the recipient of the GIS Service Center, etc. This concept is part of the draft proposal that was being moved on.

It was noted that there should be proper recognition of the earlier work of DOE and that this proposal, in part, is a continuation of the evolution of that effort.

It was noted that it is premature to place priority on any of the data layers or concepts on the data page, and that individual decisions would be made later as part of the decision-making function of the State Map Advisory Council.

The vote was called for and the concept was passed by a unanimous vote of all voting members of the Executive Board in attendance. Those in attendance constituted a quorum.

In other business, Ken Dueker described several activities of general interest to the Board. URISA is planning for its annual meeting. Ken distributed a concept paper coming out of a GIS coordination meeting in Florida. The paper illuminated numerous issues relating to standards in development of data bases, and was a good example of a technically oriented effort to coordinate activities. It was reiterated that there is a large long-term need for the State Map Advisory Council to develop good interaction between entities developing local data bases and State data bases so that State GIS capabilities can operate with local data. There also is a need for the State Map Advisory Council to now focus its attention on state-wide data layers, responsiblities of lead agencies for data, and standards.

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MEETING SUMMARY

EXECUTIVE BOARD

State Map Advisory Council

Monday, September 19, 1988

Attendees

Name	Agency
Pam Wiley	Division of State Lands
Harold Sawyer	Dept. of Environmental Quality
Dave Stere	Dept. ofForestry
Paul Staub	Geology/Chairman Oregon Map Comm.
Becky Kreag	Water Resources Department
Don Pearson	Bureau of Land Mgmt.
Dick Mathews	DLCD
Jeff Weaver	DLCD
Larry Bright	Fish & Wildlife
Nancy Rockwell	Department of Energy
Scott Smith	Department of Energy
Mike Zanon	Water Resources Department
George Beard	Exec. Dept/GIS Committee
Don Adams	Department of Transportation
John Beaulieu	Geology/Chairman SMAC
Excused	
Ken Dueker	Chairman, Land Records Committee

A statement of GIS strategic cooperation among Oregon State and local government agencies was presented for discussion. After minor editorial changes, enhancements, and clarifications, the statement was adopted by the Executive Board. The five elements of the strategy (attached) constitute the general framework in which SMAC judges that GIS evolution in Oregon can most beneficially proceed.

The working list from which priorities would be defined was discussed. The list provided by the Executive Department Information Systems Division was regarded as basically adequate. Added to the list, however, were several other projects for the purposes of clarification or for the purpose of addressing needs that have not been identified in the routine activities to date of the Information Systems Division.

Not included in the priorities process were small scale on-going base budget projects of Natural Resource agencies. These were regarded individually as below the level of attention implied by Fred Miller's letter or beyond the grasp of the Committee, given its charge and the information available to it.

Regarding data collection of lead agencies for certain thematic data, it was determined that a general category focusing on lead agency data collection was warranted and should be placed on the list. Placement of this concept on the list would assure that the concept of data development by lead agencies and use of that data by all agencies would be provided for. Lead agency data development hopefully would then not be arbitrarily cut in the budget process through improper interpretation of the priorities list.

In general discussion regarding the GIS Service Center concept, it was uniformly affirmed that the Center should receive high emphasis and priority both on the list and in the cover letter to Fred Miller. It was also emphasized that the GIS Service Center constitutes one part of the five part Oregon strategy for GIS development.

The concept of GIS in relation to automated cartography was discussed. From a technical standpoint, there are differences and similarities that must be recognized sooner or later. From the standpoint of this priority exercise, however, it was decided to treat both technologies equally and to leave technical considerations for later Committee action of a more routine nature.

Regarding the priorities, it was decided that rankings should be made independent of funds and that emphasis should be placed on statewide applicability, sense of urgency, and the utility of the effort to multiple agencies. Other criteria are listed on the general worksheet that was used by the agencies. These other criteria basically are met by all of the projects.

After each agency had an opportunity to individually rank projects into high, medium and low priority, votes were taken for each project and the priority list was generated (letter to Fred Miller, dated September 19, 1988). No projects of low priority were identified. It was emphasized that all projects were regarded as important to the State GIS effort. Unimportant projects previously were weeded out in individual agency project planning and budgetary fine tuning leading up to this meeting.

Regarding the GIS Service Center, it was emphasized repeatedly that a capital outlay component is included. Also included is a component dealing with the acquisition of multipurpose general digital data layers of use to numerous agencies. Included would be the land net (PLSS). This component is part of the Data Administrator function listed in the GIS Strategy for Oregon summary sheet.

Oregon Geographic Information System Committee

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

January 12, 1988

To: **GIS Committee Members**

From: Carl Grzybowski

Subject: Minutes of the January 11, 1988 GIS Committee Meeting

The next meeting of the GIS Committee is **Monday, January 25, at 10:30** to noon at the Executive Department, Information Systems Division in room 462 on the fourth floor of the Revenue Building.

In attendence:

Scott Smith	ODOE	378-4163	Carl Grzybowski	EXEC	378-4126
Bob Wright	BLM	230-7535	George Beard	EXEC	378-4126
Larry Bright	ODFW	229-5463	Kathleen McHarg	OSL	373-1094
Ray Miller	DOF	378-5033	Dennis Scofield	ODOT	378-6277
Rick Bastasch	OWRD	378-3671	David Ringeisen	ODOT	378-6256
Mike Zanon	OWRD	378-8131	Jack Doty	ODR	378-3321
Pam Wiley	DOSL	378-3806			

After the brief introduction of our new Committee Chairman, George took the group through a quick "Civics" class that explained Executive Department's planning, review and policy making roles and their relationship to GIS issues.

The November 18 SMAC meeting and library index/publication was discussed.

The majority of the meeting was focused on a review of the proposed GIS mission and goals (see attached). It was decided that the group would finalize these important statements in the next meeting.

GIS MISSION

Promote the effective use of geographic information technology to enhance the management of Oregon's natural and social environment.

GIS GOALS

- (Define ways to) Serve the geographic information needs of policy and decision makers throughout Oregon State Government.
  (Revised version - lead in raised questions)

- Promote opportunities to develop knowledge, skills and abilities to use GIS technology effectively. (Revised version)

- Achieve high quality and value for the State in its use of GIS products and services. (Not discussed - edit for next meeting)

Be prepared to finalize these and discuss strategies, objectives, and projects for 1988!

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

January 26, 1988

To: **GIS Committee Members**

From: Carl Grzybowski

Subject: Minutes of the January 25, 1988 GIS Committee Meeting

The next meeting of the GIS Committee is **Monday, February 8, at 10:30** to noon at the Executive Department, Information Systems Division in room 462 on the fourth floor of the Revenue Building.

In attendance:

Scott Smith	ODOE	378-4163	Kathleen McHarg	OSL	373-1094
Larry Bright	ODFW	229-5463	Dennis Scofield	ODOT	378-6277
Ray Miller	DOF	378-5033	David Ringeisen	ODOT	378-6256
Mike Zanon	OWRD	378-8131	Mike Seber	ODR	378-3321
Carl Grzybowski	EXEC	378-4126	Doug Nebert	USGS-WR	
George Beard	EXEC	378-4126	Glen Ireland	USGS-NMD	

The majority of the meeting was spent smoothing out the GIS committee mission and goals (see other side). Look at them closely, the concrete is almost cured!

Work on the User Reference Guide continues. Letters went out to the agencies to verify the information we have is current. Glenn and Doug are to send information on other indexes. *Don't forget!* Dave and I will assemble it for review at next meeting. Can we improve on the forward? *By the way - the spelling errors were designed to check if you read it.*

15 minutes of "thinking up" 1988 projects left us with a list of candidates (see other side). Can **you** think of any more?

GIS COMMITTEE

MISSION

Promote the effective use of geographic information technology to enhance the management of Oregon's natural and social environment.

GOALS

- Serve the geographic information needs of policy and decision makers throughout Oregon State Government.
- Present opportunities to develop knowledge, skills and abilities to use GIS technology effectively.
- Foster interagency cooperation and achieve high quality and value for the State in its use of GIS products and services.

***

CANIDATES FOR 1988 PROJECTS

Goal 1	Goal 2	Goal 3
ORMAP Pamphlet	GIS Conference	Policy on sharing resources
Hard copy Reference file	Public access	Translator standards
Briefing papers	Case studies	Budget review
Mail list	Free training	Elliot Forest
Cursor	Career growth (PD's)	Group Purchases
	Groovy Demos	Price Agreements/ Contracts

Note: Add others, think about which 3 or 4 are most important, how much effort is required, when can they start and end, who should lead, and who should participate.

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

February 11, 1988

To: **GIS Committee Members**

From: Carl Grzybowski

Subject: Minutes of the February 8, 1988 GIS Committee Meeting

In attendance:

Scott Smith	ODOE	378-4163	Jacquz Greenleaf	LEG	378-5781
Ray Miller	DOF	378-5033	David Ringeisen	ODOT	378-6256
Mike Zanon	OWRD	378-8131	Mike Seber	ODR	378-3321
Carl Grzybowski	EXEC	378-4126	Doug Nebert	USGS	231-2075
George Beard	EXEC	378-4126	Bob MacOnie	Weyerhaeuser	
Kathleen McHarg	OSL	373-1094	Pam Wylie	Land	378-3806

Business conducted

1. The GIS committee mission and goals have been agreed upon. Attached is a copy suitable for framing.

2. Work on the User Reference Guide continues. We've improved the forward and will be adding a few new listings. It should be ready for the printer next week.

3. The results of the primary election for 1988 project candidates are:

    1. Policy on Shared Resources (33)
    2. Budget review (29)
    3. Translators (16)
    4. GIS Conference/studies/training/demos (11)
    5. Data standards (11)
    6. Policy and methods for public access (9)
    7. Contracts/group purchases (5)
    8. Other projects (Elliot forest) (4)

(over)

A sub-group has already begun work on the Policy on Shared Resources. We'll discuss the Cursor, and continue to define and plan the other projects next meeting.

Next Meeting

The next meeting of the GIS Committee is **Monday, February 22, at 10:30** to noon at the Executive Department, Information Systems Division in room 462 on the fourth floor of the Revenue Building.

GIS COMMITTEE

MISSION

Promote the effective use of geographic information technology to enhance the management of Oregon's natural and social environment.

GOALS

- Serve the geographic information needs of policy and decision makers throughout Oregon State Government.
- Present opportunities to develop knowledge, skills and abilities to use GIS technology effectively.
- Foster interagency cooperation and achieve high quality and value for the State in its use of GIS products and services.

***

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

February 23, 1988

To: **GIS Committee Members**

From: Carl Grzybowski

Subject: Minutes of the February 22, 1988 GIS Committee Meeting

In attendance:

Scott Smith	ODOE	378-4163	Mike Seber	ODR	378-3321
Ray Miller	DOF	378-5033	Glenn Ireland	USGS	231-2019
Carl Grzybowski	EXEC	378-4126	Dennis Scofield	ODOT	378-6277
George Beard	EXEC	378-4126	Pam Wylie	DSL	378-3806
Kathleen McHarg	OSL	373-1094	Rick Bastasch	OWRD	378-8131
David Ringeisen	ODOT	378-6256	Lisa Blackburn	BLM	

Business conducted

1. The **Interagency Geographic Information Workgroup** has been endorsed as the technical subcommittee of the Geographic Information Systems Committee.

2. Responsibility for publishing the **CURSOR** will shift from the Water Resources Department to the Geographic Information Systems Committee by the end of summer.

3. Publication of the **User Reference Guide** was delayed to add a few new listings.

4. Dave Ringeisen informed the State Printer as to the potential opportunity to meet the state's growing **GIS publishing needs**. Dave will invite Mr. Shrunk to a future meeting

5. An important item on the GIS committee agenda is the development of **GIS policies, guidelines and standards**. After they are reviewed by SMAC, they will be issued by the Executive Department. Draft material on a policy on shared resources was circulated for review. Proposed standards are to include **architecture(s)** for sharing data, information, applications, and systems.

6. HOMEWORK ASSIGNMENT: A project **work plan matrix** was distributed for detailing the project specific objectives, responsibilities, start and completion dates. *Committee members are asked to complete the form by the next meeting.*

7. At the next meeting, we will continue the discussion as to what role will the GIS committee have on **reviewing agency GIS projects and acquisitions.**

REMEMBER:

If you would like to receive any publication that may be useful to our mission, contact the State Library.

IGIW meets on March 1.

LIS meets on March 31.

Next Meeting

The next meeting of the GIS Committee is **Monday, February 29, at 10:30** to noon at the Executive Department, Information Systems Division in room 462 on the fourth floor of the Revenue Building.

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310-0310

March 1, 1988

To: **GIS Committee Members**

From: Carl Grzybowski

Subject: Minutes of the February 29, 1988 GIS Committee Meeting

In attendance:

Scott Smith	ODOE	378-4163	Mike Seber	ODR	378-3321
Ray Miller	DOF	378-5033	Dennis Scofield	ODOT	378-6277
Carl Grzybowski	EXEC	378-4126	Pam Wylie	DSL	378-3806
George Beard	EXEC	378-4126	Rick Bastasch	OWRD	378-8131
Dick Myers	OSL	373-4368	Mike Zanon	OWRD	378-3741
David Ringeisen	ODOT	378-6256			

Business conducted

1. George briefed the group on the **recent SMAC meeting**. Also discussed NOLAN model and four key growth processes that should be addressed in policy statement:

   - Application Portfolio
   - Organization
   - Technology
   - User awareness

2. The project **work plan matrix** was completed. See other side.

3. Publication of the **User Reference Guide** was delayed again to add a few new listings. Expect to be printed next week.

4. At the next meeting, we will focus the discussion on policy, goals and strategies for sharing resources.

NEXT MEETING IS IN THREE WEEKS INSTEAD OF TWO!

The next meeting of the GIS Committee is **Monday, March 21, at 10:30** to noon at the Executive Department, Information Systems Division in room 462 on the fourth floor of the Revenue Building.

GIS COMMITTEE PROJECTS

PROJECT	LEADER	OTHERS INVOLVED	START / FINISH	ESTM. COST	Dependency on other projects	Must do = 5 Should do = 3 Nice to do = 1
1. Policy on Shared Resources	**PAM**	RICK, DAVE & SCOTT	NOW / MAR21			5
2. Budget Review	**GEORGE**	GRZ & MIKE Z.	NOW / JULY		1	5
3. Translators	**DENNIS**	IGIW	NOW / APR15			5
4. GIS Conference/Studies/ Training/Demos	**RICK**	GRZ	ONGOING			3
5. Data Standards	TO BE ASSIGNED		MAY		1, 3	3
6. Policy on methods for Public access	**KATHLEEN**				PART OF #1	3
7. Contracts/Group Purchases	**GRZ**	MIKE S.	JULY		1, 2, 3	3
8. Data exchange "Elliot Forest"	**BOB**		QUARTERLY / REPORT			1
Others: _____						
Others: _____						

MARCH 1, 1988

Oregon Mapping Committee

NEIL GOLDSCHMIDT
GOVERNOR

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

1/26/88 Meeting Summary

Attending	Agency
Mary Grainey	ODWR
Glenn Ireland	USGS/NMD
George Shore	ODF
Dennis Scofield	ODOT
Dave Ringeisen	ODOT
Tom Jackson	BPA
Ted Albert	BLM
Paul Staub	DOGAMI

Not present
Iverson, Smith, Yandell, Klaver, Crystal, Niebert
Excused
Kimerling, McArthur

Future Mapping Committee meeting arrangements were discussed. It was decided that at least once a year the Committee 'business meeting' will be followed by an afternoon 'informational meeting'. This will provide a forum for the Oregon mapping community at large (beyond SMAC) to make presentations. The first such dual meeting is being planned for the last week of April.

A review of Mapping Committee goals and objectives ensued with the following results:

GOALS

1. Focus base mapping efforts in Oregon on policy needs of government.

2. Achieve effective development and use of base mapping for Oregon through cooperative and coordinated activity.

3. Facilitate awareness of emerging technologies and processes in the mapping sciences.

OBJECTIVES

1. To serve as an efficient clearinghouse for the status of map availability and use in a variety of activities statewide.
2. To promote commonly recognized standards in map development.

3. To define and promote a coherent base mapping effort for the state.
4. To continue promoting the completion of the 7 1/2' topographic series on a statewide basis in hardcopy form, including topo/bathymetric editions. Also, to promote cooperative efforts in production of the digital format of this series.
5. To define and promote an effective revision strategy for the 7 1/2' topographic map and orthophoto series in Oregon.
6. To promote the completion of the 1:100,000 series in both hardcopy and digital formats for Oregon in transportation, hydrography, elevation, and land net layers, including topo/bathymetric editions.
7. To assist and cooperate in development of large scale map data standards for Oregon.
8. To promote uniform and strategic collection of geodetic control data in development of base mapping in Oregon.
9. To provide necessary coordination and communication relating to (development of) thematic map layers on a statewide basis.
10. To promote the adoption of NAD 83 as the reference for mapping in Oregon.

Activities of the National Committee for Digital Cartographic Data Standards were reviewed. One component of the proposed national standard, emphasizing data quality, was previously distributed to the Mapping Committee for discussion purposes. Consensus was that the standard would be cumbersome to meet and is still in an infant stage. However, examples of the proposed data quality report would be useful for the committee to review.

Glenn Ireland stated that the Elliott State Forest Project will involve testing the proposed exchange format standard (SDTS), which data quality is but a part of. A workshop is planned for the cooperating agencies of this project to learn about the standard. Possibly an informational session for the Mapping Committee to become familiar with the standard can be arranged.

The final agenda item dealt with the 7 1/2' series revision process. The Mapping Committee is seeking a consensus of statewide need for which areas to revise. To accomplish this, forms are being distributed for map users to communicate their priorities. These should be returned to the committee chair by <u>February 15, 1988.</u>

NEIL GOLDSCHMIDT
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OREGON MAPPING COMMITTEE
Meeting Summary of April 21, 1988

Attendees: Ireland, Jackson, Kimerling, Iverson, Ringeisen, Shore, Wellbrock, Pearson, Moonier, McArthur, Staub

An updated Committee membership list was distributed and suggestions invited for filling an existing vacancy.

Dave Ringeisen distributed copies of the new Oregon GIS User Reference Guide. Distribution is planned for Oregon cities, counties, state, and federal agencies. For the most current information, online access through the Oregon State Library (OPAC) is suggested.

Glenn Ireland distributed copies of an experimental edition of the San Rafael, CA 7½' quadrangle. The map is printed both sides with one side positioned on NAD 83 and the other positioned as originally produced on NAD 27. A questionnaire is included for users to comment on this cartographic solution of handling the NAD 83 adjustment.

SMAC Open House

An informational session of the Oregon Mapping, GIS, and Land Records interests is scheduled for Thursday May 26, 1988, in Room 50 of the State Capitol. The meeting will run from 9 a.m. until 4 p.m. and will include presentations, displays, and poster sessions. Announcements will be out soon.

Offshore Geographic Names

Lewis McArthur recently attended a meeting of the U.S. Board on Geographic Names in Reston, Virginia. His attempts to clarify the policies and procedures applying to offshore feature-naming unfortunately met with inaction. Confusion exists in the naming of offshore features because various presiding organizations exist with no single one exerting authority. The situation needs attention due to the increased research and planning activities in the Exclusive Economic Zone (extending out to 200 nautical miles).

Major players include the Advisory Committee on Undersea Features (ACUF), and an international organization that reviews names appearing on the General Bathymetric Chart of the Oceans (GEBCO). Lew recommends that the policies and procedures presently applied by the Domestic Names Committee (USBGN) be extended to feature naming in the EEZ. A meeting of Glenn Ireland, Jeff Weber (LCDC), and McArthur will summarize the situation.

(over)

U.S.G.S. solicitation of digital data needs

In addition to the Mapping Committee of SMAC, the GIS and Land Records Committees were queried for what U.S.G.S.-produced digital data is needed in Oregon. A standard form was used for agencies to respond regarding DLGs and DEMs. Results of the survey are enclosed with this summary.

Proposed Standard for Digital Cartographic Data

Jon Kimerling stressed that the Oregon SMAC needs to review and comment on the proposed Standard. The Standard is being tested across the country this year with an Oregon test slated for the multi-agency Elliott Forest project.

The importance of this Standard will require the attention of future Mapping Committee meetings. Jon will try to obtain more copies of the American Cartographer issue containing the Standard and indicated he could provide assistance later in the year to familiarize Oregon SMAC with the document.

NEIL GOLDSCHMIDT
GOVERNOR

Department of Geology and Mineral Industries
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April 25, 1988

Mr. J.R. Swinnerton
Chief, Western Mapping Center, NMD
U.S. Geological Survey
345 Middlefield Road
Menlo Park, CA 94025

Dear Mr. Swinnerton,

On March 11, 1988, the Oregon SMAC sent to you requirements for primary map revision, completion priorities for intermediate scale 100K topographic editions, and completion priorities for both 7½' and 100K topographic/bathymetric editions. Since that time, the Mapping Committee of SMAC has again contacted agencies for their needs for NMD digital data.

Federal, state, and local agencies were canvassed for their requirements of 1:24,000 digital line graphs (DLG) and digital elevation models (DEM). A majority of agencies requested the DLG contour (hypsographic DLG) form of elevation data rather than DEM. The reason for this request is a need for more precise elevation data, especially in areas of low to moderate relief.

Oregon SMAC suggests the A-16 process be modified to accept multi-year long-range program planning as opposed to the current policy of year-by-year planning. A SMAC publication in 1984 identified long-range digital data needs for Oregon. The title of this study is Oregon Survey of Digital Requirements of State Agencies and Select Organizations (copy enclosed). The findings of this study are still valid.

The information contained in this survey was gathered in April 1988 by Paul Staub (Chair, Oregon Mapping Committee) and Glenn Ireland (State Resident Cartographer), USGS/NMD. Please contact these two authors if additional information is required.

Sincerely,

Dr. John D. Beaulieu
Chair, Executive Board
Oregon State Map Advisory Council

Paul E. Staub
Chair, Oregon Mapping Committee

enclosures

A-16 Mapping Requirements Survey--1988 Oregon SMAC digital data requirements

DIGITAL LINE GRAPH REQUIREMENT, 1:24,000 SCALE
(see map enclosure 1)

DLG data categories are needed in this order of priority:

1. Hydrography
2. Transportation
3. Hypsographic DLG
4. Public Land Survey System
5. Boundaries

Priority 1: Willamette Valley and urban areas-96 quadrangles

- Federal, state, and local agencies are cooperating to study the regional ground-water system to better understand and project water availability.
- A state agency plans a study of the Willamette drainage basin to project water availability and usage.
- Federal and state agencies are managing public land for a variety of uses.
- Federal, state, and local public safety operations in rural areas are being coordinated.
- Various agencies are monitoring air quality in the valley, including field burning and industrial emissions.
- The urban and rural transportation system is undergoing assessment and planning for future demand.
- Major universities in the valley will use the data in a variety of applications.
- DLG contours (hypsographic DLG) are requested by the majority of agencies due to the low relief of the Willamette Valley and the need for precise elevation data
- Priority 1 is requested by U.S. Bureau of Land Management; Bonneville Power Administration; U.S. Forest Service; Oregon State University; Oregon Department of Energy; Oregon Division of State Lands; Oregon Department Water Resources; Oregon Department of Transportation; Oregon Department of Environmental Quality; Multnomah County; Clackamas County; City of Portland; and Clark County, Washington.

Priority 2: Baker County, northwest Oregon, central western Cascades--126 quadrangles

- State agency cadastral mapping project is planned for Baker County.
- Federal and state agencies are managing public lands for a variety of uses and benefits.
- Federal, state, and local public safety operations in rural areas are being coordinated.
- Priority 2 is requested by U.S. Bureau of Land Management; Oregon Department of Revenue; Oregon Department of Forestry.

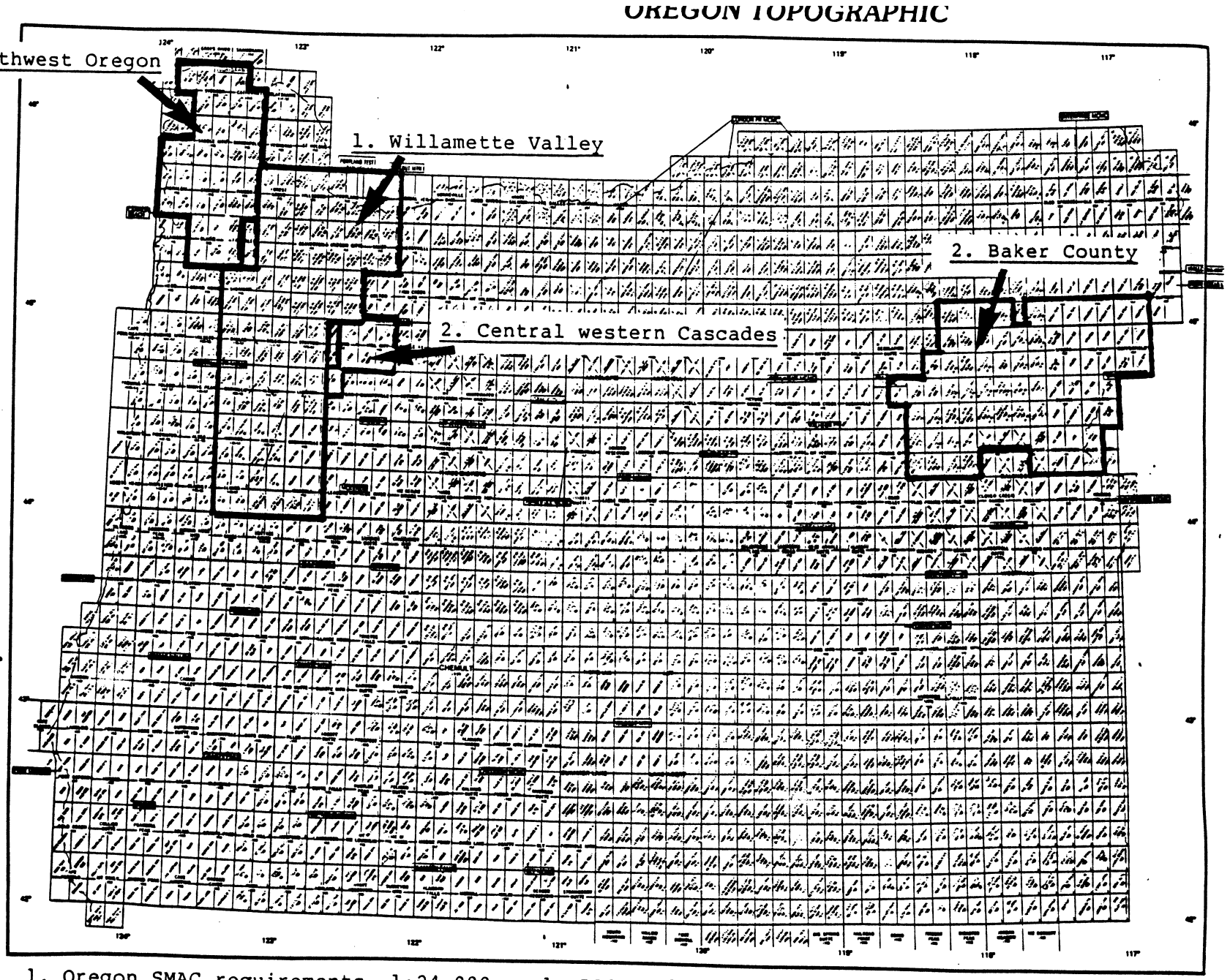
DIGITAL ELEVATION MODEL REQUIREMENT, 1:24,000 SCALE
(see map enclosure 2)

Priority 1: Northwestern Oregon--20 quadrangles

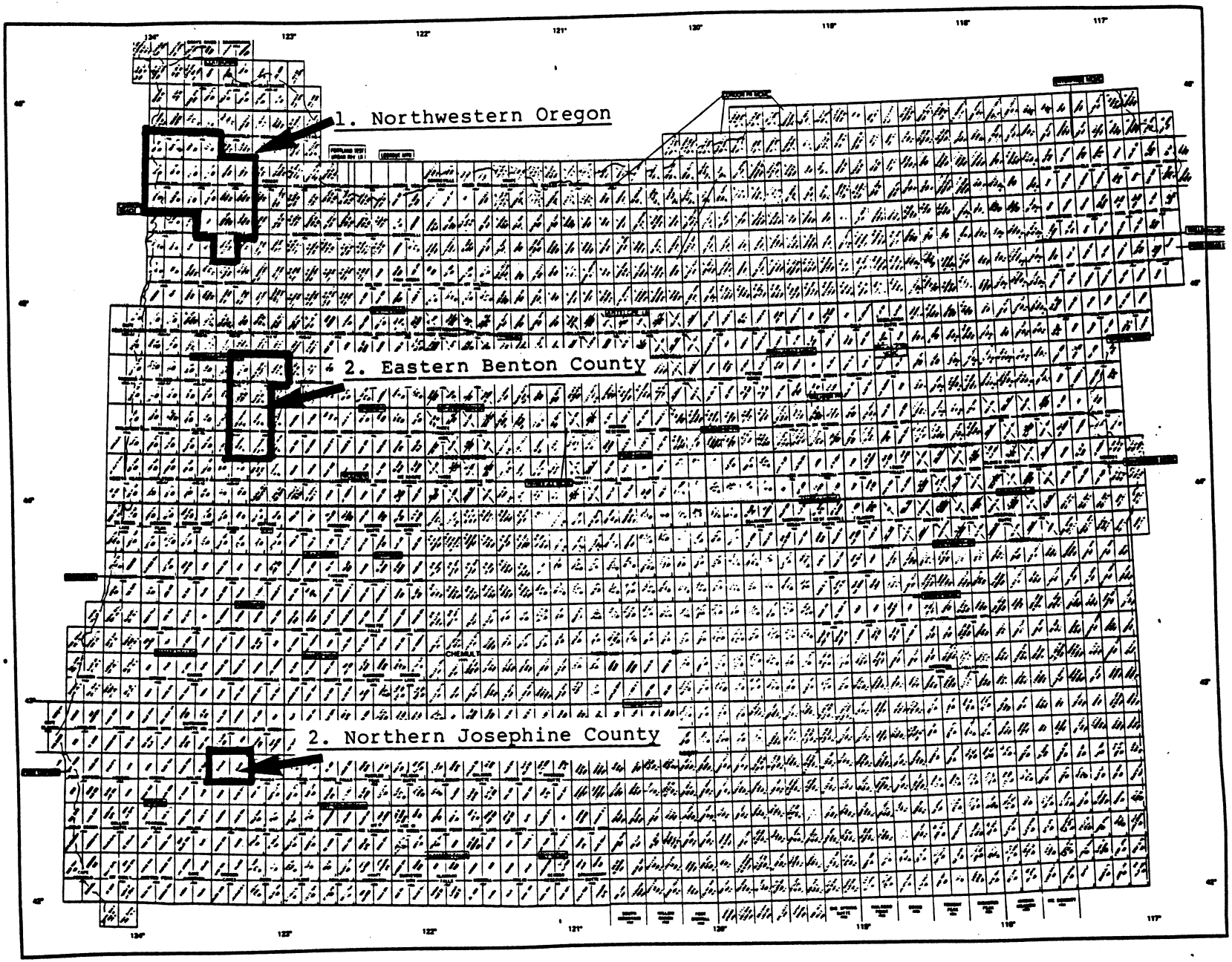
- Federal and state agencies are managing public lands for a variety of uses and benefits.
- Priority 1 is requested by U.S. Bureau of Land Management and Oregon Department of Forestry.

Priority 2: Eastern Benton County, northern Josephine County--11 quadrangles

- Educational and research projects are planned to utilize the DEM data.
- Federal and state agencies are managing public lands for a variety of uses and benefits.
- Priority 2 is requested by U.S. Bureau of Land Management; Oregon State University; and Oregon Department of Forestry.



1. Oregon SMAC requirements, 1:24,000 scale DLG - all data categories including hypsographic. Numbers indicate priority.



2. Oregon SMAC requirements, 1:24,000 scale DEM. Numbers indicate priority.

NEIL GOLDSCHMIDT
GOVERNOR

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

Meeting summary of September 6, 1988

Present: Grainey, Parkison Ringeisen, McArthur, Shore, Ireland, Nebert, Albert, Moonier, Dueker, Loy, Davenport, Scherler, Jackson, Staub

The brochure describing Oregon Maps and Aerial Photography will be published in late September with an extensive mailing to follow in October.

Earlier this year, the Mapping Committee coordinated Oregon's needs for revision of USGS 7½' maps. USGS assigns priority to revision projects through a weighting system that combines state and federal requests. Whereas the Mapping Committee had already combined federal and state needs in preparing its request, Oregon's revision needs were all designated high priority.

Lew McArthur has drafted a resolution to the U.S. Board on Geographic Names that offshore and undersea names out to the limit of the EEZ be treated in the same manner as onshore names presently are treated by the Domestic Names Committee. This matter is on the agenda for the 12th Western Names Conference in Seattle.

Doug Nebert discussed elements of a spatial data indexing system proposed for the NWLIS network. Indexes range from non-automated status maps to the use of GIS software to enhance management and analysis capability of the system. NWLIS will be dealing with indexing issues of tiling, scale, system maintenance, and funding. Demonstration of a graphic interface to query the index system using USGS/WRD's INFO software was presented.

The Committee was brought up to date on the evolving GIS policy for Oregon State Government. A chronological summary of the process was presented.

A survey of digital spatial data **presently used** in Oregon was announced. Glenn Ireland and Paul Staub are coordinating this 'progress report' of data and are requesting that forms be returned by September 23, 1988. The survey response form was clarified and the rationale for doing the survey was discussed.

(over)

Ken Dueker, chairman of the Land Records Committee of SMAC described his group's activity. A lengthy agenda for the coming year was outlined. Additionally, Ken described his proposal for an academic counterpart to the NWLIS. Bill Loy pointed out the need for, and benefits of, intern positions with agency GIS and automated cartography operations.

Ron Scherler of BLM presented his agency's two year, $1 million project to create a digital PLSS layer for Oregon. Completion date is mid 1991. BLM plans to network with all levels of government involved with PLSS to acquire the best available data. Discussion centered on mechanics of doing the project, sources, accuracy, etc. An important element is the provision for continual updating of the database as better, more accurate data become available.

Glenn Ireland offered for discussion the creation of a directory of cadastral coordinates for PLSS. This would be an accumulation of point positions (including multiple locations). The NWLIS Technical Working Group will take up the question of who might do this. It was generally agreed that this activity potentially folds in well with the BLM digital PLSS project.

NEIL GOLDSCHMIDT
GOVERNOR

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ADMINISTRATIVE OFFICE
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OREGON MAPPING COMMITTEE

Summary of December 15, 1988 meeting

Attending: Yandell, Grainey, Loy, Marentette, Ireland, Kimerling, Albert, Shore, Iverson, Ringeisen, Davenport, Staub

Bill Loy and Dave Marentette described a supplemental aspect of Phase I GNIS to enter names from new and revised 7½' quadrangles. Feedback from GNIS users is sought with the following process agreed upon--as users discover problems with an entry, they should photocopy the page listing the entry, indicate problem, clearly indicate correction needed, and send to David Marentette, Geography Department, U. of O., Eugene, OR 97403.

Lew McArthur met with representatives from the USBGN-Advisory Committee on Undersea Features. This group publishes the Gazetteer of Undersea Features and Lew is suggesting they adopt an output format similar to GNIS. Lew is also working on formation of a technical committee to review Oregon offshore names.

Draft copies of a digital geographic data survey were circulated for review. This survey lists digital geographic data in use by state and federal agencies in Oregon.

New formats for the annual SMAC informational meeting in spring were discussed. Support was voiced for a luncheon to be included featuring a guest speaker. A subgroup of Mapping Committee members will meet in January to decide location, timing, agenda, etc.

Highlights of a November meeting in Tucson, AZ, between western state SMAC representatives and National Mapping Division personnel were provided to the Committee.

Glenn Ireland outlined the upcoming A-16 survey of mapping requirements. The Mapping Committee will again coordinate Oregon state agency needs with federal requests to NMD.

An assessment of Mapping Committee activity with respect to its mission and goals statement ensued. Suggestions for improvement and new directions were solicited. Discussion addressed three main areas:

1. Coordination
   >a strong need was expressed for better coordination between SMAC committees

(over)

-distribution of concise meeting summaries to each member of each committee could assist this
-members represented on more than one committee could provide reports on other committee's activity, especially on activity of an overlapping nature

>a closer linkage between SMAC and NWLISN is needed to communicate the activities of each

>continue coordinating map requirements (digital and conventional) of Oregon agencies, and develop process for providing user feedback to NMD regarding products

2. Digital cartography standards

>keep abreast of evolving National Standard for Digital Cartographic Data

>document digital cartographic standards in use by Oregon agencies

-provide a forum for discussions on digital map data base development, symbology, line styles, map generalization, etc.

3. Map information dissemination

>continue annual spring SMAC meeting with improvements

>universities to lead in providing awareness of emerging technologies in mapping sciences

-including demonstrations and results of research

Oregon Land Records Committee

OREGON LAND RECORDS COMMITTEE
1988 REPORT

LAND INFORMATION SYSTEMS RECOMMENDATIONS

INTRODUCTION

The purpose of this report is to disseminate the findings and recommendations from the deliberations of the Oregon Land Records Committee (OLRC) of the State Map Advisory Council (SMAC). The OLRC consists of state and local government officials and professionals, and representation from utilities and private sector firms involved in the maintenance and use of land records and geographic information systems for the analysis of data about land. These individuals have given freely of their time and experience in furtherance of the mission and goals of the OLRC.

The mission of the OLRC has to do with fostering land records modernization in Oregon by promoting the wise procurement and implementation of geographic information systems (GIS) concepts and technology.

- Promote modernization of land record to achieve greater efficiency andequity in planning, managing, and conveying land.
- Improve the quality, access, and utility of land information systems at the local government level.

During 1988, attention has been directed towards database issues that are hardware/software independent. Consequently, the recommendations of the OLRC deal with a dual strategy for developing two separate but related databases at the local governmental level. We urge that local governments proceed on a consistent effort in the development of land information systems. We recommend the development of two land information systems, one at an intermediate scale for generalized planning and management applications, wherein the street address and land ownership parcel are adequately located as a point coordinate. A more detailed and accurate database is needed for operations programs, such as infrastructure and property tax assessment, and engineering design. Our recommendations spell out this dual strategy of two databases, which together with GIS functionality, will produce a powerful set of land information systems.

OLRC BACKGROUND

The **State Map Advisory Council** consists of an **Executive Board** and three committees -- **the Oregon Mapping Committee, the Oregon GIS Committee, and the Oregon Land Records Committee.** The Executive Board is composed of persons appointed by the Governor to provide leadership at the technical and policy interface of land information system issues. Their task is to translate policy concerns in natural resource issues to land information system requirements. The purpose of the Council is to improve the quality, access and utility of Oregon's land information systems, and to link information and analytical resources to the policy needs of the agencies. The focus, organization, and membership of the Council is designed to synergize the entire spectrum of organizational coordination toward enhanced land information systems.

The State Map Advisory Council is a unique innovation suited to Oregon's present needs. It incorporates a recognition of: 1) the need for federal, state and local coordination at the

policy level, 2) the fragmented responsibility for natural resources among agencies in Oregon, 3) the need to expand efforts in the area of local land records, and 4) the need to focus efforts into action using existing institutions and budgetary mechanisms.

All three committees are involved in fostering the adoption of a powerful new technology - geographic information systems (GIS). GIS is having a major impact on the way governments conduct their affairs. GIS is being used to effectively deal with mapping and information issues. The advantage of GIS are many. They include better service to the public, automation of routine activities, better planning and management of public services, more efficient assessment, taxation and conveyance of property, and improved emergency dispatching.

The remainder of this background section is devoted to the Oregon Land Records Comittee, which is a focal point for state and local cooperation of land information issues, particularly land records modenization. Representatives from local governments, the private sector, universities, and state agencies make up the Committee.

Geographic information systems range broadly, both in cost and function. The savings and improved service potentials are great, but expensive mistakes are also possible. The Oregon Land Records Committee provides a forum for education and communications among professionals concerning the appropriate application of GIS concepts and technology to modernization of land records and information at the local level. The specific goals of the OLRC are to:

- Promulgate the multipurpose land information systems concept for spatially registering data layers.
- Foster cooperation among state and local governments, utilities, and private users and providers of land data.
- Foster coordination of geodetic control and densification of monumentation programs to achieve more accurate base mapping by local governments.
- Foster development of addressing systems and integrated address registers by local governments for unambiguous location of parcels, accidents, buildings, wells, etc.
- Provide a forum and services for education and communication among professionals and public officials concerning these objectives and programs and policies for carrying them out.

CONTEXT FOR OLRC RECOMMENDATIONS

The OLRC is functioning in the midst of a fast-moving technology, the GIS technology is difficult for state and local governments to assess, procure, and implement. The technology will continue to evolve rapidly, which suggests that the OLRC should concentrate on the more stable element, the database, which together with the GIS technology makes up land information systems. This database orientation transcends specific hardware/software issues and database issues must be addressed by all. It is the logical starting point.

Modernization of land records is an important issue because the traditional ways of managing data about land are increasingly proving inadequate. The term land records is

construed broadly, it is more than information about land ownership, conveyance and valuation. It includes land and water resources, infrastructure serving land and information about demographics and economic activities that constitutes human use of land. GIS technology provides the tools by which we can integrate data about land to address complex problems concerned with planning and management of our valuable land resource base. GIS technology provides promise of: 1) generating efficient and effective **views** of databases that describe land records, 2) **integrate** the land **data** to minimize redundancy and foster understanding of relationships, and 3) handles transactional **updating** of land data to maintain current information.

The public is demanding quality public services and management of the public interest in land records in much the same way as they are demanding quality in goods and services from the private sector. Books like Search for Excellence demonstrate the importance and rewards of quality goods and services. Increasingly, the public sector will be held accountable for improved land information by which to manage land resources more effectively. We must avail ourselves of GIS concepts and technology to meet these expectations.

We are already seeing these expectations being translated into mandates, such as enhanced 911 emergency dispatching. E911 places a demand for a GIS database that associates a phone number with a street address and an emergency service provider, to facilitate the dispatching process. E911 is a higher quality service than the basic 911. Similarly, the need to coordinate construction of infrastructure projects requires the spatial registration of map layers of different utilities, which in turn requires more accurate geodetic control and base mapping. This is needed to support one-call systems for utility excavations. Another example of mandates for improved information is EPA stormwater regulations, which will require identification of outfalls to rivers.

This context for improved land information demonstrates the need to think beyond increasing the efficiency of doing the present tasks and functions of land resource management, but to design systems to improve the ways in which the tasks and functions are performed.

OLRC RECOMMENDATIONS FOR LAND RECORDS MODERNIZATION

The OLRC has developed a recommended strategy to the modernization of land records in Oregon. It is a two-part program, one being a long-term process of creating powerful multi-purpose land information systems, while the other is to develop in the short term a geographic index that will serve immediate needs to integrate and access data by location. This short-term strategy is described first.

County Geographic Index

The OLRC recommends that counties develop a County Geographic Index, which uses the U.S. Bureau of the Census TIGER file as a spatial framework. The TIGER line file contains a record for every street and road segment for each county in the U.S. It is a digital street map. In areas with addressing systems, address range data are also included in TIGER. The County Geographic Index concept includes a program of rural addressing to extent street and road addresses county-wide. The inclusion of address ranges in a digital street map enables the conversion of street address data to x,y coordinates and to service areas, such as voting precincts, school attendance areas, and emergency service zones. This capability is central to being able to integrate and locate records from separate data files.

The OLRC County Geographic Index recommended program goes beyond this address conversion capability. An important extension is to include a Tract Index (a geographic cross-reference file) to the County Assessor's parcel data. A Tract Index includes the following: 1) tax lot number, 2) owner name, 3) situs address, 4) x,y coordinates and 5) areas in which the tax lot is located, such as tax district, city, and school district. It is proposed that this Tract Index be in the TIGER framework, and thus part of the County Geographic Index.

Although the x,y coordinates in TIGER are not highly accurate, approximate coordinates for addresses and tax lots can be interpolated using the address range information. Tax lots without addresses will have to be digitized for inclusion. As more accurate x,y coordinate information becomes available for tax lots and street intersections, the less accurate information can be replaced easily.

The County Geographic Index can solve many of the needs for integration and location of data in separate files. Geographic informations systems technology can be used for graphics processing of the TIGER file and of data that TIGER has added x,y coordinates. This will add greatly to increase the utility of data already available, but not very accessible by geographic criteria.

Multi-Purpose Land Information Systems

OLRC's second program recommendation is to carefully construct a foundation for multi-purpose land information systems (MPLIS). The MPLIS concept consists of spatially registered layers of institutionally independent data. Organizations remain in control over their data, as the responsible organization is best able to update and insure the accuracy of the data. Yet, the data, or some derivative or part, can be made available or shared, if the layers are spatially registered.

The spatial registration part of the MPLIS concept is dependent on accurate geodetic control. There must exist a network of points on the ground and in each layer of data, for which accurate state plane coordinates are known. Global Positioning Systems technology is rapidly becoming available that will enable a dense network of geodetic control to be developed. The OLRC recommends that this dense network of control be developed from a state network to insure a consistently accurate base.

The OLRC also recommends that counties undertake a base mapping program and produce orthophotography, in both hard copy and digital forms. The orthophotos can serve as base maps for the display of other layers, without having to digitize planimetric features.

The cadastral (land ownership) layer should be built in conjunction with the Cooperative Mapping Program of the Oregon Department of Revenue (DOR). However, some counties may find it necessary to digitize line images of parcels and parcel centers while awaiting their turn to accurately reconstruct the cadastral layer in the DOR Cooperative Mapping Program. This should only be done if the work can be amortized over a 2 - 5 year period.

Layers are to be created by the organizations responsible for those data, such as: the County Assessor for the cadastral layer; the County Surveyor for the survey and control layers; the highway department for the roadway layer; the planning department for the zoning, comprehensive plan, and capital improvements plan layers; and, the layers of jurisdictional, service, and statistical boundaries of areas. Utility companies and special districts would be responsible for their layers of their infrastructural networks, and resouce agencies for the resource layers, e.g., soils, hydrography, and land cover.

Although institutionally independent layers are encouraged, some standard methods and data definitions are necessary to achieve the data sharing potential of the MPLIS concept. Organizations have to agree on street addressing standards, roadway classifications, the classification of soils, etc. Also, organizations will have to agree on data structure standards in order to relate data across layers. For example, soils data and land ownership parcel will have to exist in a polygonal structure to mathematically overlay them to determine the quality of land by parcel. This requires the application of GIS concepts and technology.

Computer-aided mapping is used to generate new paper maps by overplotting selected layers of data. The relationship among layers is discernable by visual inspection. If we want the computer to calculate the relationship among layers, say floodplains and land ownership, we need the power of GIS. GIS functionality is characterized by the ability to:

- link locational alnd attribute data for objects,
- relate data across layers, by point-in-polygon or polygon overlay,
- support topographic data structures to facilitate data editing and enable routing applications.

Financing and implementing the recommended program requires new institutional arrangements. The following section outlines a legislative opportunities to finance and implement the program.

FINANCING THE RECOMMENDATIONS

Although a comprehensive legislative program to modernize Oregon's land records is desirable to achieve internal consistency, it is not appropriate for two reasons. The issues are not well articulated making it difficult to develop a constituency of interest groups, and it is too late in the legislative process to build the program into their legislative agendas. Modernizing land records in Oregon consists of a number of steps, one of which is to enable the inter-relating of land records by use of County Geographic Indexes.

The TIGER file developed by the U.S. Bureau of the Census provides cost-effective framework for the development of the County Geographic Indexes. A primary function of the Indexes will be to serve as a database for emergency dispatching. Consequently, they could be financed by a telephone tax. Constructing the E911 database from TIGER is a cost-effective approach, which will serve as a basis for its use as a County Geographic Index, with many other applications.

The building of county indexes involves a number of related steps, such as extension of street and road addressing systems to all parts of the state, and the changing of the process of assigning addresses from the time building permits are issued to the time of subdivision. Until these changes are fully implemented, it will be necessary to digitize the locations of all rural dwellings and vacant tax lots. Coordinates for locations of all tax lots and addresses are needed for emergency dispatching and for search of information about land ownership parcels. This will also require that all instruments referencing real estate filed with County Clerks shall be coded with the tax lot number. These are needed changes to existing processes. The rural addressing should be financed as part of the E911 program while the recording of tax lot numbers on real estate instruments should be financed by legislation to return property tax reappraisal and assessment to the six-year cycle.

Although the County Geographic Indexes will serve many needs, more accurate land records are needed by public works, utilities, and for site planning and layout. A program

to provide technical and financial assistance to local governments to build multi-purpose land information systems (MPLIS) is needed as the second program element. In the absence of a comprehensive program an incremental strategy will have to suffice. MPLIS requires improved large-scale mapping, which in turn requires an improved geodetic control network to bring geodetic control to PLSS section corners. The improved geodetic control will facilitate and accelerate the DOR cooperative mapping program with counties to replace the worn out assessor's maps. Improved geodetic control can occur by cooperative programs with federal agencies, such as BLM, the U.S. Forest Service, USGS, and NGS to develop a geodetic control network. Similarly, reliance on existing programs, such as the Section Corner Preservation program for permanent geodetic control referencing, can be used toward implementation of the MPLIS concept.

The OLRC recommends that the real estate transfer fee be reserved for land records modernization activities, such as to fund indexing of tax lots and improved large-scale maps and geodetic control, and the recording of tax lot numbers on instruments filed with the County Clerk pertaining to real estate. Similarly, beneficiaries of land records modernization programs should pay for those improvements by means of fees and appropriations, such as county building permit fees to fund the use of GIS for screening for secondary lands designation, state utility franchise fee to fund improved geodetic control and large-scale mapping improvements, and an appropriation of lottery revenue to help fund the development of the County Geographic Indexes and vacant land inventories.

A real estate transfer tax is a target of opportunity that is being sought by various interest groups to finance various programs. If such an approach is taken to finance infrastructure, we urge that information about infrastructure be an allowable cost. After all, the information to inventory monitor the performance of infrastructure is essential to a program of infrastructure finance.

CONCLUSION

The recommendations of the OLRC serve as a guide for local governments in the introduction of GIS technology to meet their needs of land records modernization. The recommendations also serve to guide state government in the design of financial assistance programs to implement programs of land records modernization. The emphasis is on database issues which underly the application of technology. If the databases are well constructed the technology will evolve to make better use of the data.

OREGON LAND LAND RECORDS COMMITTEE

MINUTES

January 6, 1988

Present: Dueker, Lundeen, Swank, Strawn, Iverson, Kern, Riggers, Yandell (for Myra Lee), Sipp, Pearson, Stern, Porter, DeLacy, Estes

Not Present: Magnus, Worrell, Burkholder, Proffitt, Herring, Ireland, DeViney, Lawton, Slipher

Guests: Beaulieu

The meeting was called to order by Chair Dueker. New members, Barton DeLacy, representing the appraisal industry, Bruce Estes, Water Rights Specialist from the Water Resources Department, and Suzanne Porter, Industrial Property Specialist from the Economic Development Department, were introduced. Jim Gangle, Lane County Assessor, will be invited to serve on the Committee. These appointments are subject to concurrence by the Executive Board of the State Map Advisory Council.

Dueker circulated several items concerning upcoming meetings and two newsclippings, one dealing with assessment inequities that generated considerable discussion. Apparently many counties have fallen behind in reassessing due to budget and staff reductions. However, this is not an issue that the OLRC can be very effective and we decided on issues of this type to play a reactive role and wait for an opportunity to use this kind of issue to demonstrate the need to modernize land records.

The Tract Index/ Address Directory concept was discussed again. The problem of several organizations maintaining address files for single purposes, such as voter registration, taxing districts, school attendance area boundaries, demonstrates the need to promote the adoption of an integrated approach modeled after the ADLIB in Lane County. Bob Swank reported that he and Dave Yandell needed guidance from the Committee as to the charge to develop standards. Discussion yielded a modification to the subcommittee charge. They should recommend what type of education materials are needed to make presentations to professional associations

and county boards to make them aware of the efficiency and effectiveness of the integrated approach.

John Beaulieu was invited to share with the Committee the goals and objectives of the State Map Advisory Council. he emphasized that the three committees of SMAC have separate nodes of attention and he is not particularly concerned with boundaries as there is necessary overlap. He would like us to suggest modes of relations between state and local governments, but cautioned that we should recognize channels of authority. DeLacy expressed the concern that normal channels may be unnecessarily slow and that economic development requirements may necessitate fostering external pressures from commercial interests to speed up the modernization of land records. He felt we needed to better articulate problems the commercial sector has in working with non-uniform data and maps. Dueker appointed a subcommittee of DeLacy and Porter to prepare a brief draft articulating these concerns. Further discussion resulted in a decision to draft a letter for the Governors signature addressing the importance of modernizing land records and the work of this Committee, to be sent to County Commissioners. Janet Lundeen will provide the first draft. It will contain a paragraph from the DeLacy and Porter report on the the economic development connection.

The Subdivisons/Partioning Requirements was discussed. Chuck Pearson received comments from Lane County and the Department of Revenue. After drafting the legislation requiring short plats he will seek comment from a wide variety of effected groups and develop support and sponsors of the legislation. It was felt that the Committee should be an active sponsor and seek recognition for instigating popular and needed legislation. (Attached is a copy of comments by Earl Burkholder on Pearson's report. He also makes a point on the need for the development of a systematic geodetic control network that I would like Lyle Riggers to comment on.)

The Committee viewed a videotape on the Lane County Common Mapping project produced by LCOG, parts of which might be of use to the Committee in preparing a video to explain our activities and objectives. Bob Swank indicated that the audience for the tape is: professional associations, such as URISA, local political leaders, and visitors who come to see the system. It was noted the interviews of the City Manager

and City Engineer were particularly effective in explaining the utility of the system. Others liked aspects of the Wisconsin tape, particularly the person who had to go from office to office to collect needed data. This would provide more emphasis on private sector users, than exists in the LCOG tape. Bob will mark up a copy of the script and send to Dueker who will put it through another iteration. We intend to produce a videotape for city and county public officials in Oregon.

The Committee is experiencing problems with proceeding on Pilot Projects. Without a staff the Committee cannot provide on-going technical assistance. The Committee decided to drop it as an agenda item.

Discussion of progress on implementation of the recommendations of the Briefing Paper on Geodetic Control and Monument Densification was discussed. Lyle Riggers reported that ODOT is maintaining a Geodetic Reference System containing coordinates of monuments that can be used by surveyors. The feasibility of downloading this information to counties or ODOT field offices was discussed. Currently ODOT contracts out for setting six GPS points per job, for about half of the construction jobs.

Irv Iverson reported on the development of digital mapping standards by the DOR. They have developed standards for lines and parcel numbers. They have conducted an inventory of computing equipment in each County. Also they have been working with a number of users of assessors maps to determine common mapping requirements. As written material becomes available he will seek review and comment from the Committee.

The next meeting was scheduled for February 10 in Salem. MARK YOUR CALENDAR!

OREGON LAND LAND RECORDS COMMITTEE

MINUTES

February 10, 1988

Present: Dueker, Swank, Strawn, Iverson, Kern, Riggers, Yandell, Lee, Sipp, Pearson, Porter, DeLacy, Estes, Burkholder, Proffitt, Herring, Ireland, Kent, DeLacy

Not Present: Magnus, Worrell, Lawton, Slipher, Stern, Gangle

Under announcements Dueker circulated several items concerning upcoming meetings including a traffic Safety workshop at OSU on April 12-13 on Locational Coding, with particular emphasis on relating route and milepoint accident coding to other spatial referencing systems, such as coordinates and addresses. Dueker circulated minutes from other SMAC committees for informational purposes.

The Tract Index/ Address Directory concept was discussed again. The problem of several organizations maintaining address files for single purposes, such as voter registration, taxing districts, school attendance area boundaries, demonstrates the need to promote the adoption of an integrated approach modeled after the ADLIB in Lane County. Dueker identified the need to develop state policy to set a consistent direction and guidance material for local use, and a program of technical and financial ssistance. David Yandell reviewed the 911 program requirements for uniform addressing systems. He urged a database be developed at a statewide scale and the establishment of a statewide standard for rural addressing. Dueker suggested that calling it guidance material might be less threatening and emphasized that local officials are looking for good material to help make the right choices. Bob Swenk pointed out that reauthorization of 911 legislation provides the opportunity to obtain funding to provide the guidance to implement the address register approach. Myra Lee and Chuck Pearson raised questions and offered suggestions as to legislative strategies. Lee suggested we develop a problem statement and work plan. Bob Swank and Dave Yandell were requested to prepare a brief report, perhaps based on a questionnaire to counties and finding out what other states are doing.

The Subdivisons/Partioning Requirements was discussed. Chuck Pearson received comments from Earl Burkholder on Pearson's report. Pearson is now drafting legislation.

Dueker reported that the script for the videotape to describe the Committee to local officials will consist of the presentation to the upcoming SMAC meeting and the interviews of local officials as contained on the Lane County video. In addition to the video the proposed draft of a letter to county commissioners and mayors from the Governor was discussed. A revised draft is attached for your review and comment.

The draft goals and objectives for the Oregon Land Records Committee were discussed and a revised copy is attached.

Irv Iverson reported again on the development of digital mapping standards by the DOR. They are currently assessing options for unique parcel numbering system statewide. This resulted in a lengthy discussion of the cadastral layer and parcel data by other agencies. Several persons thought too much was expected of the cadastral layer and that users ought to develop their own layers and not expect the parcel file and cadastral layer to solve all their problems. Iverson suggested a joint meeting with all three committees on a semi-annual basis to discuss common concerns and to foster communications.

Dueker suggested two subcommittee meetings be held in March rather than a full committee meeting. He passed out two drafts of letters of invitation to the subcommittee meetings, one on developing an address register for the Portland metro area, and one on comparing approaches to geodetic control in developing a digital base layer. Dueker distributed a report from Manatee County, Florida, on implementing a cadastral layer. Most of the report deals with methods of control, adjustments and fitting survey data to develop the cadastral layer, and the last page deals with the need for an address register. Invitations to these March meetings are attached.

At two points in the meeting Department of Land Conservation and Development programs that have GIS implications were discussed -- vacant land survey and secondary lands study. Perhaps we ought to have a representative from DLCD.

OREGON LAND LAND RECORDS COMMITTEE

MINUTES

April 13, 1988

Present: Dueker, Strawn, Iverson, Kern, Riggers, Yandell, Porter, DeLacy, Estes, Proffitt, Herring, Gangle

Not Present: Magnus, Worrell, Lawton, Slipher, Stern, Swank, Sipp, Pearson, Ireland, Kent, Burkholder,

Guests: Steve Hammerquist and David Toyama from Lane County Assessor's, Larry Mason from Stewart Technical Services

Dueker introduced a new member James Gangle, Lane County Assessor. He also invited comment on adding three additional liaison members, Chuck Nelson from the Oregon Traffic Safety Commission, Eric Carlson from the League of Oregon Cities, and a person to be named from DLCD.

Under announcements Dueker circulated several items concerning upcoming meetings and minutes from other SMAC committees for informational purposes.

The Tract Index/ Address Directory concept was discussed again. The problem of several organizations maintaining address files for single purposes, such as voter registration, taxing districts, school attendance area boundaries, demonstrates the need to promote the adoption of an integrated approach modeled after the ADLIB in Lane County. Dueker and Larry Mason reported on the March subcommittee meeting in Portland. A report on the meeting was circulated and discussed (it is attached for those not in attendance) and an invitation and agenda for the next meeting of the Portland area users group of a Street Address Register on May 20 is attached.

Dueker, Mason and Yandell reported on the April 12 short course on Locational Coding at OSU sponsored by the Traffic Safety Commission. Attendees were mainly from rural counties and they are keenly interested in rural addressing.

Dueker reported that the script for the videotape to describe the Committee to local officials has been delivered to Bob Swank of Lane County for production by their cable access unit. Dueker reported that the proposed draft of a letter to county commissioners and mayors from the Governor has been reviewed and approved by the SMAC Chair and will be sent in due course..

Porter and Iverson reported on a new system to access parcel data for selected counties from the Departments of Veterans Affairs and Economic Development. Remote access to parcel data is a major step for state agences.

Dueker reported that two subcommittee meetings will be held in May rather than a full committee meeting. One will be in Portland on May 20 to continue the dialog on forming a users group of a Portland area Street Address Register. A second meeting will be held on May11 in Salem on policy and standards for database development for enhanced 911 systems.

The next full meeting of the Committee will be held on June 29 in Bend in conjunction with the County Engineers and Surveyors Conference at The Inn of the Seventh Mountain. Mark your calendar.

OREGON LAND LAND RECORDS COMMITTEE

MINUTES
June 29, 1988

Present: Dueker, Kern, Riggers, DeLacy, Estes, Herring, Gangle, Swank, Sipp, Pearson, Ireland, Burkholder

Not Present: Magnus, Worrell, Lawton, Slipher, Stern, Kent, Strawn, Iverson, Yandell, Porter, Proffitt,

Guests: Larry Mason, Jim Kimberling, Tom Milne, Dennis Fantz, Daniel Kjerne

Under announcements Dueker described the development of the Oregon State Government's policy, goal and strategies that was circulated. It was developed by the GIS committee for state agencies and will have little impact on local governments. Discussion indicated it would not be appropriate for our committee to develop such a policy, but it would be appropriate for us to develop methods and guidance on conducting a GIS user needs assessment. Local governments need to think through their needs carefully before embarking in GIS procurement. Larry Mason vollunteered to draft a document addressing this issue. It will include a research and education component along the lines of the proposed Northwest Universities LIS Network, which is patterned after the Northwest LIS Network.

The Tract Index/ Address Directory concept was discussed again in the context of E911. Dueker reported for Yandell on the formation of a study committee to examine deveolment of a statewide E911 system. Using the smallest unit of geography, the block as in TIGER, will aid in the development of a database for E911 that will serve other users. The problem of several organizations maintaining address files for single purposes, such as voter registration, taxing districts, school attendance area boundaries, demonstrates the need to promote the adoption of an integrated approach modeled after the ADLIB in Lane County. Dueker handed out a table that shows the advantage of using TIGER as a geographic framework for E911, from which Master Street Address Guides (MSAGs) and other specialized directories can be derived. Later in the meeting a motion was passed that OLRC encourages the study commitee on statewide E911 to utilize TIGER as the building block to construct MSAGs.

DeLacy reported on his analysis of the role of land information in economic development. He noted the LCDC goal 9 on economic development is being used to mandate the inventory of industrial land. He argued that more efficient ties to assessors data might be more useful than a new inventory. The committee discussed the need for a tract index (a street address to parcel ID directory) in each county and whether it should be mandated. Instead we decided to explore whether DOR could give tract index development a higher priority, rather than it being a byproduct of the cooperative mapping program, which is a long process.

Pearson reported on draft legislation requiring short plats to eliminate the problems with land divisions. Chuck requested comments and suggestions by July 15.

Dueker had appointed a subcommittee on geodetic control and cadastral mapping to examine work in Florida on:

plat automation and cadastral map construction
separate adjustments of traverses
control network database

The first two items were discussed together, with the conclusion being a problem exists. Technicans take liberties in "shoe horning" subdivisons into assessor's maps and there is too much dependence on the assessor's maps. Riggers describe the formation of a GPS users group and their development of a directory of control points. He also called for the development of a super control network consisting of approximately 40 high precision points to serve to establish other points using GPS. Ireland called for the creation of a section corner coordinate directory. He will develop an issue paper on that topic for our next meeting. Burkholder will develop an issues paper on geodetic control that will attempt to relate all these topics.

Dueker reported that the videotape to describe the Committee to local officials is being prepared. Dueker, Proffitt, Myra Lee of Emergency Management and Delacy have been interviewed on tape. Dueker reported that the proposed draft of a letter to county commissioners and mayors from the Governor has been approved and is being prepared for signature.

The next meeting of the Committee will be held on September 14 in Salem.

OREGON LAND RECORDS COMMITTEE

MINUTES
September 14, 1988

Present: Dueker, Kern, Riggers, DeLacy, Estes, Herring, Swank, Sipp, Ireland, Burkholder, Stern, Kent, Strawn, Iverson, Yandell, Porter, Chapman, Dick Bolen (for Lawton),

Not Present: Magnus, Worrell, Slipher Proffitt, Gangle, Pearson

Guests: Larry Mason, Dave Krumbeim, Herb Huddleston, Jim Pease

Under announcements Dueker described activities of the State Map Advisory Council, particularly the controversy surrounded the proposal to place a GIS service center in the Executive Department. It appears that the GIS service center will remain in the Department of Energy. Bob Swank inquired when the Department of Revenue digital mapping standard would be issued. Irv Iverson responded, saying the proposed rules will be issued in December, and he would bring it to the Committee.

David Yandell reported on progress toward E911. The Emergency Management Division has formed a Study Committee and four subcommittees - database, networks, operations, and political. Dueker and Swank are serving on the database subcommittee. Yandell also reported on the contract with Portland State University to assist in the development of database policies and standards, and database educational material.

Pearson was not present to lead the discussion of progress on the short plat legislation. Dueker reminded the Committee to forward comments on the draft hand out in June to Chuck.

Dueker distributed a copy of the script for the videotape describing the Committee to local officials, and provided a copy of the letter from the governor to local officials. A listing of officials to whom the letter was sent was also distributed.

DeLacy reported on his draft report of the role of land information in economic development. He emphasized that the LCDC goal 9 on economic

development is being used to mandate the inventory of industrial land. He argued that more efficient ties to assessors data is equally useful. The committee discussed the need for a tract index (a street address to parcel ID directory) in each county and whether DOR could give tract index development a higher priority, rather than it being a byproduct of the cooperative mapping program, a long process. After a long discussion the Committee came to realize that x,y coordinates would be essential to support the needs of economic development and that the index should be based on TIGER. Then linkage of the tract index, based on TIGER and the database to support E911 was mentioned. Using TIGER as a framework for both E911 and the tract index will be explored at the October meeting.

Larry mason reported on progress on developing a report on GIS needs assessment for local governments. He will have a draft for review next month.

Burkholder presented an issues paper on the role and mechanism of GPS and geodetic control in implementing a multipurpose cadastre. He recommends the development of a precise network of GPS geodetic control points be established. Send your comments to Earl and it will be discussed again next meeting.

Ireland gave a brief report on issues related to the development of a Section Corner Coordinate Directory. He will have a written report next month.

Chapman, Pease and Huddleston reported on the process of LCDC Secondary Lands designation. They reported on the use of LESA ratings for forestry and farmlands in Linn and Lane counties to test the proposed methodology. The Committee was interested in data requirements -- soils by ownership parcel (not tax lot),the location of dwelling units, and parcelization. Pease reported on their use of GIS for screening and for a case by case analysis.

Dick Bolen from Metro reported on their procurement of a GIS to perform the LCDC mandated vacant land inventory. They plan to use the PGE parcel data base and 1988 aerial photos

Jeff Kern presented a statement of issues concerning GIS Land Records: acquisition, storage, retrieval and distribution that calls for the County Surveyor to be the guardian of GIS land records. This sparked other

organizational models and whether the County Surveyor is the appropriate focal point for GIS. Get your comments to Jeff.

The next meeting of the Committee will be held on October 18 in Salem.

OREGON LAND RECORDS COMMITTEE

MINUTES
October 18, 1988

Present: Dueker, Kern, Riggers, DeLacy, Estes, Herring, Swank, Sipp, Ken Bays (for Kent), Strawn, Iverson, Yandell, Dick Bolen (for Lawton), Slipher, Pearson

Not Present: Magnus, Worrell, Proffitt, Gangle, Ireland, Burkholder, Porter, Chapman, Stern

Guests: Larry Mason, Dennis Moonier, Rodney Jennings, Chuck Nelson

David Yandell reported on the E911 study committee process. The Emergency Management Division has formed a Study Committee and four subcommittees - database, networks, operations, and political. Dueker and Swank are serving on the database subcommittee. He was asked how much the 3 per cent telephone tax generates statewide, $8M per year all going to local government, which only covers 20 to 40 per cent of their cost. Yandell indicated that retention of some part of the tax at the state level for database development might meet resistance. Perhaps extending the tax permanently for emergency dispatching O&M and an add-on tax for database development will be proposed.

Pearson reported on proposed "short plat" legislation, which would require the platting of partitions and require a tie to the initial point, if within 1/2 mile of an established geodetic control point. Strawn expressed concern that this requirement would burden the right-of-way acquisition process. Pearson is of the opinion that partial takings constitutes a adjustment of a lot line and would not be covered by partitioning process, as it does not create a new parcel. Pearson requested comment and suggestions from the ODOT.

DeLacy reported on his second draft report of the role of land information in economic development. He emphasized the need for a tract index, based on TIGER as a framework for the addition of geographic coordinates. There was considerable discussion of the economic development rationale for the tract index and the other elements of the proposed legislative program, which calls for a dual strategy of a tract index and a longer-range effort for multiple-purpose land information systems at the county level. DeLacy commented on the need for a public/private partnership, particularly a complementary relationship to the title insurance industry, and the need for DOR to contract out for the rapid completion of the cooperative mapping program. The means of financing the ambitious dual strategy program was discussed. It was noted that existing indexing fees and transfer taxes go the general fund and earmarking new revenues to the modernization of land records will be resisted, particularly by proponents of competing proposals. (For example the LOC is proposing to finance infrastructure with a title transfer fee.)

Burkholder's revised issues paper on the Oregon Primary Geodetic Control Network was discussed. Riggers indicated that the existing GPS Users Group is handling the establishment of the State Geodetic Control Network. Moonier and Bays indicated that as representatives of federal agencies they wanted to see something more formal than a users group. Dueker indicated that SMAC is interested in the establishment of a committee to deal with this, it is broader than our committee, but we want to influence the state and local government membership. It was requested that Burkholder prepare another draft, leaving out the call for registration of geodetic engineers and the Geodetic Control Authority. This kind of recommendation should come out of the broader-based committee that we want formed. We are in a good position to set their agenda, but not in a position to do the work of the special committee. Federal agencies working through SMAC are identifying the problem in a similar way that we have.

Jeff Kern presented a revised statement of the role of the County Surveyor in land records modernization. He calls for the County Surveyor to be responsible for a county geodetic control network within the state network and that the County Surveyor be responsible for the cadastral layer. Others argued that the cadastral layer continue to be the responsibility of the Assessor and that the survey layer be the responsibility of the County Engineer. Kern also recommends funding to bring geodetic control to section corners from the Corner Preservation Fund and from the County Road Fund. Discussion of this proposal brought out several related issues, such as the need to establish deadlines for the enactment of and milestones for progress on the Corner Preservation Fund.

Dueker reported on an invitation to meet with a GIS study committee in Clackamas County. This resulted in discussion of the need for a follow up letter to cities and counties, and the need for letterhead for the committee. We need to do a better job of building a constituency for our proposals, particularly if we go the legislative route

The next meeting of the Committee will be held on November 22 in Salem.

OREGON LAND RECORDS COMMITTEE

MINUTES
November 22, 1988

Present: Dueker, Kern, Riggers, Estes, Herring, Swank, Sipp, Ken Bays (for Kent), Ringeisen (for Strawn), Iverson, Yandell, Pearson, Porter, Lundeen, Ireland

Not Present: Magnus, Worrell, Gangle, Burkholder, Chapman, Stern, DeLacy, Lawton, Slipher

Guests: Bill Penhollow, Thera Bradshaw

Correction to minutes of October 18 meeting: The County Surveyor, not the County Engineer, should be responsible for the Survey Control Layer.

Chuck Pearson reported that he is still waiting for ODOT comment on the draft of the short plat legislation. The proposed "short plat" legislation would require the platting of partitions and require a tie to the initial point, if within 1/2 mile of an established geodetic control point. ODOT is concerned that this requirement would burden the right-of-way acquisition process if partial takings would be interpreted as a short plat rather than a lot line adjustment.

Dueker and Swank reported that the OLRC videotape is scheduled for completion in December. Then we will be able to spread the word about our work more effectively.

Riggers indicated that the existing GPS Users Group is handling the establishment of the State Geodetic Control Network. Representatives from agencies are talking and stepping forward with funding to complete the primary network for the state. There was continued discussion, trying to determine whether federal agencies need something more formal than a users group. Dueker indicated that SMAC is working with BLM and the NW LIS Network in the establishment of a committee to deal with coordinating state and federal efforts. A need for a related committee to coordinate counties in the establishment of county-level geodetic control networks was voiced.

Dueker reviewed options for a legislative strategy. The comprehensive strategy of a bill to modernize Oregon's land records has technical and political problems. The dual systems strategy is not well understood and

consequently support of important technical groups would be difficult to achieve without further discussion and education. Also, political support for the bill would be extremely difficult to muster this late in the legislative process. Important constituent groups like the LOC and AOC would require a larger lead time. A less ambitious incremental strategy was then outlined. Financial support for the Intermediate-scale GIS could be coupled with the needs of E911 for geocoding of street and road addresses and rural addressing. Similarly, the need for a geographic index to parcel data might be coupled with needs to bring the property appraisal process back into the 6-year cycle. Whether a geographic index to parcel data would increase the efficiency of the County Assessor was questioned. A meeting of Dueker and Gil Ridell of AOC and Jim Kenny and Irv Iverson of DOR was suggested. The other part of the dual strategy consists of a longer-range effort for multipurpose land information systems at the county level. Financing this longer-term, more detailed and expensive system would require that recording fees and transfer taxes be earmarking for the modernization of land records. We should encourage that the legislation LOC is proposing to finance infrastructure using a title transfer fee as a funding source, allow as an eligible cost the inventory, geodetic control, and maintenance of information layers about infrastructure. It was also suggested that legislation to clarify and improve the responsibilities of the County Surveyor would aid in the long-term effort to develop multipurpose land information systems.

Jeff Kern reviewed his proposal to clarify the duties of and strengthen the role of the County Surveyor to foster the land records modernization process. He calls for the County Surveyor to be responsible for a county geodetic control network within the state network. Kern will draft legislation to clarify the role of the County Surveyor and to expand filing requirements for surveys and property descriptions in deeds.

David Yandell provided a detailed report on the E911 study committee process. The Emergency Management Division has formed a Study Committee and four subcommittees - database, networks, operations, and political. Sara Bradshaw from Clackamas County, which has the only enhanced 911 system in the state, participated in the presentation. She described the implementation process and the maintenance efforts required to make the system work. Yandell brought to the committee the issue of building the database for E911. He asked whether TIGER is the best way to generate MSAG's (Master Street Address Guides). The OLRC recommends use of TIGER as an available and quality product, well suited for the establishment of uniform databases. A TIGER-based database

ought to be the state standard. Yandell indicated that if the study committee process finds E911 technically and politically feasible and cost effective, legislation will be proposed to remove the sunseting of current 911 legislation, which would continue the 3 per cent telephone tax to implement the enhanced capability.

The next meeting of the Committee will be held on January 18 in Salem.

1988 Annual Report of State Resident Cartographer

United States Department of the Interior

GEOLOGICAL SURVEY

National Mapping Division
c/o Bureau of Land Management
PO Box 2965
Portland, OR 97208

STATE RESIDENT CARTOGRAPHER - OREGON

REPORT TO THE STATE

1988 ANNUAL REPORT

This year has seen considerable changes in the mapping, geographic information systems, and land records communities. The State Resident Cartographer's Office was moved in November from the USGS Water Resources Division facility to the Bureau of Land Management Oregon Office facility. This will provide a closer contact and coordination with the BLM programs in the areas of mapping, GIS, and cadastral surveys.

Several new organizations were formed or gathered strength. The Northwest Land Information System Network was reorganized to make policy and budget decisions more easily and effective. A Global Positioning System Committee was formed to guide that technology's development in Oregon.

Several surveys were conducted which yielded or will yield tangible results. In the spring, the U.S. Office of Management and Budget's A-16 Mapping Requirements Survey was conducted. This resulted in the authorization of 40 quadrangles in the Willamette Valley to be digitized. In November and December the SMAC Mapping Committee conducted a survey of the operational data bases being collected by the State and Federal agencies. This survey will be used to plan future authorization and acquisition. In October, the SMAC Mapping Committee, State Department of Geology and Mineral Industries, and the SRC's Office published Oregon Maps and Aerial Photography Information Guide. This Guide details how various types of base maps, aerial photography, satellite imagery, and thematic maps can be obtained from State, Federal and local agencies.

The remainder of this report touches on a few of the other activities which the SRC has been involved with during the year.

- The SRC chaired the Lower Umpqua Digital Exchange Project Committee. This Committee is studying ways of exchanging and using digital data produced by various agencies.

- Assisted in the formation of cooperative agreements between the USGS and USFS to produce approximately 300 orthophoto quadrangles in Oregon.

Assisted the USGS in conducting an Economic Analysis Study. This Study will help the USGS formulate its national revision program.

- A survey of intermediate to long range orthophoto needs for Oregon was conducted. It was determined that 1300 orthophoto quadrangles will be needed by State and Federal agencies in the next five years.

- Developed a plan with the USFS and the USGS to digitize 65 quadrangles in Southwest Oregon.

- Assisted in the organization of a May SMAC Meeting which gave the State and Federal agencies an opportunity to present papers or exhibit posters of their recent mapping projects. Sixty agency representatives attended the meeting.

- A paper was presented by the SRC at the ASPRS Columbia River Region's GIS in Natural Resources Workshop. The paper described actual uses of the USGS's digital data.

- The SRC was briefly involved in a controversy as to the shortest river in the world. A 200 foot long river in Wyoming was submitted to the Guiness Book of Records. A licensed engineer measured the D River on the Oregon Coast and found it to be 120 foot long.

Glenn W. Ireland
State Resident Cartographer - Oregon

Appendix A - Executive Order 87-11

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. Strategic Planning--Identifying statewide issues involving land information and recommending policies, goals, strategies, opportunities, and priorities for the development and use of land information systems.

b. Resolve Policy and Technical Issues--Assisting in translating policy directives into consistent data and system requirements.

c. Technical Assistance and Coordination--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. Fostering Interagency and Intergovernmental Cooperation--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.

Governor

Attest:

Deputy Secretary of State

Appendix B - Mission and Goals of State Map Advisory Council

STATE MAP ADVISORY COUNCIL

MISSION

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

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 intergovernmental cooperation by providing a forum for communication, problem solving, and sharing of resources.

OREGON GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

MISSION

Promote the effective use of geographic information technology to enhance the management of Oregon's natural and social environment.

Coordinate state land information policy and programs that affect local government.

GOALS

*Serve the geographic information needs of policy and decision makers throughout Government and related activities at the local and federal level.

*Present opportunities to develop knowledge, skills and abilities to use GIS technology effectively.

*Foster interagency and intergovernmental cooperation and achieve high quality and value for the State in its use of GIS products and services.

OREGON LAND RECORDS COMMITTEE

MISSION

Promote modernization of land record to achieve greater efficiency and equity in planning, managing, and conveying land.

Improve the quality, access, and utility of land information systems at the local government level.

GOALS

Foster wise procurement and application GIS technology at the local government level.

Promulgate the Multipurpose land information systems concept for spatially registering data layers.

Foster cooperation among state and local governments, utilities, and provate users and providers of land data.

Foster coordination of geodetic control and densification of monumentation programs to achieve more accurate base mapping by local governments.

Foster development of addressing systems and integrated address registers by local governments for unambiguous location of parcels, accidents, buildings, wells, etc.

Provide a forum and services for education and communication among professionals and public officials concerning these objectives and programs and policies for carrying them out.

OREGON MAPPING COMMITTEE

MISSION

Focus base mapping efforts in Oregon on policy needs of government.

Achieve effective development and use of base mapping for Oregon through cooperative and coordinated activity.

Facilitate awareness of emerging technologies and processes in the mapping sciences.

GOALS

Serve as an efficient clearinghouse for the status of map availability and use in a variety of activities statewide.

Promote commonly recognized standards in map development.

Define and promote a coherent base mapping effort for the state.

Continue promoting the completion of the 7 1/2' topographic series on a statewide basis in hardcopy form, including topo/bathymetric editions. Also, to promote cooperative efforts in production of the digital format of this series.

Define and promote an effective revision strategy for the 7 1/2' topographic map and orthophoto series in Oregon.

Promote the completion of the 1:100,000 series in both hardcopy and digital formats for Oregon in transportation, hydrography, elevation, and land net layers, including topo/bathymetric editions.

Assist and cooperate in development of large scale map data standards for Oregon.

Promote uniform and strategic collection of geodetic control data in development of base mapping in Oregon.

Provide necessary coordination and communication relating to (development of) thematic map layers on a statewide basis.

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

/dg
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Appendix C - Oregon Architecture of Geographic Information Systems

OREGON GEOGRAPHIC INFORMATION SYSTEMS

Purpose

Defines Oregon State Government's policy, goals, and strategies for managing geographic information systems and the data and information therein.

Definition

Geographic information systems (GIS) are computer-based information system technologies used for analysis and reporting on the geographical or spatial attributes of the state's natural resources, demographics, or economic activities.

Authority

ORS 291.038
EO-87-11

Background

The state has two major types of spatial data applications: GIS and computer-aided drafting/design (CAD). ODOT and Revenue are major CAD users. The natural resource agencies are primarily GIS users. Each purchases equipment independently. There are clearly opportunities for cost reduction through

In the future, GIS and CAD technologies will likely converge. Policymakers will depend on GIS systems for relevant information to help make complex resource allocation decisions. The ability to obtain this information depends upon disciplined methods: for collecting, creating, and naming data; for developing applications; and for processing, storage, and transmital of data among agencies. The central issue, then, is to define and implement the most effective way to meet

Policy

The State of Oregon is committed to developing and maintaining the human skills and technical capabilities needed to provide decisionmakers with useful GIS analyses and information.

To avoid redundant or conflicting data acquisition and maintenance practices, agencies that are uniquely positioned to serve as custodian for a particular data theme shall be assigned responsibility for and authority over that theme. Agencies so designated shall be responsible for acquiring and maintaining current and accurate GIS data needed for the state's digital map base. At the same time, agencies that are assigned responsibility for a given data theme shall ensure the GIS data they maintain are accessible to other governments and entities serving the

Agencies needing to produce GIS analyses and information to fulfill their mission or serve their clients, shall be provided access to the facilities and data required for GIS analysis and reporting.

adopted June 1988 by the Oregon State Map Advisory Council

GEOGRAPHIC INFORMATION SYSTEMS

Goals & Strategies

1. *DATA ARCHITECTURE*

Data are the building blocks of information; accurate information absolutely depends upon accurate data. Therefore, Oregon State Government needs to define and develop a Data Architecture that shows where data exists, where they yet need to be acquired, how they are defined, and what agencies are responsible for data creation and maintenance.

Goal

Create an accurate digital map base to serve the geographic information needs of Oregon State Government.

Strategy

Data Administration

Provide quality assurance over GIS data by establishing a data administration function for the State's digital map base. Specify common data layer and minimum scale requirements for the State's digital map base. Identify agencies that are uniquely positioned to serve as custodian for a particular data theme; assign data acquisition and maintenance roles. Custodianship includes responsibility and accountability for the accuracy, currency, and completeness of data, and for providing it to other public purposes.

Data Dictionary

Expand the statewide GIS index and data dictionary to show which agencies are collecting and using which types of GIS data. This activity includes development of statewide standards for naming, locational coding and attribute definitions pertaining to GIS data entities, classes, and elements. Undertake an interagency user needs study to determine common GIS/CAD requirements for themes and spatial resolution. Cooperate in the definition and development of a geodetic control network to foster the spatial registration of separately collected geographic data.

Data Acquisition , Conversion, and Maintenance

Discourage duplicate creation of the same data elements, classes, or entities. Look to other sources that may have already created GIS data before committing to new data development/acquisition projects. Establish digital map and thematic data exchange methods with federal agencies in Oregon. Foster and coordinate conversion of geographic data from NAD27 to NAD83. Maintain accessible current small area demographic and economic activity data.

Clearinghouse

The State Library shall maintain a reference systems for the GIS digital map base. Agencies that are creating and maintaining GIS layers shall report status to the State Library periodically.

3. *APPLICATIONS ARCHITECTURE*

When the GIS "data universe" (data architecture) is understood, and the demands for information are identified (information architecture), it is possible to establish the application development projects that will enable the desired information to be produced.

Goal

Develop/acquire applications that satisfy significant policy issues and serve the information needs of decisionmakers.

Strategy

Lead Agencies

Have agencies with lead responsibility for developing new GIS information products and services present their feasibility studies, cost-benefit studies, and project plans to SMAC before the project is budgeted and finally authorized. The collection of authorized GIS development projects can serve as a master agenda each biennium by showing who will develop which application projects when from what data to serve whose information needs.

Project & Budget Review

SMAC will recommend to the Governor's Office funding priorities for agency and statewide GIS projects. Concentrate investments in application projects with the potential to be shared among multiple agencies. Unplanned GIS application projects will be reviewed and approved by the State Map Advisory Council before they are launched.

Standard Development Tools

SMAC will identify a core set of standard development tools agencies in the state should use to develop GIS products and services.

Pilot Projects

Agencies should conduct pilot projects before embarking on large GIS/CAD investments.

4. *COMPUTING & COMMUNICATIONS ARCHITECTURE*

The computing and communications architecture is concerned with the machines on which the applications operate to produce data into useful information. It also addresses where data and information reside, where they are needed, and what are the best modes of transport (telecommunications).

Goal

Develop processing, storage, transport and access capabilities that make it easy and economical to obtain data and information when and where they are needed.

4. *COMPUTING & COMMUNICATIONS ARCHITECTURE*

Strategy

Procurement

Limit future acquisitions of hardware and software products that are compatible with existing GIS systems. Encourage investments in shared systems that serve the greatest number of current and potential users. Minimize the cost of technology acquisition by securing statewide price agreements for common items such as printers, plotters, and workstations.

Procedures & Standards

Establish the problems and prospects of electronically passing data and information among state, federal, and local GIS computer systems. Identify products that permit data and information sharing. Adopt machine-independent standards that permit the transportability of applications and ease the sharing of data and information. Develop (procedures to access property ownership map and attribute data from local governments.

Review

Require agencies procuring independent GIS/CAD resources to appear before SMAC for review and to demonstrate conformance to standards for data sharing.

5. *MANAGEMENT ARCHTECTURE*

The formulation of data, information, application, and machine architectures suggests different roles for different groups. As an orchestra can have different instruments, sections, and players it must have a common score to create melody and a conductor to achieve harmony. Whereas the creation and definition of architectures can serve as the State's GIS score, it is still necessary to establish a conductor. The management architecture establishes the structure for conducting the State's various GIS activities.

Goal

Ensure that statewide GIS activities are harmonious and provide GIS products and services to agencies they cannot afford or secure on their own.

Strategy

Data Administration Discipline

Prepare a decision package for the 65th Legislative Assembly to create a data administration function for all GIS data used by Oregon State Government. The data administration activity will define the data themes and scales needed for the State's digital map base(s). The data administration will identify which agencies are best-positioned to acquire and maintain data themes needed by the State's digital map base(s). It will identify the data entities, classes, and elements needed to construct a statewide digital map base, and will prepare a data dictionary to capture data names, definitions, sources, destinations, and other pertinent documentation.

5. *MANAGEMENT ARCHTECTURE*
Strategy (continued)

GIS Service Center

Prepare a decision package for the 65th Legislative Assembly to create a fee-supported GIS service center under the direction of the State Map Advisory Council. The service center will provide GIS services to smaller agencies which lack staff or data processing expertise. The GIS Service Center will manage inter-agency and statewide GIS projects, and operate equipment which is most economically acquired and operated by a single group; for instance, digitizers, expensive plotters, and translators.

Statewide Funding

Prepare a decision package for the 65th Legislative Assembly to create a GIS program facilitation fund to pay for GIS initiatives that are statewide data acquisition prioritieS. The program facilitation fund will be administered by the State Map Advisory Council and disbursed by the GIS unit.

Unity of Command via Consolidated Operation

The data administration function and GIS service center shall be organized as a single GIS unit in the same agency. Its several roles include:

1. **Data administration role**: Designates data acquisition/development responsibilities among agencies, mediates data naming conventions, and creates the GIS data dictionary.

2. **Custodian role**: Keep common themes: PLSS, tax lots, transportation system, rivers, topography, land use, and soils. Provide mass storage of digital layers .

3. **Acquisition role**: Prepare specifications for common hardware, software, and service items. Perform "participation" purchasing for big ticket items like scanners and plotters.

4. **Technology transfer role**: Evaluate promising new hardware, software, and services. Share evaluations with members of the GIS community; generalize successful results.

5. **Broker role**: Capture data and information needed by state agencies from non-state sources: e.g., remote sensing, land cover, tax lots.

6. **Clearinghouse role**: Handle all requests for GIS information from the public, state agencies, other governments, and the private sector.

7. **Technical support & education role**: Assist agencies with GIS problems. Promote opportunities for learning.

8. **Standards role**: Recommend GIS standards to Executive Department Information Systems Division for machine, software, and data communcation.

9. **Peer review role**: Provide inter-agency forum for sharing information, experiences, and for constructive review of each others GIS plans and projects.

10. **Sponsor role**: Lead significant inter-agency initiatives (e.g., address register, boundary survey)

11. **Planning role**: Work with Executive Department Information Systems Division in formulating meaningful procedures for planning GIS technology.

12. **Host computer role**: Maintain sufficient computing capacity to process large applications and to provide contract service to agencies without their own GIS computing capabilities.

Appendix D - Proposal for Geographic Information Service Center

Proposal to the

STATE MAP ADVISORY COUNCIL

for a

GIS Service Center and Data Administration Program

Prepared By

George Beard, Chair
Geographic Information Systems Committee

June 23, 1988

GIS Service Center Attributes

The following attributes were identified as highly desirable by the SMAC/GIS Committee representatives who assembled this proposal. These characteristics were identified before any discussions occurred about which agency should host the center. Candidates considered included the State Library, Department of Transportation, Department of Energy, Executive Department, and one of the State Universities.

1. Strong Service Ethic
2. Understanding of (Natural) Resource Management
3. Well-Connected to the GIS People Network
4. Accountable to the SMAC--Not Agency Self-Interest
5. Includes Data Administration Function
6. Flexible, Expandable Host Computer Architecture
7. Project Management Skills
8. Marketing Skills
9. Documentation Capabilities
10. Accounting Skills
11. Financing: Base Operation-General Fund; Projects-Fee-Suppored

State of Oregon
Geographic Information Systems Laboratory

Recommended Site

Executive Department Information Systems Division

Recommended Structure

1. Quasi-independent section accountable to the State Map Advisory Council for priority-setting and direction.

2. Operationally responsible to the Administrator, Information Systems Division.

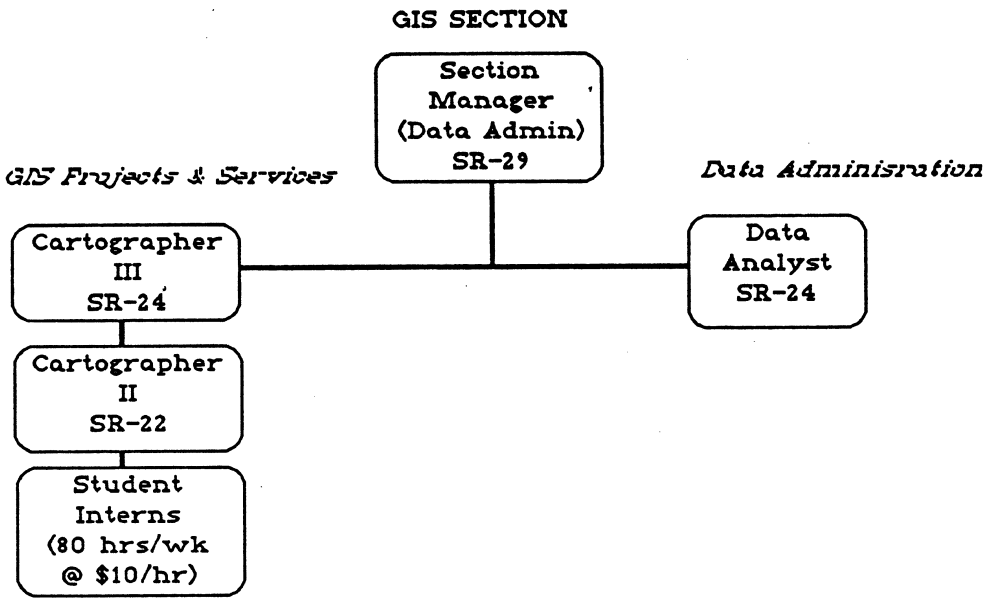
3. Housed in Computer Operations Section

   a. Physically secure environment
   b. Provides access to the State's most "universal" data network
   c. Staffed 24 hours a day, 7 days per week.
   d. Possesses existing capabilities for accounting, chargeback,
   e. Project management skills
   f. Documentation capabilities

4. Close linkage to Budget and Management Division, Planning and Review activities.

5. Well-positioned to apply carrots and sticks to make sure the State's most important GIS activities are accomplished.

Proposed Organization



Geographic Information Systems Laboratory

Responsibilities & Duties

1. *Section Manager*

   a. Serves as Data Administrator to ensure the quality, completeness, and accuracy of statewide GIS themes.
   b. Recommends statewide requirements for GIS data acquisition to SMAC.
   c. Defines requirements for statewide base map(s).
   d. Assigns data acquisition and maintenance resonsibilities to agencies best positioned to meet these responsibilities.
   f. Reports to SMAC on projects, issues, and opportunities
   g. Directs the work of the Data Administration Unit and GIS Projects & Services Unit.
   h. Enlists projects for the GIS Laboratory. Collaborates with federal and state groups on intergovernmental projects.
   i. Provides project management to products and services under development.

2. *Data Analyst*

   a. Works with agencies to plan for, identify, and catalog statewide requirements for GIS data acquisition.
   b. Works with agencies to define common naming conventions. Reports irreconcilable differences to the Section Manager for assistance or reporting to SMAC.
   c. Maintains a data dictionary of the data entities, classes, elements, scales, and naming conventions required for the State's base map(s).
   d. Acquires federal and state GIS data that are needed by the State.
   e. Oversees the development and accomplishment of data use and sharing coordination.

3. *Cartographers II and III*

   a. Perform Map Base development.
   b. Provide contract services to State agencies
   c. Remote Access
   d. Plotting Services
   e. Public Access
   f. Documentation
   g. Technical Assistance
   h. Consulting

4. *GIS Interns*

   An inexpensive way to strengthen the Town and Gown relationship, provide job experience and financial assistance to geography and cartography students in our universities, and to "recruit" talent for the GIS laboratory or agencies. Could be several interns simultaneously.

   a. Plotting and digitizing services to agencies.
   b. Plotting and digitizing services on statewide map projects.

Draft Decision Package

STATE OF OREGON
GEOGRAPHIC INFORMATION SYSTEMS LABORATORY

Description and Purpose

The purpose of this package is to establish a facility to provide data acquisition, data administration, project management, consulting, data base development, technical assistance, plotting output, remote sensing, and other special services to agencies in need of geographic information systems (GIS).

The necessary hardware, software, and personnel are included to provide these services. A reduction package is included in the budget of the Department of Energy of the resources that could be included in this program.

Impact

The positive impact of this decision package is that agency and state decisionmakers can have greater confidence in the quality of GIS data they will increasingly rely upon. This package also empowers a single group for making sure that the state's most important GIS projects are actually accomplished.

The negative impact is that denial of this package will likely lead to higher costs for independent development and acquisition by agencies of GIS data and GIS systems. Denial of this package will also cause the State to miss an opportunity to put in place the controls and discipline needed ensure the quality and integrity of GIS data that is now being accumulated at escalating rates.

Estimated Budget Requirements

1. ***Personal Services***

Position Class Title	Salary Rate	Mos Filed	Agency Request
Section Manager (SR-29)	$3,875	24	$93,000
Data Analyst (SR-24)	2,950	24	$71,000
Cartographer III (SR-24)	2,950	24	$71,000
Cartographer II SR-22)	2,750	24	$66,000
SUBTOTAL			$300,000

Estimated Budget Requirements *(continued)*

2. ***Services & Supplies***

Item Description	Estimated Cost	Comments
Rent, Postage, etc.	$22,500	
Consultants	2,500	
Other Services	80,000	80 hours/week of paid student interns @ $10/hr x 100 weeks.
SUBTOTAL	$105,000	

3. ***Capital Outlay***

Item Description	Estimated Cost	Comments
Upgrade Prime CPU	$24,500	Increases speed 25%; RAM potential 100%
Trade-in current Prime	(17,500)	
4 MB RAM	7,000	Inceases RAM 100%; improves virtual memory; allows for future upgrade to 16 MB
3 ea. 496 MB disks and controller	55,750	Increases disk by 65% to 1.5 GB; allows for future upgrade to 3 GB
Electrostatic plotter	$50,000	Increases throughput 500%; dramatic improvement in quality
SUBTOTAL	$120,000	
GRAND TOTAL		**$525,000**

Recommended Funding

The Data Administration Unit (2 FTE) will be funded by general fund monies.

All capital outlay, services & supplies, and personal services for the GIS Projects and Services Unit will be other funded by billings to contracting agencies.

Draft Decision Package
GEOGRAPHIC INFORMATION SYSTEMS LABORATORY

Recommended Funding *(continued)*

This package contains six full-time equivalent positions. There is one management position. This is a pay range 29 which will be designated as the manager for the program. A pay range 24 data analyst is needed to provide expertise data planning, data naming, and data dictionary maintenance. Two Cartographers, one a pay range 24 and the other a pay range 22, are needed to perform statewide map base development, remote access, plotting services, technical assistance, and provide contract services to state agencies. Monies are also sought to provide 80 hours per week of paid student internships to geography and cartography students within the Oregon State System of Higher Education. These positions will perform digitizing and plotting services to contracting agencies.

There is not currently a statewide GIS section. The present activity is housed in the Oregon Department of Energy and has three full-time employes. One is a salary range 24, the other two are salary range 16. The salary range 24 is to be upgraded to a salary range 29. The salary range 16 positions shall be upgraded to salary range 24 and salary range 22 respectively.

Performance/ Work Measures	1987-89		1989-91		
	Legislatively Approved	Estimated for Biennium	Base Budget	Decision Package Subtotal	Total Request

To Be Completed . . .

Appendix E - Project Budget Priorities and Statement of Strategic Cooperation

NEIL GOLDSCHMIDT
GOVERNOR

Department of Geology and Mineral Industries
ADMINISTRATIVE OFFICE
910 STATE OFFICE BLDG., 1400 SW 5th AVE., PORTLAND, OR 97201-5528 PHONE (503) 229-5580

September 19, 1988

Fred Miller, Director
Executive Department
155 Cottage Street, NE
Salem, OR 97310

Dear Fred:

In response to your request of August 26, 1988, (attached) the State Map Advisory Committee is submitting the following material:

1. Statement of GIS strategic cooperation among Oregon State and local government agencies.

2. List of GIS funding priority recommendations for 1989-1991.

The plan for cooperation to some extent incorporates stratetic decentralization to preserve sensitivity to the user in the long term. Study of this total plan will show that recent discussions regarding the specific location of the proposed GIS Service Center is but a minor component of the broader effort.

In defining priorities for 1989-1991, we considered not only proposals that are on paper but also State need. We find that in addition to specialized applications by various State agencies, more attention is needed to address broader issues. We find that failure to meet this need by the State of Oregon in general is causing inefficiencies in the specialized internal efforts of various Natural Resource agencies. Some of these projects are listed under "OTHER" on the accompanying matrix.

Sincerely,

John D. Beaulieu
Deputy State Geologist

smac/mi118-30/ch

GIS FUNDING PRIORITY

RECOMMENDATIONS FOR 1989 - 1991

STATE MAP ADVISORY COUNCIL
Amended list of September 26, 1988

GIS Service Center including Capital Outlay and multipurpose digital data acquisition (DOE)

Miscellaneous thematic digital data layers primarily in base budgets and assigned to lead agencies in their respective areas (varied)

Land Board Natural Resource Inventories (DSL)

Water Rights (WRD)

Ocean Resources Management GIS (varied)

CADD Intertie with GIS (DOT)

Hydrography Database and Watershed Analysis (WRD)

Mineral Layer (DOGAMI)

Offshore Harvesting Data (F & W)

Wildlife Habitat Inventory Assessments (F & W)

Forestry Automated Cartography (Forestry)

CADD Interface with Survey Equipment (DOT)

WRD Automated Cartography (WRD)

Remote Sensing Technology Development (GIS Service Center)

Note: Projects are listed in order of priority. All are regarded as important. None are low priority. The Ocean Resources package was inadvertently left off the earlier mailing. My apologies!

smac/gisfund

PRELIMINARY CRITERIA FOR RATING GIS PROJECTS

1. Does the project maximize use of outside funds and shelf capabilities?

2. Does the project generally conform to the SMAC strategies (6/88)?

3. Does the project address a high priority state need?

4. If the project is GF, is it designed to leverage cooperative efforts?

5. Is the project designed to facilitate multi-agency applications?

6. Is the project statewide in scope or application?

7. Is the need immediate rather than long term?

8. Does the project meet the needs of many state agencies?

smac/gis-rate
91988/ch

GIS STRATEGIC COOPERATION AMONG OREGON STATE AND LOCAL GOVERNMENT AGENCIES

The State Map Advisory Council established under Executive Order 87-11 has charted a course of action to provide effective GIS capability for state agencies and local government. This course of action places priority on program needs and recognizes the need to promote and foster a coalition of GIS efforts.

In simplest terms the strategy involves five components. Many of these build largely on what already is in place in terms of personnel, equipment and program direction. These components are as follows:

1. Coordination of state, local, and federal GIS efforts to meet policy needs - Executive Order 87-11 and subsidiary goal and strategy statements are designed and implemented to facilitate a coalition of efforts to promote partnerships, avoid duplication, and meet long term and short term state needs. State agency coordination efforts are linked with analogous efforts at the federal and local levels. Technical and planning level directions are by the State Map Advisory Council. Actual implementation of state initiatives is on an agency by agency basis with approval of the Directors and review by the Executive Department.

2. GIS Service Center - There will be a GIS Service Center for some specialized needs, in particular those of small agencies which do not have internal GIS capabilities. For these the Service Center will be cost reimbursement supported. In addition, we propose that the GIS Service Center take the lead in the development of broader based digital data bases of general use to many agencies. The activites at the Service Center will be overseen by SMAC to maintain user sensitivity.

3. Specialized applications of Natural Resource Agencies - The specialized use of GIS capabilities inside individual Natural Resource Agencies to address unique user needs will be continued. Coordination and partnerships envisaged here will enhance the efforts and will minimize potential duplication of effort.

4. Lead agencies for data development - For certain specialized types of data lead agencies will be recognized. It will be their responsibility to provide data for other agencies and it will be the responsibility of other agencies to use the lead agency data for its respective topic when appropriate and realistic to do so. This will, in part, assure up-to-date, reliable statewide standardized data in the state GIS effort and will eliminate potential duplication of effort.

5. Data Administrator function - Each agency will be encouraged and required to conform to reasonable standards of data quality to assure accuracy and to promote coordination and sharing of data. In addition, a Data Administrator should eventually be maintained at the state level to oversee broader more generic aspects of this responsibility, including the leveraging of large volume digital data bases with the federal government. For policy guidance, this person would answer to the State Map Advisory Council and its committees.

smac/gis8-30
83088/ch

Appendix F - Membership Lists

SMAC EXECUTIVE BOARD

Appointed by the Governor from State Agencies

John Borden	Water Resources Department 3850 Portland Road NE Salem, OR 97310
Eldon Hout	Dept. of Land Conservation and Development 320 S.W. Stark, Room 525 Portland, OR 97204
Nancy Rockwell	Oregon Dept. of Energy 625 Marion Street NE Salem, OR 97310
Robert Royer	Planning Section Dept. of Transportation 325 13th NE, Room 605 Salem, OR 97310
Hal Sawyer	Dept. of Environmental Quality 811 S.W. Sixth Avenue Portland, OR 97204
Gerald Schmitz	Data Systems Division Executive Department 155 Cottage Street NE Salem, OR 97310
Dave Stere	Department of Forestry 2600 State Street Salem, OR 97310
Michael Weland	Oregon Dept. of Fish & Wildlife 506 S.W. Mill Street Portland, OR 97201
Pam Wiley	Natural Resources Section Division of State Lands 1600 State Street Salem, OR 97310

Federal & Local Ex Officio

Michael Gleason	City Manager 777 Pearl Street, Room 105 Eugene, OR 97401
John Lowe	U.S. Forest Service P.O. Box 3623 Portland, OR 97208
Timothy Murray	Bonneville Power Administration P.O. Box 3621 EFB Portland, OR 97208
William Penhollow	Assn. of Oregon Counties P.O. Box 12729 Salem, OR 97309
Dick Swinnerton	National Map Division - USGS 345 Middlefield Road, MS-531 Menlo Park, CA 94025
Paul Vetterick	Bureau of Land Management P.O. Box 2965 Portland, OR 97208

Technical Committee Ex Officio

George Beard	Data Systems Executive Department 155 Cottage Street NE Salem, OR 97310
Ken Dueker	Portland State University P.O. Box 751 Portland, OR 97207
Robert B. Geltz	Department of Revenue 955 Center Street NE Salem, OR 97310
Glenn Ireland	U.S. Geological Survey c/o Bureau of Land Mgmt. P.O. Box 2965 Portland, OR 97208
Paul Staub	Oregon Dept. of Geology and Mineral Industries 910 State Office Bldg. Portland, OR 97201

GEOGRAPHIC INFORMATION SYSTEM COMMITTEE

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

Federal Agencies (Ex Officio)

Doug Niebert	Water Resource Division 847 N.E. 19th Street Suite 300 Portland, OR 97232
Bob Wright	Bureau of Land Management P.O. Box 2965 Portland, OR 97208

OREGON MAPPING COMMITTEE

Name	State Affiliation
Mary Grainey	Water Resources Dept. 3850 Portland Road., NE Salem, OR 97310
Irv Iverson	Department of Revenue 955 Center Street NE Salem, OR 97310
A. Jon Kimerling	Dept. of Geography Oregon State University Corvallis, OR 97331
Myra Lee	Emergency Management Division 43 Capitol Building Salem, OR 97310
William Loy	Department of Geography University of Oregon Eugene, OR 97403
Lewis McArthur	Oregon Board of Geographic Names 4154 S.W. Tualatin Portland, OR 97201
Dave Ringeisen	Department of Transportation 135 Transportation Building Room 22 Salem, OR 97310
George Shore	Department of Forestry 2600 State Street Salem, OR 97310
Douglas Terra	Dept. of Environmental Quality 811 S.W. 6th Avenue Portland, OR 97204

Federal Agencies

Ted Albert	Bureau of Land Management P.O. Box 2965 Portland, OR 97208
Glenn Ireland	U.S. Geological Survey c/o Bureau of Land Mgmt. 825 N.E. Multnomah Street P.O. Box 2965 Portland, OR 97208
Tom Jackson	Bonneville Power Administration P.O. Box 3621 Portland, OR 97208
Dennis Moonier	U.S. Forest Service P.O. Box 3623 Portland, OR 97208
Doug Nebert (Bruce Fisher)	U.S.G.S./WRD 847 NE 19th Avenue, Suite 300 Portland, OR 97232
Vacancy	

LAND RECORDS COMMITTEE

Earl Burkholder	Oregon Institute of Technology 3201 Campus Drive Klamath Falls, OR 97601-8801
Barton Delacy	Appraisal Group, Inc. 621 S.W. Morrison Portland, OR 97205
Richard Donovan	FEMA, Region X Federal Regional Center Bothell, WA 98021
Bruce Estes	Water Resources Department 3850 Portland Road NE Salem, OR 97310
Jim Gangle	Lane County Assessor 125 E. Third Street Eugene, OR 97401
Jack Herring	555 Liberty Street SE Room 110 Salem, OR 97301
Irv Iverson	Dept. of Revenue 955 Center Street NE Salem, OR 97310
Timothy Kent	Bureau of Land Management 825 N.E. Multnomah Portland, OR 97208
Jeff Kern	Jefferson County c/o 1030 N.W. Newport Ave. Bend, OR 97701
Keith Lawton	Metropolitan Service District 2000 S.W. First Avenue Portland, OR 97201
Janet Lundeen	OR. Assn. of Co. Eng. & Surv. Justice Bldg., Room 205 c/o Douglas County Roseburg, OR 97470
Mike Magnus	Oregon Title Insurance Co. 1515 S.W. Fifth Ave., Suite 105 Portland, OR 97201

Charles Pearson	Washington County 150 N. First Avenue Hillsboro, OR 97124
Suzanne Porter	Economic Development Dept. 595 Cottage Street NE Salem, OR 97310
Lyle Riggers	Oregon Dept. of Transportation Transportation Building Salem, OR 97310
Edward Sipp	Star Route 77-22 Tranquility Drive Banks, OR 97106
George Strawn	Oregon Dept. of Transportation Transportation Building Salem, OR 97310
Alan Slipher	LANDATA, Inc. 200 S.W. Market, Suite 104 Portland, OR 97201
Robert Swank	Lane Council of Governments 125 E. Third Avenue Eugene, OR 97401
Kim Worrell	Yamhill County Assessors Office Fifth and Evans, Room 135 McMinnville, OR 97128
Dave Yandell	Emergency Management Division 43 State Capitol Salem, OR 97310