# Continuum of Care Initiative Evaluation

## Annual Report: Fiscal Year 2006-07

## July, 2006 – June, 2007

For

Colorado Department of Human Services
Office of Children, Youth and Family Services
Division of Youth Corrections

By

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# Executive Summary

Over the last three years, the Colorado Division of Youth Corrections has undertaken a comprehensive systems improvement effort – the Continuum of Care Initiative. This initiative has brought significant attention and improvements to the Division's continuum of services from pre-commitment (detention) services through commitment and parole. The flexible funding authorization contained in Footnote 86 of Senate Bill 07-239 is a central component of the overall Continuum of Care Initiative, allowing the Division to flexibly deploy funds to ensure the availability of the most effective services in the most appropriate settings to meet the rehabilitation needs of juvenile offenders served.

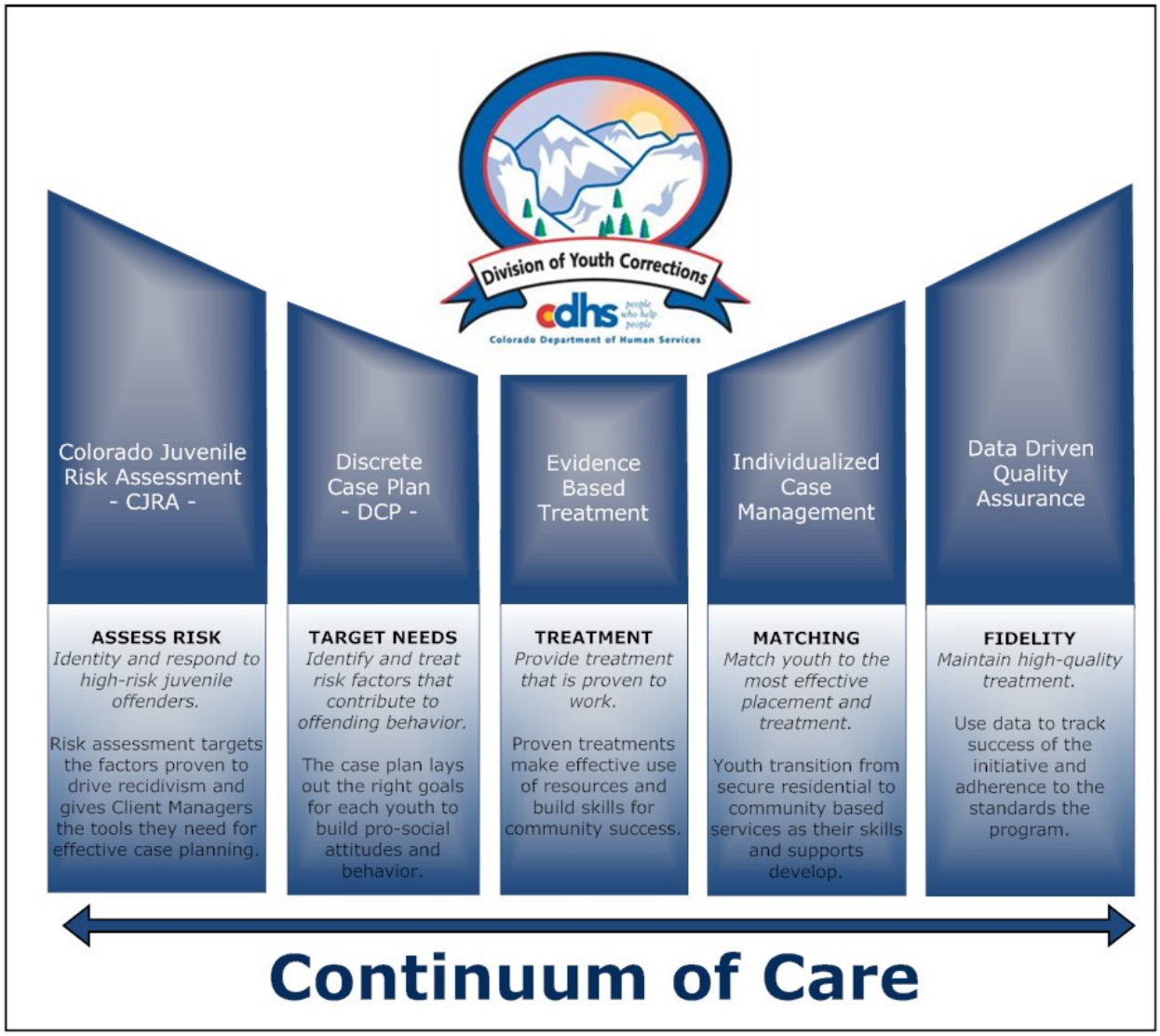
## The Continuum of Care Initiative

The Division of Youth Corrections (DYC), as part of its ongoing efforts to systematically pursue and utilize the most advanced strategies available for juvenile rehabilitation, has launched the Continuum of Care Initiative. The initiative is based on principles of effective juvenile justice service that have been proven through research and practice to work. The Continuum of Care Initiative has been implemented by integrating multiple, coordinated components: state-of-the-art assessment, enhanced treatment services within residential facilities, and improved transitions to and availability of appropriate community-based services. The Continuum of Care Initiative seeks to provide the optimal length of service in each stage of the continuum as youth move from secure residential to community-based services on parole. To ensure accurate and targeted information to support individualized case planning, DYC identified a state-of-the-art, empirically-based risk assessment instrument (the Washington State Juvenile Risk Assessment), which it modified and renamed the Colorado Juvenile Risk Assessment for use in Colorado.

**Continuum of Care Initiative Process** – Each component of the process interacts with all others, starting with assessment using the Colorado Juvenile Risk Assessment (CJRA). Through the CJRA, each youth's unique criminogenic needs are identified by a series of questions that probe all the areas of a youth's life that have been proven through research to predict anti-social behavior: family, relationships, use of free time, attitudes, behaviors, alcohol and drugs, education, employment, mental health, aggression, and social skills. Each area is analyzed in terms of both risk factors that make it more likely a youth will re-offend, as well as protective factors that buffer youth from family and community risks and make it less likely they will re-offend.

Using CJRA results, DYC Client Managers build a Discrete Case Plan to match each youth, based on their unique pattern of risk and protective factors, to the most appropriate treatment, tailoring the intensity and duration of supervision and treatment for each youth. The five principles underlying the Continuum of Care Initiative are summarized in Figure 1, below. As depicted in Figure 1, these principles are inter-related and are intended to be implemented together in order to yield the full benefits of the Continuum of Care Initiative.

**Figure 1: Principles of the Continuum of Care Initiative**




## A Continuum of Services

In order for risk assessment data and individualized case management to positively impact youth outcomes, DYC Client Managers are intended through the initiative to have access to a comprehensive continuum of services based on proven, evidence-based strategies. This continuum is designed to allow each youth to receive appropriate placements based on his or her criminogenic risks, needs and protective factors as assessed through the CJRA. Moreover, access to a full array of services is intended to support an efficient utilization of funds and resources by allowing each youth to move to lower levels of restrictiveness (and cost) as their risk profile and treatment progress allows.

## Barriers to an Effective Continuum of Care

As the continuum of community-based services is being enhanced and restructured, DYC is working closely with providers to ensure that new services meet criteria for effectiveness (discussed later in this report). However, even as the array of community-based service options increases, the long term success of the Continuum of Care Initiative is challenged by the current structure of funding allocation which is based on a formula that uses average daily population (ADP) in commitment placement to determine funding levels. Under this structure, DYC's efforts to improve the overall quality and efficiency of services through the Continuum of Care Initiative will create a situation in which success in transitioning youth more rapidly from restrictive and expensive residential commitment to appropriate community-based placements will leave DYC trapped in a downward spiral of the very funding now being more flexibly used to achieve reduced ADP. Given that community expenditures under Footnote 86 are also funded as a percentage of the overall budget based on commitment ADP, successful community initiatives will undermine the budget on which they depend. Without a shift in funding allocation structures, as better community services become available and Client Managers become more effective in appropriately transitioning youth to community placements, DYC's resources for both commitment and community-based services will shrink to the point that youth are left with insufficient resources to continue the services that achieved the ADP reductions.

Without a shift from funding formulas that rely on commitment ADP, any success of the Continuum of Care Initiative in appropriately transitioning youth from commitment to community placement will result in a downward spiral of the very funding now being more flexibly used to achieve reduced ADP.

## Youth Served

Records of flexible funding expenditures identify 1,703 individual youth receiving services under the Continuum of Care Initiative during fiscal year (FY) 2006-07. This number is considerably higher than the 765 youth identified during FY 2005-06. The majority of youth served in the Continuum of Care Initiative (89%) were male. This is consistent with the overall DYC commitment population that was 87% male in FY 2006-07. The majority of youth served were either Caucasian (43%) or Hispanic (37%), with African American youth making up 18% of youth served. American Indian or Alaskan Native youth, Asian youth, and Native Hawaiian or Pacific Islander youth made up less than 1% of youth served. Again, these proportions closely mirror the proportions of all committed youth served by DYC during FY 2006-07. Youth served across the Continuum of Care Initiative were an average of 16.4 years of age at the time of commitment. On average, by the time youth left residential placement and began their parole period, they were an average of 17.8 years old.

**Youth Treatment Needs at Community Transition** – Colorado Juvenile Risk Assessment (CJRA) scores may be used to examine treatment needs at the time of a youth's transition from residential placement to the community. Of the 1,703 youth served with Continuum of Care Initiative funds, 1,311 (77%) could be linked to at least one CJRA completed at some point during the commitment period. Of these youth, 891 (67%) had assessments that could be linked by type or by date to the time the youth was referred to either a Parole Board or Community Review Board. These 891 assessments served as the basis for our analysis of youth needs at the time of community transition. The vast majority (83%) of youth in the Continuum of Care Initiative were found by the CJRA to be at high risk to re-offend based on their criminal histories. This shows the project to be clearly targeting those youth most in need of intensive, ongoing support in order to support successful community re-entry.

In terms of treatment needs, over half of these youth demonstrated needs (elevated or moderate score range) related to the CJRA Relationships, Attitudes, and Aggression domains. This suggests that available treatment services will need to have sufficient capacity to meet this need. Similarly, just under one-third of youth scored within the elevated treatment need range on the Family domain. This underscores the importance of sufficient capacity, both in community services and for youth in residential placement, to address family functioning in order to ensure that youth will be able to succeed when they return home. Nearly half of youth served (45%) demonstrated a significant mental health-related need (elevated or moderate range) in which mental health issues were linked to their delinquent behavior.

## Expenditures

Information regarding the types of services purchased under the Continuum of Care Initiative was tracked for each DYC management region. For FY 2006-07, tracking data showed expenditures of $3,790,116. This was considerably higher than expenditures reported in the Fiscal Year 2005-06 ($928,904), the first year of the Continuum of Care Initiative. This primarily reflects the increased number of youth served in the Initiative, as well as, in part, the additional expenditure tracking begun for this year's report. Last year, DYC tracked only expenditures directly from the purchase of Contract Placements line item that contains the flexible spending provision. In order to more accurately describe the range of services that comprise the Continuum of Care, in FY 2006-07 DYC has begun tracking all parole program services expenditures as well.

Fiscal Year 2006-07 expenditures across the 1,703 youth served represents an average of $2,225 per youth. The table below shows the distribution of expenditures across the DYC management regions.

**Table 1: Expenditures Across DYC Management Regions**

| Management Region | Funds Expended | Percent of Total Funds |
|---|---|---|
| Central | $1,574,580 | 41.5% |
| Northeast | $804,836 | 21.2% |
| Southern | $859,327 | 22.7% |
| Western | $551,373 | 14.5% |
| **Total** | **$3,790,116** | **100.0%** |

The distribution of expenditures across DYC Management Regions closely matches the regional distribution of youth served and overall commitment ADP. The Central Region, which serves nearly half (44%) of all DYC committed youth, expended 42% of Continuum of Care funds. The Northeast region, serving one quarter of the DYC commitment population, expended 21% of funds, while the Southern region, which serves 20% of the DYC population, expended 23% of the funds. Finally, the Western region of the state serves the smallest proportion of youth (10%), and accounted for the smallest proportion of expenditures as well (14%).

## Types of Services Provided

One hundred percent of expenditures were spent on the provision and enhancement of services to youth. The types of services purchased broadly fall into one of three categories:

- **Treatment Services** encompass all expenditures used for treatment or rehabilitation programs. These include clinical assessment and evaluation of individual youth, therapy (individual, family or group), mentoring, educational and vocational programs, substance abuse treatment, and offense-specific treatment. This category of expenditures is also used to support and expand capacity in community-based treatment programs.

- **Youth Supervision** expenditures include supervision beyond the general services already provided by parole officers. This includes third party tracking, electronic monitoring, and biological testing (urine analysis and alcohol test saliva strips).

- **Youth Support** expenditures are used to pay for general youth independent living expenses, including emancipation, housing, legal and professional services, and day to day living expenses for youth.

The majority of expenditures (77%) were spent on youth treatment services. The remaining expenditures were allocated to youth supervision (15%) and youth support (8%) services.

Treatment Services make up the preponderance of supports purchased through Continuum of Care expenditures. Table 2, below, shows the distribution of treatment services, by specific service type.

**Table 2: Distributions of Treatment Expenditures by Type of Service**

| Type of Service | Amount Spent | Percent of Treatment Expenditures |
|---|---|---|
| Mentoring | $1,188,863 | 39.3% |
| Family Therapy | $659,698 | 21.8% |
| Job/Skills Training | $386,709 | 12.8% |
| Community Transition | $290,108 | 9.6% |
| Individual Therapy | $142,145 | 4.7% |
| Day Treatment | $89,875 | 3.0% |
| Substance Abuse Treatment | $74,896 | 2.5% |
| Administrative-Capacity Building | $53,803 | 1.8% |
| Offense-Specific Treatment | $52,580 | 1.7% |
| Group Therapy | $41,124 | 1.4% |
| Art-Recreational Therapy | $31,487 | 1.0% |
| Assessment and Evaluation | $6,430 | <1% |
| Restorative-Community Justice | $4,973 | <1% |
| **Total** | $3,022,691 | 100% |

## Continuum of Care Outcomes

The evaluation of the Continuum of Care's first year of implementation revealed important indicators of successful program implementation. Data gathered during the first year showed that DYC had put into place the tools necessary to create a significant system-wide change. A better understanding of youths' risks and needs allowed Client Managers to tailor community services to each youth's needs. Having the flexibility to better support youth transitioning from residential placement to the community also put in place infrastructure that can lead to a more efficient use of resources and better outcomes for youth.

In order to examine preliminary outcomes during this stage of the initiative, all Continuum of Care youth who were discharged from DYC supervision during this fiscal year (n=693) were compared to an equivalent group of youth who were discharged during FY 2004-05 (n=700), the year prior to implementation of the Continuum of Care Initiative.

**Commitment Residential ADP –** Prior to FY 2005-06, commitment ADP trends had shown a steady increase over the past 14 years. During the first year of the Continuum of Care Initiative (FY 2005-06), for the first time in 14 years the commitment ADP rate did not show an increase, but rather a slight decline. This decrease continued in FY 2006-07. As was noted

in last year's report, in light of the large (approximately 70%) multi-year reductions in state funds for Parole Program Services between FY 2001-02 and FY 2005-06, the success of DYC in reducing the ADP is particularly noteworthy.

**Recommitment** – The Continuum of Care Initiative appears also to have had an initial impact on the rate of recommitment. A statistically significantly lower proportion of FY 2006-07 Continuum of Care Initiative youth were recommitted to DYC prior to discharge from their original commitment than youth in the FY 2004-05 discharge comparison group.

**Table 3: Rate of Recommitment**

| | Recommitment | | No Recommitment | |
|---|---|---|---|---|
| **Group** | **N** | **Percentage** | | |
| Continuum of Care FY 2006-07 Discharges (n=645) | 145 | 20.9% | 548 | 79.1% |
| DYC FY 2004-05 Discharge Cohort (n=831) | 175 | 25.0% | 525 | 75.0% |

While overall lengths of service may require more time to be affected by the Initiative, DYC appears to be moving towards a process whereby an optimal (and not necessarily shorter) length of service for each youth can be achieved through a detailed assessment of each youth's risk, strengths and treatment needs, thereby matching those youth to the most appropriate placement and treatment strategy to improve youth outcomes and ensure public safety.

**Improvements to the Assessment Process** – One important continuing development is the enhancement of DYC's assessment process. In October of 2006, DYC put into place a plan to reduce overcrowding in state secure facilities. A significant part of this plan involved increasing assessment efficiency, which coincided with a reduction in the length of service for youth in assessment from 30 days to 23. By the last quarter of the fiscal year, the majority (78%) of youth were assessed within the targeted 23 days. Overall, the average length of service in assessment was reduced from an average of 30 days in FY 2005-06 to an average of 16 days by the last quarter of FY 2006-07.

**Risk of Re-Offending** – Pre-release discharge recidivism rates for the Continuum of Care youth sample were significantly lower than for the FY 2004-05 DYC Discharge Cohort. There were nearly 10% fewer pre-discharge recidivism events in the Continuum of Care Initiative FY 2006-07 cohort than there were in the FY 2004-05 group. This represents a decrease of 23.5% in the rate of recidivism for Continuum of Care Initiative youth.

Decreases in pre-discharge recidivism represent a 23.5% reduction over FY 2004-05.

## Conclusion and Recommendations

While the Continuum of Care Initiative remains in early stages of its evolution, there are some emerging findings pointing to positive progress in this comprehensive system change effort. Four primary findings are highlighted below.

**The Continuum of Care Initiative is serving youth who enter the system as high risk for re-offending.** This indicates that DYC is targeting its resources to those youth most likely to represent the highest delinquency costs, in terms of the social cost of re-offense, as well as costs stemming from returns to the juvenile justice system.

**Expenditure tracking data suggests increasing use of evidence-based services**. This is a preliminary finding. Future evaluation efforts dedicated to learning more about the specific services being provided to youth should help to confirm this pattern.

**While Length of Stay (LOS) remains unchanged, the Average Daily Population of committed youth has dropped for the first time in 14 years.** Further, the June 2007 commitment ADP was down to 1359.3, nearly 100 ADP lower than in Fiscal Year 2005-06. This decline in ADP represents a reduction of over 6%. A decline in recommitments, as well as reductions in pre-discharge recidivism, suggests that at least some of this ADP reduction may be attributable to the Continuum of Care Initiative.

**Preliminary data indicates significantly lower pre-discharge recidivism rates for youth served under the Continuum of Care Initiative.** This finding underscores the importance of preserving the funding available to the Continuum of Care Initiative. By taking away funds based solely on the decrease in ADP, DYC will be limited in its efforts to use funding flexibility to assure the right treatment, the right length of service and, therefore, reduced levels of recidivism and the best possible juvenile justice outcomes for youth in its care.

**An Effective Approach –** Section 5 of the Footnote specifically addresses the need to evaluate the "effectiveness of this footnote." The experience of juvenile justice jurisdictions nationally points clearly to the strategies authorized through the footnote as the most appropriate and effective approach to managing services for juvenile offenders (e.g., Barnoski & Aos, 2005). The Continuum of Care Initiative is built on effective juvenile justice strategies that have been proven through research and practice to be effective.

> The outcomes and process information available for this report are consistent with the successful implementation of a juvenile justice system improvement such as this one.

- The Initiative emphasizes a coordinated continuum of care with a broad array of program and service options that are sequenced and combined to create a range of intervention options that ensure the appropriate treatment, education, training, and care compatible with the youth's specific needs.

- It emphasizes community-based options when appropriate. Instead of removing youth from their home environment, community-based services impact the youth's total environment by addressing problems in the community where they develop, and by establishing the long-term support necessary to sustain progress.
- The Continuum of Care Initiative features individualized programming that is sufficiently intensive and comprehensive to accommodate the individual needs and potentials of the youth and their families.
- The Initiative attends to aftercare and re-integration so that youth continue receiving the support of treatment services following their treatment in a residential facility.

The current report demonstrates a continued positive trend from the first year of the Continuum of Care Initiative (FY 2005-06). Outcomes, in terms of LOS, ADP and pre-discharge recidivism suggest a positive trend. This is especially notable in light of the prior fourteen year trend toward increasing ADP.

Overall, the Continuum of Care Initiative has made a strong start toward implementing the vision of the Division to continually improve its system of care. The elements are in place to meet the goals of DYC and the General Assembly over time, an evaluation framework has been established to measure the extent to which those goals are achieved, and initial outcomes are positive.

Ongoing barriers to the Continuum of Care Initiative's success remain significant. Given reductions in appropriate community-based services for youth in DYC custody over recent years, the Division remains challenged to match youth with the most effective services in the most appropriate settings to meet their rehabilitation needs. As the array of community-based service options continues to be rebuilt and expanded, the success of the Continuum of Care Initiative will in turn be challenged by the current funding structure which is based on a formula that uses average daily population (ADP) in commitment placement to determine funding levels. Without a shift in funding methodology, as better community services become available and Client Managers become more effective in appropriately transitioning youth to community placements, the Division's resources for both commitment and community-based services could shrink to the point that youth are left with insufficient resources to continue the services that achieved the ADP reductions in the first place.

## Background

Over the last three years, the Colorado Division of Youth Corrections has undertaken a comprehensive systems improvement effort – the Continuum of Care Initiative. This initiative has brought significant attention and improvements to the Division's continuum of services from pre-commitment (detention) services through commitment and parole. The flexible funding authorization contained in Footnote 86 of Senate Bill 07-239 is an important component of the overall Continuum of Care Initiative.

The Division of Youth Corrections (DYC) sought authorization from the General Assembly to flexibly deploy funds from DYC's Purchase of Contract Placements funding line item in order to optimize the availability of the most effective services in the most appropriate settings to meet the rehabilitation needs of juvenile offenders in DYC's custody. In Fiscal Year (FY) 2005-06 and FY 2006-07, the General Assembly authorized DYC to engage in a demonstration of enhanced flexibility in treating and transitioning youth from residential to non-residential settings:

Text of Footnote 86 of Senate Bill 07-239:

*It is the intent of the General Assembly that up to 15.0 percent of the General Fund appropriation to this line may be used to provide treatment, transition, and wrap-around services to youths in the Division of Youth Correction's system in residential and non-residential settings. The Division is requested to provide a report to the Joint Budget Committee on November 1, 2007. This report should include the following information:*

*(1) The amount spent serving youths in residential and non-residential settings from this line item in FY 2006-07;*

*(2) the type of services purchased with such expenditures;*

*(3) the number of committed and detained youths treated with such expenditures;*

*(4) baseline data that will serve to measure the effectiveness of such expenditures; and*

(5) *an evaluation of the effectiveness of this footnote in addressing the need for flexibility in treating and transitioning youth from residential to non-residential settings.*

### Context: The Continuum of Care Initiative

The current report responds to the requirements of Footnote 86 and should be understood in the context of both the Division of Youth Corrections' overall Continuum of Care Initiative and the existing national research base regarding effective strategies in juvenile corrections. As noted above, DYC seeks to improve the overall effectiveness of its commitment services

continuum through a comprehensive system improvement initiative. The integrated set of strategies making up the Continuum of Care Initiative are based primarily on available research and the experiences of jurisdictions across the country regarding "what works" in juvenile justice.

DYC made a commitment to examine and realign internal operational practices to be more consistent with the principles of evidence-based practice (EBP) and a broader array of interventions that have the most research support for being effective in reducing recidivism and re-victimization by juvenile offenders. As part of this strategy, the Continuum of Care Initiative seeks to provide the optimal length of service in each stage of the continuum as youth move from secure residential to community-based services on parole. In order to ensure accurate and targeted information to support individualized case planning, DYC identified a state-of-the-art, empirically-based risk assessment instrument (the Washington State Juvenile Risk Assessment), modified and renamed the Colorado Juvenile Risk Assessment (CJRA) for use in Colorado[1].

The Division of Youth Corrections (DYC), as part of its ongoing efforts to systematically pursue and utilize the most advanced strategies available for juvenile rehabilitation, has launched the Continuum of Care Initiative. The initiative is based on principles of effective juvenile justice strategy that have been proven through research and practice to work. The Continuum of Care Initiative has been implemented through an integrated strategy involving state-of-the-art assessment, enhanced treatment services within residential facilities, and improved transitions to appropriate community-based services.

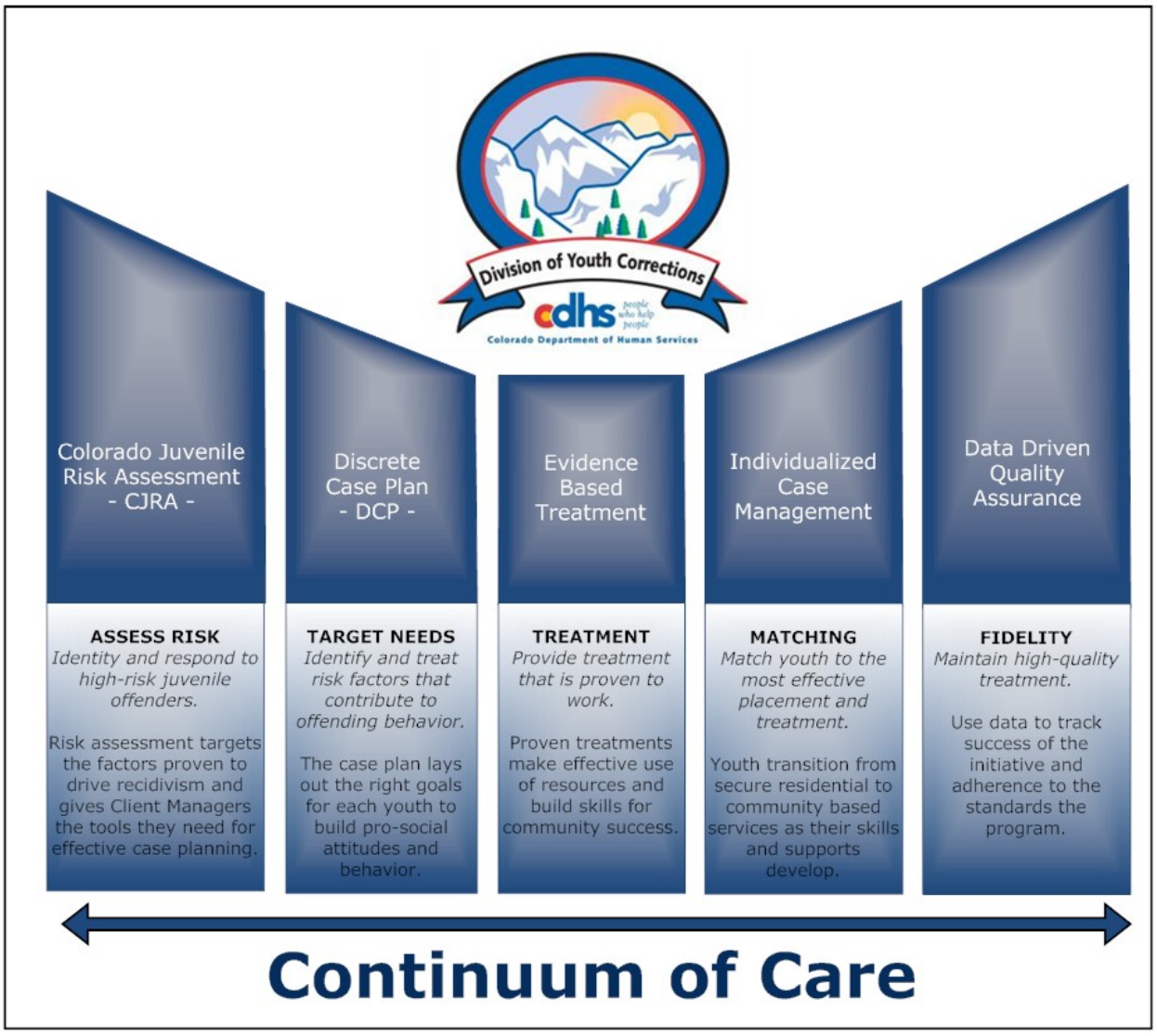
**Continuum of Care Initiative Process** – Each component of the process interacts with all others, starting with assessment using the Colorado Juvenile Risk Assessment (CJRA). Through the CJRA, each youth's unique criminogenic needs are identified by a series of questions that probe all the areas of a youth's life that have been proven to predict pro- or anti-social behavior: family, relationships, use of free time, attitudes, behaviors, alcohol and drugs, education, employment, mental health, aggression, and social skills. Each area is analyzed in terms of both risk factors that make it more likely a youth will re-offend and protective factors that buffer youth from family and community risks and make it less likely they will re-offend.

Using CJRA results, Client Managers build a Discrete Case Plan to match each youth, based on their unique pattern of risk and protective factors, to the most appropriate treatment and tailor the intensity and duration of supervision and treatment for each youth. The Discrete Case Plan relies on treatments that are based on proven approaches to reduce recidivism. The Continuum of Care Initiative's model seeks to provide the optimal length of service in each commitment stage to adjudicated juvenile offenders as they move from secure residential to

[1] The CJRA is introduced later, under Risk Assessment, and discussed further in the Profiles of Youth Served section of the report.

community-based services on parole. DYC's Continuum of Care Initiative strategy also matches youth to services based on personality characteristics and other factors that may constitute barriers to treatment such as a lack of motivation, anxiety, reading levels and learning styles. Finally, the fidelity principle is maintained across programs, reflecting DYC's commitment to achieve and maintain the highest quality services through ongoing review of youth outcomes and program practices. The five principles underlying the Continuum of Care Initiative are depicted in Figure 1, below. As depicted in Figure 1, these principles are inter-related and must be implemented together in order to yield the full benefits of the Continuum of Care Initiative.

**Figure 1: Principles of the Continuum of Care Initiative**



The concepts of risk and protective factors are inherent to this strategy. These factors have been noted broadly in national research reports. They include circumstances and characteristics in a number of areas or domains that can be changed through treatment, including substance abuse, behavior, attitudes, personality, peer associations, the family, and circumstances at school. Although the dynamics involved are not fully understood, research indicates that youth who enter the juvenile justice system with challenges in many of these areas are more at risk to re-offend than those who present with only a few—the effects are additive. By focusing on these characteristics, youth may be differentiated into high- and low-risk categories.

Placements and services may have a positive effect, no effect, or even in some cases result in increased rates of re-offending. To maximize the likelihood of positive treatment effectiveness, DYC has made a commitment to the assessment of individual criminogenic risk and needs, and utilizing the results to match youth to appropriate evidence-based treatments. The Continuum of Care Initiative targets youth according to their risk level, focusing on risk factors that contribute to offending behavior, in order to tailor the intensity and duration of supervision and treatment for each youth. This approach was designed to allow DYC to utilize resources more efficiently by ensuring that youth receive supervision and treatment that matches their criminogenic risks and needs, and takes into account responsivity issues such as personality and learning characteristics and other factors that constitute barriers to treatment such as a lack of motivation, anxiety, and reading levels.

> Individualized case management allows youth to be matched to the most effective placement and treatment – yielding better outcomes for youth and efficient use of State resources.

## A Balanced Continuum of Services

In light of clear and consistent evidence that targeted treatments matched to youth-specific criminogenic needs show the most benefit (Andrews & Zingler, 1990) and that residential treatment has demonstrated inconclusive results (Lyons, et al., 1998), DYC seeks to achieve a more effective and efficient balance between residential and community-based intervention strategies. After enhancing targeted treatment capacity in State-operated commitment programs in FY 2006-07 by constructing the State's new Sol Vista Youth Services Center and adding 29 newly funded positions dedicated to the treatment of juveniles who have committed sexual offenses, as well as those having mental health and substance abuse treatment needs, the Continuum of Care Initiative has been focusing on building capacity to link youth to appropriate community and family-based services.

## Risk Assessment –*Colorado Juvenile Risk Assessment*

Central to the Continuum of Care Initiative has been the implementation of a state-of-the-art, evidence-based risk assessment process. Assessment helps identify specific categories of criminogenic risk and reveal roadblocks to treatment. In addition, the instrument examines protective factors in a youth's life, which represent opportunities to build on strengths in case planning. The assessment is designed to provide enough variability to show change before and after treatment in targeted areas, and provide for initial case planning as well as direction for transition and aftercare services. Because of this, the assessment of youth using the CJRA is an ongoing process throughout the youth's commitment, rather than a one-time static event.

The newly implemented Colorado Juvenile Risk Assessment (CJRA) is state-of-the-art in that it provides an overall score related to risk for re-offending and also provides a detailed analysis of the specific risk and protective factors that may contribute to a youth's success or failure under DYC supervision. State-specific versions of this instrument are in use in over a dozen states, and it is widely regarded as the current leading juvenile justice assessment protocol. The CJRA was piloted, all Diagnosticians and Client Managers were trained, and full scale implementation began in July 2006. Training emphasized strategies for individualized case management that matches youth to appropriate supervision and treatment services.

Section 5 of Footnote 86 specifically addresses "effectiveness." National research clearly points to the strategies authorized through the footnote as the most appropriate and effective approach to managing services for juvenile offenders (e.g., Barnoski & Aos, 2005). In fact, a consistent finding across research and program evaluations has been the centrality of targeting treatment for juvenile offenders based on individualized assessment of criminogenic risk and need factors through instruments such as the CJRA. The authorization in Footnote 86 provides the flexibility that DYC needs to successfully implement these proven strategies.

## A Continuum of Services

In order for risk assessment data and individualized case management to positively impact youth outcomes, DYC Client Managers must have access to a comprehensive continuum of services based on proven, evidence-based strategies. This continuum allows youth to receive appropriate placements based on his or her criminogenic risks, needs and protective factors as assessed through the CJRA. Moreover, access to a full array of services supports an efficient utilization of funds and resources by allowing youth to move to lower levels of restrictiveness (and cost) as their risk profile and treatment progress allows.

Unfortunately, as noted above, implementation of the Continuum of Care Initiative is challenged by the multi-year State program reductions stemming from the reductions in Parole Program funding from fiscal years FY 2001-02 through FY 2006-07. That trend

resulted in an overall reduction of community-based service options and placed increasing demands on commitment resources. At the same time, categorical funding structures have created incentives for placement of youth in high-cost, restrictive residential programs, in spite of strong national research support for community-based services for youth in the juvenile justice system.

Use of evidence-based programming can result in significant cost avoidance. Researchers for the State of Washington, for example, have found that evidence-based treatments such as Functional Family Therapy, Multi- Systemic Therapy, and Aggression Replacement Training result in returns of $2 to $12 in benefits and avoidance of the costs associated with future crime for every $1 spent (Aos, et al., 2004). In light of clear and consistent national findings pointing to the effectiveness (and cost-effectiveness) of community-based treatment options, it is critical to ensure that funding levels remain adequate to support the full continuum of evidence based community treatment options even as ADP in residential facilities is reduced through successful implementation of the principles underlying the Continuum of Care Initiative.

Categorical funding, in concert with multi-year funding reductions in community capacity, has resulted in an unbalanced continuum of contract services. Relatively easier access to residential services has left DYC Client Managers struggling among remaining community programs to identify sufficient community-based options for youth that could benefit from them.

## Barriers to an Effective Continuum of Care

Barriers to implementing this initiative included the quality of youth-specific assessment information available to guide case planning and lack of capacity to link youth to appropriate community based treatment. The first barrier was readily addressed through the implementation of the Colorado Juvenile Risk Assessment. Ensuring access to appropriate community-based services for youth in Division of Youth Corrections custody has been historically impeded by significant (approximately 70%) reductions in state funds for Parole Program Services between FY 2001-02 and FY 2005-06[2]. These reductions significantly reduced the availability of contracted community-based services that DYC Client Managers are able to access for youth. For FY 2006-07, the Parole Program Services appropriation totaled $3.3 million, or approximately 78 percent of the FY 2001-02 appropriation.

As the continuum of community-based services is being rebuilt, DYC is working closely with providers to ensure that new services meet criteria for effectiveness (discussed later in this report). However, even as the array of community-based service options increases, the long term success of the Continuum of Care Initiative is challenged by the current structure of funding allocation which is based on a formula that uses average daily population (ADP) in commitment placement to determine funding levels. Under this structure, DYC's efforts to

[2] Parole Program Services funds were cut from an appropriation of $4,255,899 in FY 2001-02 to $3,310,675 in FY 2006-07.

improve the overall quality and efficiency of services through the Continuum of Care Initiative will create a situation in which success in transitioning youth more rapidly from restrictive and expensive residential commitment to appropriate community-based placements will leave DYC trapped in a downward funding spiral. Given that community expenditures under Footnote 86 are also funded as a percentage of the overall budget based on commitment ADP, successful community initiatives will undermine the budget on which they depend. Without a shift in funding allocation structures, as better community services become available and Client Managers become more effective in appropriately transitioning youth to community placements, DYC's resources for both commitment and community-based services will shrink to the point that youth are left without either commitment or community placements.

> Without a shift from funding formulas that rely on commitment ADP, the Continuum of Care Initiative's success in appropriately transitioning youth from commitment to community placement will result in a downward funding spiral that will limit DYC's capacity to serve youth.

## Continuum of Care Initiative Evaluation Requirements

Each year, the Colorado Long Bill requires that DYC submit a report to the Legislative Joint Budget Committee detailing the flexibility to use up to 15 percent of funds appropriated for the purchase of contract placements to provide treatment, transition and wrap-around services to committed youth. Table 1, below, summarizes the relationship between evaluation findings and the five report requirements outlined in Footnote 86 of Senate Bill 07-239.

**Table 1: Footnote Report Requirements and Report Sections (*to be revised later*)**

| Footnote Requirement | Corresponding Report Section |
|---|---|
| 1. The amount spent serving youths in residential and non-residential settings from this line item in FY 2006-07 | Section II: Expenditures (page 16) |
| 2. The type of services purchased with such expenditures. | Section II: Expenditures (page 18) |
| 3. The number of committed and detained youths treated with such expenditures | Section I: Youth Served (page 9) |
| 4. Baseline data that will serve to measure the effectiveness of such expenditures | Section III: Outcomes (page 27) |
| 5. An evaluation of the effectiveness of this footnote in addressing the need for flexibility in treating and transitioning youth from residential to non-residential settings. | Section III: Outcomes (page 27) |

In responding to these requirements, the report seeks to achieve three main objectives:

- To describe the youth being served by the Continuum of Care Initiative, including a preliminary analysis of risk for re-offending and treatment needs.
- To describe the services provided, relative to youth needs and the features of evidence based practice; and
- To discuss emerging indicators regarding program effectiveness.

Data for this report come from four primary sources.

1. **Flexible funding tracking forms** developed by DYC were used by Client Managers to document each service purchased through the Continuum of Care Initiative. For each youth receiving services, these forms track the amount of funds expended, the types of service purchased, and the service provider. Forms also include a Trails ID for linking youth receiving services to their information in the Trails system.

2. **DYC Trails Data System –** Extracts from the Trails data system provide information regarding the youth served with flexible funds, commitment LOS for each youth, and overall monthly ADP over the course of the fiscal year.

3. **Services detail information** was collected from descriptions provided in the DYC 2006 Provider Directory. Where more information was needed to determine the nature of services purchased and to link those services to what is currently known regarding evidence based practice, brief phone interviews were conducted by the evaluators with providers to clarify the nature of services delivered.

4. **Risk Assessment Data** is available from the first year of implementation of the Colorado Juvenile Risk Assessment (CJRA). For this fiscal year, a web-based data system records the results of the CJRA. The CJRA will be transitioned into the Trails data system during Fiscal Year 2007-08.

# Youth Served

Records of flexible funding expenditures identify 1,703 individual youth receiving services under the Continuum of Care Initiative during fiscal year (FY) 2006-07. This number is considerably higher than the 765 youth identified during FY 2005-06. This increase in youth served over the initial program year reflects two primary factors. First, during the FY 2005-06 program startup year, there was a "ramp up" implementation period. In addition, for the current fiscal year DYC expanded tracking of expenditures to include all community-based services beyond the originating budget line item in its Continuum of Care Initiative expenditure tracking. As was the case during the previous fiscal year, all of the youth receiving services were DYC committed youth. No pre-commitment youth were served using Continuum of Care Initiative funds.

**Figure 2. Youth Served in DYC Management Regions**

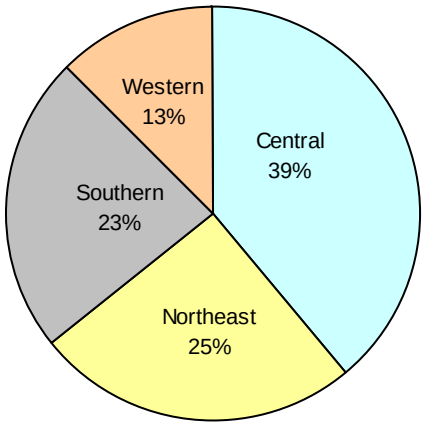



Figure 2 (to the left) shows the distribution of youth served across the four Management Regions. These proportions of youth served in the Continuum of Care Initiative are consistent with those reported in last year's (FY 2005-06) evaluation report. In addition, these percentages closely reflect the distribution of average daily population (ADP) for youth across the regions.

Table 2 (below) shows a comparison between the proportions of youth served in the Continuum of Care Initiative and the overall FY 2006-07 DYC commitment average daily population (ADP).

**Table 2; Continuum of Care Youth Served vs. 2006-07 DYC Commitment Population**

| Management Region | Proportion of C of C Initiative Youth | Proportion of FY 2006-07 DYC ADP |
|---|---|---|
| Central | 38.8% | 43.7% |
| Northeast | 25.3% | 26.4% |
| Southern | 23.4% | 20.2% |
| Western | 12.5% | 9.8% |

Differences are not statistically significant. For all regions $Z<1.0$; $p>.05$.

Table 3 (below) shows the demographic distributions of youth served with funds under the Continuum of Care Initiative.

| Table 3; Gender and Ethnicity of Youth Served | | | | |
|---|---|---|---|---|
| | Continuum of Care Initiative Youth | | Overall DYC Commitment Population | |
| | Number of Youth | Percentage | Number of Youth | Percentage |
| Female | 194 | 11.4% | 370 | 12.9 |
| Male | 1509 | 88.6% | 2498 | 87.1 |
| American Indian or Alaskan Native | 33 | 1.9% | 51 | 1.8 |
| Asian | 8 | <1% | 17 | <1% |
| Black or African American | 299 | 17.6% | 503 | 17.5 |
| Hispanic | 629 | 36.9% | 1041 | 36.3 |
| Native Hawaiian or Other Pacific Islander | 6 | <1% | 16 | <1% |
| White (Caucasian) | 728 | 42.7% | 1234 | 43.0 |
| Unable to Determine | 6 | <1% | 6 | <1% |
| **TOTAL** | **1703** | **100.0%** | **2868** | **100.0%** |

Differences are not statistically significant. For all demographics $Z<1.0$; $p>.05$.

The majority of youth served in the Continuum of Care Initiative (89%) were male. This is consistent with the overall DYC commitment population that was 87% male in FY 2006-07.

The majority of youth served were either Caucasian (43%) or Hispanic (37%), with African American youth making up 18% of youth served. American Indian or Alaskan Native made up less than 1% of youth served. Asian youth and Native Hawaiian or Pacific Islander youth also made up less than 1% of the youth served. Again, these proportions closely mirror the proportions of all committed youth served during FY 2006-07.

## Profiles of Youth Served

Youth served across the Continuum of Care Initiative were an average of 16.4 years of age at the time of commitment. On average, by the time youth left residential placement and began their parole period, they were an average of 17.8 years old.

**Table 4: Age at Commitment of Youth Served**

| Age at Commitment | Number of Youth | Percentage |
|---|---|---|
| 14 years and younger | 243 | 14% |
| 15 years | 340 | 20% |
| 16 years | 455 | 27% |
| 17 years | 574 | 34% |
| 18 years and older | 91 | 5% |
| Average | 16.4 years | |
| **TOTAL** | **1703** | **100.0%** |

As shown in Table 4 (below), the majority of youth served (71.3%) were originally committed under a Non-Mandatory sentence. These sanctions involve no minimum out-of-home sentence and a maximum sentence length not to exceed 24 months. Another 19% were committed on a Mandatory Sentence. These sanctions specify a minimum time period of up to 24 months during which a youth must remain in an out-of-home placement.

**Table 5: Original Sentence Types of Continuum of Care Initiative Youth**

| Original Sentence Type | Number of Youth | Percentage |
|---|---|---|
| Non-Mandatory | 1,214 | 71.3% |
| Mandatory | 323 | 19.0% |
| Repeat Offender | 51 | 7.1% |
| Aggravated Offender | 23 | 1.4% |
| Violent Offender | 16 | 1.0% |
| TOTAL | 1703 | 100.0% |

The remaining youth were sentenced to DYC as Repeat (7.1%), Aggravated (1.4%) or Violent (1%) offenders. Definitions of these special sentence types are shown below.

> **Repeat Offender (Sentence Type)** - A juvenile may be sentenced as a repeat offender if he or she has been previously adjudicated a juvenile delinquent and is adjudicated a juvenile delinquent for a delinquent act that constitutes a felony, or if his or her probation is revoked for a delinquent act that constitutes a felony. The court may or may not designate a minimum sentence length.

**Aggravated Offender (Sentence Type)** – These sanctions specify a time period of three to seven years, during which time a youth must remain in the custody of DYC. Contingent upon court approval, youth may be eligible for non-secure placement, parole, or transfer to the Department of Corrections (adult corrections).

**Violent Offender (Sentence Type)** - A juvenile may be sentenced as a violent offender if he or she is adjudicated a juvenile delinquent for a delinquent act that constitutes a crime of violence as defined in Section 16-11-309(2), Colorado Revised Statutes.

## Overview of the Colorado Juvenile Risk Assessment

As introduced in the opening section of this report, implementation of a state-of-the-art, evidence based risk assessment instrument has been a central component of the Continuum of Care Initiative. The Colorado Juvenile Risk Assessment (CJRA) provides an overall score describing each youth's risk for re-offending and also provides a detailed analysis of the specific risk and protective factors that may contribute to a youth's success or failure under Division of Youth Corrections supervision. The overall individual risk score is derived from the youth's criminal history and a subset of items from each youth's social history (including family relationships, peer groups, substance use, mental heath status, attitudes and social skills). The overall risk score is categorized into one of three levels: low, moderate or high.

Table 6 illustrates how the criminal history and social history risk scores combine to yield the overall risk score predicting likelihood for re-offending. Each youth's risk level is determined using the matrix of criminal and social history scores. For example, a youth with a criminal history score of 10 and a social history score of 5 would be classified as a "moderate" risk to re-offend. A 2004 validation study of the tool as it is used in Washington State has demonstrated that the risk levels are predictive of actual re-offending behavior[3].

**Table 6: Levels of Risk for Re-offending**

| Criminal History Score | Social History Risk Score | | |
|---|---|---|---|
| | **0 to 5** | **6 to 9** | **10 to 18** |
| 0 to 2 | Low | Low | Moderate |
| 3 to 4 | Low | Moderate | High |
| 5 to 7 | Low | Moderate | High |
| 8 to 31 | Moderate | High | High |

The full CJRA assessment is a comprehensive examination of a youth's needs for treatment, based upon scores on 12 domain areas that have been shown to be related to a youth's

[3] Barnoski, R. (2004). *Assessing risk of re-offense: Validating the Washington State juvenile court assessment.* Olympia, WA: Washington State Institute for Public Policy.

recidivism risk. As noted in the introductory section of this report, these risk domains have been reported broadly in national research and include circumstances and characteristics across a range of areas that can be changed through treatment, including substance abuse, behavior, attitudes, personality, peer associations, the family, and circumstances at school. Although the dynamics involved are not fully understood, research indicates that youth who enter the juvenile justice system with challenges in multiple areas are more at risk to re-offend than those who present with only a few—the effects are additive. Similarly, each youth's pattern of risks and needs provide vital guidance in selecting the specific array of services that may reduce recidivism and enhance community success.

The CJRA full assessment generates two overall types of scores for each domain. Risk score describe factors that make it more likely the youth will re-offend. Protective scores describe factors that make it less likely that the youth will re-offend. In addition, both types of scores can be divided into factors that can be changed through treatment (dynamic factors) and those that are historical and cannot be changed (static factors).

The CJRA's dynamic factors can change as a result of successful interventions – risk factors may decrease and protective factors may be enhanced. DYC completes the instrument at several points for each youth in order to guide case planning, monitor improvement and plan for successful community transitions by ensuring that youth have appropriate and sufficient community supports in place as they move from secure to community placement and onto parole. Typically, youth are assessed with the CJRA as they enter DYC commitment, at significant times during commitment (such as changes in placement), and prior to community transition. One important use of the CJRA is at the time the youth prepares to enter parole. Reports submitted to the Parole Board for each youth now include a detailed CJRA report that outlines areas where treatment and support are needed as the youth begins the parole period, as well protective factors that the youth has that will help to mitigate those needs and can be built upon prior to discharge.

**Treatment Needs at Community Transition** – CJRA scores may be used to examine treatment needs at the time of a youth's transition from residential placement to the community. In addition to describing individual youth needs for the purpose of case planning, the overall pattern of CJRA risks and needs can provide a profile of the needs of the population served by DYC. In turn, this profile may be compared to the existing array of services to assess the extent to which available services match the demonstrated need. However, because implementation of the CJRA was relatively recent – the end of FY 2005-06 – complete assessments are available for only a subset of youth served in FY 2006-07.

It is expected with the implementation of a new assessment tool that there will be a period during which users become comfortable with the tool and achieve greater consistency of administration over time. Therefore, early CJRA data should be treated with a great deal of caution. Because of this, the CJRA results presented in this report should be understood as a preliminary examination of how assessment findings may be integrated into the evaluation of the Continuum of Care Initiative. While an early indication of overall youth needs within the

population of committed youth may be gleaned from this data, more data collection and analysis will be needed to make decisions regarding potential gaps in service availability.

DYC's Continuum of Care Initiative seeks to support successful transition from residential placement to the community. Client Managers complete a CJRA re-assessment for each youth prior to this transition in preparation for an appearance before the Community Review Board (if transitioning into a community residential placement) or the Parole Board (if a youth is preparing to enter parole). Typically, these assessments take place after a youth has received residential treatment services and describe the youth's risks and needs as they prepare to enter the community. For the current evaluation, these re-assessments for youth receiving services under the Continuum of Care Initiative were examined in order to describe the general treatment needs of the population as they move towards community transition.

**Baseline Risk to Re-Offend.** Of the 1,703 youth served with Continuum of Care Initiative funds, 1,311 (77%) could be linked to at least one CJRA completed at some point during the commitment period. Of these youth, 891 (67%) had assessments that could be linked by type or by date to the time the youth was referred to either a Parole Board or Community Review Board. These 891 assessments served as the basis for our analysis of youth needs at the time of community transition.

The vast majority of youth in the Continuum of Care Initiative are at high risk to re-offend based on their criminal histories. The project is clearly targeting those youth most in need of intensive, ongoing support in order to facilitate successful community re-entry.

As shown in Table 7 below, 83% of youth in the Continuum of Care Initiative are classified as at high risk to re-offend based on their CJRA score profile. The project is clearly targeting those youth most in need of intensive, ongoing support in order to facilitate successful community re-entry.

**Table 7: Risk for Re-Offending of Youth at Community Transition**

| | | Percent of Youth Served | | |
|---|---|---|---|---|
| | **N** | **Low Risk** | **Moderate Risk** | **High Risk** |
| **CJRA Risk For Re-Offense** | 872 | 2% | 15% | 83% |

As noted earlier, the overall risk score of the CJRA is based on a youth's criminal history and a subset of social history factors. The overall risk score is largely weighted towards criminal history – a static historical factor that cannot be changed through treatment. The purpose of the overall risk score is to make an initial determination of a youth's likelihood to continue offending behavior. Typically in systems using this kind of assessment, low risk youth are diverted to lower levels of supervision and treatment, and system resources are directed towards youth at a moderate or high risk to re-offend.

Because the overall risk score is designed to be an initial categorization of risk to re-offend and is based largely on static, historical, factors, a youth who scores "high risk" will not move to a lower overall risk classification even with successful treatment. This overall score is not intended to describe which areas of the youth's life (family, peers, personality factors) are contributing to risk. Because of this, the overall score does not provide guidance regarding what kind of treatment might be helpful. In addition, because the overall risk score so heavily relies on historical factors that do not change, it is note designed to depict changes in youths' risks and needs as they proceed through commitment. However, as youth needs change over time and through the course of treatment in residential and community placement, it is important to be able to track the patterns of change for each youth. The 12 individual domains scores of the CJRA are designed for this purpose; they track youth through the commitment period and illustrate how risk is reduced and needs changes at different commitment stages.

**Specific Youth Risks and Needs.** The full CJRA assessment provides Client Managers with a profile of scores across 12 domains of risk and protective factors. This guides service planning for individual youth as well as supporting the design of the overall service array to best meet the needs of the population served by DYC. Table 8, below, depicts the relative needs of treatments in each of the 12 CJRA domains.

**Table 8: Distribution of Treatment Needs**

| | | Percent of Youth Served | | |
|---|---|---|---|---|
| | N | Level of Treatment Need | | |
| | | Low | Moderate | Elevated |
| **Criminal History** | 890 | 2% | 12% | 86% |
| **Relationships** | 875 | 11% | 55% | 34% |
| **Attitudes** | 872 | 46% | 20% | 34% |
| **Aggression** | 882 | 27% | 42% | 31% |
| **Family** | 879 | 45% | 28% | 27% |
| **Social Skills** | 857 | 75% | 12% | 13% |
| **Substance Use** | 879 | 92% | 3% | 5% |
| **Mental Health** | 873 | 55% | 41% | 4% |
| **School** | 880 | 91% | 6% | 3% |
| **Use of Free Time**[4] | | N/A | N/A | N/A |
| **Employment**[5] | | N/A | N/A | N/A |

The Criminal History domain shows the highest percentage of youth whose scores fell into the "elevated" range. As discussed above, this reflects the nature of the commitment

[4] Note that the Use of Free Time and Employment Domains do not have scores that indicate treatment need. These domains both record youth's protective factors (rather than risk) and may be areas that can be bolstered for successful community transition, but do not necessarily indicate a treatment need.
[5] See footnote 4 above.

population. As a static factor, Criminal History cannot be changed through intervention. However, changes in the other subscales can help mitigate this baseline risk level.

More than one-third of youth scored within the elevated need range in the Relationships, Attitudes, and Aggression domains. Many moderate need youth might also benefit from interventions in these areas. This suggests that available treatment services should have sufficient capacity to meet this need. Similarly, just under one-third of youth scored within the elevated treatment need range on the Family domain. This underscores the importance of sufficient capacity, both in community services and for youth in residential placement, to address family functioning to ensure that youth will be able to succeed when they return to the community.

A relatively small proportion of youth scored in an elevated range in the social skills, school, substance use, and mental health domains. However, when we add in moderate needs, nearly half of youth served (45%) demonstrated a significant mental health-related need. When considering the apparently low percentages of youth scoring in the elevated need area in the school, substance abuse, and mental health areas, it is necessary to understand three important contextual factors related to juvenile justice risk assessment. First, the CJRA emphasizes behaviors that have been empirically demonstrated to relate to risk for re-offending – *criminogenic* risks and needs. Therefore, a youth's use of drugs or alcohol will only result in an elevation of risk score if that use is directly influencing her delinquent behavior. However, DYC may determine that the youth's substance use warrants treatment once the youth is committed to its care regardless of the direct link between her use and her other delinquent behavior.

Another important factor is that these scores reflect CJRAs that were completed at the time youth were preparing to enter parole, after spending (on average) more than 18 months in a residential facility. Because these youth have already completed treatment in residential programs designed to address delinquent behavior, relatively lower scores may be expected. Similarly, during this time, a youth has likely been attending school, denied access to drugs and alcohol and received medical and counseling resources to stabilize any mental health issues. Therefore, when the CJRA is completed, with the Client Manager recording information about the most recent 12 months of the youth's life, in the CJRA may reflect an apparently low need range in these domains. DYC is considering adaptations of the instrument to address these issues, including consultation with the original tool designer and other states using the tool who are also addressing these issues.

Now that DYC has used the CJRA for a full year, the next phase will involve analysis of score distributions and determination of Colorado-specific norms for each domain. In addition, further analysis regarding strategies for quality assurance will be conducted and ongoing standards will be developed. Finally, as mentioned previously, because this is the first year of full implementation, the overall quality of risk assessment results may be inconsistent in early months as users were learning to use the tool and moving towards consistent administration. In future analyses, such early assessments may be removed from

analysis. They are included here in order to try to have the sample sizes as representative as possible (in terms of its proportion to the total number of youth served).

As DYC continues to integrate the CJRA into its ongoing system change efforts under the Continuum of Care Initiative, the link between improvements in the assessment process to long term system improvements has begun to emerge. This will be discussed in the Outcomes section of this report.

## Expenditures

Information regarding the types of services purchased under the Continuum of Care Initiative was tracked for each DYC management region. For FY 2006-07, tracking data showed expenditures of $3,790,116. This was considerably higher than expenditures reported in the Fiscal Year 2005-06 ($928,904). This reflects, in part, the additional expenditure tracking begun for this year's report. Last year, DYC tracked only expenditures directly from the Contract Placements Line item that contains the flexible spending provision. In order to more accurately describe the range of services that comprise the Continuum of Care, this fiscal year DYC has begun tracking all parole program services expenditures as well.

Fiscal year 2006-07 expenditures across the 1,703 youth served represents an average of $2,225 per youth. Table 9 (below) shows the distribution of expenditures across the DYC management regions.

**Table 9: Expenditures Across DYC Management Regions**

| Management Region | Funds Expended | Percent of Total Funds |
|---|---|---|
| Central | $1,574,580 | 41.5% |
| Northeast | $804,836 | 21.2% |
| Southern | $859,327 | 22.7% |
| Western | $551,373 | 14.5% |
| **Total** | **$3,790,116** | **100.0%** |

The distribution of expenditures across DYC Management Regions closely matches the regional distributions of youth served and overall committed ADP. The Central Region, which serves nearly half (44%) of all DYC committed youth, expended 42% of Continuum of Care funds. The Northeast region, serving one quarter of the DYC commitment population, expended 21% of funds, while the Southern region, which serves 20% of the DYC population, expended 23% of the funds. Finally, the Western region of the state serves the smallest proportion of youth (10%), and accounted for the smallest proportion of expenditures as well (14%).

**Table 10: Distributions of Youth Served, Expenditures and ADP**

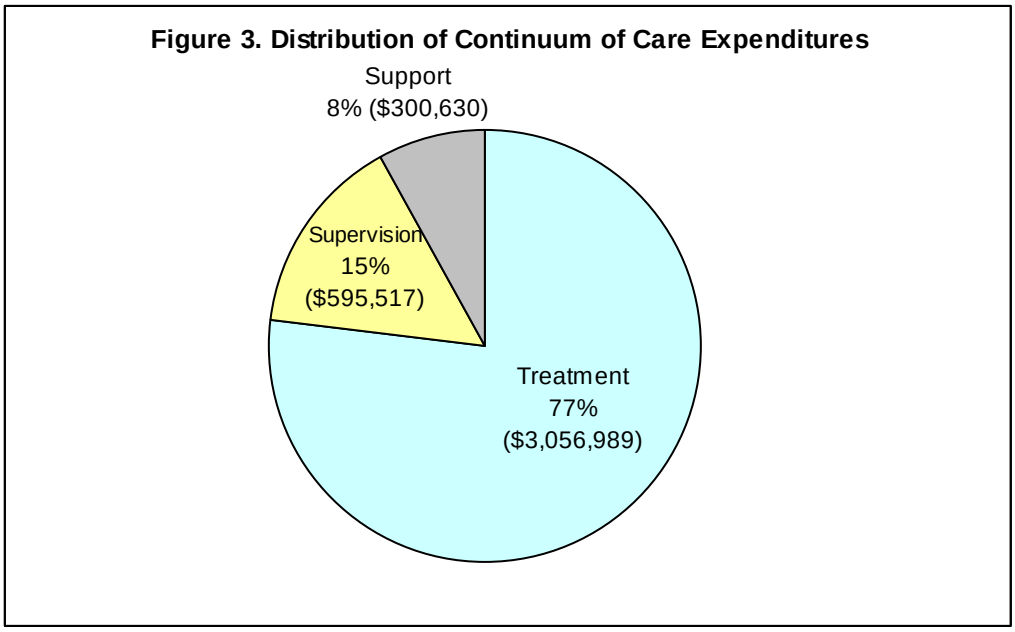
| Management Region | Proportion of Expenditures | Proportion Youth Served | Proportion of FY 2006-07 DYC ADP |
|---|---|---|---|
| Central | 41.5% | 38.8% | 43.7% |
| Northeast | 21.2% | 25.3% | 26.4% |
| Southern | 22.7% | 23.4% | 20.2% |
| Western | 14.5% | 12.5% | 9.8% |

## Types of Services Provided

One hundred percent of expenditures were spent on the provision and enhancement of services to youth. The types of services purchased broadly fall into one of three categories (these will be further discussed later in this section):

- **Treatment Services** encompass all expenditures used for treatment or rehabilitation programs. These include clinical assessment and evaluation of individual youth, therapy (individual, family or group), mentoring, educational and vocational programs, substance abuse treatment, and offense-specific treatment. Also included in this category are expenditures used to support and expand capacity in community-based treatment programs.
- **Youth Supervision** expenditures include supervision beyond the general services already provided by parole officers. This includes third party tracking, electronic monitoring, and biological testing (urine analysis and alcohol test saliva strips).
- **Youth Support** expenditures are used for to pay for general youth independent living expenses, including emancipation, housing, legal and professional services, and day to day living expenses for youth.

As shown in figure 3 below, the majority of expenditures (77%) were spent on youth treatment services. The remaining expenditures were allocated to youth supervision (15%) and youth support (8%) services.




There was some variation among the management regions across the three main service categories, as shown in Table 11 below. The Northeast region spent a larger proportion of funds on surveillance services than did the other three regions (28% for the Northeast region versus 8% for the Central region, 7% for the Southern region, and 6% for the Western region). Table 11 summarizes the regional distributions of expenditures across the general categories.

**Table 11: Distributions of Youth Served, Expenditures and ADP**

| Management Region | General Type of Service Expenditures | | |
|---|---|---|---|
| | Treatment | Support | Supervision |
| Central | 79.7% | 12.1% | 8.3% |
| Northeast | 67.0% | 4.9% | 28.1% |
| Southern | 86.4% | 6.2% | 7.4% |
| Western | 88.9% | 4.9% | 6.3% |

## Evidence-Based Practice

At the core of the Continuum of Care Initiative is an emphasis on evidence-based practice. Typically, the term “evidence-based practice” describes programs or approaches for which there is consistent evidence showing that they improve client outcomes. In addition, the term refers to those programs that have not been subject to rigorous evaluations, but are designed and implemented using principles of evidence-based practice that have been discovered through research with proven programs.

In juvenile justice settings, prioritized outcomes include reduced recidivism and successful community functioning. DYC has been working with service providers to move towards a service array built upon evidence-based practices and that is focused on strengths, interests, abilities and capabilities, rather than deficits, weaknesses, or problems.

Research has shown that the most effective programs typically involve intensive skills training and cognitive behavior modification techniques aimed at reducing risk factors for juvenile justice involvement (Lipsey, 1992). Programs which use cognitive behavioral approaches to improve interpersonal skills, self-control, anger management, and substance abuse resistance have been found to be most effective at reducing recidivism. In general, the most effective programs are highly structured, emphasize the development of basic social skills, and provide individual counseling that directly addresses behavior, attitudes, and perceptions (Altschuler, 1998).

In light of clear and consistent research evidence to support the cost effectiveness of community-based options, the Continuum of Care Initiative strives to enhance community program funding levels even as residential ADP is reduced through successful implementation.

Effective programs also tend to be community-based. Removal from the community and placement in secure settings is necessary for some youth. However, for youth for whom community safety concerns are not immediate and preeminent, the most promising approaches, based on research evidence, are family and community-based approaches (e.g., Henggeler, et al., 1998; Greenbaum, et al., 1998). Admission to restrictive residential placement is typically justified on the basis of community protection or the perceived benefits of residential treatment itself (Barker, 1982; Lyons, et al., 1998). However, these justifications have limited research support. For example, youth who engage in seriously violent and aggressive behavior have not shown improvement from participation in residential treatment (Joshi & Rosenberg, 1997). One possible reason is that association with delinquent peers is a major risk factor for later behavior problems (Loeber & Farrington, 1998). Moreover, community-based interventions that target change in peer relationships have been found to be effective at breaking contact with violent peers and reducing aggressive behaviors (Henggeler et al., 1998).

Well-established evidence-based programs, often labeled “model,” are supported by a body of research that has demonstrated their effectiveness in reducing recidivism for juvenile offenders. Most intervention programs, however, do not have access to rigorous program evaluation and lack a strong evidence base. However, the national research base has yielded a consistent set of key components of effectiveness. These “evidence-based practice” elements include:

- a theoretical foundation based on existing research and/or program evaluation;
- a focus on cognitive-behavioral training and on teaching concrete skills;
- a concrete program structure with intensive service delivery;
- involvement of the youth’s family and community, as possible; and
- quality assurance and training measures to ensure fidelity to the program model.

Use of evidence-based programming can result in significant cost avoidance. Researchers for the State of Washington, for example, have found that every $1 spent on evidence-based treatments such as Functional Family Therapy, Multisystemic Therapy, and Aggression Replacement Training result in returns of $2 to $12 in benefits and avoidance of the costs associated with future crime (Aos, et al., 2004). In addition, *avoiding* the referral of youth to programs that have not demonstrated effectiveness can in and of itself result in further savings, since some programs fail to generate more benefits than costs.

In light of clear and consistent national findings pointing to the effectiveness (and cost-effectiveness) of community-based treatment options, the Continuum of Care Initiative strives to ensure that community program funding levels are enhanced to support the full continuum of evidence-based community treatment options even as ADP in residential facilities is reduced through successful implementation of the principles of the initiative.

During FY 2007-08, DYC will work with state and contracted providers to conduct an analysis of the current services array. This analysis will assess the extent to which services are evidence-based or draw from principles of evidence-based practice. DYC will also develop practice expectation for providers and work with providers to enhance the array of evidence-based services available to youth and further align the continuum of services with the emerging risk and needs profile of youth served by DYC.

## Treatment Services

Treatment Services make up the preponderance of services purchased through Continuum of Care expenditures. These services include individual, group and family therapy services. Vocational, educational and mentoring programs also account for a substantial proportion of these expenditures. Restorative Community Justice Services, Assessment and Evaluation each made up less than half of one percent of expenditures. Table 12, below, shows the distribution of treatment services, by specific service type.

**Table 12: Distributions of Treatment Expenditures by Type of Service**

| Type of Service | Amount Spent | Percent of Spending |
|---|---|---|
| Mentoring | $1,188,863 | 39.3% |
| Family Therapy | $659,698 | 21.8% |
| Job/Skills Training | $386,709 | 12.8% |
| Community Transition | $290,108 | 9.6% |
| Individual Therapy | $142,145 | 4.7% |
| Day Treatment | $89,875 | 3.0% |
| Substance Abuse Treatment | $74,896 | 2.5% |
| Administrative-Capacity Building | $53,803 | 1.8% |
| Offense-Specific Treatment | $52,580 | 1.7% |
| Group Therapy | $41,124 | 1.4% |

| Type of Service | Amount Spent | Percent of Spending |
|---|---|---|
| Art-Recreational Therapy | $31,487 | 1.0% |
| Assessment and Evaluation | $6,430 | <1% |
| Restorative-Community Justice | $4,973 | <1% |
| **Total** | $3,022,691 | 100% |

The largest overall proportion of treatment program expenditures was spent on **Youth Mentoring** programs. This is consistent with the preliminary CJRA data that 89% of youth served had moderate or elevated need in the Relationships domain. This domain reflects needs related to both peer and adult relationships. Mentoring programs attempt to build positive relationships with an adult in the community. This relationship may provide support during transitions from placement and can help to reduce youth's recidivism risk. Current data does not allow for a detailed description of programs providing "youth mentoring," and it is likely that there is considerable variation across programs. Research has demonstrated that mentoring programs can be effective in intervening with at-risk youth. As more examination into specific program practices occurs as part of the Continuum of Care Initiative, it will be important to measure to which degree these programs follow principles of evidence based practices and whether their specific content matches the assessed needs of youth served by them.

The use of mentoring programs varied across the DYC management regions. In both the Central and Southern regions, mentoring programs made up approximately half of expenditures (51% and 46%, respectively). Relating this expenditure pattern to CJRA risk scores we might expect a mentoring intervention to be especially relevant with youth for whom supportive prosocial relationships are lacking. In the Central region, we see 39% of youth in the elevated needs range on the Relationships domain, while in the Southern region, 29% of youth scored in the elevated range. Both the Western and Northeast regions spent a lower proportion of their expenditures (18% for each) on youth mentoring programs. In the Northeast region 34% of youth scored in the elevated needs range and in the Western region 25% of youth scored in the elevated needs range on the Relationships domain.

When properly designed and implemented, mentoring interventions can also address other risk areas, such as social skills and aggression. However, we do not currently have sufficient data regarding services actually provided to determine the specific content of existing mentoring interventions. Therefore, these findings offer only preliminary information regarding the fit between risks/needs and services provided.

**Family Therapy** services made up the next largest proportion of treatment expenditures at 22%. This represents an increase over last year, when family therapy made up only 12% of expenditures. A large body of research has demonstrated that comprehensive and intensive family therapy programs are among the most promising approaches to prevent recidivism and support successful community functioning. In addition, the preliminary risk assessment

results demonstrate that many youth experience elevated levels of need in the family relationships domain.

DYC's expenditures on family therapy include proven programs, such as Functional Family Therapy (FFT) and Multisystemic Therapy (MST) as well as locally developed family therapy programs that have not been subject to rigorous evaluation. As DYC continues to examine its services, it will be important to learn more about these untested programs to determine the degree to which they are implemented according to proven principles of effective intervention.

The increase in use of family therapy is a positive indication of a greater use of evidence-based practices within the Continuum of Care. Individual Therapy (4%), Group Therapy (1%) and Day Treatment (3%) programs were used less frequently than the more effective family therapy approach.

Once again, distributions varied across DYC management regions. Whereas the Northeast and Western regions spent a lower proportion of their funds on mentoring programs, they spent a much larger proportion on family therapy programs (40% and 31%). In turn a lower proportion of funds were spent on family therapy in the Southern and Central regions (14% for both programs).

A substantial portion of treatment funds were also spent on vocational and skills training, as well as community transition services. Youth moving back into the community after spending time in residential placement have great practical needs in all of these areas. While little national research evidence currently exists to support these programs' effectiveness, DYC research has demonstrated a link between employment at the time of discharge and post-discharge recidivism in committed youth. There was a fairly even distribution in the proportion of funds spent on job and skills training (between 10% and 12%), with the exception of the Western region, which expended 5% of its treatment funds on vocational and skills training.

A relatively small proportion of treatment funds were expended on non-family treatment practices that are generally recognized as Evidence Based Practices. Less than one percent of funds were expended on Cognitive Behavioral Training (CBT) and Dialectical Behavior Training (DBT). Given the emergent risk data (approximately one-third of youth had treatment needs in the area of attitudes and aggression) showing possible need for intervention in addressing risk in the areas of delinquent attitudes and aggressive behavior, these programs may warrant attention and consideration for additional development as resources within the Continuum.

There was also a relatively low utilization of substance abuse services (2.4%), given that at the time youth are committed, most youth are assessed as needing either intervention or treatment services in this area. On the other hand, youth are likely receiving these services in residential placement and the CJRA data from pre-release assessments does not suggest a

high need for these services. Some substance abuse issues are also addressed in part from a supervision standpoint, including the use of drug and alcohol testing.

A small proportion of funds (1%) were expended on offense-specific treatments for youth identified as committing either domestic violence or sexual offenses. However, this fiscal year DYC spent most of its service dollars for juveniles committing sexual offenses from a separate budget line item that was not included in the Continuum of Care Evaluation.

Another 1% of funds were expended for art and recreational therapy programs. Other services that were provided and not listed on the above table (each contributed to less than one-half of one percent of expenditures) included restorative justice services and services for the clinical assessment and evaluation of individual youth (including psychological and educational evaluations).

## Supervision Expenditures

Supervision services made up a much smaller proportion of the overall Continuum of Care expenditures at only 15 percent of all expenditures ($595,517), compared with the more than $3 million (77%) spent for treatment services. The proportion of overall expenditures spent on supervision (vs. treatment or support) varied across the management regions. The Northeast region, for example, spent just over one-quarter of its total Continuum of Care funds on supervision. In contrast, the Western, Southern, and Central regions spent only a small proportion of funds on supervision (6%, 7%, and 8%, respectively).

**Table 13: Distributions of Supervision Expenditures by Type of Service**

| Type of Supervision Expenditure | Amount Spent | Percent of Spending |
|---|---|---|
| Supervision-Based Mentoring | $443,660 | 75.3% |
| Tracking | $67,889 | 11.5% |
| Electronic Home Monitoring | $49,428 | 8.4% |
| Substance Use Screening | $13,697 | 2.3% |
| Day Reporting | $8,337 | 1.4% |
| Offense Specific Supervision | $5,955 | 1.0% |
| **Total** | **$588,966** | **100%** |

Of the $588,966 spent on supervision, most expenditures were for supervision-based mentoring service (75%) or on youth tracking services (11%). A smaller proportion (8%) was spent on electronic home monitoring equipment and services, as well as substance use screening materials and testing (2%). One percent (1%) of expenditures went to day reporting services. The remaining supervision funds (1%) were used for offense specific supervision services, primarily in the form of polygraph exams.

**Table 14: Distributions of Supervision Expenditures by Region**

| | Percent of Expenditures | | | |
|---|---|---|---|---|
| **Type of Service** | **Central** | **Northeast** | **Southern** | **Western** |
| Supervision-Based Mentoring | 77.2% | 78.9% | 87.0% | 50.5% |
| Tracking | 10.6% | 5.2% | -- | 31.8% |
| Electronic Home Monitoring | 10.0% | 13.7% | -- | 4.3% |
| Substance Use Screening | 1.7% | 2.3% | 1.9% | 4.8% |
| Day Reporting | -- | -- | -- | 8.7% |
| Offense Specific Supervision | <1% | -- | 6.1% | -- |

Across all regions, the majority of expenditures was spent on supervision-based mentoring services. The Western region had a more even distribution, spending less on Supervision Mentoring and a larger proportion of expenditures on Tracking than any of the other regions.

## Youth Support Expenditures

The inclusion of additional funding from the parole program services line item from the DYC budget in the Continuum of Care evaluation resulted in the recording of fund expenditures used to support youths' basic needs as they transition back into their communities This amount ($300,630) represented the smallest percentage, only 8 percent of all Continuum of Care Initiative dollars spend. Table 15, below shows the general areas in which those support dollars were expended.

**Table 15: Distributions of Support Expenditures by Region**

| **Type of Service** | **Amount Spent** | **Percent of Spending** |
|---|---|---|
| Emancipation | $171,359 | 57% |
| General Living Expenses | $63,132 | 21% |
| Transportation | $24,050 | 8% |
| Education | $21,044 | 7% |
| Medical | $15,032 | 5% |
| Legal and Professional | $6,013 | 2% |
| Parenting | $1,503 | 1% |
| **Total** | **$302,133** | **100%** |

More than half (57%) of all support services expenditures went to Emancipation and Independent Living Assistance for youth. This primarily consists of housing support for youth who are not returning to their families' homes following their commitment. An additional 21% of expenditures went to general living expenses such as clothing, groceries and recreation. Eight percent (8%) of funds were spent on transportation and another 7% on educational expenses (including GED testing, tuition and supplies).

A small proportion of support expenditures went toward other day-to-day expenses, including medical needs (5%). Legal and professional services (2%) consisted mainly of obtaining legal documents (birth certificates, identification) and interpreter services. Less that 1% of expenditures went to parenting needs, including baby supplies and day care. Each region had a different pattern of support expenditures, as seen in Table 16.

**Table 16: Distributions of Supervision Expenditures by Region**

| | Percent of Expenditures | | | |
|---|---|---|---|---|
| **Type of Service** | **Central** | **Northeast** | **Southern** | **Western** |
| Emancipation | 78.0% | 35.5% | 18.3% | 13.0% |
| General Living Expenses | 13.7% | 17.0% | 52.1% | 11.8% |
| Transportation | 3.7% | 17.4% | 15.5% | 14.7% |
| Education | 2.4% | 3.1% | 6.7% | 48.7% |
| Medical | <1% | 24.1% | 5.7% | <1% |
| Legal and Professional | <1% | 2.9% | .21% | 11.7% |
| Parenting | <1% | -- | <1% | |
| **Total** | 100% | 100% | 100% | 100% |

## Continuum of Care Outcomes

The evaluation of the Continuum of Care's first year of implementation revealed important indicators of successful program implementation. Data gathered during the first year showed that the Division had put into place the tools necessary to create a significant system-wide change. A better understanding of youths' risks and needs allow Client Managers to tailor community services to each youth's needs. Having the flexibility to better support youth transitioning from residential placement to the community can lead to a more efficient use of resources and better outcomes for youth.

An important component of the Division's Continuum of Care Initiative, and a potential benefit of the flexibility authorized in Long Bill footnote 86, is to serve youth in the most appropriate and least restrictive placement that satisfies needs for community safety and youth treatment. For many youth, the necessary and most appropriate level of restrictiveness will decrease over the course of their DYC commitment. Flexibility allows DYC Client Managers to move youth more quickly out of high cost, restrictive residential placement into community based options that will offer increased opportunities to prepare youth for successful transition back into normal community connections such as family, school and employment.

The ultimate success of the initiative will be measured through multiple factors, including recidivism rates, youth success in the community, and cost avoidance to the taxpayer. As the Initiative evolves over time, these outcomes will continue to be monitored through the evaluation. However, this type of broad, long term system change takes time, so preliminary outcomes are expected to emerge gradually as resources are developed.

In order to examine preliminary outcomes during this stage of the initiative, all Continuum of Care youth who were discharged from DYC supervision during this fiscal year (n=693) were compared to an equivalent group of youth who were discharged during fiscal year 2004-05 (n=700), the year prior to implementation of the Continuum of Care Initiative.

There were no significant differences between the two groups on general demographics. In addition, there were no differences in the general type of offense, the sentence type, drug and alcohol treatment need, or risk/security need (as measured by the DYC security/placement level assigned to youth at assessment)[6]. Table 17, below, shows the equivalency of the comparison and Continuum of Care groups[7].

[6] Because the CJRA was not implemented during Fiscal Year 2004-04, youth could not be matched using the new risk assessment data.

[7] No differences were statistically significant. Gender: $\chi^2$=4.5; p=.34. Ethnicity: $\chi^2$=0.15; p=.70. Offense type: $\chi^2$=4.5; p=.34. Drug/Alcohol Treatment Level: $\chi^2$=4.7; p=.32. Age: t = -.333; p=.741. Risk/Security Level: t=1.78; p=.074.

**Table 17: Continuum of Care vs. Comparison Group**

| | Continuum of Care Youth (n=693) | Comparison Group (n=700) |
|---|---|---|
| **Gender** | | |
| Female | 14% | 13% |
| Male | 86% | 87% |
| **Primary Ethnicity** | | |
| American Indian or Alaskan Native | 1% | 2% |
| Asian | 1% | 1% |
| Black or African American | 16% | 16% |
| Hispanic | 34% | 37% |
| White (Caucasian) | 46% | 47% |
| **Age** | | |
| Average Age at Commitment | 16.4 years | 16.4 years |
| Average Age at Parole | 17.8 | 17.4 |
| **Committing Offense Type** | | |
| Person | 41% | 38% |
| Property | 44% | 46% |
| Drug | 6% | 8% |
| Weapon | 3% | 3% |
| Other | 7% | 5% |
| **Drug and Alcohol Treatment Level** | | |
| Treatment | 59% | 58% |
| Intervention | 27% | 28% |
| Prevention | 13% | 15% |
| **Commitment Type** | | |
| Violent | 1% | 1% |
| Repeat | 6% | 7% |
| Non-Mandatory | 74% | 77% |
| Mandatory | 18% | 14% |
| Aggravated | 1% | 1% |
| **Risk/Security Level** | | |
| Average Level (range 1- 20) | 11.7 | 12.1 |

## Days in Residential Placement

At the end of Fiscal year 2006-07 of the 1,703 youth receiving services through the Continuum of Care, 647 (38%) were in residential placement, 305 (18%) were on parole and 693 (41%) had been discharged from the Division of Youth Corrections.

Forty-one percent (41%) of youth served this year through Continuum of Care expenditures were discharged by the end of the fiscal year. This represents a large increase over the first year, which represented only a partial year of implementation. As a result few of the youth served through the Continuum of Care had been discharged by the end of data collection for the last evaluation report.

**Table 18:** Placement of Participating Youth as of June 30, 2007

| Type of Placement | Number of Youth | Percentage |
|---|---|---|
| Residential Placement | 646 | 38% |
| Escape Status | 58 | 3% |
| Parole | 305 | 18% |
| Discharged from DYC | 693 | 41% |
| **TOTAL** | 1702 | **100%** |

Length of Stay (LOS) for discharged youth for both cohorts was extracted from the DYC Trails database. Total commitment, residential and parole length of stay were compared between Continuum of Care youth and the Fiscal Year 2004-05 comparison group.

As shown in Table 19 (below), there was no significant difference in the two groups on any of the three LOS measures.

**Table 19: Average Time in Commitment**

| **Months in Residential Placement (Commitment)** Includes youth discharged as of June 30, 2005. | **LOS in Months** | | |
|---|---|---|---|
| | **CoC Youth** | **Comp Group** | **Sig. Test** |
| **Total Residential Length of Service (LOS)** | **19.0** | **18.6** | **t=.843 p=.404** |
| **Total Parole Length of Service (LOS)** | **6.8** | **7.0** | **t=1.11 p=.270** |
| **Total Commitment Length of Service (LOS)** | **25.7** | **25.9** | **t=.537 p=.591** |

Length of stay in residential placement, while on parole, and for total overall commitment are virtually identical for both the Fiscal Year 2006-07 Continuum of Care youth and the Fiscal Year 2004-05 comparison group. This is consistent with the overall stable or slightly increasing LOS trend that DYC has experienced in past years.

Average length of service did vary somewhat based on offender characteristics. Overall, males had longer lengths of service than did females. Also, juveniles who committed sexual

offenses had significantly longer lengths of service as did youth who were recommitted for a new offense before the expiration of their original DYC commitment.

However, none of these populations' length of service varied significantly between the comparison group and youth served by the Continuum of Care Initiative. There was some indication that parole length of service was shorter for both girls and for juveniles committing sexual offenses that were served through the Continuum of Care Initiative. There were no differences, however, in residential or total length of service for any of these subgroups.

**Table 20: Average Time in Commitment, by Offender Characteristics**

| **Months in Residential Placement (Commitment)** Includes youth discharged as of June 30, 2005. | **LOS in Months** | | |
|---|---|---|---|
| | **CoC Youth** | **Comp Group** | **Sig. Test** |
| **Female Offenders** | | | |
| **Total Residential Length of Service (LOS)** | **17.2** | **15.8** | **t=.972 p=.332** |
| **Total Parole Length of Service (LOS)** | **6.7*** | **5.8*** | **t=2.73 p=.007** |
| **Total Commitment Length of Service (LOS)** | **22.5** | **23.4** | **t=.623 p=.334** |
| **Juveniles Committing Sexual Offenses** | | | |
| **Total Residential Length of Service (LOS)** | **24.3** | **23.8** | **t=.908 p=.364** |
| **Total Parole Length of Service (LOS)** | **8.5** | **11.0** | **t=2.07 p=.040** |
| **Total Commitment Length of Service (LOS)** | **31.9** | **33.0** | **t=.537 p=.591** |
| **Recommitted Youth** | | | |
| **Total Residential Length of Service (LOS)** | **23.7** | **25.5** | **t=1.38 p=.169** |
| **Total Parole Length of Service (LOS)** | **8.3** | **8.0** | **t=.350 p=.727** |
| **Total Commitment Length of Service (LOS)** | **33.0** | **32.0** | **t=.749 p=.454** |
| **Male Youth, No Sexual Offense, New Commits Only** | | | |
| **Total Residential Length of Service (LOS)** | **17.0** | **16.7** | **t=.558 p=.577** |
| **Total Parole Length of Service (LOS)** | **6.2** | **6.3** | **t=.571 p=.568** |
| **Total Commitment Length of Service (LOS)** | **23.3** | **23.3** | **t=.098 p=.922** |

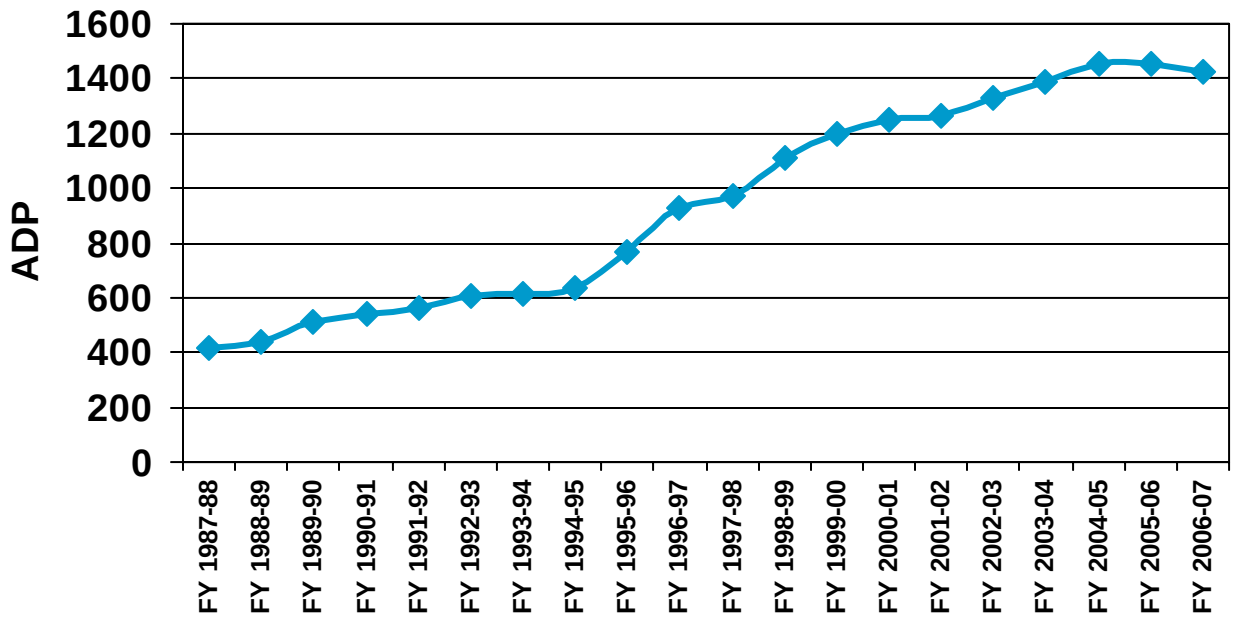
* denotes statistically significant

## Changes in Commitment Residential ADP

Prior to 2005-06, commitment ADP trends have shown a steady increase over the past 14 years (Figure 4). During the first year of the Continuum of Care Initiative, for the first time in 14 years, the commitment ADP rate did not show an increase, but rather a slight decline. This decrease continued in Fiscal Year 2006-07. Further, the June 2007 commitment ADP was down to 1359.3, nearly 100 ADP lower than in Fiscal Year 2005-06. This decline in ADP represents a reduction of over 6% of prior ADP levels. As was noted in last year's report, in light of the large (approximately 70%) multi-year reductions in state funds for Parole Program Services between FY 2001-02 and FY 2005-06 – the success of the Division of Youth Corrections in reducing the ADP is noteworthy.

The decrease in ADP for FY 2006-07 represents a positive shift in a troubling trend and may reflect a shift to decreasing commitment ADP as a function of more individualized and targeted case management and services through the Continuum of Care Initiative.

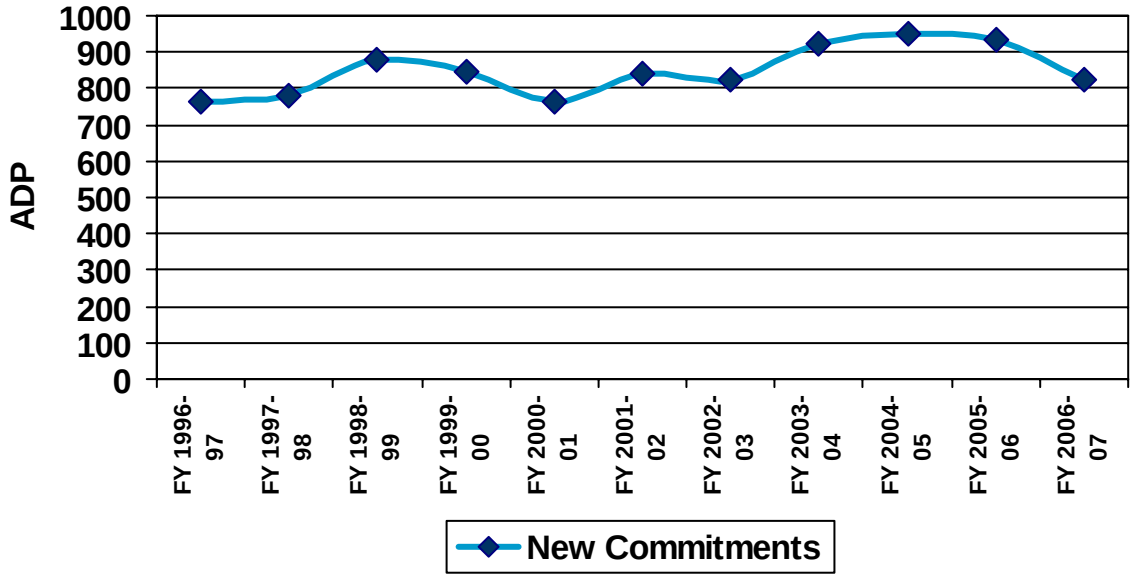
**Figure 4: Division of Youth Corrections Commitment ADP Trends**




As mentioned previously, there were no significant differences in length of service in the Continuum of Care youth served in Fiscal Year 2006-07 compared with DYC youth discharged in Fiscal Year 2005-06 Therefore, the recent decreasing ADP trends may be traced either to the number of new commitments or the number of recommitments.

As seen in Figure 5, below, after a steady five year increase in the number of new commitments, there has been a sharp decline in new commitments over the past two years.

**Figure 5. Division of Youth Corrections Commitment ADP Trends**




In addition, the Continuum of Care Initiative appears to have had an initial impact on the rate of recommitment. As seen in Table 21, a (statistically) significantly lower proportion of Continuum of Care Initiative youth were recommitted to DYC prior to discharge from their original commitment than youth in the Fiscal Year 2004-05 discharge comparison group.

**Table 21: Rate of Recommitment**

| | Recommitment | | No Recommitment | |
|---|---|---|---|---|
| **Group** | **N** | **Percentage** | | |
| Continuum of Care FY07 Discharges (n=645) | 145 | 20.9% | 548 | 79.1% |
| DYC FY05 Discharge Cohort (n=831) | 175 | 25.0% | 525 | 75.0% |

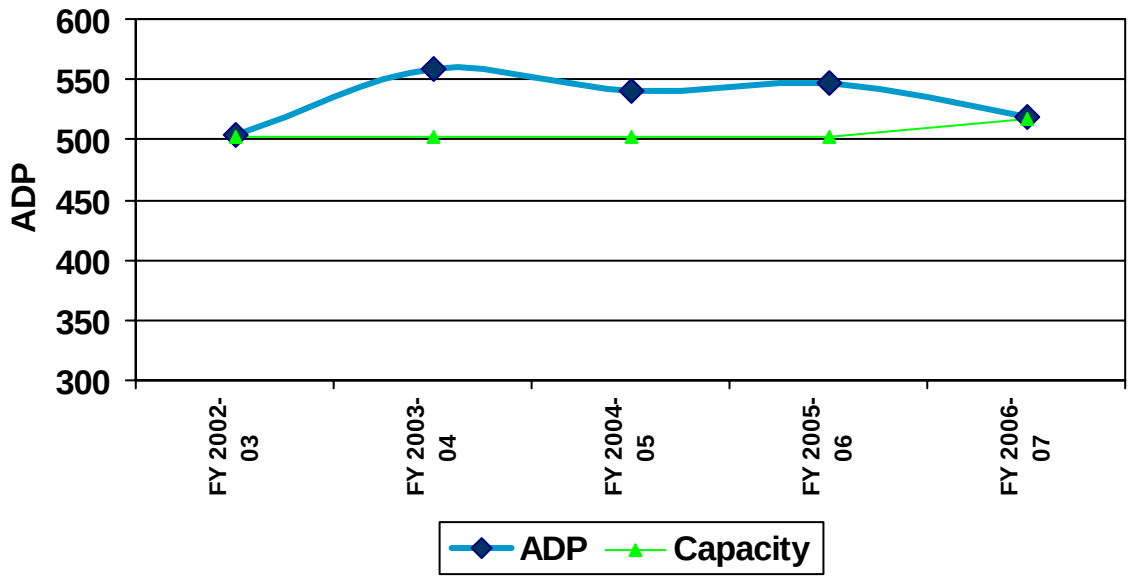
$\chi^2 = 3.24$; one-tailed significance p=.04.

While overall lengths of service may require more time to be affected by the Initiative, DYC appears to be moving towards a process whereby an optimal (and not necessarily shorter) length of service for each youth can be achieved through a detailed assessment of a youth's risk, strengths and treatment needs and matching those youth to the most appropriate placement and treatment strategy to improve youth outcomes and ensure public safety.

**Improvements to the Assessment Process** – One important continuing development is the enhancement of DYC's assessment process. In October of 2006, DYC put into place a plan to reduce overcrowding in state secure facilities. A significant part of this plan involved increasing assessment efficiency, thereby reducing the length of service for youth in assessment from 30 days to 23. By the last quarter of the fiscal year, the majority (78%) of youth were assessed within the targeted 23 days. Overall, the average length of service in assessment was reduced from an average of 30 days in Fiscal Year 2005-06 to an average of 16 days by the last quarter of Fiscal Year 2006-07.

Assessment improvements, the addition of new treatment staff positions at State-operated facilities, and DYC's commitment to ensure that reforms through the Continuum of Care Initiative benefit all aspects of the commitment process, have resulted in significant reductions in overcrowding at State-operated facilities. The Division's State operated facilities averaged an ADP of 109% of operational capacity over the last 15 years. Overcrowding was actually greater than 109% since operational capacity is defined as 110% of design capacity (or the number of youth the facility was architecturally designed to hold). Since the implementation of the Continuum of Care Initiative and the Division's emphasis on bed management and placing youth at appropriate levels of security, overcrowding is state-operated facilities has been eliminated. Figure 6 shows this reduction in overcrowding. In FY 2006-07 State operated facilities averaged 100% of operational capacity.

**Figure 6. Division of Youth Corrections State Secure ADP Trends**



## Risk of Re-Offending

After the first full year of implementation, only a preliminary analysis of recidivism outcomes is possible. This type of evaluation requires enough time to elapse so that recidivism in the year after youth are discharged from service can be observed. For the current evaluation report, pre-discharge data was available to examine emerging recidivism outcomes for Continuum of Care youth. Pre-discharge recidivism events for Continuum of Care youth were extracted from recidivism files provided by the DYC Research and Evaluation Unit.

Table 22 illustrates that pre-release discharge recidivism rates for the Continuum of Care youth sample were significantly lower than for the Fiscal Year 2004-05 DYC Discharge Cohort. There were nearly 10% fewer pre-discharge recidivism events in the Continuum of Care Initiative FY 2006-07 cohort than there were in the FY 2004-05 group. This represents a decrease of 23.5% in the rate of recidivism for Continuum of Care Initiative youth.

Decreases in pre-discharge recidivism represent a 23.5% reduction over FY 2004-05.

**Table 22: Pre-Discharge Recidivism Rates**[8]

| Group | N | Percentage | N | Percentage |
|---|---|---|---|---|
| Continuum of Care FY07 Discharges (n=645) | 193 | 29.9% | 452 | 70.1% |
| DYC FY05 Discharge Cohort (n=831) | 325 | 39.1% | 506 | 60.9 |

There were no significant differences in recidivism rates for female compared to male youth (27% and 29%, respectively)[9]. There were also no significant gender differences between female and male youth reported in the Fiscal Year 2005-06 Recidivism Report.

Just over half (57%) of all offenses were committed while a youth was on parole, compared to 37 percent of offenses committed prior to the parole period (while still in a residential facility) [10]. This is consistent with the 55.1% of pre-discharge filings for youth on parole status reported in the Fiscal Year 2005-06 Recidivism Report.

These numbers represent only pre-discharge recidivism, that is to say new filings that occur while a youth is still under DYC supervision (either in a residential placement or on parole), and does not reflect youth offending once the youth has been discharged from DYC. However, substantial reduction for FY 2006-07 discharged Continuum of Care youth, over the comparison FY 2004-05 cohort is encouraging.

[8] These differences are statistically significant. $\chi^2 = 13.8$ ; p=.000.
[9] $\chi^2 = .075$; p=.785.
[10] This difference is not statistically significant. $\chi^2 = 1.8$ ; p>.05.

## Conclusion and Recommendations

Over the last two years, the Division of Youth Corrections has undertaken a comprehensive systems improvement effort – the Continuum of Care Initiative. This initiative has brought significant attention and improvements to the Division's continuum of services from the continuum of pre-commitment (detention) services, through commitment and parole. The flexible funding authorization contained in Footnote 86 of Senate Bill 07-239 is an important component of the overall Continuum of Care Initiative. The Division of Youth Corrections is using this added flexibility to support the implementation of a set of integrated system improvements based on research-based principles of effective practice.

While the Continuum of Care Initiative remains in early stages of its evolution, there are some emerging findings pointing to positive progress in this system change effort. Four primary findings are highlighted below.

**The Continuum of Care Initiative is serving youth who enter the system as a high risk for re-offending.** This indicates that DYC is targeting its resources to those youth mostly likely to represent the highest delinquency costs, in terms of the social cost of re-offense as well as costs stemming from returns to the juvenile justice system.

**Expenditure tracking data suggests increasing use of evidence-base services**. This is a preliminary finding. Future evaluation efforts dedicated to learning more about the specific services being provided to youth should help to confirm this pattern.

**While LOS remains unchanged, the Average Daily Population of committed youth has dropped significantly (by just over 100 ADP).** Most recent data refect a reduction of over 6% relative to FY2005-06 levels. A decline in recommitments, as well as reductions in pre-discharge recidivism, suggests that at least some of this ADP reduction may be attributable to the Continuum of Care Initiative.

**Preliminary data indicates significantly lower pre-discharge recidivism rates for youth served under the Continuum of Care Initiative.** This finding underscores the importance of preserving the funding available to the Continuum of Care Initiative. By taking away funds based solely on the decrease in ADP, DYC is hampered in its efforts to use funding flexibility to assure the right treatment, the right length of service and, therefore, the best possible juvenile justice outcomes for youth in its care.

**An Effective Approach –** Section 5 of the Footnote specifically addresses the need to evaluate the "effectiveness of this footnote." The experience of juvenile justice jurisdictions nationally clearly points to the strategies authorized through the footnote as the most appropriate and effective approach to managing services for juvenile offenders (e.g., Barnoski & Aos,

The outcomes and process information available for this report are consistent with the successful implementation of a juvenile justice system improvement such as this one.

2005). In fact, a consistent finding across research and program evaluations has been the centrality of targeting treatment for juvenile offenders based on individualized assessment of criminogenic risk and need factors. The Continuum of Care Initiative is built on effective juvenile justice strategies that have been proven through research and practice to be effective. First, the Initiative emphasizes a coordinated continuum of care with a broad array of program and service options that are sequenced and combined to create a range of intervention options that ensure the appropriate treatment, education, training, and care compatible with the youth's specific needs. Second, it emphasizes community-based options when appropriate. Instead of removing youth from their home environment, community-based services impact the youth's total environment by addressing problems in the community where they develop, and by establishing the long-term support necessary to sustain progress. Third, the Continuum of Care Initiative features individualized programming that is sufficiently intensive and comprehensive to accommodate the individual needs and potentials of the youth and their families. Fourth, the Initiative attends to aftercare and re-integration so that youth continue receiving the support of treatment services following their treatment in a residential facility.

In keeping with these strategies, the Continuum of Care Initiative has been implemented through an integrated strategy involving state-of-the-art assessment, enhanced treatment services within residential facilities, and improved transitions to appropriate community-based services. The Division made a commitment to examine and realign internal operational practices to be more consistent with the principles of evidence-based practice and the interventions that have the most research support for being effective in reducing recidivism and re-victimization by juvenile offenders. As part of this strategy, the Continuum of Care Initiative seeks to provide the optimal length of stay in each stage of service to juvenile offenders as they move from secure residential to community-based services on parole. In order to ensure accurate and targeted information to support individualized case planning, DYC implemented a state-of-the-art, empirically-based risk assessment instrument (the Washington State Juvenile Risk Assessment), modified and renamed the Colorado Juvenile Risk Assessment (CJRA).

A system change initiative like the Continuum of Care Initiative takes time to implement fully and must take into account the inter-dependency of all parts of the system – both state-run and contracted. Complex assessment information for each youth must be integrated into a case plan that is then communicated across the system so that the same delinquency risk and needs factors for a given youth are being addressed in each component of the system. This systemic perspective is critical for long term success, but necessarily suggests that the system change will not be able to be achieved in one year, but will be developmental.

The current report demonstrates a continued positive trend from the first year of the Continuum of Care Initiative (FY 2005-06). Outcomes, in terms of LOS, ADP and pre-discharge recidivism suggest a positive trend. This is especially notable in light of the prior fourteen year trend toward increasing ADP.

Overall, the Continuum of Care Initiative has made a strong start toward implementing the vision of the Division to continually improve its system of care. The elements are in place to meet the goals of DYC and the General Assembly over time, an evaluation framework has been established to measure the extent to which those goals are achieved, and initial outcomes are positive. As noted earlier, in light of the early success of the Initiative in Colorado and the clear and consistent research evidence to support the cost effectiveness of community-based options, it seems critical that funding levels be maintained even as residential ADP is reduced by successful implementation of the Continuum of Care Initiative.

Ongoing barriers to the Continuum of Care Initiative's success remain significant. Given reductions in appropriate community-based services for youth in DYC custody over recent years, the Division remains challenged to match youth with the most effective services in the most appropriate settings to meet their rehabilitation needs. As the array of community-based service options continues to be rebuilt and expanded, the success of the Continuum of Care Initiative will in turn be challenged by the current funding structure which is based on a formula that uses average daily population (ADP) in commitment placement to determine funding levels. Without a shift in funding methodology, as better community services become available and Client Managers become more effective in appropriately transitioning youth to community placements, the Division's resources for both commitment and community-based services could shrink to the point that youth are left without placement.