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MONTANA: MOVING TOWARD EXCELLENCE

MAY 8 1995

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by

Al Davis, Administrator Juvenile Corrections Division, Montana Department of Institutions

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This publication was made possible by a grant from the Annie E. Casey Foundation

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Printed: December 1993

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FOREWORD

The Center for the Study of Youth Policy at the University of Pennsylvania, School of Social Work works with selected public officials and juvenile justice professionals in elected states towards the goal of improving their youth corrections systems. The Center assists officials to re-examine their system, carefully evaluate juvenile crime trends, and determine how juvenile crime fighting resources can best be utilized.

Montana is one of the states the Center is working with. As this booklet indicates, Montana had a traditional and abusive system. Triggered by a class action lawsuit coupled with the determination to reform their system by policy-makers and professionals, Montana's Youth Corrections Program are being completely overhauled. Although Montana is a rural state, it too is plagued by violent juvenile crime and even gang activity. The reform includes recent juvenile justice developments which allow youthful offenders to be managed within the juvenile corrections system rather than adult jails and prisons.

We want to thank Al Davis, Administrator of Montana's Juvenile Corrections Division, for telling the "Montana Story." We also want to congratulate the Governor of Montana, the Montana Legislature, the judges and other juvenile justice professionals in the state, staff from various public and private agencies, and child advocates who are collaborating to bring about much needed reform.

Ira M. Schwartz
Dean and Director
Center for the Study of Youth Policy
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December, 1993

ACKNOWLEDGMENT

Special recognition goes to Montana's Governor, Marc Racicot, for selecting juvenile corrections as a top priority. A special thanks goes to Montana's Attorney General, Joseph Mazurek, for his strong support of juvenile corrections. Thanks are due to key Montana leaders who contributed their time and energy to the reform movement: Hank Hudson, Director of the Department of Family Service, members of the Juvenile Corrections Task Force, The Montana Advocacy Program, Inc., Eighteenth Judicial District Judge, Thomas Olson, and the Pilot Project chief probation officers. The author would also like to thank Betty Hall for editing this booklet.

MONTANA: MOVING TOWARD EXCELLENCE

INTRODUCTIONS

Montana, called the "The Last of What is Best," in America, displays its plains and unspoiled wilderness areas where people are few. In her book Montana, Norma Tirrell reminds us that, "In a world overrun with people and their impacts, it is immensely important that there is still a place like Montana." Known by many as "The Big Sky Country," Montana is a land of extremes. The clear blue sky of the Eastern and Central plains stretches from horizon to horizon, while the mountainous West abounds with rugged peaks, alpine meadows, fertile valleys, free-flowing rivers, and thousands of square miles of timber. Montanans love their diverse state and are willing to accept nature on its terms. Whether plowing out after a big snow, praying for rain in the drought-ridden prairie, or enjoying a hot summer day followed by a cool evening, Montanans are resilient and would not trade their lifestyle.

Living in the fourth largest state in the United States, Montanans reside in the wide open spaces. The Big Sky Country encompasses some 150,000 square miles (96 million acres) and averages 600 miles from east to west with 300 miles between its northern and southern borders. In a state as vast as Montana, people are often required to travel hundreds of miles to get from community to community; often fighting ground blizzards, black ice and snow-packed mountain passes. Because people are so scarce, citizens count and communities are valued. The nearly 800,000 residents who make up the state's population are decedents of immigrant farmers, ranchers, miners railroad workers and Native Indian tribes. The state's population has remained fairly constant for the past 20 years and shows no signs of dramatic increases in the immediate future. Montanans must rely on their state to provide services that most Americans find in a single metro area.

As in most states, the attitudes, demands, and desires of its people are greatly influenced by its past. Montanans are an independent, resilient lot who take pride in solving their own problems. The state's colorful history flavored the current attitudes and demeanor of present day Montanans.

The first outside influence that produced social and economics change in Montana was the discovery of gold in the 1860s. The glitter of gold attracted a significant number of white men to Montana, and boom towns grew in their wake. Many are viable communities today. It wasn't long until Montana's population soared to roughly 26,000. As gold mining declined, the wide-open plains and fertile valleys lured a permanent populace of white farmers and ranchers. Agriculture became the predominant enterprise, and more communities developed to support their pursuit. Because of this tremendous growth, Native Indian removal started and marked a major turning point in the development of this area.

The United States government began to deal formally with the Montana Indians by carving out nine government reservations intended to provide for these Native peoples who were no longer permitted to roam at will. Today, seven semi-sovereign reservations provide a setting for various tribal-affiliated population around the state.

As Montana rioved from a territory in 1867 to the 41st state in 1889, a defined social structure emerged. Survivors of those early days; minors, homesteaders, cowboys, and other settlers were a tough, hard-working, ambitious breed. They demanded these qualities from each other producing a tough law and order environment. Historical chronicles evidence these colorful events like the formation of Vigilantes in Virginia City, the demise of notorious outlaws, Henry Plummer and Club Foot George, and large investments by shrewd and ambitious businessmen like Marcus Daly and Thomas Cruse.

Today, the social climate in Montana somewhat resembles the Old West values and attitudes that existed in the

state's early days. The majority of Montanans reside in small communities. Billings, with a population of approximately 100,000 is the state's largest city and major trade and distribution center. Only four other communities have populations over 25,000. The Old West flavor is especially noticeable in smaller communities, most of which have less than a thousand residents. A visit with Bill Seward, owner of the Jersey Lilly Bar in Ingamar, Mark Haynes at his general store in Judith Gap, or the early morning patrons of the 600 Cafe in Miles City will clearly reveal the honest, optimistic and self-reliant attitudes which characterize the profiles of Montanans.

Clear, trout-filled mountain streams, thousands of square miles of wilderness, mountains heavily populated with elk, deer and other wildlife, scenic backdrops, and a sky that goes forever do not ensure a problem-free society for Montana. Like all states, Montana continually wrestles with social flaws that demand intervention and resolution. Montanans are unique. They demand quality services and resolutions to problems that are multiplying in the communities they cherish. Evolving from a history of hearty survivors is an attitude of neighbor helping neighbor that must be valued and kept in mind as the state pursues resolutions to the social problems facing a tough-minded citizenry.

JUVENILE JUSTICE IN MONTANA

Pine Hills School, a 100-bed, secure-care facility, located on Montana's eastern border and is one of the state's two training schools. It is located on the original site of the Women's Montana Territorial prison. Still in use are buildings that were constructed in the late 1800s for that purpose. Similar to many of the nation's old training school campuses, the age, location, and outdated campus design, regularly cause management and program difficulties. Originally a coneducational facility, it provided for Montana youth who evidenced deviant behavior and needed to reside outside their homes.

The increasing need for female incarceration led to the construction of a juvenile girls' training school located in Helena, the state capital. Mountain View School, with a 70-bed capacity, has served as the girls' juvenile training school since 1922. Its old, picturesque buildings, located eight miles from the city, give an appearance of a resort rather than a correctional facility. This aspect belies the fact that its age and structure make it inappropriate for its current use.

Pine Hills and Mountain View are the state's two juvenile training schools and the only institutions that serve juveniles who cannot stay in their home community. Their autonomous nature, along with 21 local-influenced judicial districts, led to a system without interface, accountability, or continuity for juvenile treatment.

Montana youth courts were created in each judicial district during the 1940s. Youth court judges appointed a chief probation officer and deputy officers. County, district, and state funding provided resources for youth intervention, diversion, treatment, or placement by the youth courts.

Originally the child welfare system included youth justice and belonged to the Montana Humane Society. Children's issues were considered on a level playing field with the needs of cats, dogs, and horses. In many instances, the latter received the highest priority. With the creation of the Montana Department of Institutions, youth corrections was moved and remained there until 1988.

CLASS ACTION LAW SUIT

A class action suit was filed in 1978 by the American Civil Liberties Union and the Montana Legal Services Association after five cases of cruel and unusual punishment were reported at Pine Hills School for Boys. Just two years earlier a suicide was committed in the maximum security unit. An out-of-control population, over 100 escapes in one year, and archaic seclusion

procedures sent a Gear signal to the state that business as usual was not the option for future planning.

Anthony Travasino, then Executive Director of the American Corrections Association, Bill Holden, Superintendent of Hennipen County Home in Minnesota, and Robert Cain, a private child care consultant from Arizona, worked with Al Davis, the newly appointed Superintendent, to develop a plan to solve these serious problems. A federally-ordered Consent Decree was entered in May 1980. Conditions of the decree followed new standards and goals for training schools developed by the American Correctional Associations. Major changes had occurred by 1982 at the state training school, and the work of many succeeded in establishing a manageable population with recognized policies and procedures.

PROBLEMS IN THE 1980S

Increased juvenile crime, a lack of revenue, and lack of public tolerance led to a major upsurge of adjudicated youth in secure care facilities. A doubling of the populations at Pine Hills and Mountain View placed extreme demands on the two facilities. Revenue shortfalls were also occurring at the local level, leaving diversion and prevention programs starving. Youth court judges were frustrated and referred increased numbers of court-committed juveniles to each facility.

As the population exploded and exceeded capacity, life at Pine Hills School became one of survival. Control was the name of the game. The institution's major mission was to make sure the census did not vary from morning to night. Crisis intervention and protecting youth and staff from injury became top priority. The numbers of seriously, mentally ill and sex offenders increased, adding to the mounting problems.

Concerned and dedicated staff delivered a strong message to the state that serious problems were brewing at both schools. Few major incidents masked the serious conditions. State decision-makers neglected to believe that the situation had

reached crisis level. However, population problems at the adult state prison became a budget priority for lawmakers, and the juvenile crisis was placed on the back burner.

In September 1986, The Report to the Governor from the Council on Reorganization of Youth Services was released that recommended a new department. The department would consolidate youth institutional programs, the child protective services program, the aftercare program, and the youth court probation services. The report recommended local youth services planning boards within each multi-county service area to ansure a broad-based community plan with community-based support to develop a local plan for children and youth services in their area.

CREATION OF THE DEPARTMENT OF FAMILY SERVICES

In 1986, a commission was appointed to study children and family services as well as the youth justice system. The mission was to create a department that would interface all human service programs relevant to families and children. On July 1, 1987, the Department of Family Services was implemented. With the exception of youth probation, which remained separate and part of the youth court, all youth corrections were considered separate from adult corrections; a move that set the stage for a philosophical change about how juvenile offenders were viewed. It provided a fresh perspective to reactions about juvenile crime and resultant programs. The change allowed juvenile corrections to gain an identity of its own without competing against a highly visible, more sensational adult system.

Although separation from the adult system provided an opportunity for juvenile corrections to take on it's own identity, little meaningful progress occurred. It simply became a separate program within the Department of Family Services, shifting competition from adult corrections to more costly and visible child welfare programs. Each juvenile corrections component

operated independently, and the energy flowed into defending the integrity of services within each component. Turf was the result. In response to system failures, juvenile corrections became a division of the Department of Family Services in July 1991 and is a division within the department today. Al Davis, previously Superintendent of Pine Hills School and Assistant Superintendent of Mountain View School, was appointed Administrator of the Juvenile Corrections Division. Serious consideration for system reform began.

MONTANA CORRECTIONS TODAY: INDICATORS FOR TOMORROW

"...to carry anything to an end worth reaching ...you must be willing to commit yourself to a course, perhaps a long and hard one, without being able to foresee exactly where you will come out."

Oliver Wendell Holmes, Jr.

By definition, the Juvenile Justice System implies regularly interacting, interdependent groups forming a unified whole. Based on a recent review of the juvenile justice structure, Montana has never had a "system." Montana has a structure composed of interrelated but independent entities: youth courts, correctional facilities, parole officers, and various administrative support operations that do not interact on a regular basis. These entities have evolved with little regard for the system as a whole. They should be collaborating to assure consistency and coordinated actions.

Restructuring Montana's juvenile corrections system is a major undertaking. The Juvenile Corrections division has few resources and fewer staff to do the job, but, that does not mean it can not be done. It means that care must be taken to ensure that all involved understand where we are headed and how we intend to get there. Those Montanans who have agreed to support the reform, along with the juvenile corrections staff, will

need to provide ideas, experience and unending energy in order to accomplish this important task.

Each year, Montana's 21 youth courts find approximately 300 to 500 youth to be delinquent. Today, the delinquency label earns adjudicated youth a bed in one of the state's two juvenile correctional facilities. Although in theory the structure of our existing juvenile corrections system suggests uniformity, in practice youth in the system are anything but uniform,

The term "adjudicated delinquent" covers a broad range of problems and behaviors. Because a standardization classification system was nonexistent, youth could not be counted by category. But from experience, juvenile corrections knew it was involved with at least ten types of youth:

- serious offenders who pose a real threat to themselves or others;
- medium risk youth;
- low risk youth who have not committed serious offenses, and are more a nuisance at the community level that a threat;
- youth committed for court-ordered, 45-day evaluations frequently ordered to give youth "a taste" of the institutions as a deterrent:
- victims of sexual abuse;
- juvenile sex offenders;
- emotionally disturbed youth;
- the serious mentally ill;

- tribal and federal borders who may fall into any of the above categories; and
- a small number of young offenders referred from the adult criminal justice system.

One program can't meet the needs of this diverse group. The rape of a 10-year old girl by a Pine Hills School youth in February 1990 and the October 1991 suicide of a seriously mentally ill boy at Pine Hills School are unshakable evidence that Montana's juvenile corrections institutions are being asked to do an impossible task.

Montana's juvenile corrections system must be restructured to better meet the needs of the state and adjudicated youth. The first and most critical step is to implement a standardized system of assessing every juvenile prior to placement. When we know the number of youth in e system, the remainder of the reform plan will fall into place.

The essential elements of a reform plan are to:

- decrease the census of Pine Hill School to high risk male and female offender and develop a quality, long-term clinical, educational, and vocational program to meet their needs:
- use Mountain View as a minimum security, short-term, coeducational program for medium risk youth;
- develop an intensive, professional training curriculum for correctional facility staff;
- divert low risk youth to community-based programs;
- develop additional private, community-based programs to deal with specific needs of juvenile offenders;

- develop funding and resources to place adjudicated delinquents who are seriously mentally ill; and
- create local juvenile corrections coalitions to provide local input to community-based programs being developed.

The Juvenile Corrections Division was created to develop a statewide system that responds to the needs of Montana's delinquent youth. The division's ability to develop a responsive and integrated system depends upon the following factors.

- standardization
- collaboration
- creativity
- role clarification
- training
- funding
- development of community options

The division focuses on each of these factors in its effort to create a Juvenile Justice System that is responsive to troubled youth.

CENTER FOR THE STUDY OF YOUTH POLICY

In May 1991 Ira Schwartz, Dean of the School of Social Work at the University of Pennsylvania and the Director of the Center for the Study of Youth Policy (CSYP), was asked to provide technical assistance to Montana's juvenile corrections reform movement. The CSYP's Russell Van Vleet, Deborah Willis, and consultant Orlando Martinez provided an initial assessment of Montana's system.

With the assistance of the CSYP, a placement guideline was developed to determine population profiles of youth committed to the Juvenile Corrections Division. Further research was provided to indicate appropriate levels of care for the diverse population demanding service.

Case scenarios of 419 youth committed to secure-care in the previous 12 months were analyzed. Using the placement guideline as an instrument to assist in determining youth disposition, the following findings were determined:

- 32% scored at a level to suggest a legitimate need for placement in a secure-care institution;
- 24% scored at a level suggesting a need for community placement with a level of restrictiveness below that secure care; and
- 44% scored at a level suggesting an appropriate community alternative, the majority were female offenders.

A Juvenile Corrections Task Force, represented by Montanans from varying backgrounds, was created to help provide local input to the instrument and influence system modification.

Principles considered in the instrument were:

- placement decisions to balance treatment with public safety;
- reduction of reliance on secure care to be balanced with an increase in the number of alternatives available in each jurisdiction;
- instrument to be used as a guideline, and options for "override" and judicial discretion in sentencing to prevail;
- instrument does not predict re-offense probability; and
- continual review of guideline results in order to validate scoring.

According to the study, the state significantly over utilizes secure-care facilities for youth placed or entering the juvenile justice system. It further indicated a need to develop community-based programs as the alternative to secure care.

PILOT PROJECT

The findings of the CSYP research led to pilot project implemented in February 1993. Six judicial districts participated in a six-month experiment utilizing the design placement guideline. To ensure that all components of the juvenile justice system maintained equal involvement in the pilot project, representation from all six districts was requested from the beginning. The youth court probation officers were considered especially important in this process. Cross-planning and cross-training were emphasized. Orientation was given to participants in each district to provide continuity. Deborah Willis, CSYP, met with probation and parole officers to encourage understanding of guideline utilization.

Because it was recognized that success of the project would be influenced by the judicial system, special orientation

was provided to district judges who resided in each pilot region. Judge Frank Orlando, from CSYP, met with the judges in January 1993 to review, discuss, and encourage participation.

The project required each youth, who ordinarily would have been considered for commitment to the department, be reviewed by department and youth court support staff prior to the despositional hearing. The placement guideline was used as a resource to support the recommendations offered to the district judge. Youth being considered for formal probation were also scored.

To ensure summary objectivity, the division contracted with the University of Montana to carefully examine results of the pilot project. Dr. John Bradley, university staffer and a member of the juvenile corrections task force, is led the research and developed a project findings report. This information is being utilized to influence decisions about full state implementation.

PILOT PROJECT RESULTS

With less than one month remaining, general conclusions are being drawn and are listed below:

- Scoring determined from utilization of the placement guideline correlates closely with disposition desires of the Youth Court judge.
- Cross-agency discussions of youth prior to disposition have provided a vehicle encouraging front end diversion.
- Community needs that respond to youth support services have started to surface.
- More than 80% of the youth reviewed come from broken homes.
- Seventy-five percent of the referrals are from low-income families.

- Based on the instrument, a small percentage of female offenders qualify for secure-care placement.
- More than 50% of the females reviewed reported sexual abuse.
- There does not appear to be a significant overrepresentation of minorities.
- Either instrument over-ride needs to be encouraged or an upward adjustment of score cut-off lines needs to be considered.
- State-wide referrals have decreased from previous years throughout the duration of the project.

MONTANA CORRECTIONS TOMORROW

The jury is in after a year and a half review of the state's needs to provide better care for our troubled youth. Although programs have attempted to respond to community needs, it is time to make decisions about total system modifications. All facets of the juvenile justice system have been afforded an opportunity to contribute. National experts reviewed the plans and contributed to the planning process.

Montana is moving aggressively toward "system" change. Successful accomplishment of the reform will provide a corrections system that:

- better utilizes existing programs to match services to appropriately referred youth;
- ensures federal and state funds are being spent in the most efficient manner;
- provides proven, nationally-recognized and endorsed service delivery;

- responds to Montana youth and blends with the needs of the juvenile justice system; and
- demands collaboration among all involved entities.

Certain aspects of the existing juvenile corrections system demand immediate attention in order to accomplish the above principles. Approximately \$6 million of the current \$7.2 million budget goes to the high cost of providing services at the state's two secure-care facilities. Montana, like most states, faces serious budget deficits. Unless the state initiates serious steps towards reform and provides less costly, community-based services, Montana's youth will suffer, resulting in a continual downward cycle for the state. Current reform movement will require.

Establish a recognized capacity at Pine Hills School Facility. Pine Hills School encompasses over 60 acres of property and no longer provides a functional design for the youth it is mandated to serve. It's location in Eastern Montana discourages family and community involvement and demands costly transportation. Recruitment of professional staff is difficult because of its location and small surrounding community. Considering the outdated physical plant and staffing needs, the facility would provide adequate services for a maximum of 80 secure-care youth. Pine Hills School will not be considered for expansion or major renovation.

Remove Juvenile Sex-Offender Program from the array of services provided at the Pine Hills School. Currently, the school provides care for about 14 juvenile sex offenders. The Sex-Offender Program will be eliminated, and these youth will be treated in other contract programs.

Recently a risk assessment profile of the juvenile sexoffender population was completed that indicated placement needs can be provided in existing sex-offender treatment programs. Removal of the Sex-Offender Program and initiating state use of placement guidelines should reduce the number of adjudicated male offenders needing placement in a secure-care facility. Enhancement of community-based opportunities and strengthening revocation procedures should further impact the number of youth demanding secure-care placement.

Establish a maximum population at Mountain View School at 16 beds. Only one cottage at Mountain View School, a secure-care facility, is appropriate for safe housing for committed youth. The population will be boys who score lower on the placement guideline. The program will be designed as a short-term 60-day intervention program emphasizing treatment plan development, life skills training and education.

Integrate the Juvenile Corrections Division with the Child Protective Services Division creating a Division of Youth Services. True integration cannot occur until the department's two major service divisions are integrated to allow better coordination of service. Full integration of services is anticipated to be completed by January 1995.

Develop available secure-care beds in each region. The Montana Department of Family Services is separated into five regions. Based on the placement guideline, each region would provide secure-care facilities for youth who demand out-of-home placement. Secure-care providers would report directly to each regional administrator responsible for department activities in the field.

A five year reform effort would provide a fully-integrated Corrections and Child Protective Services Program. Each of the Department's five regions would offer full range of services to youth. All services would be directly supervised by a regional administrator with central office coordination provided by a youth services administrator.

Classification and referral decisions would be made regionally. The decision-making process would demand

collaboration among all juvenile justice components. Local correctional coalitions would be in place to plan, support and monitor the needs of juvenile corrections. Local involvement and ownership would result in a successful outcome for communities and their youth.

SUMMARY

Montanans demand and deserve a quality of life that is influenced by meaningful and effective government intervention. Its troubled youth deserve the best possible services that respond to their afflictions. Continual awareness must be maintained to provide services in the most cost-effective manner possible.

Juvenile corrections in Montana is in transition. There is an immediate demand for change. Rationale for change must be strategically planned and presented in a manner to allow for early implementation. Communication, collaboration, and cooperation are necessary for reform success.

Assistance from CSYP, other "key decision-makers states," dedicated juvenile justice participants, and strong leadership will help Montana's youth, who will be better served and given a chance to contribute to, rather than burden, their society.

Montanans are not afraid of hard work and risk -- it's a part of our identity, our nature. There's much work to be accomplished, and it won't be easy. However, pursuing anything worthwhile is always a challenge and involves risk.

References

- Tirrell, N. (1991). *Montana*. Oakland, CA: Compass American Guides, Inc.
- The Council on Reorganization of Youth Services (1986, September 17). Report to the Governor. Helena, MO: Author. unpublished manuscript.