MINNESOTA

IRON RANGE STATE HOSPITAL



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The Legislative Research Committee is a joint committee of the legislature, meeting quarterly at the State Capitol and giving advance consideration to problems expected to confront the next legislature.

The Committee (1) acts as a clearing house for current legislative problems by receiving proposals for research studies; (2) determines and directs the study and research necessary for proper consideration of all proposals; (3) disseminates advance information on these problems to other legislators, the governor and the public by means of committee and research reports; and (4) reports to the legislature one month in advance of the regular session.

The Research Department of the Legislative Research Committee is organized to provide an unbiased, factual source of information with regard to problems which may be acted upon by the legislature. This department is engaged in objective fact finding under the general supervision of members of the Committee.

MINNESOTA

LEGISLATIVE RESEARCH COMMITTEE

IRON RANGE STATE HOSPITAL

Research Report issued pursuant to Proposal No. 111

RESOLVED that the Legislative Research Committee conduct a survey and investigation regarding the feasibility of the establishment of a state institution on the Iron Range to be known as the Iron Range State Hospital.

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INTRODUCTION

The proposal did not specify whether the Legislative Research Committee should study the needs for a mental hospital or a hospital for retarded children. However, in the first meeting it was apparent that the gains in the mental health program would preclude the need for an additional institution for the mentally ill in the foreseeable future. This is evidenced by the fact that the average daily resident population in the institutions for the mentally ill has declined from 11,297 in fiscal 1955 to 10,925 in fiscal 1959 or an average decrease of 120 patients per year. At the same time the preliminary information indicated the possibility of need for another institution for the retarded. Therefore the committee has concentrated its efforts on a study of the needs of the retarded.

To accomplish the study the subcommittee held a total of 11 meetings including hearings, institution visitations and reviewing prospective sites. In addition several meetings were held for the purpose of drafting this report.

In order to obtain a better understanding of the care and treatment program in the institutions for the mentally retarded and epileptic the committee visited the following institutions:

Faribault State School and Hospital Cambridge State School and Hospital Brainerd State School and Hospital Owatonna State School Lake Owasso Children's Home Annex St. Cloud Annex for Defective Delinguents

These visits also gave the committee an understanding of the type of construction required to provide the best patient care and most economical maintenance.

Commissioner Hursh of the Department of Public Welfare and several of his staff members cooperated in the study and presented information on the care and treatment programs - both present and contemplated. Mr.Walsh of the Minnesota Association for Retarded Children appeared before the committee as did the State Architect, Mr. Alfred Nelson.

Publications of national authorities in the field of mental retardation were also studied and excerpts are included in the report.

CARE AND TREATMENT PROGRAM

The hospitals for the retarded are not merely custodial institutions. Bather they have active care and treatment programs with good medical care even though the institutions have difficulty in filling the authorized medical staff.

Each institution has an educational program which is generally limited to those with an IQ of 50 or above and goes up to the eighth grade. There are also a few classes which offer special training such as a household training course for educable girls. In addition handicraft programs, industrial programs, and recreation programs are provided so that almost all patients are able to take part in some activity.

RECENT DEVELOPMENTS IN THE CARE AND TREATMENT OF THE MENTALLY RETARDED

From statements made by professional personnel of the Department of Welfare and from information in technical publications it is apparent that changes in the care and treatment of the mentally retarded are taking place. This new philosophy Involves establishment of community facilities for the retarded.

The first step towards establishment of community facilities was taken by the 1957 Legislature when they passed an act (L. '57, C. 867) requiring school districts to establish classes for the mentally regarded classified as educable. This act also provided for payment of special state aids to partially defray the cost of conducting these classes. A similar act, including payment of aid, was also passed by the 1957 Legislature (L. '57. C. 803) which authorized local school districts to establish classes for the trainable mentally retarded.

At the present time approximately 331 classes for the educable retarded and 36 classes for the trainable retarded are conducted throughout the State. It is estimated that 4,735 educable and 349 trainable pupils attend these classes.

The educable retarded (IQ's of 50 or over) do not usually require institutional care and can get along quite well in the community, particularly when there is a protected environment. For this reason they are not considered as the greatest potential source for the institution population. As of June 30, 1959 there were 1,512 educable retarded in our institutions, Of this number 355 were in the Owatonna State School which provides an academic program for retarded persons up to age 21.

The Department is attempting to Increase the number of placements from the Institution back to the community. Some members of their professional staff feel than an analysis of the 1,512 mildly retarded (educable) patients is necessary to determine if some of them can be returned to the community.

It should be indicated that only 508 or approximately one-third are age 19 or younger. The largest age group of 415 is from 40 to 64 years of age and it would appear doubtful that many of this group could be placed into the community.

The Department of Welfare is encouraging communities to establish educational facilities for the trainable retarded. Since this is not mandatory they are urging the County Welfare Boards to stimulate community interest. They are

also trying to develop a day care center to provide leisure time activities for retarded children.

The waiting list is being screened to determine the actual number requiring institutionalization. Staff social workers in the various counties are urged to consider use of the community facilities which are presently available, rather than hospitalization, when working with the family in determining a plan for the retarded child.

FOSTER-HOME CARE

Foster Home Care provides a means of caring for the retarded child in the community. According to figures obtained from the Department of Welfare there are more than 300 children in such private facilities. Although a foster home usually would not be equipped to carry out education functions it does have the advantage of providing individual care. Of course a retarded child in a foster home could be enrolled in either an educable or trainable class in the local school.

In 1958 the average daily per capita cost of caring for retarded children in boarding homes ranged from a low of \$.93 per day in Beltrami County to a high of \$4.93 in Renville County. The average was \$3.18 per day. This compares to \$2.99 per day at the Faribault State School and Hospital and \$3.55 per day at the Cambridge State School and Hospital in the same year*

The figures for the State Institutions do not include amortization of buildings and equipment* Adding an amortization factor would increase the per capita cost at both State Institutions beyond the average for boarding home care. However, it should be remembered that the State Institutions provide a complete care and treatment program while the boarding home care provides only board and room, clothing and medical care.

Despite this difference in care it is apparent that some retarded children can be adequately cared for in a boarding home situation. Increased use of boarding homes should be encouraged whenever it fits the needs of the children in order to reduce the pressure of the waiting list and as a possible aid in relieving the overcrowding in the institutions.

The supervisor of the Section of Mentally Deficient and Epileptic of the Department of Public Welfare is very hopeful that the new concepts will reduce and possibly even eliminate the need for additional beds. However, other experts in the field are not as hopeful. Dr. Gunner Dybwad, the executive director of the National Association for Retarded Children recognizes the changes that are taking place; however, he does not believe that the need for new institutional bed space will be eliminated. In commenting on the oft repeated phrase "institutions are on the way out" he said:

"I most strongly disagree with this view. To be sure, we shall see many radical changes in our institutional patterns across the country, but we certainly will not only continue to need, but in my opinion will undoubtedly increase the use of facilities for residential group care of the mentally retarded. But what kind of facilities will be needed for what kind of group care?

WE SHALL FIRST provide hospital facilities for those so severely handicapped as to require permanent around-the-clock nursing care. . .

Next I would put children suffering from a combination of physical and mental handicaps, but who can be helped materially even in infancy by an intensive therapeutic program in a residential setting. Alleviation of the more severe physical disabilities in this fashion should make it possible for a substantial number of these children to be cared for in their own families. . .

NEXT is quite a different program with emphasis on training rather than medical needs* Many severely retarded children age 5, 6 or 7 or thereabouts could profit from an Intensive residential educational program over a period of one, two or three years, which would help the youngster sufficiently to return to his home and make a satisfactory adjustment there. . .

Another group that would benefit from an intensive temporary residential training program are certain of our adolescents, who during that period of contradictory growth patterns, hard enough for the average youngsters, will respond better to a specialized education program woven into a pattern of group living. ...

That severely retarded adults can make an adjustment in the community has certainly been demonstrated.... But the time may come for many of these older severely retarded individuals when the pressures of community living become too much and they wish for a more sheltered environment with others like themselves. In contrast to the other programs I have mentioned, they will require neither intensive medical care nor specialized educational or training efforts.

One might gather. . .that I foresee a tremendous increase in Institutional facilities. However, it must be remembered that several of (these proposed programs) are temporary programs providing for eventual and in some cases early return home. Furthermore, long-range planning for residential care must take into account that certain new community programs, such as day-care centers, can bring sufficient relief to the parent so as not to make it necessary for them to ask for care in an institution."

Other experts have indicated a need for additional hospital beds. They refer to the increasing longevity of the mentally retarded as one of the casual factors. Tears ago the retarded with severe spastic conditions, or mongolism or other such conditions would die at an early age. With the recent advances in medical science their life span has increased.

CONVERSION OF MENTAL HOSPITAL TO AN INSTITUTION FOR MENTALLY RETARDED

Mr. Hursh, Commissioner of Welfare, indicated to the committee that it might be possible to convert an existing mental hospital - possibly St. Peter -to an institution for the mentally retarded. The theory being that as the mental hospital population decreased the vacated space could be used for the mentally retarded. One of the factors contributing to this statement is the department's estimate that 2,500 mental hospital patients could be returned to the community. Host of these patients could be cared for in nursing homes if facilities were available.

Unfortunately this nursing home space is not available and if it were it would be more costly in most instances than care in our State Hospitals. As

shown in Table I the per capita cost in the seven mental hospitals in 1959 varied from a low of \$1,318.93 at Moose Lake to a high of \$2,143.74 at Anoka (including care of T.B. patients.) The cost of nursing home care, both county and private, varies considerably throughout the State. In 1959 the per capita cost of County operated nursing homes ranged from a low of .\$997.56 in Traverse County to a high of \$2,822.40 in Kittson County and an average cost of. \$1,531.80. It should be noted that only two state hospitals - Anoka and Hastings exceeded this average per capita cost.

In February 1960 the Department of Welfare made a survey of private nursing home costs and found minimum rates of less than \$1,080 and maximum rates of over \$3,600. In this instance only the Anoka State Hospital has a higher per capita cost than the average rate of \$1,764.00.

TABLE I COMPARISON OF PER CAPITA COSTS NURSING HOMES AND STATE HOSPITALS

	Annual Per Capita Cost		
	High	Low	Average
County operated nursing homes (1959)	\$2 , 822.40	\$ 997.56	\$1531.80
Privately operated nursing homes (Feb.	3,600.00	1,080.00 1	1764.00
State Mental Hospitals (Fiscal 1959)			
Anoka			2,143.74
Fergus Falls			1,484.40
Hastings			1,742.12
Moose Lake			1,318.93
Rochester			1435.33
St. Peter			1,354.05
Willmar			1,415.50

(1) Survey made by Department of Welfare indicated minimums of less than \$1,080 and maximums of more than \$3,600.

Because of the nursing home situation and -the unwillingness of relatives to accept the responsibility of assisting patients in adjusting to community life it is not very likely that the department will be able to discharge a significant proportion of these patients.

The other factor in Mr. Hursh's proposal was the declining population in the mental hospitals. A review of the Departments statistical report of June 30, 1959, indicates the population of the mental hospital decreased from 11,448 on June 30. 1954 to 10,648 on June 30, 1959 - an average decrease of 160 per year. In the same period the average daily population, which is the measure by which certain budgetary allowances are made, decreased from 11,524 in fiscal 1955 to 10,925 in fiscal 1959 - an average decrease of 120 per year. Since bed space has to be provided on the basis of the average population rather than the population on a particular date it would seem that the trend shown in the average daily population should be used in estimating availability of bed space.

The department has claimed that the mental hospitals are 18% overcrowded (about the same as the hospitals for the retarded). This committee has not verified this claim, however, if it is true it indicates a need for 1,966 beds based

on the 1959 average daily population. At the present rate of decrease it would take approximately 16 years to eliminate the reported overcrowding. It is very possible that improved treatment methods may accelerate this decline. However, planning should be based on present trends with sufficient flexibility provided to allow adjustments as new situations develop.

A further complication to this suggestion is the condition of some of the buildings at St. Peter. Present long range plans of the Department of Welfare call for the replacement of the obsolete buildings over the next ten years. If, in the ten year period, surplus space develops in other mental hospitals then patients from St. Peter could be transferred and plans for new buildings reduced accordingly.

HOSPITAL SIZE

There is disagreement among experts in the field as to the optimum size for an institution. As Dr. Vail, Medical Director of the Department of Welfare, stated before the Committee, "You talk to five experts and get eight different answers."

The National Association for Retarded Children suggested a maximum size of 1,500. In Minnesota we apparently have set 2,000 as the maximum for new institutions. Dr. Dybwad of the NARC has recently stated that in the far distant future the institutions will not exceed 500 to 700 residents. Other experts claim that a large institution, properly staffed can provide as good care and treatment as a small hospital.

The committee does not take issue with the claims of any of these experts. We do want to point out the obvious economical advantage of a large institution as shown in Table II.

The cost of operating the schools and hospitals varies considerably as might be expected. However, it is readily apparent that the larger institutions operate at a much lower cost than the small institutions. There is also a significant difference in cost between Faribault and Cambridge indicating that more economical operations can be carried out in the very large facilities. Some of this difference in cost between Faribault and Cambridge is due to the latter institution having a higher ratio of nursing personnel to patients with a resultant higher salary cost. However, most of the difference can be attributed to economical operation of the larger hospital.

TABLE II

DEPARTMENT OF PUBLIC WELFARE

SCHOOLS AND HOSPITALS FOR THE MENTALLY RETARDED AND EPILEPTIC

Per Capita Costs

1957	<u>Faribault</u>	Cambridge	Brainerd	Shakopee	Lake <u>Owasso</u>	Owatonna	Total and <u>Average</u>
Average Daily Population	3,142	1.356	N/A	29	90	325	4,942
Total Expenditure	\$2,795,939.00	\$1,446,886.00		\$47,028.00	\$146,301.00	\$622,906.00	\$5,059,061.00
Annual Per Capita Cost	889.86	1,067.03		1,621.66	1.625.57	1,916.64	1,023.69
Daily Per Capita Cost	2.44	2.92		4.44	4.45	5.25	2.80
1958							
Average Daily Population	3.206 1	1.432	N/A	29	N/A	317	4,984
Total Expenditure :	\$3,504,368.00	\$1,856,776.00		\$56,040.00		\$740,560.00	\$6,157,744.00
Annual Per Capita Cost	1,093.07	1.392.63		1,932.41		2,336.15	1,235.50
Daily Per Capita Cost	2.99	3.55		5.29		6.40	3.43
1959							
Average Daily Population	3,139 2	1.716	81	28	N/A	313	5 , 277
Total Expenditure	\$3,654,042.00	\$2,492,504.00	\$329,649.00	\$56,806.00		\$780,580.00	\$7,313,581.00
Annual Per Capita Cost	1,164.08	1,452.51	4,069.74	2,028.78		2,493.87	1,385.94
Daily Per Capita Cost	3.19	3.98	11.15	5.56		6.83	3.80

⁽¹⁾ Includes 99 patients at Lake Owasso.

⁽²⁾ Includes 106 patients at Lake Owasso.

OUT-PATIENT AND DIAGNOSTIC FACILITIES

The question of providing out-patient and diagnostic facilities for the retarded has become more prominent recently. Mr. Walsh of the Association for Retarded Children suggested that such facilities be included as a part of anynew hospital which might be built. He also proposed that hospital employees, as a part of their job, might serve as consultants to community facilities in the region served by the hospital.

Whether or not such facilities should be included in a new hospital would be dependent on the recommendations of the professional staff of the Department of Welfare. It should be stated that Minnesota, at this writing, has fourteen Community Mental Health Centers which provide out-patient and diagnostic services to both the mentally ill and mentally retarded. These clinics are financed on a 50-50 basis by the State and community and should increase in number in the near future.

NEED FOR ADDITIONAL HOSPITAL BEDS FOR THE MENTALLY RETARDED AND EPILEPTIC

The need for additional hospital beds for mentally retarded and epileptic persons is difficult to determine. A complete census of those requiring hospitalization is not available. Each school district takes a census of retarded children but they are not able to measure the degree of retardation and therefore a determination of the number requiring hospitalization or other specialized care cannot be made.

The Department of Welfare maintains a waiting list of retarded persons, committed to the Commissioner, for whom the responsible relatives feel hospitalization is the best solution. However, in some instances, hospitalization is refused when it is offered because the family has been able to care for the child* (This refusal rate was 25% in the past year.) Further, this list does not anticipate possible population growth in future years.

The Department of Health and Department of Welfare are cooperating in a long term study called the Four County Project for Retarded Children. The project has as its principal objective the encouragement of community responsibility for mentally retarded children and the development of adequate services for the children and their families. As one facet of this study they are attempting to identify or locate all retarded children in Becker, Clay, Wilkin and Otter Tail Counties. The children will be given psychological examinations and they will attempt to determine the type of resource (state institution, day care center, special class) the child needs, however, at present they cannot make an estimate of the number of children requiring hospitalization which may be located as a result of their study.

Because of the lack of specific information the Legislative Research Committee asked the Division of Research and Statistics of the Department of Welfare to make a projection of the need for hospital beds up to the year 1970. The statistical records of 1950 and 1955 through 1960 were used as the basis for the projections. Provision was also made for the bed space which is refused, as mentioned in a previous paragraph. The projection is shown in Table HI.

In reviewing the records it was found that the number of retarded persons in the institutions and on the waiting list were not a fixed percentage of the $\frac{1}{2}$

TABLE III
1960-1970 Projections of Mentally Retarded and Epileptic

Waiting List and State Population

Year Ending June 30 1950	Waiting List June 30 881	Beds to Become Available at Brainerd State Hospital	Book Pop. June 30 At MRE Inst. 4439	Total Book Population & Waiting List 5320	Minnesota Population 2,982,483 1	Percent MRE of Total Population .178%
1955 1956 1957 1958 1959 1960	958 918 1174 1425 1190 1071		4872 5141 5219 5212 5828 6045	5830 6059 6393 6637 7018 7116	3,150,367 3,199,846 3,250,817 3,304,561 3,345,392. 3,393,302	.185- .189 .197 .201 .210
ι ω ι 1961	Projection I_ II 1114 1183	171 ²	6216	Projection I II 7330 7399	3,441,219	Projection I II .213% .215%
1962 1963 1964 1965 1966 1967 1968 1969	910 1050 1120 1332 863 1149 1078 1441 714 1156 946 1470 1182 1789 1422 2114 1664 2443	410 ² 470 ² 594 ²	6626 6626 7096 7096 7690 7690 7690 7690	7536 7676 7746 7958 7959 8245 8174 8537 8404 8846 8636 9160 8872 9479 9112 9804 9354 10133	3,469,117 3,537,046 3,584,974 3.632,873 3,685,812 3,738,721 3,791,631 3,844,540 3,897,479	.216 .220 .219 .225 .222 .230 .225 .235 .228 .240 .231 .245 .234 .250 .237 .255 .240 .260

^{1.} Actual census figures

Projection II assumes MRE population in State Institutions will increase at the rate of .005% of state population as it did from 1955-1960 on the average.

PREPARED BY: Division of Research and Statistics
Minnesota Department of Welfare

^{2.} Assumption — that beds at Brainerd State Hospital will become available according to this time table and will be filled thereafter.

Projection I assumes MRE population in State Institutions will increase at the rate of .003% to state population as it did from 1950-1960 on the average.

total population as was commonly thought. Instead the number of these retarded persons has grown at an increasing rate each year since 1950, except for the last year which remained unchanged from the 1959 rate. One of the causes of this change in 1960 was the fact that the personnel in the section of mentally deficient and epileptic worked with county social workers and "purged" the waiting list. In so doing they removed 350 prospective patients from the waiting list which otherwise would have been included until such time as the bed space was offered.

During this same period we have also had an increase in the number of retarded persons committed, due to an increasing state population. Because of this it was necessary to forecast the growth in the State population (Col. V). This was done by projecting the average growth between the 1950 and 1960 census with an adjustment for the increased rate of growth which has occurred since 1955.

In Table III the waiting list (Col. I) and the total institution book population (Col, III) are shown for the years 1950 and for 1955 through 1960, When the total of these two figures (Col. IV) is expressed as a percentage of the State population (Col. VI) we find that the mentally retarded in institutions and on the waiting list increased from .178? of the total population in 1950 to .210% in 1960 or an average growth of .003% per year. In the last five years of this ten year interval the increase has occurred at an even greater rate - from .185% in 1955 to .210% in 1960 or an average of .005%.

Unfortunately the records do not disclose the reasons for the increasing rates. Possible causes are left to individual conjecture but may include:

- 1. Increasing longevity of patients due to improved medical care.
- 2. Improved facilities and care are more attractive to parents and they become willing to place their child in an institution.

Because of the difficulty in ascertaining the cause of the increasing rate of commitments one can only presume that it will continue. It is not known whether the experience of the last ten years (.003%) or of the last five years (.005?) is the best basis for estimating growth in the next ten years. Therefore both rates have been projected - .003% as Projection I and .005% as Projection II.

The Table also shows that the institution book population (Col. III) has increased from 4,439 on June 30, 1950 to 6,045 on June 30, 1960 - an increase of 1,606. In this same ten year period the waiting list (Col. I) increased from 881 to 1,071 or 190. This points out that despite construction of new facilities which provided an average of 160 new hospital beds each year, the waiting list has continued to grow.

The need for constructing a new hospital becomes apparent even when using Projection I, the more conservative estimate. This projection shows that the waiting list will be 1, 114 on June 30, 1961 after 171 patients have been placed in the new facility at Brainerd. The list will alternately increase and decrease until 1966 when the last building planned for construction at Brainerd will be completed. At that time the waiting list is estimated to be 714 and it will grow to 1,664 by June 1970.

It must be remembered that the above figures are based on the more conservative estimate. Should Projection II prove to be more accurate there will be a need for 2,443 beds by 1970.

OVERCROWDING IN PRESENT INSTITUTIONS

The superintendents of Faribault State School and Hospital and Cambridge State School and Hospital in appearing before the committee strongly emphasized the problems caused by overcrowding in their institutions.

When the committee visited the Faribault institution Dr. Engberg, Superintendent, stated that according to Department of Health Standards they are overcrowded by 18%. The present population is 3,150 and they are overcrowded to the extent of 544 patients. Re also indicated that five buildings with a total rated capacity of 186 patients have a number one priority for replacement* In addition he indicated that in the next ten years four additional buildings with a total rated capacity of 426 patients should be replaced. Thus it is apparent that Faribault has buildings available for long term use with a rated capacity of only patients.

Many authorities on the care and treatment of the mentally retarded have indicated that a small institution of from 500 to 1,200 patients would provide the best setting for a good care and treatment program. Others have stated that a large institution, properly, staffed, can provide a good program. Dr. Engberg has indicated that a maximum population of 2,500 would be satisfactory but a population of 2,000 is more desirable. This committee is of the opinion that consideration should be given to the elimination of the overcrowding and not replacing the obsolete buildings. Rather a maximum population of 2,000 is established at Faribault and the remaining 1,150 patients cared for in another institution. This recommendation differs somewhat from the Legislative Building Commission's suggested maximum of 2,550. However it is believed that the reduced population will provide a better opportunity for improving the care and treatment program while still retaining some of the economy of a large: institution.

In visiting the Cambridge institution the committee again observed over-crowded wards. Dr. Adkins, Superintendent, indicated that the present 2,000 patient population is also overcrowded by approximately 18% according to Department of Health standards. Presuming these standards to be realistic it would appear that the best way of overcoming the overcrowding would be through construction of another building at Cambridge. Such an addition would be contingent upon the adequacy of the present power plant and ether service facilities such as the laundry and kitchen.

SHAKOPEE HOME FOR CHILDREN

Employees of the Department of Public Welfare indicated that they are somewhat concerned over the difficulty they have keeping the home filled and the lack of an educational program. Because of limitations – 30 trainable girls from 4 to 12 years of age, able to walk up and down stairs – it is not economically feasible to establish a training program. Another disconcerting fact is the high per capita cost, \$2,028.78, per patient in fiscal 1959. In the same year the cost at Faribault was \$1,204.76 and at Cambridge, \$1, 452.51.

When these facts are considered along with the new programs for trainable children being established in the local school districts it appears that the Shakopee Home for Children can soon be closed or its function changed to care for a different type of retarded child.

LAKE OWASSO CHILDREN'S HOME ANNEX

The Home cares for approximately 110 female patients all of which are classified as trainable. The Home is an annex of the Faribault State School and Hospital and does carry out an educational program as well as a recreation program. Mention was made of the possibility of using the Home as a research facility. For the present it appears that the home should be continued even though the per capita costs are somewhat higher than the larger institutions.

ELIMINATE THE WAITING LIST OR REDUCE OVERCROWDING?

During the course of the survey the committee heard statements urging the elimination of the waiting list before reducing the overcrowding and equally strong arguments to the contrary. Mr. Walsh, of the Minnesota Association for Retarded Children, was very definite in supporting reduction of the overcrowding before eliminating the waiting list. He favored a reduction of the Faribault population and building the new buildings elsewhere.

The committee is of the opinion that the Commissioner of Public Welfare, as guardian of the retarded children, should decide each situation on its merits rather than establishing a definite policy in favor of either point of view. In this way, as additional space becomes available the Commissioner can decide which need is most critical.

It appears that 1,180 new hospital beds would be required to replace existing beds at Faribault (1,150) and Shakopee (30). In the following tabulation the 1,180 beds have been added to the projected waiting lists from Table III in order to show the total need for new hospital beds.

TABLE IV

NEED FOR ADDITIONAL BEDS COMBINED
WAITING LIST AND ELIMINATION OF OVERCROWDING

TEAR	PROJECTION IA	PROJECTION IIA
1961	2,294	2,363
1962	2 , 090	2,230
1963	2,300	2,512
1964	2,043	2 , 329
1965	2,258	2,621
1966	1,894	2,336
1967	2,126	2 , 650
1966	2,362	2 , 969
1969	2,602	3,294
1970	2,844	3,623

SUB-COMMITTEE RECOMMENDS NEW HOSPITAL

The foregoing facts clearly point to the need for a new institution -and in the near future. As a result of its study the sub-committee suggests that the 1961 Legislature appropriate \$250,000 for preliminary plans and specifications for an Iron Range State School and Hospital based on an estimated cost of \$25,000,000

to \$30,000,000 for a 2,000 bed hospital. It will also be necessary to authorize acceptance of one of the sites offered by Iron Range communities in order to facilitate completion of the plans.

The committee also suggests there is an immediate need for completing the Brainerd State School and Hospital. As of July 1, 1960 approximately 526 beds are completed and funds appropriated for completion of two patient buildings and for constructing four additional patient buildings. The report of the Legislative Building Commission to the 1959 Legislature indicated the following time schedule for completion of the remaining patient buildings planned for Brainerd:

1961 - Construction of four patient buildings

1963 - Construction of four patient buildings

- Construction of three patient buildings

According to this schedule the Brainerd institution would not be completed and fully occupied until the end of 1966.

In view of the urgent and immediate need for more bed space for retarded children it would appear that the 1961 Legislature should appropriate the funds necessary to complete construction of the eleven remaining patient buildings. The committee recognizes that the Legislature will be faced with a problem in financing building appropriations but when that problem is overcome the Brainerd institution should be given number one priority.

If this is done the Brainerd institution might possibly be at the full capacity of 2,000 patients by 1963. Even this immediate action would not completely fill the demand for bed space. The combined need for additional beds (projection of waiting list, elimination of overcrowding and abandoning obsolete buildings) based on the more conservative estimate would still be 1,236. The waiting list would then continue to grow and/or overcrowding in existing facilities would increase until a demand for 2,844 beds is reached in 1970.

ADMISSION AREA AND HOSPITAL SIZE

The projection in Table IV indicates a minimum need, of 2,844 new hospital beds by 1970 in order to eliminate the waiting list, reduce the overcrowding and replace obsolete buildings at Faribault, and allow the closing of the Shakopee Rome for Children. Undoubtedly the new programs will meet with some success and reduce the present apparent need for additional beds. The degree of success of these programs remains to be proven but the consensus of professional personnel indicates a need for additional beds.

Geographically speaking the Northeastern part of the state provides an ideal location for an institution for the mentally retarded. The residents of this area are farther removed from present hospital facilities than those of any other area of the state. St. Louis County, the center of this region, has the third largest population in the State* Located within the area are several ideal building sites with picturesque settings and adequate service and utility facilities readily available.

As a result of the committees suggestion the follow institution populations would prevail:

Faribault	2,000
Cambridge	2,000
Brainerd	2,000
Iron Range	2,000
Owatonna	370
Lake Owasso	110
Annex for Defective Delinquents	70
Total	8 , 550

A 2,000 bed hospital is urged on the presumption that the new programs would reduce the need for additional beds. Projection I of Table $\overline{\text{VI}}$ indicated a need for 9,354 beds by 1970 as compared to 8,550 indicated above. It appears that, should the new concepts not be as successful as the more enthusiastic proponents anticipate, it may be necessary to provide another hospital in the distant future. Changing of present state-wide population trends would also have an effect on requirements for hospital space.

When the institution on the iron range is completed the admission area for all schools and hospitals for the mentally retarded and epileptic will have to be altered. The three smaller institutions - Owatonna, Lake Owasso, and Annex for Defective Delinquents - will continue to draw from the entire state because of their special programs. Each of the four large institutions will accommodate approximately 25% of the patients and can draw from the nearest contiguous counties necessary to fill the hospital.

A map showing the county of residence of the mentally retarded persons in the institutions and on the waiting list as of June 30, 1960 is shown as an appendix to the report. There maybe further shifting of the state population from rural to urban areas but for practical purposes one can presume that the present proportionate distribution will be maintained through 1970.

The proposal requested that the report include information on the effect the Iron Range hospital would have on existing hospitals. In this regard the committee is of the opinion that the only change affecting the other institutions for the retarded will be a reduction in the size of admission area, a decrease in the population at Faribault to eliminate overcrowding and abandon obsolete buildings and closing of the Shakopee Home for Children.

LOCATION OF PROPOSED INSTITUTION

In following the instructions contained in the study proposal the subcommittee visited five building sites which were offered to the state without charge by various Iron Range community and civic groups. Each of these sites contains desirable features and is worthy of consideration.

Before visiting each site the committee spent several hours with local residents reviewing the physical characteristics of the site, availability of utilities, local labor markets, transportation facilities and the countless other items necessary to the establishment of a state institution. Since this committee is without authority to accept any of these offers, remarks will be confined to a comparison of the attributes of the various locations.

A large institution as proposed in the subcommittees' recommendation will require the services of many different professional, technical and skilled employees as well as unskilled and clerical personnel. Because the proposed institution will be located within the third largest county of the State, recruiting of personnel should be easier than in most other areas.

In this regard the State Medical Society has indicated that St. Louis County has 277 medical doctors and four psychiatrists as members. In addition, it is understood that University professors and other specialists serve as consultants to the medical profession on the Iron Range. This arrangement is convenient to specialists in the Twin City area because of regular airline service to the Range cities.

In addition to the requirement of an adequate labor force (which the Iron Range has) the proposed hospital must be located on a site which has available the necessary service facilities.

To allow a comparison of the more important items necessary to the establishment of an Institution a listing of the facilities available at each site is presented in Table V.

In general the site should contain approximately 200 acres of land with subsoil conditions capable of supporting large buildings. It should be located near transportation facilities and a source of electric power. Host important is the availability of water and sewer service. Considerable economy could be obtained from tying into an existing system rather than constructing new plants.

TABLE V

DESCRIPTION OF SITE AND RELATED FACILITIES

City of Chisholm

1. Size.

200 acres or more.

- Description of physical characteristics of site and surrounding area.
 Land rolling with a good view of the surrounding area; building site on level ground.
- 3. a. Description of surface soil and water conditions.

Humus on account a lot of it is covered by birch trees. Good run off of water with drainage ditch near the present school.

b. Evaluation of general subsoil suitability.

The subsoil is clay, ideal for building.

c. Depth of ground water table.

10 to 40 feet.

- d. Is surface water drainage system
 necessary? No,
- 4. Transportation facilities
 - a. Distance to nearest State trunk highway* 1/2 mile.
 - b. Distance to nearest railroad line.

 $1 \frac{1}{2}$ miles.

c. Distance to nearest commercial airport with regularly scheduled airline service. 8 miles.

5. Utilities

a. Source of nearest adequate pure water supply.

City water system. Distance from water

supply to proposed site.

About 500 feet to approximate building site.

Type of treatment.

Filtered and chlorinated from wells. Present daily

capacity of water source and daily peak use.

Daily capacity - 1,500,000 gal.

Daily peak use - 450,000 gal.

Reserve storage- 1,000,000 gal.

b. Distance front nearest sewage disposal system to proposed site.

8 or 10 inch lines alongside

site. Type of treatment.

New sewage treatment plan capable of handling a population twice the

size of Chisholm.

Present daily capacity.

500,000 gallons.

c. Source of Electric Power.

Minnesota Power and Light

Company. Dependability of power

supply.

Very good service. High tension lines alongside

site. Total down time per year.

Nil.

TABLE V (cont.) DESCRIPTION OF SITE AND RELATED FACILITIES

Village of Cook

1. Size.

200 acres, plus or minus.

- 2. Description of physical characteristics of site and surrounding area. Located on south shore Lake Vermilion - Pine and mixed forest. Ancient site of aboriginal settlement*
- 3. a. Description of surface soil and water conditions.

Sand gravel with leafy top soil. Water

plentiful. b. Evaluation of general subsoil suitability.

Canadian shield not evident on this site - sand and gravel.

c. Depth of ground water table.

Average - 18' to variable depths.

- d. Is surface water drainage system necessary?
 No.
- 4. Transportation facilities.
 - a. Distance to nearest State trunk highway.

5.5 miles (approx.)

b. Distance to nearest railroad line.

5.5 miles.

c. Distance to nearest commercial airport with regularly scheduled airline

service.

45 miles.

- 5. Utilities.
 - a. Source of nearest adequate pure water supply.

Available on property. Distance from

water supply to proposed site.

On site.

Type of

treatment.

State would have to install system.

Present daily capacity of water source and daily peak use. Unknown.

b. Distance from nearest sewage disposal system to proposed site. No system available.

Type of treatment.

Independent system proposed. Present

daily capacity and daily peak use.

Not indicated.

c. Source of electric power.

Northern Electric Coop. Association.

Dependability of power supply.

Not indicated. Total

down time per year.

Not indicated.

TABLE V. (cont.) DESCRIPTION OF SITE AND RELATED FACILITIES

City of Eveleth

1. Size.

150 acres.

- 2. Description of physical characteristics of site and surrounding area.

 Present Eveleth Municipal Golf Course approx. 1/4 mile wide by 1
 mile in length bordering St. Mary's Lake. Rolling Terrain.
- 3. a. Description of surface soil and water conditions.

Surface soil - sandy loam - water runoff fast.

- b. Evaluation of general subsoil suitability. Subsoil excellent.
- c. Depth of ground water table.

Not indicated.

- d. Is surface water drainage system necessary? No.
- 4. Transportation facilities.
 - a. Distance to nearest State trunk highway.

Immediately adjacent.

- c. Distance to nearest commercial airport with regularly scheduled airline service.

19 miles.

5. Utilities.

a. Source of nearest adequate pure water supply.

City pumping station - St. Mary's Lake.

Distance from water supply to proposed $\dot{}$

site.

Adjacent to site.

Type of treatment.

Not indicated. Present daily

capacity of water source.

Daily capacity - 1,500,000 gal.

Daily peak use - 800,000 gal.

Reserve storage - Not Indicated.

b. Distance from nearest sewage disposal system to proposed site.

2 1/2 miles. Type

of treatment.

Primary treatment - Imhoff tank; secondary treatment - percolating filter. Present dally capacity and daily peak use.

Not recommended for property

site, c. Source of electric power.

Minnesota Power and Light.

Dependability of power supply.

Total down time per year. 3 hours.

TABLE V, (cont.) DESCRIPTION OF SITE AND RELATED FACILITIES

City of Gilbert

1. Size.

Approximately 80 acres.

- 2. Description of physical characteristics of site and surrounding area. Wooded slope overlooking town.
- 3. a. Description of surface soil and water conditions. The surface is on gradual slope with good drainage* b. Evaluation of general subsoil suitability. Subsoil is glacial fill.
 - c. Depth of ground water table.

Likely quite deep.

- d. Is surface water drainage system necessary? No.
- 4. Transportation facilities.
 - a. Distance to nearest State trunk highway.

Two city blocks.

b. Distance to nearest

railroad line.

Approximately ten city blocks.

- c. Distance to nearest commercial airport with regularly scheduled airline service. Approximately five to six miles,
- 5. Utilities.
 - a. Source of nearest adequate pure water supply.

City water system. Distance from water

supply to proposed site.

6" main within £00

feet. Type of treatment.

Now using rapid sand filtration of surface water from Ely Lake.

Present daily capacity.

Capacity of present water supply is inadequate. A program to increase the

availability of water supply is

underway* Present daily peak use.

Not indicated.

b. Distance from nearest sewage disposal system to proposed site.

Adjacent to site.

Type of treatment.

Gilbert opened a new biological sewage treatment plant on February, 1957. Present daily capacity.

600 gals, per min.

Daily peak use.

200 gals, per min. c.

Source of electric power.

Minnesota Power and Light Company.

Dependability of power supply.

Total down time per year* Perhaps 1/2 hour per year mostly due to storms.

TABLE V. (cont.) DESCRIPTION OF

SITE AND RELATED FACILITIES

City of Hibbing

1. Size.

217 acres - ample expansion acreage.

- 2. Description of physical characteristics of site and surrounding area. High ground, wooded, and some farm land.
- 3. a. Description of surface soil and water conditions.

Surface in loam for 12 inches. East of site a stream flowing south from O'Brien Lake.

b. Evaluation of general subsoil suitability.

Clay and gravel subsoil.

c. Depth of ground water table.

Approximately 20 feet.

- d. Is surface water drainage system necessary?
 No.
- 4. Transportation facilities.
 - a. Distance to nearest State trunk highway.

Adjacent to State Highway 216.

b. Distance to nearest railroad line*

1 mile to DM & IR RR.

c. Distance to nearest commercial airport with regularly scheduled airline service.

3 miles.

- 5. Utilities.
 - a. Source of nearest adequate pure water supply.

Hibbing Public Utilities Commission.

Distance from water supply to proposed site.

Adjacent to site. 8" water main.

Type of treatment.

Not indicated. Present daily capacity of water source and daily peak use.

Daily average - Not indicated.

Daily peak use - 3,259,000 gal.

Reserve storage- 3,650,000 plus 1.100 gal. per minute.

b. Distance from nearest sewage disposal system to proposed site.

On site boundary.

Type of treatment.

Trickling filter plant.

Present daily capacity.

4,000 gals, per min.

Daily peak use.

1,800,000 gals.

c. Source of electric power.

Municipal power plant. Tie with

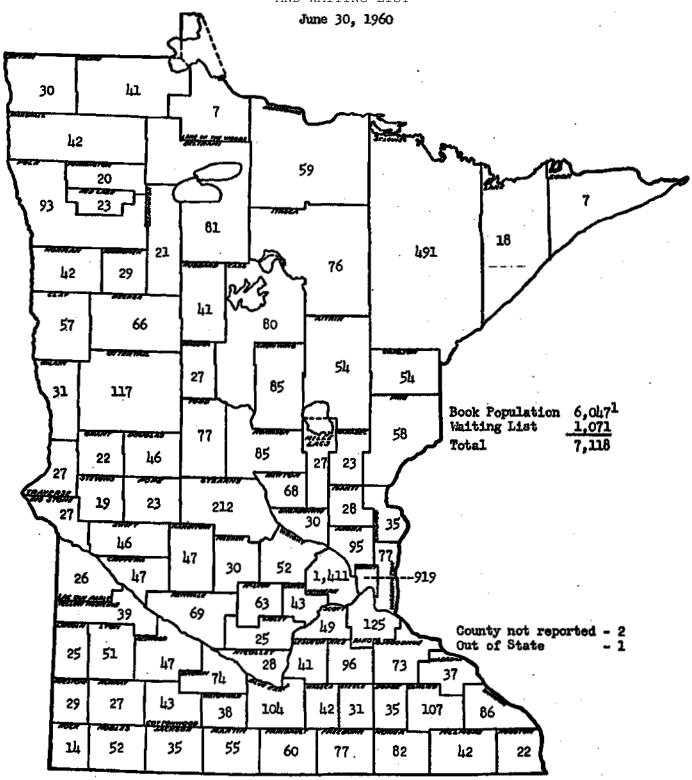
M.P.L. Dependability of power supply.

Total down time per year.

None.

APPENDIX

MENTALLY RETARDED AND EPILEITIC POPULATION ON BOOKS OF INSTITUTIONS AND WAITING LIST



1. The total book population is two (2) more than that shown on Table III. This figure is not yet final and may be adjusted when the Department of Welfare completes its statistical report for fiscal 1960.