

MINUTES OF THE MEETING OF THE APPROPRIATIONS SUB-COMMITTEE ON
ELECTED OFFICIALS AND HIGHWAYS

March 4, 1983

(Tape 102, Side B, Tape 103,
and Tape 104, Side A)

The Appropriations Sub-committee on Elected Officials and Highways met at 7:00 a.m. on Friday, March 4, 1983 in Room 437 with Chairman Quilici presiding. The following members were present:

Chairman Quilici
Rep. Connelly
Rep. Lory

Senator Dover
Senator Keating
Senator Van Valkenburg

Senator Stimatz was excused.

Also present: Cliff Roessner, LFA, Terry Cohea, OBPP,
and Doug Booker, OBPP.

WORK SESSION

Department of Administration

Telecommunications

The Chairman said this would not be a full hearing. The sub-committee's plan is to move this budget into the Long Range Building Sub-committee because there is no money in this sub-committee to fund this budget.

Hiram Shaw distributed Exhibit 1 to the committee. He said perhaps this should be a question and answer session to see if there are questions that have to be resolved.

Senator Dover said he understood that the committee would address only the portion of the budget that was needed to keep this program active. He noted that pressure was being put on the telephone company to reduce their rates.

Mr. Shaw said under Tab 2 of Exhibit 1 the committee would find the Contracted Services Requirements. Under "Optimization" this is essentially what they have now, working on the telephone system to make it effective. This would include traffic studies and routing of telephone calls to improve the use of Bell lines. Under "Network Development" they propose to proceed to look at the sites recommended in the microwave system to determine their specific viability. Included under "Land Mobile Radio Management" is some assistance with technical specifications for frequency utilization and analysis of radio dispatch systems which are getting into state-wide with regional dispatch. This would result in \$27,000 in FY84 and \$21,500 in FY85 for a total of \$48,500 in "Contracted Services" for the biennium.

Discussion.

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Senator Dover made a MOTION that the committee accept the budget. (This is set out on the first page after Tab 2 of Exhibit 1. This would provide \$27,000 in FY84 and \$21,500 in FY85 for "Contracted Services".)

Discussion. Rep. Lory noted that Mountain Bell was taking a look at their high density lines and they may lower their rates. Senator Keating asked for clarification on just to what extent the state is into the telephone business.

Mr. John Neraas said they have touched on the impact on large organizations. He said you would have to go back to AT&T. For 80 years there has been a single company that the state relied on for all of its telecommunications needs. In answer to a question from Senator Keating, Mr. Neraas said the links are accomplished in a variety of different manners. He said it doesn't matter if it is a voice pattern or a computer run. They need to be able to handle both types. They do use telephone lines for radio control links as well. The same equipment is used to manage a variety of services or to provide different services. With the break-up of AT&T, as a result of the settlement of the anti-trust suit, an independent track which AT&T basically took on itself was to deregulate its business sales so they could get into the competitive market and not be bidding based on their tariffs; AT&T basically split three ways. One is to take a local operating company which gives you a dial tone and allows you to make local calls and allows you to make long distance calls would be one company. Another company is called American Bell which is now a deregulated subsidiary of AT&T. The local operating companies will be independent and not owned by AT&T anymore. Mr. Neraas said if you own stock in AT&T in January 1 of 1984 you would be a stock-holder in 7 local operating companies and AT&T so you would actually own 8 different companies. AT&T is retaining the long lines division which means they are proposing to break Montana into two separate long distance calling areas. He showed on a map where these divisions would be made. They would deal with Mountain Bell in each division with AT&T between the boundary.

In answer to a question from Senator Keating, Mr. Neraas said the two Mountain Bell areas do not have names yet. There is a big hassle over who gets to retain the name "Mountain Bell". Mountain Bell is removed from the new equipment business by the settlement, however, they may get into it later. They are just selling dial tones and network access. Western Electric, which manufactures equipment, stays with AT&T. That will, in effect, be represented by American Bell. The law said the state could deal on a non-competitive basis with the regulated public utility. There was no bid system, they could go to the regulated utility since their prices are set by the PSC. That now disappears. They have to get dial tones from one company, equipment from another company. And this has to be bid because

of the state procurement laws, plus they have to deal with AT&T for long distance calls, mainly out-of-state at this point. Due to that break-up they are dealing with those three portions of AT&T, plus, due to the competitive bidding, they are dealing with Centel for big systems around the state.

In answer to a question from Senator Keating, Mr. Neraas said that Centel is Central Telephone Utilities, the fourth largest independent telephone company. In 1976 they established an independent deregulated subsidiary, similar to what AT&T is doing now with American Bell. It is called Centel Business Systems. Mr. Neraas said they account for about 20% of Central Telephone Utilities' annual revenue. Centel was the lowest responsible bidder.

Senator Keating asked to what extent the state owns its own equipment. Mr. Neraas replied that the state will be leasing equipment. The telephone switching is accomplished at the central office in Helena. When the new equipment is put in it will be in the basement of the Mitchell building. The state will pay about 60% of the annual expenditures for servicing equipment for the lease of that equipment and about 40% will be paid to the local utility, still called Mountain Bell, for access to the local and long distance network.

The Chairman asked Mr. Neraas what the Traffic Analysis and Network Engineering would be doing for \$15,000 in each fiscal year. Mr. Neraas replied that they will be looking at what alternatives they would have. He explained if you want to call from Billings to Missoula, you would dial 125, it switches you to the Helena switch that says you want to go to Missoula and kicks you down. So you take two tie lines. They are re-engineering that network so there will be tie lines directly from Billings to Helena, Billings to Bozeman, Billings to Missoula and potentially to Great Falls. This would allow you to route directly from Billings to Missoula without taking two tie lines. This would control some costs by doing some re-engineering of facilities.

Senator Keating thanked the Chairman for allowing Mr. Neraas' explanation. (252)

Senator Dover reiterated his MOTION. Discussion. Mr. Roessner said, for clarification, this is not general fund, it is out of the revolving fund. Question being called for, the motion carried. (271)

Financing of Telephone Switch Replacement

Senator Dover asked that the amendment regarding the Certificates of Participation be explained to the committee.

Morris Brusett distributed Exhibit 2 and Exhibit 3 to the committee. He told the committee they went to bid a year ago because the Big Four, which is Missoula, Bozeman, Eastern and

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Helena, just couldn't handle the volume, plus the system was outmoded. One bidder was Mountain Bell. They had seven or eight bidders, had a consultant, evaluated all the bids and signed a contract with Centel, the lowest responsible bidder, to put in these new switchers in the four locations. The law did not permit them to purchase the equipment; it is leased over a ten-year period. Even with a lease at 14% it was cheaper to go with Centel than Mountain Bell. The savings over the lease period would be \$11 to \$20 million based on whatever the tariff would be. House Bill 493, carried by Yardley, which went through the House, permits them to convert a 10-year lease purchase for ten years. By converting to a lease purchase they can go into a tax exempt market for financing. So instead of paying 14% interest they had chosen to go with a lease participation. (Exhibit 2 re. Financing Options) With this conversion they would save \$3 million. They would like the committee to approve this conversion by the amendment on page 2 of Exhibit 3. This way they can use municipal financing instead of regular financing which would save them \$3 million.

Senator Dover made a MOTION that the committee approve the amendment as stated on page 2 of Exhibit 3.

Senator Dover asked Mr. Brusett if they had set aside \$7.2 million now. Mr. Brusett said they pay this cost over a period of ten years and it is charged out to the users. In answer to a question from Senator Dover, Mr. Neraas said they would actually issue certificates for 115% of the \$7.2 million so the investors would, in effect, fund the reserve. Discussion.

Question being called for, the motion carried.

Highway Patrol Radios & Personnel (Funding)

Senator Dover told the committee that he had talked with Gary Wicks (Dept. of Highways) and Col. Landon (Highway Patrol) and they both agreed that the Highway Patrol radios and the personnel who operate those radios should be in the Highway Earmarked Fund as they are using the same bases, the equipment is a mix and the Highway Patrol, at least at nights, will also be working with the Highway Commission. Discussion.

Senator Dover made a MOTION that the Highway Patrol radios and the personnel who operate these radios be funded by the Highway Earmarked Fund. Discussion. (Tape 103, Side A)

Question being called for, the motion carried.

Word Processing Proposal

Mr. Brusett told the committee that in the Department of Administration many of the divisions had requested word processing equipment. In order to fill these needs with the most efficient

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and cost-effective equipment, he had a study done which begins on Page 3 of Exhibit 4. He then told the committee that they tied this to the budget for the biennium and came up with Page 1 and Page 2 of Exhibit 4 which shows the areas where they need additional money for equipment and where they could either put off the purchase of the equipment or eat this expense within the present budget. The total reduction which would impact the general fund would be \$7,062 in FY84 and \$11,190 in FY85.

Discussion. It was noted that the Workers Comp Court really needs this equipment but they could go to a less expensive model because it is a separate unit and would not have to tie with other divisions. This would bring the requested amount of \$16,000 to \$10,000. Discussion by the committee.

(Senator Dover assumed the chair.)

Senator Van Valkenburg made a MOTION that the committee approve the adjustments recommended on Page 1 and 2 of Exhibit 4 which would reflect the reduction in the general fund and additions in other funds.

Senator Dover told Mr. Brusett that he really appreciated this study and recommendation to the committee. He said he has done this with the word processing equipment and the radios and it has been very helpful for the committee to get a handle on things. (Chairman Quilici resumed the chair.)

Discussion.

Question being called for, the motion carried.

Local Governments

The Chairman noted that the Local Governments budget has been transferred from the Department of Administration to the Department of Commerce. This was accomplished by House Bill 639. The Chairman said the budgets as this committee worked them were given to the other sub-committee. They are having hearings. The Chairman said one thing they looked at was BARS; this committee recommended 75-25 split, the other committee is looking at 50-50. Mr. Booker told the committee that he had attended the hearing yesterday while representing the executive budget and he has told the committee that this funding split would put them \$52,000 over the Executive recommendation. They moved \$200,000 out of District Courts into BARS with the 75-25 split and added another \$52,000 in BARS of general fund money. They are having another hearing tomorrow. Discussion by the committee. The committee expressed concern for the District Court budget.

Department of Administration & Department of Highways

Fuel Tax Transfer of Funds

The Chairman told the committee that there is \$75,000 in fuel tax that should be moved from the Department of Administration to the Department of Highways. The Chairman explained that this was a committee bill and the purpose of the bill was so this money didn't have to be transferred twice.

Senator Dover made a MOTION that the committee approve the transfer of \$75,000 of fuel tax money from the Department of Administration to the Department of Highways. Discussion by the committee. Question being called for, the motion carried. (175)

Disaster and Emergency Services Division

This supplemental will be taken care of in the full Appropriations Committee. Mr. Booker explained that we had the floods in the previous biennium, FY81 and FY82, at the end of the biennium. The law now states that we can authorize \$750,000 to take care of the disaster situation. \$152,365 in addition to this figure is needed for the claims. Mr. Booker said this was not in the supplemental bill; the Department of Administration had prepared it in the past week. Discussion by the committee. Mr. Booker noted that there are two separate bills. One is to raise the \$750,000 to \$1.5 million, carried by Rep. Donaldson, and the other is for \$152,000 which just came up. Discussion by the committee.

Secretary of State (232)

Indexing Program

Mr. Roessner explained to the committee that in the Administrative Codes Program there is the issue of funding for that program. Cliff Christian of the Secretary of State's office asked to address the committee. He said he would like to discuss the indexing program which was not approved at the first meeting. The Chairman noted that we are not having another hearing. Mr. Christian said he would like to make a short statement on the subject which he felt was vital and he would like the committee to hear it. The Chairman said the committee would listen to his statement. (Exhibit 5)

In answer to a question from Senator Keating, Mr. Christian said the \$41,000 in FY84 and \$42,000 in FY85 requested is all general fund. Senator Keating said he had correspondence from people requesting that the Secretary of State's office be funded as they always give them all the information they need. He asked if this involved helping businesses find the rules and regulations that affect them in their business. Mr. Christian said, "Absolutely."

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Senator Keating noted that these are the people that pay the taxes to keep the state going and the quicker they can get into business the quicker they start earning money for jobs and paying taxes to the state. He said this would facilitate a lot of new businesses and this was a small amount to pay to get business going.

Senator Keating made a MOTION that the committee approve \$41,041 for FY84 and \$42,833 for FY85 to continue the indexing program. The Chairman said he would be bringing this up as an issue before the full Appropriations Committee. Discussion by the committee. Question being called for, the motion carried. (Senator Van Valkenburg was not present). The Chairman voted "no". (415)

Administrative Codes Program

Mr. Roessner told the committee that the rate that is to be charged for the ARMS has to be determined.

Larry Akey of the Secretary of State's office told the committee that the Montana Administrative Procedures Act requires the Secretary of State, in consultation with the Administrative Code Committee, to establish a fee structure to approximately recapture the cost of publication of the Administrative Rules. He said there are several ways to do this and he has two options for the committee's consideration. (Exhibit 6) The approach the Legislative Fiscal Analyst' has taken in its budget analysis is Option 1 listed on Exhibit 6 which increases the proportion of general fund support over the last biennium and keeps the fee structure constant. The option that is indicated in the Executive budget analysis keeps the proportion between general fund and revolving fund or earmarked fund constant. In order to do that leads to an increase in the various fees that will have to be charged. The fee schedules here are hypothetical but they are ones that are in the ballpark of what they would have to charge for the two options. The reason Mr. Akey feels the sub-committee needs to take a look at this action is that it does impact on other agency budgets.

Option 1 would maintain the fee of \$13.50 per page for agencies' filing. This option would increase the expense from the general fund. Option 2 would maintain the proportion of funding, however, the agencies would have to pay \$25.00 per page.

In answer to a question from Senator Keating, Mr. Akey said that all of the ARM Sales have been entirely to the general public. ARM Updates and Subscriptions to the Administrative Register do go to agencies to some extent. Mr. Akey said he thought they had about 35 subscribers to the register, and 30 subscribers to ARM updates that are state agencies.

Discussion by the committee.

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Senator Dover made a MOTION that the committee approve Option 2 on Exhibit 6. Mr. Booker suggested that the bill include a statement that the agencies cannot be charged over \$25.00 a page.

Senator Dover AMENDED his MOTION to include this statement. (Agencies cannot be charged over \$25.00 per page.)

Question being called for, the motion carried.

Secretary of State

Indexing Program

Senator Dover told the committee that he would like to give Senator Van Valkenburg an opportunity to vote on the previous motion since he was not present during this vote. The Chairman agreed.

Senator Van Valkenburg made a MOTION that the committee reconsider its action on the Secretary of State's ARM Indexing Program.

Question being called for, the motion carried.

Senator Keating restated his previous MOTION. (That the committee approve \$41,041 for FY84 and \$42,833 for FY85 to continue the indexing program.)

Senator Van Valkenburg asked what had changed. Mr. Akey said they have had a chance to go back and re-evaluate where they stand with the project. After looking at their existing index the situation that they have is that he would have to recommend to the Secretary that it is not adequate for public use at this point and if the project is not funded they will have a \$90,000 investment that will be dumped in the circular file.

Senator Van Valkenburg asked why they would come to that conclusion that they can't publish the index they have. Mr. Akey said the reason for this is that there are several major topic areas including taxation, education, water and agriculture where the rules cover many different agencies and the existing index they have right now in those areas is worse than the topical indexes they have in each of those individual volumes. Discussion.

In response to a question from Senator Van Valkenburg, Mr. Christian said that \$90,000 is predicted on a four-year project. He said no where down the line had they anticipated this would be stopped at the half-way point.

The Chairman noted that the committee didn't think they would be in the budget constraints they are in now either.

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Question being called for, the motion carried. The Chairman and Senator Van Valkenburg voted "no". The Chairman said this would still be an issue in the full Appropriations Committee. (600)

Legal Settlement on Rules

Mr. Roessner told the committee that there was a question as to whether or not this should be an unliquidated claim and be presented as a supplemental. The Chairman noted that others had gone in as supplementals.

Mr. Akey told the committee that he recalled that Mona Jamison, of the Governor's office, was to be contacted as to whether the appropriate avenue was through this sub-committee or through an unliquidated claim route and then through the Board of Examiners as a supplemental. He said he talked to Ms. Jamison about a week ago and she recommended that he call Mike Young of the Department of Administration. Mr. Young told him that the liquidated claims route, which then does go to the Board of Examiners for approval, is one where there is a dispute between the agency and the claimant as to the amount of the claim. Mr. Akey said his agency is not disputing the \$6,500 bill that they have. All they are saying is that it is not in their existing budget.

In answer to a question from the Chairman, Mr. Akey said that this is a bill that should be paid. It is for services incurred. Senator Van Valkenburg, in order to refresh the committee's recollection of this matter, said that there was a Court Order requiring payment of attorneys' fees to the attorney for the employees of the Department of Fish, Wildlife and Parks. There is no Court Order requiring payment of attorneys' fees to the Secretary of State's retained counsel in this case. It was hired outside of their office. He said he felt there was a real distinction there; \$2,000 some to Mr. Leaphart who represented the Plaintiffs and then there is \$4,000 some for Mr. Murfitt who represented the Secretary of State's office. He felt the committee should look seriously as to whether they want to approve paying those attorneys' fees which are not court ordered. Secondly, the Secretary of State's office has gone outside of their own office; there is an attorney there and also there was the availability of asking assistance from the Attorney General's office.

Mr. Akey said Senator Van Valkenburg was correct that there was the opportunity to have the Attorney General represent them. They approached the Attorney General and he declined to take the case. That is why they were forced to go to outside counsel. (Tape 103, Side B)

When asked by Senator Van Valkenburg why their in-house legal counsel did not take the case, Mr. Akey replied that this attorney is busy with office matters and it was the decision of the Secretary of State, since this was a constitutional matter, to have representation by counsel who could devote time to this and not use in-house counsel on a "catch as catch can" basis. He also told the committee that the reason the Attorney General declined this case was that it involved two state agencies, the Secretary of State's office enforcing the Code of Ethics, and an ethics charge being brought against employees of the Department of Fish, Wildlife and Parks. The Attorney General declined to take sides on the case. Mr. Akey said, at that point, they were left with no other alternative than to go to outside counsel.

In answer to a question from Senator Keating, Mr. Akey said that the Department of Fish, Wildlife and Parks also had to go to outside counsel. Discussion by the committee.

Senator Dover made a MOTION that the committee approve this expenditure.

Senator Van Valkenburg made a SUBSTITUTE MOTION that the committee approve \$2,010 line-itemed for payment to the Plaintiff's attorney in this particular case as required by Court Order. Senator Van Valkenburg CORRECTED his SUBSTITUTE MOTION to read \$2,037.40. Discussion. The Substitute Motion failed.

Senator Dover's previous MOTION was brought before the committee. This motion also failed. Discussion.

Mr. Akey asked the Chairman if that reflects the sub-committee's intent that they not pay the bills.

Senator Van Valkenburg said that they have a Court Order to pay Mr. Leaphart.

Rep. Lory said he felt the committee should reconsider. Anytime the state has a Court Order it has to pay it.

Senator Van Valkenburg said the only question here is whether the Legislature is going to give the Secretary of State's office another \$6,000 to pay this. The Secretary of State's office has incurred bills and they have to pay them. There is no doubt about that. They have to pay both Murfitt and Leaphart and it is a matter of whether they eat it out of their current budget, their FY83 budget, or we appropriate some more money to them to do that.

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Senator Dover asked what is normally done. The Chairman said normally they see a supplemental. Senator Van Valkenburg said "on Court Orders, not where somebody goes outside and hires additional work. That goes on all the time in state government where people decide they have to go out and get some additional help that they don't have. They have to get into "Contracted Services" and vacancy savings and find money to pay for that." Senator Van Valkenburg said that they are saying that they should be treated differently here because this was a constitutional question that they didn't anticipate.

Rep. Lory made a MOTION that the committee reconsider its action. In answer to the question from the Chairman as to the purpose of the motion to reconsider, Rep. Lory said he felt we have to appropriate the Court Order and he is going to change his vote.

Question being called for, the motion carried.

Senator Van Valkenburg made a MOTION that the committee approve \$2,037 line-itemed for payment to the Plaintiff's attorney in the Case of "State ex rel. Spencer vs. Waltermire".

Question being called for, the motion carried. (85)

Military Affairs (Adjutant General)

The Chairman asked Col. Cottrill to address the committee. Col. Cottrill said that this is a high frequency radio system which would "marry up" the military requirement for radios, disaster and emergency requirements for radios, and the Department of Military Affairs' need for a cheaper communication system. By funding this project with a one-time expenditure of \$120,600 in the first year and \$5,000 for repairs in the second year, they would be able to have a radio system for disasters, a radio system for the military, and the Department anticipates using this system every day for telephone communications.

The Chairman asked if this would reduce some of the communication costs. Mr. Booker said that in the executive base they have already taken out \$6,000 with the idea that this would be approved.

Rep. Lory made a MOTION that the committee approve this expenditure. (\$120,600 for FY84 and \$5,000 in FY85 for the high frequency radio system) Discussion.

Question being called for, the motion carried.

Mr. Booker explained that the \$5,000 for repairs in the second year had all been in the general fund but it is going to be a 50-50 split so that will be an expenditure of only \$2,500 from the general fund. Discussion.

Fire Fighters

The Chairman said that these four fire fighters in Great Falls are to be 100% federally funded. He said the community feels they are really needed. Senator Van Valkenburg noted that this may be true that they are federally funded this year, but that may not be the case later on.

General Duffy responded to Senator Van Valkenburg, that if the Senator would feel more secure, the General said he would like to go on record saying that "if the federal government withdraws the money, we will come in and ask for withdrawal of the State FTE's."

He said they want the federal government to pay for what they are actually supposed to be paying for 100%. "They really should be giving us the FTE's but they don't have it. There is a Congressional limit on the FTE's and that is why they have to do it this way."

Senator Lory made a MOTION that the committee approve the four fire-fighters for the Great Falls area.

Question being called for, the motion carried. (158)

Position of Deputy Director

The Chairman said that the consensus of the military was that this position is not needed. He said he felt the committee could make a motion to delete that position.

Senator Dover made a MOTION that the committee delete the position of deputy director.

General Duffy gave the committee a brief history of this position. He told the committee that the deletion of this position was recommended by the Governor's Council on Management and he did not need this position. Discussion.

Question being called for, the motion carried. (243)

Water Court Funding

Mr. O'Brien told the committee that the Water Development Funds come from 30% of the RIT money which is the Resource Indemnity Trust. Also, monies that go into that account are project revenues. These are monies the state receives for water development projects they have already made. Mr. O'Brien told the committee that .625 of the coal severance money goes into the RIT account because of the distribution of coal severance tax. That amounts to \$473,000. (See Exhibit 7 for Mr. O'Brien's blackboard presentation) Discussion by the committee.

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Mr. O'Brien said there is a question about whether this money could be used for water development. Dick Gilbert and Mr. O'Brien have gone through the statute and prepared something for Senator Van Valkenburg. The statute says something to the effect that funds "will be used for water development in the state of Montana." When they talked with Chairman Quilici they noted that if you don't know who owns the water, how could we have development? So it would promote water development in the state. This is what the end balance would be if we funded Water Courts out of the water development fund. (\$2,467,204) The Chairman noted that this would be a logical place. The Chairman read Title 85-2-243 to the committee which states that if there is no money in the earmarked revenue fund, the expense shall be paid from the state's general fund. We had to come up with a supplemental for that. The Chairman said the statute says the state general fund will pick it up if it isn't from earmarked. He noted that this money could be earmarked and it would save the general fund \$1,018,000. Discussion.

Senator Dover made a MOTION that the committee approve using funds from RIT if these funds are available, using the projection set down by the LFA. If not, then these Water Courts have to be funded, as per statute, out of the general fund. (535) Discussion. The Chairman told the committee that DNRC and State Lands are using a large percentage of this money for operating expenses and this is not what the intention is. If we are mandated by the law to fund water courts and water adjudication, this is where it should come out of. It was noted that this would have to be in bill form. The committee discussed the methods of accomplishing this. The Chairman requested that Mr. Booker and Mr. O'Brien get together on this.

(Mr. O'Brien diagramed for the committee how these funds are allocated.) Discussion by the committee.

In answer to a question from the Chairman, Mr. O'Brien told the committee that they have already approved the agency budget. Senator Dover said, for clarification, he would ADD to his MOTION that the Water Courts be funded for \$418,330 in FY84 and \$599,204 in FY85. (Tape 104, Side A)

Discussion. Motion carried.

Supreme Court

MONTCLIRC

Mr. Booker told the committee that they had, in previous action, asked that the 5% increase in salaries for MONTCLIRC be backed out of the budget to conform with all the other agencies' budgets. Mr. Booker and Mr. O'Brien were asked to furnish the committee

with the actual figures which they are prepared to do now.

Mr. Booker explained to the committee that in this budget the agency had put in a 5% raise. None of the other budgets contain this and Senator Van Valkenburg had made a motion in a previous meeting that this be backed out so it would conform to all the other budgets which are based on current level. Mr. Booker said, in working out these figures with the Supreme Court, they reduced the budget approximately \$10,000 the first year and \$15,000 the second year. In answer to a question from Rep. Lory, Mr. Booker said the exact figures would be \$96,855 in FY84 and \$98,933 in FY85. The committee has already taken action on this and the committee request for the exact figures requires no additional action on the part of the committee.

Legal Settlement - Justice Shea

In answer to a question from the committee, Mr. Booker said, Senator Van Valkenburg had felt this had to be funded, as it is a liquidated claim. (Senator Van Valkenburg was absent during this segment of the meeting.)

Mr. Booker said the actual figure for this claim is \$8,504. Senator Dover made a MOTION that the committee approve the expenditure of \$8,504 in FY84. Discussion. The Secretary of State (regarding previous action by the committee) exceeded the Court ordered amount whereas in this situation, the entire amount was ordered by the Court to be paid. Question being called for, the motion carried.

State Auditor (64)

Termination Pay

The committee discussed the problem of funding the termination pay of the employees in the State Auditor's office who will be leaving when the new auditor comes into the office. (Mr. Omholt, the present auditor, has announced his intention to retire.) Senator Dover said that he has a bit of a problem with this as far as setting a precedent. He also noted that even though the new auditor would bring some new people with him he couldn't imagine that he would want to step into an office with 10 new people who don't know what they are doing. Why would we encourage that? The Chairman suggested that they could perhaps cut the proposed amount in half so when people would leave there would be money for their termination. The committee discussed the fact that there would probably be a six-month period of time when this transition would take place and that there would not be 10 people leaving on any given day. Discussion.

Senator Dover made a MOTION that the committee approve \$50,000.

Rep. Lory suggested that the committee set this aside and have the new auditor put in a supplemental for the next legislature.

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That way the committee does not set a precedent. Mr. Booker noted that this is what was done with the Supreme Court.

Senator Dover WITHDREW his MOTION and made a MOTION that the committee reconsider its action regarding the \$108,000 proposed for termination pay for the State Auditor's office. Discussion. Motion carried.

Senator Dover made a MOTION that the committee take out the \$108,000 that was appropriated for termination pay in this budget. At the Chairman's suggestion, Senator Dover AMENDED his MOTION to include that it is the committee's intention that the State Auditor would come in for a supplemental for this expenditure. The committee noted that the intention of the committee regarding this proposed supplemental would be in the minutes and asked Ms. Cohea to research whether or not this should be boilerplate in the bill or if the committee's intent as expressed in the minutes would be sufficient.

Question being called for, the motion carried. (137)

Discussion by the committee on previous claims and the methods which had been used to fund them.

Emergency Equipment Replacement

Mr. O'Brien told the committee that they had previously approved \$26,000 for the State Auditor's office for emergency replacement of equipment. The State Auditor has requested that this be a biennial appropriation rather than an annual appropriation. Senator Dover made a MOTION that the committee make this \$26,000 for emergency replacement of equipment a biennial appropriation. Discussion by the committee. Question being called for, the motion carried. (171)

Central Payroll Division - Funding Split

Mr. O'Brien told the committee there is a question as to how much revolving fund should be authorized and how much general fund would be used to offset the expenses for the Central Payroll Division.

Mr. Booker explained that there are different options. Basically their budget was put together taking 40% of the data processing costs out of revolving fund and the remainder would be general fund. If this approach is used in the first year there are more data processing costs because of development monies. Based on the budget which was passed, the revolving fund for the first year would be \$227,788 and the second year would be \$213,135. Discussion by the committee regarding meeting schedules. The Chairman said the committee would look at this funding split and several other items at their next meeting which is, at this time, unscheduled. Mr. Booker is to have sheets for the committee regarding this funding split and the highway funding split for

Minutes of the Meeting of the Appropriations Sub-committee on
Elected Officials and Highways, March 4, 1983, Page 16

the next meeting. (223)

Discussion by the committee regarding workload in the Senate
and the House.

The meeting adjourned at 9:35 a.m. (258)


Joe Quilici, Chairman

dm

TELECOMMUNICATIONS TRANSMISSION ALTERNATIVES

Department of Administration
Communications Division

MARCH, 1983

TAB 1.....EXECUTIVE SUMMARY

TAB 2.....DEVELOPMENT PROJECTS

TAB 3.....RESOLUTIONS AND LETTERS

EXECUTIVE SUMMARY

PROPOSED STATEWIDE TELECOMMUNICATIONS TRANSMISSION SYSTEM

DEPARTMENT OF ADMINISTRATION
COMMUNICATIONS DIVISION
NOVEMBER, 1982

PROPOSED STATEWIDE TELECOMMUNICATIONS TRANSMISSION SYSTEM

INTRODUCTION

Rising costs of long-distance telephone service and projected growth requirements for voice, data and land mobile radio communications led the Communications Division to a study of alternative transmission methods. The present low rates for groups of telephone circuits leased from Mountain Bell (TELPAK) are expected to increase sharply. The tariff governing TELPAK has "grandfathered" these circuits. This means that the system cannot be extended to other communities at low rates, nor can more volume be added to the system to accomodate future growth. The alternative is much higher-cost conventional line rental. "Grandfathering" has occurred in Idaho and Wyoming as well. It is likely that a tariff will be filed to eliminate TELPAK in the near future. This has occurred in Colorado and New Mexico.

In order to plan ahead for increasing rates and the eventual elimination of TELPAK, Associated P & C Engineers, a Billings-based firm, was employed in June, 1982, by the Communications Division, to identify technologies and costs for an alternative to the present telephone lines leased from common carriers. The study (found in Appendix C) includes four major topics:

- a. Analyzed historical data and projected requirements for communications circuits for the State from 1982 to 1997.
- b. Analyzed microwave, fiber optic cable, and satellite technologies.
- c. Provides for statewide transmission of voice, data and land/mobile radio.
- d. Provides access for local governments to the State Telephone System (as required by 2-17-302(g) MCA).

CONCLUSION

The State of Montana's telecommunications requirements are expected to grow considerably in the future, primarily due to the advantages offered by improved electronic communications between people and the exploding data processing environment. In order to meet these projected increases, a state-owned transmission system would offer several important advantages compared to the present system. First, a state network to the east and northeast regions of the state would be offered. This would increase the utility for all state users. Secondly, the state would have increased control over its communications costs and system configuration. Third, data transmission speed and quality would be greatly improved. This feature will be of increasing

importance as future data transmission needs are implemented. Fourth, the possibility of other government entities using, and therefore supporting the system, would offer increased utility to many users and overall cost advantages.

Referto Attachment 1 for proposed microwave transmission system.

PRESENT SYSTEM DESCRIPTION

A. TELPAK

1. The Communications Division currently manages a voice/data network centralized in Helena, which interconnects the following communities:

<u>COMMUNITIES</u>	<u>ACCESS CODE</u>
Missoula	125
Billings	122
Boulder	128
Butte	123
Deer Lodge	127
Warm Springs/Galen	129
Warm Springs/Anaconda	129
Dillon	134
Bozeman	126
Great Falls	124
Lewistown	(Data only)
Havre	135
Kalispell	136
Miles City	133

2. The State leases channels (circuits) which extend from Helena to terminate in those towns listed above.
3. The State pays TELPAK rates for the channels to those communities based on air mileage and number of channels. There are 4 groups of channels available to the State:

- 12 channel groups at \$26.01 per mile
- 24 channel groups at \$34.68 per mile
- 60 channel groups at \$43.36 per mile
- 240 channel groups at \$78.04 per mile

4. The attached map shows the TELPAK routing currently in place which determines the rates the State pays each month for service to the communities on its TELPAK network. (See Attachment 2).
5. The following lists the current monthly TELPAK circuit costs of each routing configuration based on current tariffs:

<u>ROUTE</u>	<u>MONTHLY COST</u>
-Helena to Boulder	\$2,029.04
-Boulder to Bozeman	2,818.40
-Boulder to Big Timber	4,682.88
-Big Timber to Billings	3,035.20
-Billings to Forsyth	3,329.28
-Forsyth to Miles City	1,421.88
-Boulder to Deer Lodge	2,497.28
-Deer Lodge to Missoula	2,991.84
-Missoula to Polson	2,011.44
-Polson to Kalispell	1,248.48
-Deer Lodge to Galen	693.76
-Galen to Warm Springs	173.44
-Warm Springs to Butte	823.84
-Butte to Dillon	1,430.55
-Helena to Great Falls	3,121.92
-Great Falls to Fort Benton	962.37
-Fort Benton to Havre	1,794.69
-Great Falls to Stanford	1,456.56
-Stanford to Lewistown	988.38

6. To illustrate how these costs are determined, the Deer Lodge to Missoula route is analyzed. The State currently leases a 60 TELPAK channel group for that route which covers 69 air miles. Thus:

$$69 \text{ air miles} \times \$43.36 \text{ per air mile} = \$2,991.84$$

7. The total TELPAK monthly bill is currently \$37,511.23 which is approximately \$450,135 annually.
8. Note that the costs are based only on the 4 groups of channels offered and not on how many channels are actually used from one location to another. For example, the State is leasing a 60-channel group from Deer Lodge to Missoula but is actually using 53 of those channels. However, the monthly cost remains the same for this portion of the TELPAK charges.

B. Channel Termination or End Charges

1. To communicate over the TELPAK channels (either voice or data), the State must pay channel termination charges. These are commonly known as end charges.
2. The end charges for each channel termination location are a function of Mountain Bell tariffed rates for the hardware required at the ends of each channel and the number of channels needed to link Helena to the towns on the existing TELPAK network. For example, we currently use 28 TELPAK channels tying Helena to Billings. These circuits have related end charges amounting to \$115.08 per line (channel) which creates a total monthly cost of \$3,222.24 for end charges

connecting Helena to Billings through 28 TELPAK channels.
The State's monthly end charges are:

<u>CITY</u>	<u># CHANNELS</u>	<u>COST/CHANNEL</u>	<u>MONTHLY TOTAL</u>
Miles City	11	\$109.23	\$1,201.53
Havre	9	109.23	930.07
Lewistown	5	50.80	254.00
Kalispe ¹	12	91.68	1,100.16
Butte	19	109.23	2,075.37
Warm Springs/ Galen	2	17.55	35.10
Warm Springs/ Anaconda	8	109.23	873.84
Dillon	6	109.23	655.38
Billings	28	115.08	3,222.24
Deer Lodge	7	109.23	764.61
Boulder	5	109.23	546.15
Missoula	33	115.08	3,797.64
Bozeman	26	115.08	2,992.08
Great Falls	20	109.23	2,184.60

C. Interexchange Channels (IXC)

1. Although most of the State communication channels are covered under the TELPAK tariff some channels to towns like Wolf Point, Hamilton, Glendive, and Livingston are governed by IXC rates.
2. Most of these channels are presently data channels for the LETS network, for the Highway Department's remote dial-up locations, for the Revenue Department's dedicated lines and Computer Services Division (CSD) data lines. The Department of Institutions and Eastern Montana College use some voice-grade channels covered under IXC rates.
3. IXC rates are a function of distance. The first 100 miles are charged at \$2.51 per mile per IXC, the next 200 miles cost \$1.63 per mile per channel, each additional mile in excess of 300 is set at \$1.38 per mile per channel.

D. Intrastate WATS ("151" Access)

1. The State currently leases 33 Intrastate WATS lines which provide us access to those Montana communities not on the TELPAK voice network.
2. The total monthly intrastate WATS bill is currently \$29,230.

3. Based on analysis of intrastate WATS traffic, approximately 37% of the current WATS traffic is to communities proposed to be added to the existing network.

E. Toll Calls

1. When the TELPAK network is not available and users do not have access to WATS lines then they can use Direct Distance Dialing, credit card calls, collect, third party calls, or wait until the network is available. Grouped together these kinds of calls are referred to as toll calls.
2. The current average monthly toll call bill is \$17,000. It has been conservatively estimated that 29% of that bill could be eliminated by the proposed network.

IMPACT OF RECENT RATE INCREASE

A. TELPAK

1. The following shows the impact of Bell's recent rate increase effective January 10, 1983:

-Monthly TELPAK costs:

<u>CHANNEL GROUP</u>	<u>OLD RATE</u>	<u>NEW RATE</u>
12	\$17.82	\$26.01
24	23.76	34.68
60	29.70	43.36
240	53.46	78.04

2. An example of the cost impact can be demonstrated using the Big Timber to Billings TELPAK route, a 60 channel group, 70 mile route. This route now costs \$3,035.20 per month (70 x \$43.36), an increase of \$956.20 per month over the previous monthly cost of \$2,079.00. This would amount to an annual increase of \$11,474.40 for this particular route.

B. End Charges

1. As noted earlier, end charges are in part determined by the actual equipment needed to allow the network to function properly.
2. The following shows the impact of the recent Mountain Bell rate increase:

Monthly Costs Per Channel:

<u>OLD RATE</u>	<u>NEW RATE</u>	<u>% INCREASE</u>
\$15.00	\$ 17.55	17.0
34.80	50.80	46.0
81.78	109.23	33.6
86.78	115.08	37.3
66.78	91.68	37.3

3. To project the full impact of a rate increase the estimated future circuit growth to each locality on the existing network must be incorporated into the model. For example, we presently use 28 channels from Helena to Billings with monthly end charges totaling \$3,222.24. Our circuit growth analysis estimates a need for 31 channels at the end of 1983. Thus with the new Bell rate increase, Billings monthly end charges would increase next year from \$3,222.24 to \$3,567.48 (31 x \$115.08). This would correspond to an annual increase of \$4,142.88 due to circuit growth alone.

C. IXC

1. IXC rates did not increase in Mountain Bell's recent tariff change.
2. IXC rates are currently 2.5 times higher than current comparable TELPAK rates. As TELPAK rates approach IXC rates, the advantage of using bulk channel service is reduced.

D. Intrastate WATS "151"

1. The new tariff changes WATS rates from a fixed rate per line to a measured rate basis:

<u>USAGE</u>	<u>CHARGE</u>
0-15 hours	\$15.00 per hour
15.1-40 hours	13.50 per hour
40.1-80 hours	12.00 per hour
80.1-140 hours	10.50 per hour
140.1-220 hours	9.00 per hour
over 220 hours	7.00 per hour

2. In addition to the proposed rate schedule above, Bell now charges \$30 per WATS line for access charges (similar to end charges in the TELPAK system). The old flat rate of \$790 included this access charge.

3. Any WATS usage in excess of 60 hours per line per month will cost more on the proposed measured basis than the current fixed rate.

E. Toll Calls

Charges for credit card, collect and third party calls have increased 26% due to the new Bell rates. The average monthly toll call bill increased from \$17,000 to \$21,420 resulting in an annual increase of approximately \$53,040.

F. Total Impact of New Rate Increase on Network Costs

	<u>PREVIOUS ANNUAL</u>	<u>PRESENT ANNUAL</u>	<u>% INCREASE</u>
TELPAK CHANNELS	\$308,363	\$450,135	46.0%
TELPAK END CHARGES	186,078	248,229	33.4%
INTRASTATE WATS	350,760	FIXED RATE TO MEASURED RATE BASIS	
DEDICATED LINES (IXC)	158,020	NO CHANGE	
TOLL CALLS	204,000	257,040	26.0%

SUMMARY OF PROBLEMS WITH PRESENT SYSTEM

- A. A significant possibility exists that current discount services will be eliminated in the near future.
- B. The pending rate requests are forewarnings of higher costs of transmission in the future.
- C. The number of available TELPAK channels is "frozen" with no expansion possible. Some channel routes, like Great Falls to Havre, are already at capacity and the demand is increasing, particularly for data circuits. Unless alternate transmission systems are analyzed and implemented, the State could be forced to use IXC's which are 2.5 times more expensive than TELPAK. A State-owned network would provide increased flexibility in extending service to communities already on the current network and to those which are not.

PRESENT AND FUTURE COMMUNICATIONS REQUIREMENTS

A system is required which enables low-cost telephone service with sufficient capacity to fulfill present and future needs of state government as well as enable use by local governments. The system should be versatile, enabling high-speed data traffic and land mobile radio control features, and it should provide statewide coverage. Teleconferencing, electronic mail, and heavy increases in data traffic are expected to require greater capabilities than the present system will economically and

technically support.

TECHNOLOGIES STUDIED

The three most modern transmission technologies available are microwave radio, fiber optic cable, and satellite. While fiber optics and satellite are increasingly improving and costing less, microwave is recommended because of lower projected costs and higher reliability. The proposed system is capable of expansion to meet future needs and is completely compatible with the new digital electronic switches planned for Helena, Bozeman, Billings, and Missoula, and installed at Dillon.

ALTERNATE TRANSMISSION SYSTEM FEATURES

The proposal expands the State Telephone System from 15 to 27 communities (Attachment 1). The high speed digital feature enables data to be transmitted to more locations at almost six times the present speeds. According to the Data Processing Coordinator, Office of Budget and Program Planning, the proposed system would be "highly beneficial to the data processing community". Some of the applications of high speed data transmission will include:

- Extension of the Law Enforcement Network System at high data speeds and to more communities.
- Expansion of community information network, such as AGNET and State Library systems.
- Improved communication of data such as unemployment claims, drivers license registrations, county tax data and other applications where high speed communications between offices of state agencies is required.
- Access by local political subdivisions to intrastate data communications.

In a recent letter, the Flathead County Data Processing Manager said, "Flathead and Missoula Counties have discussed the merits of connecting our two Burroughs B1000 series computers together to share various application programs and to provide service and emergency back-up to each other. Other smaller counties are also becoming interested in utilizing one or both of our installations for computer servicing. We are also interested in working toward long range solutions to moving data between our installations and the State of Montana, at Helena".

Land mobile radio communications can be managed on a statewide basis through implementation of the proposed system. Microwave radio locations serve as links which can be centrally controlled to enable statewide or regional dispatching or radio communications of all kinds. Communication from base stations can be greatly improved for the Montana Highway Patrol and Department of Highways. Other agencies will, for the first time,

be able to dispatch their personnel from a central location: brand inspectors, game wardens, revenue agents, etc.

Concern for statewide communications has been expressed by the Board of Crime Control: "If the State of Montana, its political subdivisions, and criminal justice agencies especially are to develop cost-effective, efficient, compatible communications systems for the rapid exchange of information...the Department of Administration...shall proceed to establish, implement, and maintain a state-wide centrally managed telecommunications network capable of accommodating digital, land mobile, telephony, data and text transmissions".

Similarly, the Montana Sheriffs and Peace Officers Association and the Montana Association of Chiefs of Police supported "the implementation of a state-wide land mobile communications system".

Telephone access will be economically provided, enabling greater use of telephone conferencing and reducing the need for intrastate travel. Accomplishing this will require organizational management, but the system will be in place to enable use of modern teleconferencing techniques.

Overall, reliability and expansion, such as for videoconferencing and increased data usage, are built in to the proposed system. Local governments at any system location may obtain access and other communities may also join the system if they so desire.

COSTS

The proposed digital microwave transmission system is estimated at a "worst case" cost of \$13,112,000. According to Associated Engineers and the Communications Division's most recent experience with the competitive bid process, the nature of the marketplace could reduce the highest possible cost by a minimum of 10%. However, to present a conservative model, the full \$13.1 million figure was used in our cost analysis.

Microwave equipment has an average useful economic life of 20 years. To calculate conservative estimates of cost avoidance, circuit (channel) requirement projections for each community on the existing network were computed for the next 15 years. These circuit projections were calculated using regression analysis which is a method of analyzing trends based on historical data.

To proceed with a cost analysis, one should first look at the percentage of total present cost avoidance represented by: TELPAK channel rates, end charges, IXC rates, intrastate WATS costs and toll call costs. Attachment 3 provides a graphic illustration of these percentages.

Due to the circuit requirement projections being different for each community and the differences in determining rates, the present costs being analyzed cannot be projected by simply adding

an inflation factor each year. An illustration of how some of the projected costs were computed should prove helpful at this point.

First, all of the existing network TELPAK circuits would be replaced in 1984 by IXC based on the high probability that Mountain Bell will file in early 1983 for elimination of TELPAK effective in early 1984. For example, the 33 TELPAK channels in use to Missoula become 33 IXC's.

Present IXC rates were increased annually at 10% based on historical increases, giving a 1984 monthly IXC rate of \$2.76 per mile per channel. Trend analysis projects 39 circuits will be needed to serve Missoula in 1984. The annual channel cost to Missoula in 1984 would be \$124,000 ($\$2.76 \times 39 \times 96 \text{ miles} \times 12 \text{ months}$). This same process was used to project future network channel costs for all communities presently on the TELPAK network.

To compute the associated end charges, the present rates were increased 10% annually and applied to the projected circuits required. For example, Missoula annual end charges would be \$59,244 in 1984 (present rate of $\$115.08 \times 1.1 \times 39 \text{ circuits} \times 12 \text{ months}$).

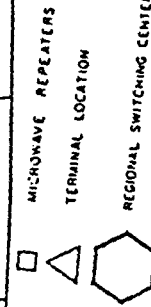
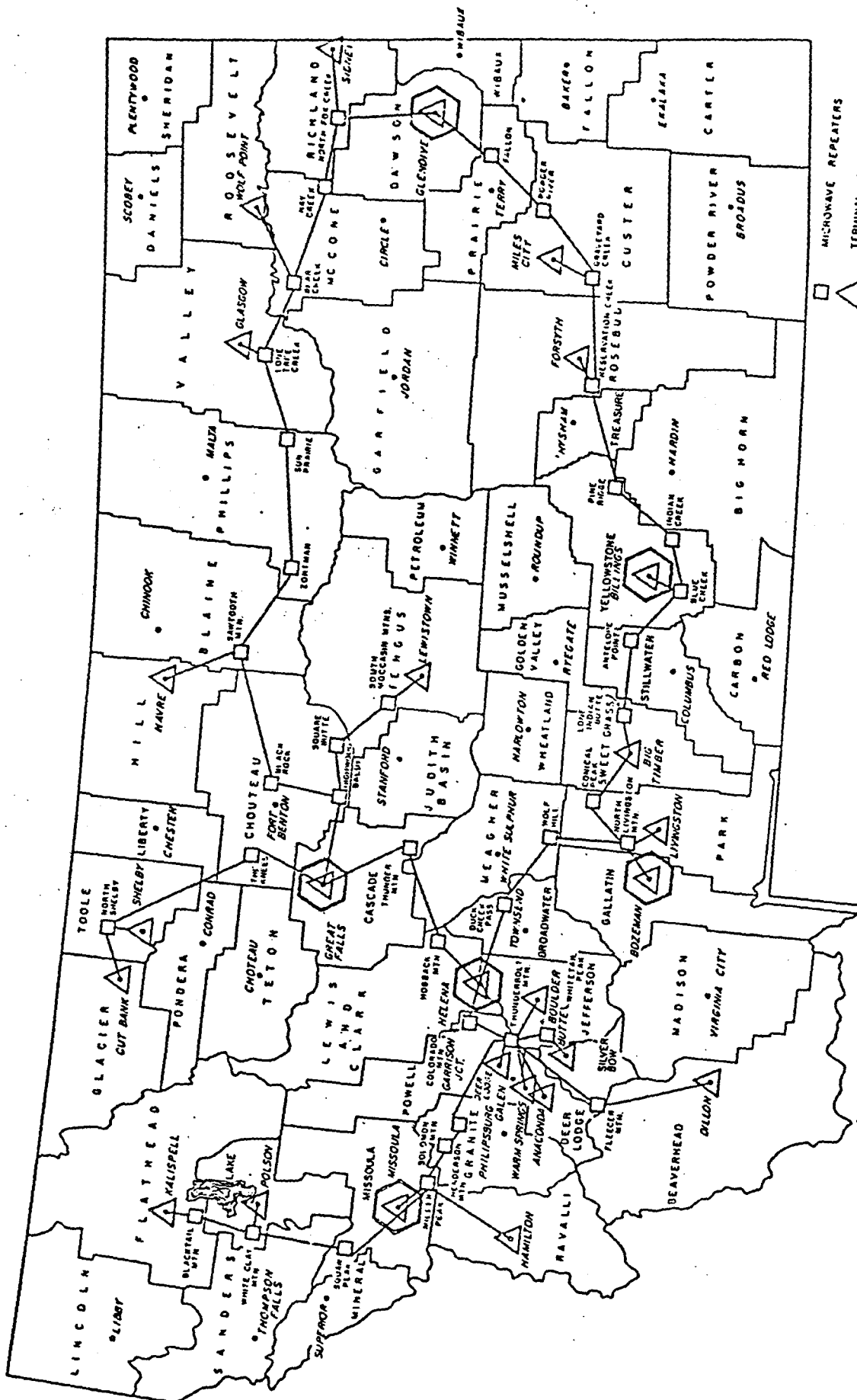
Thus, total annual network line costs to Missoula in 1984 would be approximately \$183,244, which is approximately \$11,000 higher than a simple annual 10% inflation model would project.

The methodology mentioned in the previous paragraphs was used to provide existing system cost estimates for the remainder of the 15-year period.

Two financing models were used to project cost savings of the transmission system alternative. The municipal lease and the general obligation bond markets were employed.

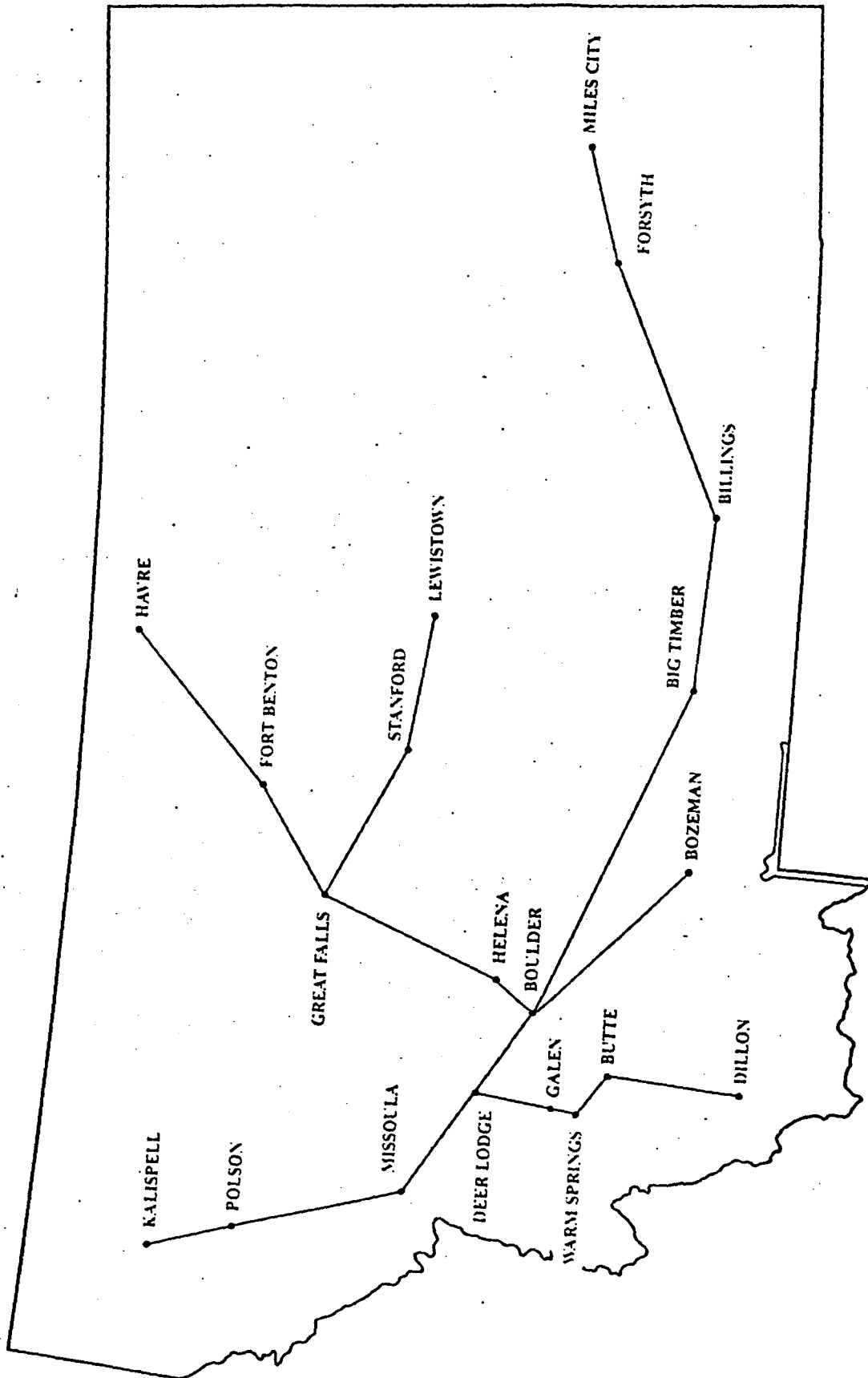
A summary of project savings using both financing models with the associated assumptions can be found in attachments 4, 5 and 6.

-Prepared by Communications Division;
February 1983.

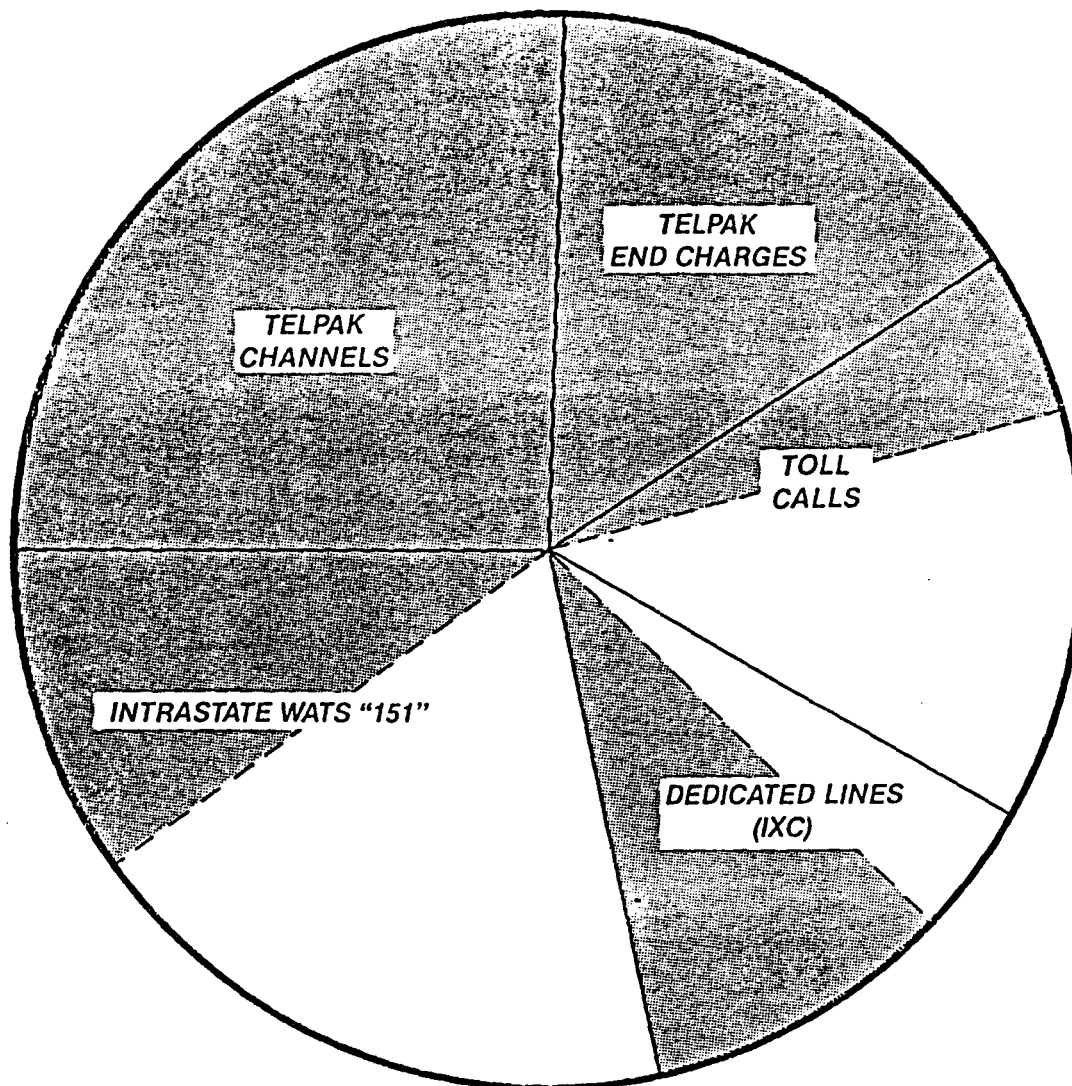


STATE OF MONTANA
 PROPOSED
 MICROWAVE TRANSMISSION SYSTEM
 PLAN II

STATE TELPAK LINES



Prepared by Communications Division, April, 1982



STATE OF MONTANA
INTRASTATE TELECOMMUNICATIONS NETWORK
IMPACT OF NETWORK ALTERNATIVE ON COSTS

CATEGORY	PRESENT AMOUNT	% OF PRESENT TOTAL NETWORK COSTS	AMOUNT ELIMINATED BY PROPOSED NETWORK	% ELIMINATED
TELPAK CHANNELS	\$450,135	31%	\$450,135	100%
TELPAK END CHARGES	248,229	19%	248,229	100%
TOLL CALLS	204,000	14%	59,160	29%
INTRASTATE WATS-151	350,760	25%	128,550	37%
DEDICATED LINES-IXC	158,020	11%	112,550	71%

\$TOTALS 1,411,144

998,624 (71% OF CURRENT
TOTAL)

NOTE: SHADED AREAS REPRESENT IMPACT OF PROPOSED NETWORK

ATTACHMENT 3

PROJECTED SAVINGS
OF
TRANSMISSION SYSTEM ALTERNATIVE
GENERAL OBLIGATION BOND MODEL

	<u>1984/1985</u>	<u>1986/1987</u>	<u>1988/1989</u>	<u>1990/1991</u>	<u>1992/1993</u>	<u>1994/1995</u>	<u>1996/1997</u>	<u>1998/1999</u>
Existing System Costs:	\$3,700,500	4,731,930	6,056,560	7,754,050	9,991,040	12,798,140	16,354,830	19,109,700
Alternative System Costs:								
1. G.O. Bonds (P + I)	2,137,860	3,147,640	3,147,640	3,147,640	3,147,640	3,147,640	3,147,640	3,147,640
2. Maintenance	524,000	1,210,440	1,464,630	1,772,210	2,144,370	2,594,690	3,139,570	3,798,880
Projected SAVINGS:	<u>\$1,038,640</u>	<u>373,850</u>	<u>1,444,290</u>	<u>2,834,200</u>	<u>4,699,030</u>	<u>7,055,810</u>	<u>10,067,620</u>	<u>12,163,180</u>

Assumptions:

1. G.O. bonds are 15 year issue to correspond with the useful life of the equipment.
2. 2nd year maintenance at 4% of system cost, then inflated 10% annually.
3. System covered under warranty for first 12 months; thus, maintenance estimates do not begin until 1985.
4. Rates increased annually at 10% based on increases over the last 5 years.
5. Growth projections incorporated in both voice and data.

Additional Benefits:

1. A state network to the east and northeast regions of the state (more users on the network).
2. Increased control over network costs and system configuration.
3. Data transmission speed and quality should be improved.
4. Local government access.
5. Enhanced electronic mail capabilities.

Prepared by Communications Division, February, 1983.

PROJECTED SAVINGS
OF
TRANSMISSION SYSTEM ALTERNATIVE
MUNICIPAL LEASE MODEL

	<u>1984/1985</u>	<u>1986/1987</u>	<u>1988/1989</u>	<u>1990/1991</u>	<u>1992/1993</u>	<u>1994/1995</u>	<u>1996/1997</u>	<u>1998/1999</u>
Existing System Costs:	\$3,700,500	4,731,930	6,056,560	7,754,050	9,991,040	12,798,140	16,354,830	19,109,700
Alternative System Costs:								
1. Municipal Lease	2,180,590	3,182,180	3,182,180	3,182,180	3,182,180	3,182,180	3,182,180	3,182,180
2. Maintenance	524,000	1,210,440	1,464,630	1,772,210	2,144,370	2,594,690	3,139,570	3,798,880
Projected SAVINGS:	<u>\$ 995,910</u>	<u>339,310</u>	<u>1,409,750</u>	<u>2,799,660</u>	<u>4,664,490</u>	<u>7,021,270</u>	<u>10,033,080</u>	<u>12,128,640</u>

Assumptions: 1. Municipal lease market at 9% interest rate.

Remaining assumptions are the same as those in the G.O. Bond model.

Additional Benefits: The same as those mentioned in the G.O. Bond model.

ARGUMENTS FOR ASSUMPTIONS IN
COST/SAVINGS PROJECTIONS

ASSUMPTIONS:

1. G.O. Bonds are 15 year issue to correspond with the useful life of the equipment.
 - Microwave equipment has a minimum useful life of 15 years; thus, general obligation bonds issued for a 15-year period would not extend debt beyond the life of the equipment.
 - With the State's excellent bond rating and the associated relative ease of floating an issue, G.O. bonds were used in the projection model to minimize future interest costs.
2. 2nd year maintenance at 4% of system cost, then inflated 10% annually.
 - Maintenance based on recent experience with telephone switch replacement contract.
3. System covered under warranty for first 12 months; thus, maintenance estimates do not begin until 1985.
 - Warranty period based on recent experience with telephone switch replacement contract.
4. Rates increased annually at 10% based on increases over the last 5 years.
 - 10% annual increase figure based on:
 1. TELPAK network increase of 74% over the last 5 years.
 2. Toll calls have increased 44% over the last 4 years on an average cost per call basis.

Arguments for Assumptions in Cost/Savings Projections

Page 2

3. State Telephone System calls (on the voice network and "151" WATS) have increased 76% over the last 4 years on an average cost per call basis.

5. Growth projections incorporated in both voice and data.

- Circuit growth projections based on a standard statistical method known as regression analysis.
- Regression analysis uses historical data (especially more recent data) to project trends.

- Prepared by Communications Division; February, 1983

SUMMARY

TELECOMMUNICATIONS DEVELOPMENT BUREAU WORK PLAN FY 84-85

CONTRACTED SERVICES REQUIREMENTS

	<u>FY 84</u>	<u>FY 85</u>
A. NETWORK OPTIMIZATION		
1. Traffic Analysis and Network Engineering	\$15,000	\$15,000
2. Economic Forecasting Models	2,500	2,500
B. NETWORK DEVELOPMENT		
1. Transmission Site Analysis	6,000	
C. LAND MOBILE RADIO MANAGEMENT PROGRAM		
1. Technical Specifications for Frequency Utilization	500	
2. Radio System Design Manual	3,000	
3. Radio Dispatch System Analysis	<u> </u>	<u>4,000</u>
TOTALS	\$27,000	\$21,500

TELECOMMUNICATIONS DEVELOPMENT BUREAU WORKPLAN 1984 -85
CONTRACTED SERVICES REQUIREMENTS

A. NETWORK OPTIMIZATION

1. Traffic Analysis and Network Engineering

Requirements: The Division needs a standard methodology for monitoring voice and data traffic in order to optimize the use of telephone trunks leased from common carriers. A point-to-point analysis of telephone traffic, using WATS data, State Telephone System usage data, and incorporating CCS (hundred call seconds) data would enable the Division to accurately reconfigure the state's tie line network, particularly after the new telephone switches have been installed, but also between locations not served by new switches.

The principle would be to enable the Division to apply such a methodology to maintain a monitoring program which would permit economies in the number of tie lines the state would require to handle telephone traffic.

Recommendation: Employ a consulting engineering firm to develop such a methodology and train Division staff in its application.

Cost: 150 days work @ \$200 per day (including computer time) = \$30,000 FY 1984-85.

2. Economic Forecasting Models

Requirements: The Division must perform accurate economic forecasting appropriate for estimating telephone network costs and costs for financing network enhancements (e.g., future switches and transmission systems). The Division needs assistance from telephone industry consultants to assure that all growth factors and variables peculiar to the industry have been taken into account to assure the most accurate economic forecasting possible.

Recommendation: Employ a communications financial analyst to review the Division's econometric models.

Costs: Ten days work @ \$500 per day (including computer time) = \$5,000 FY 1984 - 85.

B. NETWORK DEVELOPMENT

1. Transmission System Preliminary Site Analysis

Requirements: The Division needs to refine its selection of potential sites for the implementation of a state microwave network. Sites included in the 1982 study were generally known sites but further study would be required to determine suitability for the state system. Preliminary mapping and path analysis would confirm site suitability prior to bidding a transmission system and would be a prerequisite for a successful bid package. Such information would verify cost estimates, including necessary site preparation requirements (roads, power, etc).

Recommendation: Employ specialists in microwave path analysis to prepare detailed maps, preliminary path studies, and define site characteristics and suitability.

Cost: Sixty days work @ \$100 per day = \$6,000 FY 1984.

C. LAND/MOBILE RADIO MANAGEMENT PROGRAM

1. Technical Specifications for Frequency Utilization Plan

The Division will be preparing technical standards to serve as radio frequency guidelines as part of its permanent frequency utilization plan. A critique of these standards by professional radio engineers would confirm their suitability for Montana and avoid costly errors in implementing such standards. Review of frequency plan guidelines would be required for specifying:

- Effective radiated power maximums for omnidirectional antenna systems.
- Maximum overall antenna heights.
- Use of directional antennas, control tones, tone-coded squelch, and time-out timers.
- Efficient distance-sensitive frequency assignment criteria.

Recommendation: Employ a radio engineering consultant to conduct an analysis of proposed technical standards for the state frequency utilization plan.

Cost: Five days work @ \$100 = \$500 FY 1984.

2. Radio System Design Manual for State and Local Government

Requirements: The most common problem facing state government and local public safety agencies is assuring that radio systems purchased will perform most effectively and for a reasonable cost. Decisions of concern to agencies pertain to configuration of radio

systems (e.g. placement of base and repeater systems), options available in various radio offerings (e.g., priority scan), and overall system design. An easy to read, comprehensive manual to assist agencies in making knowledgeable choices for radio systems would considerably reduce confusion and save funds for both state and local agencies.

Recommendation: Employ a radio engineering consulting firm to prepare a manual appropriate to Montana's requirements.

Cost: Fixed fee = \$3,000 FY 1984.

3. Radio Dispatch Systems

Requirements: Several state agencies, and potential local agencies, are engaged in the development of central and regional radio dispatch systems. The State of North Dakota, and cities such as Phoenix and Los Angeles, have successfully developed computer-aided dispatching systems. The aims of an optimum dispatching operation are to achieve a rapid response time, accurate and appropriate responses to calls for help from the public or from a particular public safety agency, and to manage such a system at least cost. Proven dispatching techniques should be applied as Montana develops its particular systems.

Recommendation: Employ experts in radio dispatch methodologies to assist the Division in planning the enhancement and orderly expansion of the state's dispatching program.

Cost: Twenty days @ \$200 = \$4,000 FY 1985.

MOTION

If the State of Montana, its political subdivisions, and criminal justice agencies especially are to develop cost-effective, efficient, compatible communications systems for the rapid exchange of information, the Criminal Justice Information Systems Advisory Committee finds that the Montana Board of Crime Control should recommend to the Governor and the Attorney General that:

(1) the Department of Administration, Communications Division as required by MCA 2-17-302 through 2-17-306 shall proceed to establish, implement, and maintain a state-wide centrally managed telecommunications network capable of accommodating digital, land-mobile, telephony, data and text transmissions;

(2) the Division be provided with the resources to accomplish this;

(3) the Department of Administration, with the support of the Governor and the Attorney General, present to the 1983 Legislature specific recommendations for the implementation and maintenance of this sytem.

Motion adopted by the full Board of Crime Control
on August 12, 1982

The Montana Sheriffs and Peace Officers Association supports the implementation of a statewide land/mobile communications system that will coordinate, and allow for, the development of interagency communications among all levels of government and that an integral part of this system be a requirement that the State of Montana fund the local government conversion costs.

This is in support of a total statewide system of which it is assumed the Montana Highway Patrol System would be an integral part, no more and no less than any other local government, law enforcement agency's system. It was the desire of the board of directors of the MSPOA that the state place responsibility for the system in a department to be other than the Department of Justice, such as the Department of Administration.

From Montana Sheriffs & Peace Officers Board of Directors
meeting, October 7, 1982, Bozeman.

September 24, 1982
Montana Association of Chiefs of Police Meeting
Whitefish, Montana

The Montana Chiefs of Police Association recognizes the need for coordination of the development of communications systems and supports the implementation of a statewide land-mobile communications network which provides for the capability for coordination of public safety/law enforcement communications at all levels of government.

CITY OF BILLINGS
2305 8th Avenue North

ROBERT S. WILLIAMS
Fire Chief

PO BOX 1173
BILLINGS MONTANA 59103
PHONE (406) 245-6999
FIRE DEPARTMENT

R. W. DAEM
Ass't Chief

23 June 1982

Hiram Shaw
Senior Telecommunications Planner

Dear Hiram:

In reciept of your information and after reading it over,
I feel that this study will benefit all concerned.

The City of Billings has a centralized communications center
for all communication and this will be expanding in the
future. Currently we are investigating the direction we
will go, but when considering emergency communication and
long term cost involved, micro wave appears to be quite
promissing.

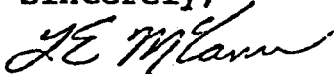
The fire departments of the state have a need for inter-
communication. This likewise includes the State Fire
Marshals Office and the State Fire Trainning School. It
is suggested that copys of the information I recieved be
sent to them for future planning.

All concerned personnel in our department will be informed
of the study the State has underway.

As we continue with our plans we will keep you informed.
It is our desire to be compatable with the State wide
system.

Thank you for passing along the information. If we can
be of assistance please do not hesitate to contact this
department.

Sincerely,



L. E. McCann
Fire Marshal

LM/lb

FLATHEAD COUNTY DATA PROCESSING

P.O. Box 1000 - Kalispell, Montana 59901

Phone (406) 755-5300

August 5, 1982

Hiram Shaw
Senior Telecom Planner
State of Montana
Sam Mitchell Building, Room 222
Helena, MT 59620

Dear Hiram,

Flathead County is very much interested in any plans that the State of Montana has in the area of statewide or western Montana telecommunication networks.

Flathead and Missoula Counties have discussed the merits of connecting our two Burroughs B1000 Series computers together to share various application programs and to provide service and emergency back-up to each other. Other smaller counties are also becoming interested in utilizing one or both of our installations for computer servicing.

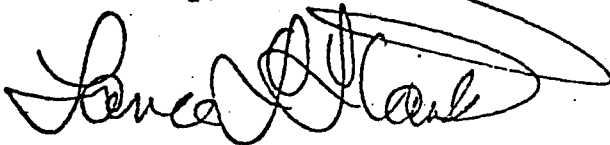
We are also interested in working toward long range solutions to moving data between our installations and the State of Montana, at Helena.

At present, microwave lines exist between Kalispell and Missoula. None are installed between Missoula and Hamilton. Ravalli County is interested in this concept but is unsure what to do recognizing the State is researching this situation.

Missoula and Flathead Counties offer whatever expertise and support available to assist the State of Montana in their endeavors to establish a datacommunication network.

Thank you.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lance S. Staub", with a large, sweeping flourish extending from the end of the signature.

Lance S. Staub
Data Processing Manager

LSS/sak

MONTANA STATE LIBRARY

930 EAST LYNDALF AVENUE
1515 E. Sixth Avenue

HELENA, MONTANA 59601-
59620

RECEIVED

FEB 1 1983

COMMUNICATIONS DIVISION
HELENA

February 9, 1983

TO: Hiram Shaw, Chief
Telecommunications Bureau, Communications Division
Department of Administration

FROM: Sara Parker *sp*
State Librarian

Thank you for the copy of "Alternative methods of transmission." I have reviewed it. Please know this is of much interest to both the Montana State Library and other libraries within the state.

Librarians firmly believe we are quickly becoming an information-based society. The Montana State Library Commission has statutory responsibility for library development within the state. As libraries play their role in information provision, they are increasingly dependent upon telecommunications for rapid exchange of information. Library needs are summarized in two areas:

- (1) Resource sharing activities and interlibrary cooperation mean libraries need to talk with each other often. Voice-grade communications systems available at low cost are of great importance. The Montana State Library has special needs in this area. Our consulting function is undertaken with inadequate staff and vast geographical distances. We use the telephone often to talk to libraries within the state. A quality, low-cost phone system is vital to our fulfilling our role. We simply will never have the staff and travel money available to provide the level of service required. Dependence upon the telephone will continue indefinitely.
- (2) Data transmission between libraries is increasingly important and the use of data transmission will grow rapidly during the next few years. Our current "Apple network" is only the first example of how interchanges will occur between libraries. Two telefacsimile experiments are currently underway in Montana. The Montana State Library is upgrading current terminals and will have the first of our 1200 baud equipment in a few weeks. High-speed data transmission at faster baud rates will be necessary.

My general knowledge of telecommunications options available to libraries and my experience in other states is the basis for my support of your proposed microwave system. Discussions with other telecommunication planners and examination of studies made in other states support the conclusion microwave transmission is the best available option currently viable for Montana. The rapidity with which technology is changing may, in the future, bring other options. It is my feeling

Hiram Shaw
February 9, 1983
Page 2

the use of the "break even year concept" would enhance your decision making. Your speaking of a six-year, break-even point is quite important. If cost savings can pay for the system within six years, the state should be in a good position to keep pace with the technological alternatives for both data and voice communications.

Thank you for allowing me to comment on this.

SP/jf

State Law Library of Montana



Justice Building • 215 North Sanders
Helena, MT 59620 • (406) 449-3660

February 14, 1983

Hiram Shaw, Chief
Telecommunications Bureau,
Communications Division
Department of Administration
Helena, Montana 59620

Dear Hiram:

A good affordable telecommunications system is now basic to the functioning of the Law library. Why? To a larger degree than ever before information is obtained and/or transmitted utilizing the telephone or on-line data transmission.

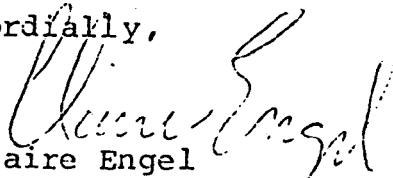
Increasing use of the Law Library, increasing availability and use of on-line data transmission, and increasing urgency of requests all point towards an increased need for good telecommunications.

Unfortunately, the cost of telecommunications is not very affordable. The Law Library's phone bill has more than doubled in the past year and I understand more substantial increases are to be expected. If this is indeed so, the cost of telecommunications will cripple our ability to provide needed information in a timely manner.

I am delighted to know that the Communications Division is attempting to alleviate this problem. Although I do not understand the technical aspects of your proposed microwave transmission telecommunication system, I do understand that the end result will be an improved and less costly telecommunication system for the state of Montana. Hopefully, over the long term, the Law Library will reap the benefits of this system.

If I can assist you in any way, please call me.

Cordially,


Claire Engel
State Law Librarian



Memorandum

TED SCHWINDEN
GOVERNOR

TO: Hiram Shaw, Chief
Telecommunications Bureau
Communications Division

FROM: Al Arvish *Al Arvish*
EDP Coordinator
Local Government Services Division

DATE: December 9, 1982

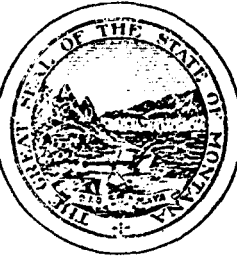
SUBJECT: Data Communications for Local Government

Thank you for a copy of the "Alternative Methods of Transmission." As per your request, I reviewed this document and have the following input which may not have any impact on the proposed system:

1. Cities and Counties are automating in increasing numbers. Many of these entities are incorporating telephone modems on their systems for maintenance purposes. Because of this, the Accounting and Management Systems Bureau of the Local Government Services Division, will have the ability to maintain and pull reports from their BARS accounting system. We do not have the financial resources to undertake this at this time, however, I envision this happening in the time frame of the proposed new Communications System.
2. Our Division has been working with the Office of Public Instruction to develop and implement accounting systems in the School Districts. This has created a large interest in automation and many school districts are presently purchasing computer systems. As above, many of these systems will have telephone modems which could enable OPI to pull information. Bill Connet and myself hope to establish a process in which this goal could transpire. Again, if this does happen, it will be in the time frame of the proposed new Communications System.
3. Should the above occur, two to three members of our staff would most likely be needed to be maintaining automated accounting systems in 30-40 Counties, 50-60 Towns and Cities, and approximately 200 School Districts over the long range period. Because of the variety of computer systems installed/to be installed, I can only approximate the communication needs, but I will assume that at peak maintenance periods, 21 hours per day would be needed.
4. For simplicity and smallest cost to local government, most data transmission will be done at a 1200 band rate. However, it would be nice to have the ability to communicate at 2400 and 4800 band rates.

Please feel free to contact me with any further questions you may have.

DEPARTMENT OF
SOCIAL AND REHABILITATION SERVICES



TED SCHWINDEN, GOVERNOR

P.O. BOX 4210

STATE OF MONTANA

HELENA, MONTANA 59604

December 7, 1982

TO: Hiram Shaw, Chief
Telecommunications Bureau
Communications Division
Department of Administration

FROM: Ron Brown, Administrator
Centralized Services Division

A handwritten signature in dark ink, appearing to read "Ron", written over the name "Ron Brown" in the "FROM:" line.

SUBJECT: ALTERNATIVE METHODS OF TRANSMISSION

Thank you for the opportunity to review the "Preliminary Study of the Feasibility of Alternative Methods of Transmitting Voice, Data and Text Between Localities in the State of Montana," and the accompanying Executive Summary.

It appears that such a system would be of significant benefit to the State and this Department, not only in long term cost reduction but, also, in improved service.

The Department of Social and Rehabilitation Services has a unique relationship with the 56 County Welfare Departments. Each County Welfare Department operates semi-independently under the supervision of the County Commissioners. However, all rules, regulations, etc., for programs administered by these County Departments, except General Assistance and County Medical, are promulgated by this Department. County Welfare Department employees are hired by the County Commissioners, but are on the State payroll.

All this results in a need for us to have direct telecommunications with these county offices, similar to the need of the Department of Revenue in their property assessment operations (County Assessors). Therefore, County Welfare Departments should be included as a part of this Department for the purposes of this study.

Please call me at 449-2631 if you have any questions.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
RR 4034
Great Falls, MT 59401

December 17, 1982

Hiriam Shaw, Chief
Telecommunications Bureau, Communications Div.
Highway Building
2704 Prospect Ave.
Helena, MT 59601

Dear Mr. Shaw:

The National Weather Service is interested in pursuing the possibility of using several communication channels in the proposed alternate state plan. Accordingly, I have sent your Preliminary Study to our Regional Headquarters in Salt Lake City for additional study.

Should you desire technical information, please contact Carl Bullock in Salt Lake City, phone 1-801-524-4000.

Sincerely yours,

David E. Olsen
Meteorologist in Charge

cc: W/WR1x4



FINANCING ALTERNATIVES FOR
TELEPHONE SWITCH REPLACEMENT
\$7.2 MILLION

<u>FINANCING OPTION</u>	<u>INTEREST RATES</u>	<u>TOTAL INTEREST COSTS</u>	<u>PROJECTED INTEREST SAVINGS</u>	<u>LEGISLATIVE ACTION</u>
Municipal Lease	9%	\$4.04 Million	\$2.63 Million	1. Sub-Committee Action 2. Appropriation Bill Language 3. Legislative Resolution
Lease Participation*	7.3%	\$3.58 Million	\$3.09 Million	Same as above
G. O. Bonds	7.0-8.25%	\$3.50 Million	\$3.17 Million	LRBP-2/3 Majority Vote

NOTE: Time period is 10 years in all cases. In the G. O. Bond case, debt can be structured to fit the useful life of the telephone equipment.

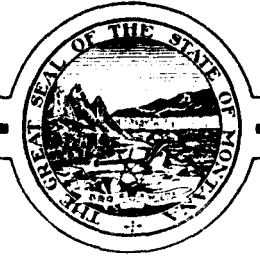
*Lease participation requires a 15% reserve fund (15% of 7.2 million) that would be added on to the principal amount of \$7.2 million. This reserve fund is held by a trustee and invested at an interest rate which generates earnings used to lower the effective rate to 7.3%.

AMENDMENT NO. 1 - HB 447

Following line 4, page 38, Insert: "If the Department of Administration exercises its right to convert the existing Lease Agreement between the State and Centel Business Systems to a lease with an option to purchase as provided in section 16.12 of the Lease Agreement, then the Department is authorized, in its discretion, to issue lease participation certificates to finance such purchase option in a manner and form determined to be in the best interests of the State. The Department is further authorized to employ financial consultants and counsel deemed necessary to issue lease participation certificates, the cost of which may be paid from the proceeds of said certificates."

	<u>1984</u>	<u>1985</u>
<u>PERD</u>		
Purchase Cost		
Maintenance Agreement	\$ 3,028	3,330
Previously Requested	<u>(14,192)</u>	
Sub Total (Reduction)		
Addition	\$ (11,164)	<u>\$3,330</u>
 <u>Teachers Retirement</u>		
Purchase Cost		\$16,146
Maintenance Agreement		2,006
Previously Requested		<u>(10,000)</u>
Sub Total (Rduction)		
Addition		<u>\$3,152</u>
 <u>Investment Division</u>		
Purchase Cost	\$ 16,146	
Maintenance Agreement	2,006	2,207
Previously Requested	<u>(14,410)</u>	
Sub Total (Reduction)		
Addition	<u>\$ 3,742</u>	<u>\$2,207</u>
 TOTAL OTHER FUNDS BUDGET		
ADDITION (REDUCTION)	<u>\$ 3,758</u>	<u>\$9,226</u>

DEPARTMENT OF ADMINISTRATION
COMPUTER SERVICES DIVISION



TED SCHWINDEN, GOVERNOR

ROOM 22, MITCHELL BUILDING

STATE OF MONTANA

(406) 449-2700

HELENA, MONTANA 59620

TO: Dave Ashley, Deputy Director
Department of Administration

FROM: Paul Rylander, Chief
Operations Bureau *Paul*

DATE: February 9, 1983

SUBJECT: Word Processing Study

Attached is the long-awaited Word Processing Study for our department which you requested.

I sincerely apologize for my tardiness in this endeavor. I do have a lot of excuses for being so late but won't bore you with them here.

If the recommendations of the study are adopted, I feel it to be imperative that the Director's Office acquire a Displaywriter. The potential benefits of automated text processing to the entire department will be limited if the "Home Office" is not compatible with the divisions.

I am available at any time to discuss this matter with you.

cc: Mike Trevor

Word Processing Analysis
for the
Department of Administration

The purpose of this document is to report findings and make recommendations relative to the Word Processing study and analysis recently completed, the Department of Administration.

To gather information for this study, each division administrator or his/her designate was interviewed to ascertain the following:

1. The equipment and personnel currently used to meet their respective word processing needs.
2. The word processing needs of each division; specifically the volumes, frequencies, and required quality of the paperwork generated.

This information is included in Attachment A.

Analysis

Most of the divisions of this department stand to realize benefits in the efficiency and quality of the services they provide through further automation of their word processing function. A few of them (Building Codes, Workers' Compensation Court, PERS) are in dire need of automation.

Attachment B is a brief analysis of relative need for word processing automation of each division. Please keep in mind that this evaluation is preliminary and is by no means final. The relative ranking of need for automation of each division reflects the impressions gained through brief interviews at each office.

The Department of Administration is comprised of divisions which are quite autonomous; each division being primarily a service organization. The services provided and the clientele served by each division are distinct and unique. As a result, most of the paperwork generated by each division in providing their services has little to do with other divisions within the department.

Auxiliary activities of each division do however, require a substantial amount of inter-divisional and inter-departmental exchange of information. These functions include:

- A. Personnel Administration
- B. Budget and Accounting
- C. Payroll
- D. Purchasing

E. Administrative Rules

Available Options

The following have been recognized as available options in addressing the word processing needs of this department.

1. Use the host computer system. This system offers:
 - A. Large document storage and archive capacity.
 - B. High-speed, high quality print capability.
 - C. Comprehensive word processing software, including ATMS, DCF, DLF, and STAIRS.
 - D. Communications link with phototypesetter operated by Publications and Graphics Division.
 - E. Potential for effectively integrating Data Processing and Text Processing in the future.
 - F. One disadvantage of printing at the site of the host computer is the inconvenience to users with offices in other buildings.
2. Acquire a shared logic system (IBM 8100 or 5520, for example). This would offer:
 - A. User-friendly word processing software.
 - B. Blanket automation of word processing for entire department.
 - C. Local printing available.
3. Acquire the same type of communicating stand-alone word processors for those divisions which need them (for example, the IBM Displaywriter). This option offers:
 - A. User-friendly word processing software.
 - B. The capability to spread the cost out over time.
 - C. Equitable distribution of the costs to each division.
 - D. Use of the same word processing terminals to access non-text data on the host computer system. (examples: SBAS, PPP, etc.).
 - E. A short-term low cost solution for those divisions with the most critical need for automation. Each division can automate their word processing functions independently of other divisions.

- F. The potential for centralized training, installation assistance, methods and standards to be provided by CSD.
 - G. Seasonal workload peaks of one division could be better accommodated if all divisions have similar equipment and software.
 - H. Local printing available.
4. Allow each division to determine their needs and acquire the equipment of their choice.
- A. With the price performance of small standalone word processors, significant improvements in efficiency at relatively low cost could be realized.
 - B. The benefits listed under 3A, 3B, 3C and 3H apply for this approach also.
 - C. The main drawbacks to this approach are:
 - 1. A diverse mix of machine types and software would probably result. This would impair CSD's (or the division's) ability to provide centralized training, standards, and assistance.
 - 2. The possibility of communication with the host computer system (and the advantages this offers) would be least likely with this option.
 - 3. Machine-readable document interchange between divisions would be least likely due to hardware/software incompatibilities.
5. Develop, staff, and operate a centralized departmental word processing center to be used by each division.
- A. Claimed by system vendors to be the most efficient option available.
 - B. Able to better accommodate peak workload situations of each division.
 - C. Disadvantages of this approach include:
 - 1. Logistics/Communication and coordination problems arising from the fact that the divisions are not housed together. Printing done at central location may be inconvenient for some users.
 - 2. Most administrators emphasized the need for close proximity of their professional/technical staff and clerical people.
 - 3. Quality of the finished product is likely to be impaired as a result of the word processing operators having little or no application knowledge.

NOTE: Computer Services Division currently provides centralized word processing services for any state organization needing them. These services include:

- o large document preparation
- o high volume printing
- o phototypesetter output
- o training
- o peak workload/crash project assistance

Recommendation

1. Promote the use of the existing host computer system for:
 - A. Large documents
 - B. Mass mailings/voluminous printing requirements
 - C. Any text application requiring excessive text storage.
2. Acquisition of IBM Displaywriters by those divisions having a need to automate their additional text processing functions.

Rationale/Discussion

This department currently provides computer system hardware, software, telecommunications network, and support personnel required for the state's data processing needs. Many of these existing resources can be readily applied to accommodate the department's text processing needs. Using these resources for both functions whenever possible and economically feasible will help in the move toward integration of data and text processing.

It is recognized however, that use of the host computer system is not an efficient means to accommodate day-to-day correspondence, memoranda, and other low-volume, high frequency working paper produced by each division. For those divisions that produce a substantial number of small-documents on a daily basis and are in need of automation, the acquisition of IBM Displaywriters is advised.

The IBM Displaywriter is only one of the various brands and models of stand-alone word processors available in today's market. They come in all different sizes and capacities; each with its own software and hardware options. Each

vendor claims to have the best product, with the most versatile, user friendly software, at the lowest price.

In fact, any of these products can represent an efficient, cost-beneficial alternative to the typewriter. IBM's Displaywriter is not necessarily the best machine for the price. The rationale for specifically recommending this product, therefore, requires further discussion.

1. The State of Montana has a large investment in its current data processing capability, including the host computer, software, teleprocessing network and personnel to make it all work.
2. This existing configuration is comprised of primarily IBM hardware and software.
3. Full integration of data processing and text processing will be a significant contribution to the efficiency of business and government.
4. Taking a common direction now will better prepare us for the technological advances of the future. The department's ability to take advantage of any technological advances is inversely proportional to the number of vendors involved.
5. The Displaywriter currently has a communications option which enables it to be used as a 3277 CRT terminal with the host computer system.
6. IBM has issued a "Statement of Direction" which establishes as a corporate objective the full integration and inter-communication capability of their Data Processing and office products.

Note: The prime interface to accomodate this objective is a software product called "DISOSS" which will run in the host computer.

Getting Started

Assuming that the recommendations of this study are applied, the following course of action is possible:

1. Continue to expand the use of the central computer system and its word processing software for:
 - A. Large documents and publications
 - B. Voluminous print jobs
 - C. Applications which require excessive magnetic storage

The Computer Services Division will provide training and assistance to any user wishing to start or expand utilization of the central computer system

resources. In addition, the production text processing staff is available for large projects which exceed the capacity of an individual user.

2. On a division-by-division basis, CSD will assist each office in getting up to speed using Displaywriter(s).

This assistance will include:

A. Configuration determination

-Hardware and software requirements, number of workstations required, etc.

B. Operator Training

-CSD Production Text Processing Unit personnel are currently training on CSD's recently-acquired Displaywriter and will be made available to assist operators unfamiliar with Displaywriters.

C. Application Development and Systems Analysis

The Systems Development Bureau will have available Programmers/Analysts who are familiar with the general capabilities, functions and limitations of the Displaywriter to develop and implement text processing systems for specific applications.

ATTACHMENT A

ACCOUNTING DIVISION

CURRENTLY USING:

- o 1 IBM Selectric
- o ATMS for multiple-page document

WORKLOAD: Heavy

- Letters/Memos o 6-12 per week.
- Mass Mailings o 15-30 per year to approximately 50-60 recipients.
- Large Documents o Annual Financial Report, 50-100 pages. 600 copies.
 - o Annual Official Statement, 65 pages. 2-300 copies.
 - o Statewide Indirect Cost Allocation Plan, 20-30 pages. 100 copies.
 - o MOM Vol II.
 - o FYE Schedule, 50 pages.

ADEQUACY OF CURRENT CONFIGURATION:

- o Currently using ATMS for large documents. Feels stand-alone word processor would be cost justified. Convenience of local printer would allow for automation of balance of paper production.

ATTACHMENT A

ARCHITECTURE AND ENGINEERING DIVISION

CURRENTLY USING:

- o 3 IBM Selectrics
- o 1 Adler memory typewriter

WORKLOAD: Extreme

- Letters/Memos o Over thirty memos per day.
- Mass Mailings o Average one mass mailing per week to approximately 60 recipients.
- Large Documents o Average ten contract bid specs per month; 60-70 pages/spec; 20-40 copies per job.
- o Preparation of Building Program Plans publication every two years, requiring camera-ready copy.

ADEQUACY OF CURRENT CONFIGURATION:

- o Adler has been a configuration "godsend" but its capacity has been exceeded. On-site printing capability needed.

ATTACHMENT A

BUILDING CODES DIVISION

CURRENTLY USING:

- o 5 IBM Selectrics

WORKLOAD: Extreme

- Letters/Memos
 - o "A lot" of memos per day.
 - o 500-600 projects each year requiring from 1-3 form letters each.
- Mass Mailings
 - o Average three mass mailings per year (examples: 50 cities, 300-400 electrical contractors, 600 elevators).
- Large Documents
 - o Rules manual.

ADEQUACY OF CURRENT CONFIGURATION:

- o Totally inadequate. This division's need for automation greatest of all.

ATTACHMENT A

CENTRALIZED SERVICES DIVISION

CURRENTLY USING:

- o 2 IBM Selectrics
- o ATMS for Bond offerings
- o Director's Office some

WORKLOAD: Comparatively light

- Letters/Memos o 1-2 memos per week, 3-7 pages each.
- Mass Mailings o 5-6 mass mailings per year, approximately 25 copies each.
- Large Documents o Annual Financial Statement, approximately 120 pages, 40-50 copies.

ADEQUACY OF CURRENT CONFIGURATION:

- o Adequate.

ATTACHMENT A

COMMUNICATIONS DIVISION

CURRENTLY USING:

- o Televideo TS-802
- o 3 IBM Selectrics

WORKLOAD: Moderate

- Letters/Memos
 - o 6-10 letters per day.
 - o 10-12 memos per week.
- Mass Mailings
 - o One mass mailing average per month, 50-75 copies each.
- Large Documents
 - o Request for quotes, 4 to 6 per year, average 60 pages each.
 - o Various reports, 3-4 per month, small distribution.
 - o Phone Directory (currently on ATMS).

ADEQUACY OF CURRENT CONFIGURATION:

- o Adequate.

ATTACHMENT A

DIRECTOR'S OFFICE

CURRENTLY USING:

- o 1 IBM MAG CARD II
- o 1 Olivetti TES401
- o CSD Production Word Processing Unit assistance (occasionally)

WORKLOAD: Heavy

- Letters/Memos o approx. 30 per week.
- Mass Mailings o 3-5 per week, 20-35 copies each.
- Large Documents o 60 page report, 12-15 per year, 6 copies each
- Other large reports occasionally.

ADEQUACY OF CURRENT CONFIGURATION:

- o Marginal - reaching capacity limits of both machines. Also suffering inefficiencies because of using two distinct and incompatible machine types in same office.

ATTACHMENT A

GENERAL SERVICES DIVISION

CURRENTLY USING:

- o 3 IBM Selectrics
- o 1 3278 terminal, recently acquired

WORKLOAD: Light

- Letters/Memos o Approximately 12 memos per day.
- Mass Mailings o Approximately 3 mass mailings per year (to all agencies).
- Large Documents o Large documents consist primarily of on-going contracts (12 currently) of 20-40 pages each.

ADEQUACY OF CURRENT CONFIGURATION:

- o Adequate, current plans include automating contracts to ATMS.

ATTACHMENT A

INSURANCE AND LEGAL DIVISION

CURRENTLY USING:

- o 1 Olivetti diskette typewriter (since spring of '78)
- o 1 IBM Selectric
- o Some of Personnel Division and Directors Office personnel at times.

WORKLOAD: Moderately heavy

- | | |
|-----------------|---|
| Letters/Memos | o Approximately 4
memo/letters per week, 10-
15 pages each, 3-4 copies. |
| Mass Mailings | o None |
| Large Documents | o Approximately 5 per year,
40-50 pages each, 25-30
copies each. |

ADEQUACY OF CURRENT CONFIGURATION:

- o Marginally adequate. Storage limits of Olivetti are being taxed. Could use higher powered/larger capacity standalone effectively.

ATTACHMENT A

INVESTMENTS DIVISION

CURRENTLY USING:

- o 2 IBM Selectrics
- o 1 Memory typewriter

WORKLOAD: Moderately light

- Letters/Memos o 1-2 memos per week.
- Mass Mailings o Approximately 12 mass mailings per year, 40-50 copies each.
- Large Documents o Annual report, 400 copies. Vol I - 93 pages; Vol II - 41 pages.

ADEQUACY OF CURRENT CONFIGURATION:

- o Basically adequate but could be streamlined with automation.

ATTACHMENT A

PURCHASING DIVISION

CURRENTLY USING:

- o 9 IBM Selectrics
- o ATMS - 3 terminals
- o 1 NEC 7710 printer

WORKLOAD: Heavy

- Letters/Memos o Approximately 10 per day.
- Mass Mailings o 2.500 RFQ's per year.
o 10,000 PO's per year.
- Large Documents o 3 50-160 page annual reports.

ADEQUACY OF CURRENT CONFIGURATION:

- o Local printer required for RFW's & PO's.
- o Currently developing/implementing purchasing system using ATMS.
- o Requisitions prepared by other divisions/departments could if prepared with a common format, be included in RFQ's without rekeying.

ATTACHMENT A

TEACHERS' RETIREMENT

CURRENTLY USING:

- o 3 IBM Selectrics - 1 extensively

WORKLOAD: Moderately heavy

- | | |
|-----------------|---|
| Letters/Memos | <ul style="list-style-type: none">o Approximately 5 per week.o 600-700 retirees per year each requiring three form letters. |
| Mass Mailings | <ul style="list-style-type: none">o Form letter for refund of contributions, 2-3 mailings per year, 5000 copies per mailing.o Memos to reporting employers, 800-900 copies twice per year. |
| Large Documents | <ul style="list-style-type: none">o Handbook of Information. |

ADEQUACY OF CURRENT CONFIGURATION:

- o Could benefit much from additional automation.

ATTACHMENT A

WORKERS' COMPENSATION COURT

CURRENTLY USING:

- o 2 IBM Selectrics
- o 1 Mag Card II
- o ATMS for ARM Manual

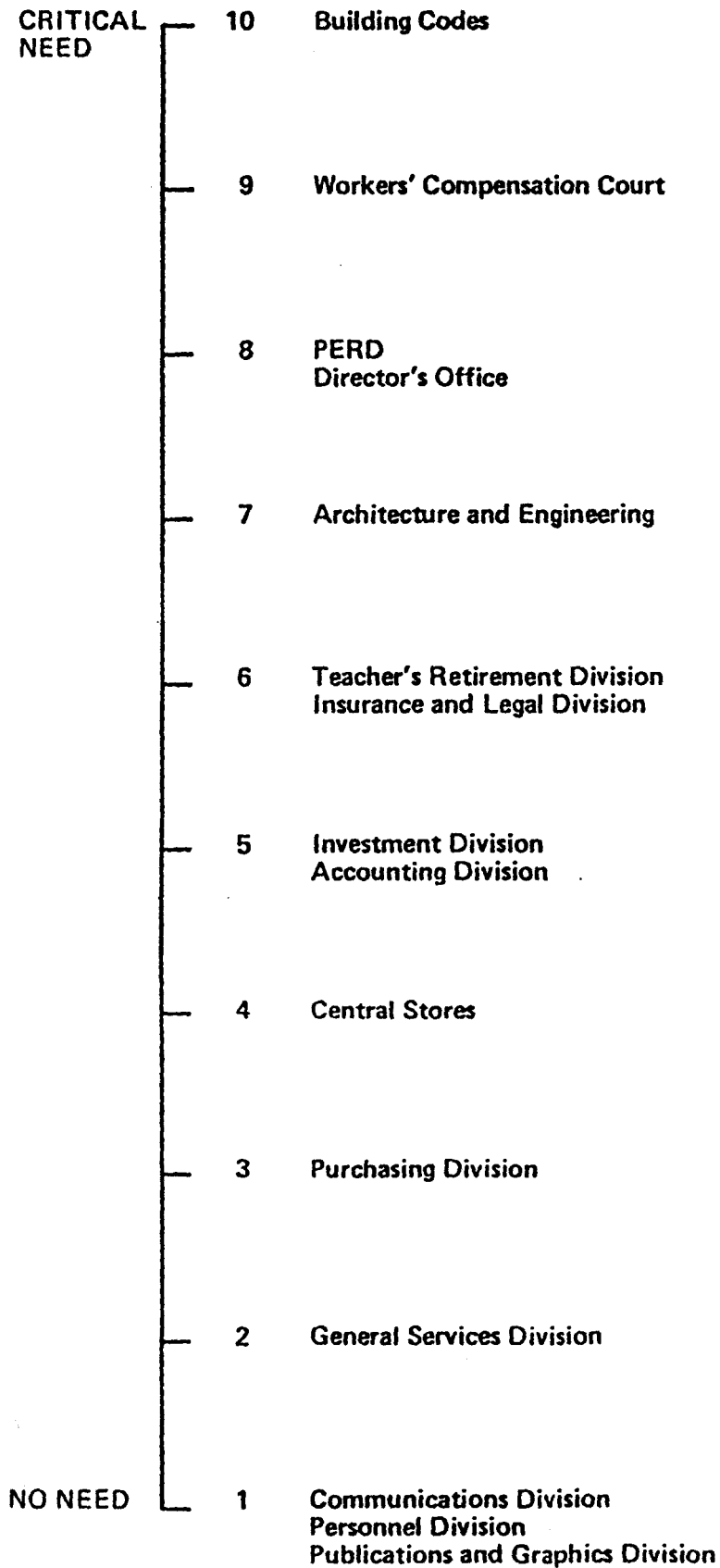
WORKLOAD: Extreme

- Letters/Memos
 - o 10-20 letters per week.
 - o Up to ten phone memos per day.
 - o 30-50 legal orders per week, 2-3 pages each.
 - o 2-3 findings of fact per week, 10-20 pages each.
- Mass Mailings
 - o Trial Schedules to all attorneys.
- Large Documents
 - o ARM Rules.

ADEQUACY OF CURRENT CONFIGURATION:

- o Over 95% of current workload is being done on Mag Card II which has worked well for them. Capacity of Mag Card II has been exceeded. Dire need for more horsepower.

**PRELIMINARY ANALYSIS OF RELATIVE NEED FOR
WORD PROCESSING AUTOMATION BY DIVISION**



Indexing Points;

1. This computer program - when completed - will make access to agency rules much easier for Legislators and the public. In fact, for the first time--all the rules promulgated by government agencies will be exposed in one complete index.
2. Montanans, who are the ones regulated by these rules, presently find it impossible to use the current index. They now must hire expensive legal counsel when they need to research rules promulgated against them. Should funding be continued, the average citizens of Montana - for the first time - will have a tremendous tool in finding all of the rules that regulate their lives.
3. There is an excellent comparison between this badly needed project and the recently completed re-codification of all the laws of Montana. I think we all can agree the MCA project was a success. For the first time - the general public - laymen like myself have the ability to find all the laws - without having to hire expensive counsel.

The MCA project was six years - ours is four. The MCA project had two fulltime indexers plus data entry staff. We are doing it all with one person.

4. Our index - as it now stands - is no worse, but also no better than what the public has been attempting to work with.

David Niss, legal counsel for the Administrative Code Committee, has reviewed our current index. Niss randomly picked 9 topics. He found -

- A. 3 were worse than the current index
- B. 5 were no better than the existing index; and
- C. 1 topic was better

Allegations that our work to date is adequate - for now - simply cannot be substantiated. Should this project be abandoned at the half-way point, we will have wasted \$90,000 already spent on this project. Putting this program on the shelf until next biennium will only cost Montanans even more.

We in the Secretary of State's office are very cognizant of the tremendous financial burdens we face this session. And even though we are a very small agency compared to most, we are more than willing to hold the line on expenditures.

But cutting off this project at its halfway point may indeed keep from the legislature a valuable tool that in future years could expose all the rules to help you to:

1. Eliminate costly rules and regulations that are duplications, causing two or more agencies to spend tax dollars, when possibly one could do the job.
2. Eliminate costly rules and regulations that are being administered by state agencies, when, in fact, the very reason the rules were adopted no longer exists.
3. To make compliance with the rules easier for Montanans, through reducing agency time needed to guarantee compliance.

Members of the committee, our approved budget of two years ago was based on a four-year commitment. Rejection of this project now seems to us to be a terrible waste of \$90,000 already spent. And the approval of approximately \$83,000 for this biennium seems to us to be an investment that could return to Montana the total cost of the project--many times over.

S/ Cliff Christian
Secretary of State Office

no Maffuck

Indexing Points

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rules much easier for Legislators & the public.

In fact, for the first time -- all

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Index

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Laymen like myself have the ability
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this project -- Putting ^{this Program} on the

Shelf until next biennium will

Only cost Montanans even more.

We in the Secretary of State
Office are very cognizant of the
tremendous financial burden you face
this session. And even though we
are a very small agency compared to
most, we are more than willing
to hold the line on expenditures.

But cutting off this project at its
beginning doesn't mean I've kept
from the legislature a valuable tool
that in future years could
to help you to: ^{Expose all the rules}

1. Eliminate costly rules and
regulations that are duplications,
causing two or more agencies
to spend tens of dollars, when
possibly one could do the
job.
- 2nd Eliminate costly rules and
regulations that are being
administered by state agencies,
when, in fact, the very
reason the rules were adopted, no
longer exists.

3. to make compliance with the
rules easier for Montana,
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Members of the committee our
opinion is that of two years ago was based
on a four year commitment. Reaction
of this project now, seems to us
to be a terrible waste of
\$90,000.00 already spent, and the
approval of approximately \$83,000.00
for this Biennium, seems to us
to be an investment that would
return to Montana the total
cost of the project -- money
turned over.

Chas. Christian
Secretary of St.

ADMINISTRATIVE RULES PROGRAM FUNDING

Exhibit 6
3-4-83

SECRETARY OF STATE

Option 1 -- Increase Proportion of General Fund Support, No Change in Fees.

<u>FUND SOURCE</u>	<u>FISCAL 1984</u>	<u>FISCAL 1985</u>
GENERAL Fund	\$139,153	\$143,935
EARMARKED Fund	79,600	79,000

FEE SCHEDULE

MAR Subscriptions @ \$170.....	\$32,980
ARM Updates @ \$100.....	20,700
AGENCY Filing @ \$13.50.....	22,410
ARM Sales @ \$350.....	3,500
TOTAL	\$79,590

Option 2 -- Maintain Proportion of General Fund Support, Increase Fees.

<u>FUND SOURCE</u>	<u>FISCAL 1984</u>	<u>FISCAL 1985</u>
GENERAL Fund	\$112,111	\$114,562
EARMARKED Fund	106,642	108,973

FEE SCHEDULE

MAR Subscriptions @\$200.....	\$36,000
ARM Updates @\$135.....	27,000
AGENCY Filing @\$25.00.....	41,000
ARM Sales @\$350.....	3,500
TOTAL	\$108,000

Water Development Funds

Ending Balance FY 82 503,035

Fiscal Year 1983:

REVENUE:

30% RIT

1,000,947

Project Revenue

280,000

Total Available FY 83

1,783,983

EXPENDITURES:

Less Budget Amendment Projects

1,014,874

Ending Balance FY 83

769,103

Fiscal 1984:

REVENUE:

30% RIT

1,230,404

Project Revenue

280,000

.625 Cont

473,000

Total Available FY 84

2,752,505

EXPENDITURES:

Less Amounts Committed

1,013,192

Ending Balance FY 84

1,739,313

Fiscal 1985

REVENUE:

30% RIT

1,470,576

Project Revenue

280,000

.625 Cont

774,000

Total Available

4,263,889

FY 85 Total Available	4,263,889
Expenditures Committed	<u>778,648</u>
End Balance FY 85	3,485,241

End Balance FY 85	3,485,241
LESS Water Courts 85 Biennium Balance	<u>1,018,037</u>
	2,467,204
LESS Water Adjudication	<u>2,551,176</u>
End Balance	(83,972)

VISITOR'S REGISTER

HOUSE Elected Officials/Highways COMMITTEE
Appropriations Sub-committee

BILL

DATE 7/4/83

SPONSOR _____

[illegible]

IF YOU CARE TO WRITE COMMENTS, ASK SECRETARY FOR LONGER FORM.

WHEN TESTIFYING PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.