

Education Outcomes at the Colorado Division of Youth Services

Committed Youth

Fiscal Year 2016-2017



CO L O R A D O

**Office of Children,
Youth & Families**

Division of Youth Services

INTRODUCTION

House Bill 18-1010

The Colorado Department of Human Services (CDHS or Department), Office of Children, Youth and Families (OCYF or Office), Division of Youth Services (DYS or Division) has prepared a report on education outcomes for committed youth in partial response to the following HB 18-10101:

On or before July 1st 2018, and on or before each July 1st thereafter, the Department of Human Services shall collect the recidivism data and calculate the recidivism rate and the educational outcomes for juveniles committed to the custody of the department who complete their parole sentences and discharge from department supervision.

DEMOGRAPHICS for FISCAL YEAR 2017

The Division of Youth Services interacts with many youth as they become justice involved and follows a continuum of services to meet their needs. Within each placement, all youth receive a free and appropriate education. When a youth is detained, for example, the detention centers work with the local school district where the detention center is geographically located to provide educational services. When youth must serve a commitment sentence, educational services continue to be provided at residential facilities which include staff-supervised contract programs or community-based contract programs as well as at state-operated secure and assessment centers.

The annual data regarding average length of stay, age of youth, and placement of the youth are monitored through the Division of Youth Services Data Management and Analysis. These data are included Figure 1. for Fiscal Year 2017.

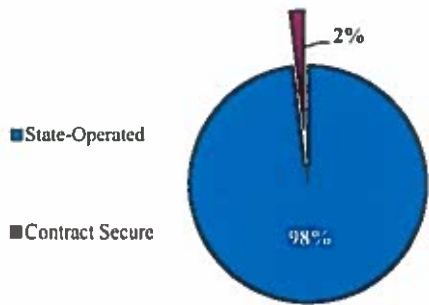
Figure 1. Population Data for Detained, Committed, and Paroled Youth Fiscal Year 2016-17.

ALL CLIENTS POPULATION DATA

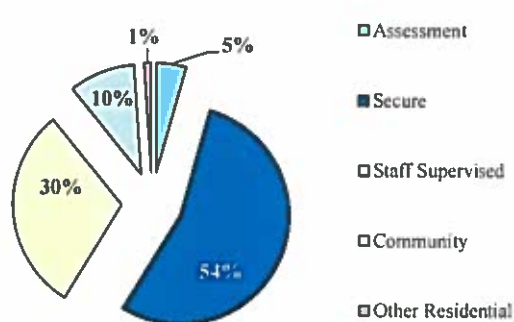
Fiscal Year 2016-2017

DETAINED YOUTH	Unique Clients Served ¹	New Admissions ²	ADP	LOS
State-Operated	3,453	5,863	252.1	15.3 days
Contract Secure	94	117	5.1	14.7 days
Unique Client Count	3,521	Total 5,980	257.1	15.3 days
COMMITTED YOUTH		New Commitments ²	ADP	LOS
Assessment	419		28.9	0.9 month
Secure	922		354.2	11.0 months
Staff Supervised	493		197.3	6.8 months
Community	252		64.0	2.3 months
Other Residential ³	33		6.7	0.2 month
Unique Client Count	1,292	Total 381	651.1	20.3 months
PAROLED YOUTH		New Intakes ²	ADP	LOS
Unique Client Count	625	Total 356	220.4	7.3 months
ALL YOUTH			ADP	LOS
Unique Client Count	4,802	Total	1,128.6	27.4 months

Detention ADP
FY 2016-17



Commitment ADP
FY 2016-17



¹Unique Clients Served is an unduplicated count of youth. These counts are not a sum of individual program areas, as youth are often served in multiple program areas (e.g., assessment and secure) throughout the fiscal year.

²Individual youth (unique clients) can have multiple detention admissions, new commitments, and new parole intakes throughout the fiscal year.

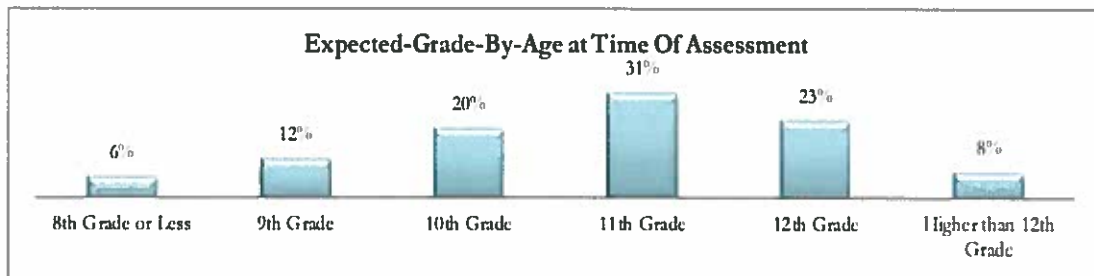
³Other Residential includes Group Homes, Job Corps, Hospitalizations, Shelter Care, etc.

During Fiscal Year 2017 (July 1, 2016 - June 30, 2017), 436 youth were discharged from the Division; in other words, 436 youth were no longer under department supervision.

Demographics: Average Age and Expected Grade-by-Age

The average age of students at time of commitment was 16.78 years old; the corresponding expected grade-by-age was 11th grade on average. Generally speaking, the expected grade-by-age can be thought of as the grade level at which a student would typically be expected to perform based solely upon age. This is illustrated in Figure 2.

Figure 2. Expected Grade-by-Age.

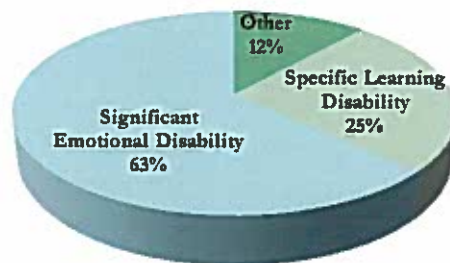


Demographics: Students with an Individualized Education Program (IEP)

Of the 436 youth evaluated in assessment, 30% were identified as having an Individualized Education Program (IEP). Each IEP indicates a primary disability that is impacting the youth’s ability to access general education and the IEP may include a secondary disability. The data show that 63% of youth with an IEP committed to DYS have a significant emotional disability (SED) as the primary disability (Figure 3).

Figure 3. Primary Disability within Student IEPs.

Primary Disability Noted in a Student IEP



EDUCATIONAL OUTCOMES

The data used to determine the educational outcomes for youth committed to the Division who complete their parole sentences and are discharged from department supervision includes two measures: standardized test scores for Measures of Academic Progress (MAP) and completion of high school requirements in the form of a high school diploma or successful completion of the suite of General Education Diploma (GED) tests.

Measures of Academic Progress (MAP)

The MAP interim assessments from Northwest Evaluation Association™ (NWEA™) “offer educators efficient and very accurate estimates of student achievement status within a subject.” The test results “compare achievement status—and changes in achievement status between test occasions—to students’ performance in the same grade at a comparable stage of the school year.” The tests are administered as a pre-test to youth at the assessment centers located at Grand Mesa Youth Services Center (GMYSC) and Mount View Youth Services Center (MVYSC). The tests given include Reading for Information, Language Usage, and Mathematics.

The initial MAP results, or pre-tests, for each student are available in the NWEA MAP database and are included with a grade equivalency in the universal education assessment report designed by and completed by Division of Youth Services education staff.

Unfortunately, some students do not complete a pre-test. The students who do not complete pre-tests include those who:

- have a verified GED or diploma;
- have scored at a 12th grade equivalency or above;
- consistently refuse testing.

MAP Pre-Test Results

Of the 436 discharged youth, 423 (97%) had a pre-test MAP score. Eleven of the thirteen who did not have a pre-test had already received their GED or Diploma.

On average, 62% of students were 4-or-more grades behind at the time of assessment, based on expected performance by age.

Specifically, 60.5% of those tested were 4-or-more grade levels behind in Language Usage (Figure 4); 66% of those tested were 4-or-more grade levels behind in Mathematics (Figure 5); and 58.5% of those tested were 4-more-grade levels behind in Reading for Information (Figure 6).

Figure 4. MAP pre-test results for Language Usage.

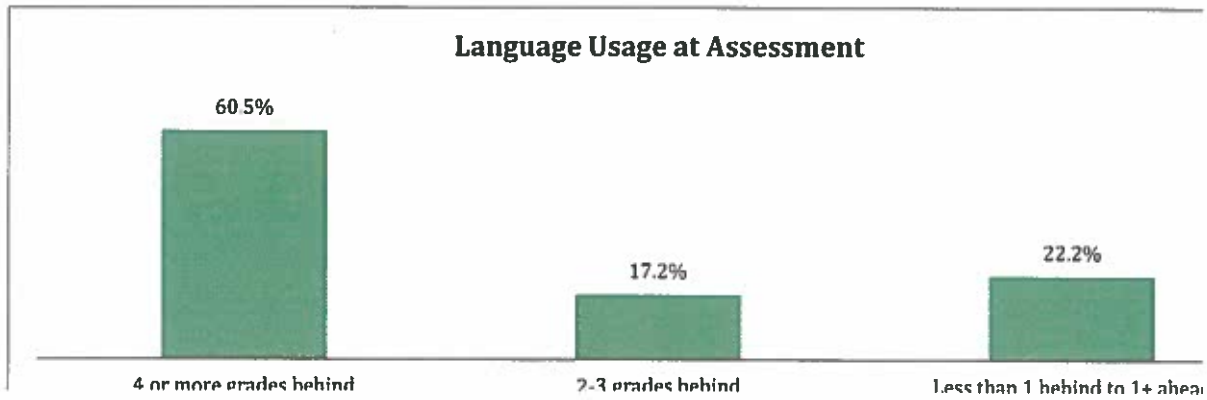


Figure 5. MAP pre-test results for Mathematics.

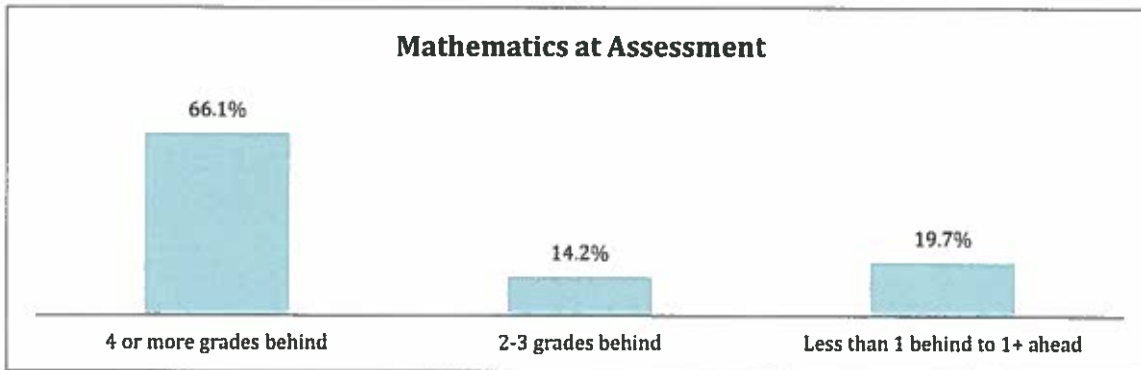
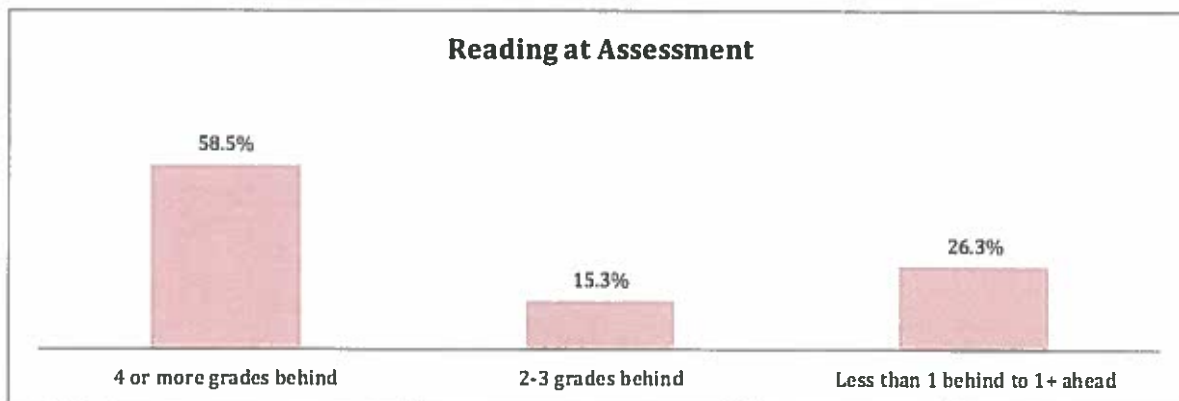


Figure 6. MAP pre-test results for Reading for Information.



MAP Post-Test Student Inclusion

During FY 17, 47% of students completed both a pre- and post-test; this represents, on average, 198 students (Figure 7).

Figure 7. FY17 discharged youth with Pre- and Post-Test MAP data.

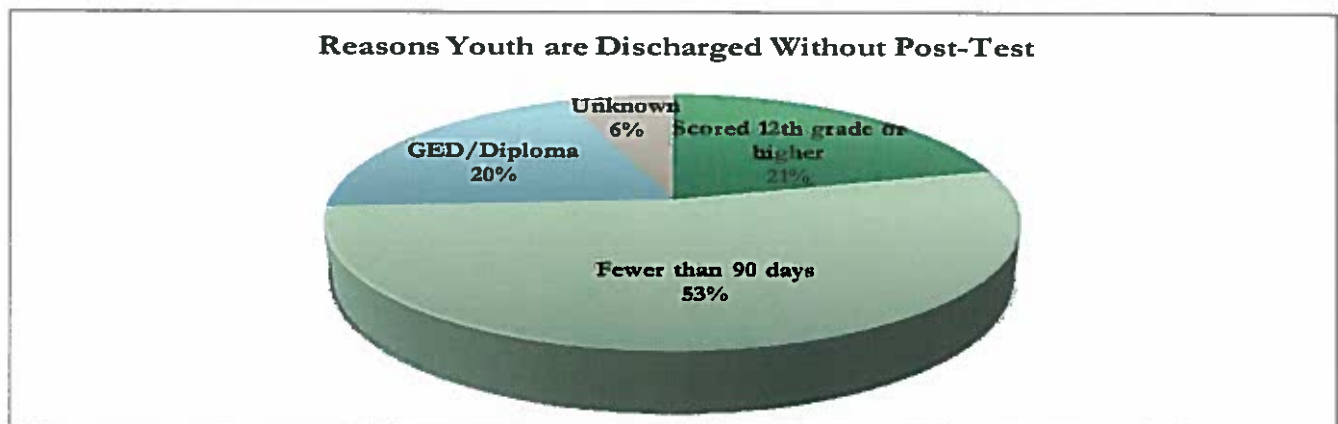
2016-17 Discharged Youth	Language	Math	Reading
Number of youth who had a pre- and post-test	198 (47.36%)	200 (47.39%)	197 (47.01%)

There are various reasons why a student might not complete a post-test. Students who are assessed at MVYSC or GMYSC but are relocated to a staff-secure residential facility or community placement do not receive interim testing, including MAP post-tests; additionally, students who are in a state commitment facility for fewer than 90 days may not be present for an additional assessment, based on the annual assessment calendar. Finally, students who score at the 12th grade level or above at the time of assessment or who have a GED or diploma are not required to take a post-test.

As illustrated in Figure 8, during FY17, of the students who did not complete a post-test:

- 53% of the students who did not complete a post-test had been placed in a less secure facility that does not administer interim testing, including MAP post-tests;
- 20% of the students who did not complete a post-test had received their diploma/GED;
- 21% of the students who did not complete a post-test had a MAP test score of 12th grade or above;
- 6% of the students who did not complete a post-test did not have data to indicate the rationale.

Figure 8. Reason discharged youth do not have a MAP post-test.



MAP Post -Test Results

The Division creates an annual calendar for on-going interim testing executed at four of the five state commitment facilities to monitor student growth.

The four commitment facilities include:

- Grand Mesa Youth Services Center (GMYSC);
- Lookout Mountain Youth Services Center (LMYSC);
- Platte Valley Youth Services Center (PVYSC);
- Zebulon Pike Youth Services Center (ZPYSC).

The Division does not provide interim testing for Mount View Youth Services Center (MVYSC) due to the itinerant nature of the students who are at MVYSC for assessment only. Typically, committed youth are placed at MVYSC for assessment purposes only prior to being placed in another facility. GMYSC assessment students do not take interim assessments; as a multipurpose facility which also has commitment services, GMYSC does test the commitment population using the annual DYS assessment calendar.

Language Usage Test Results

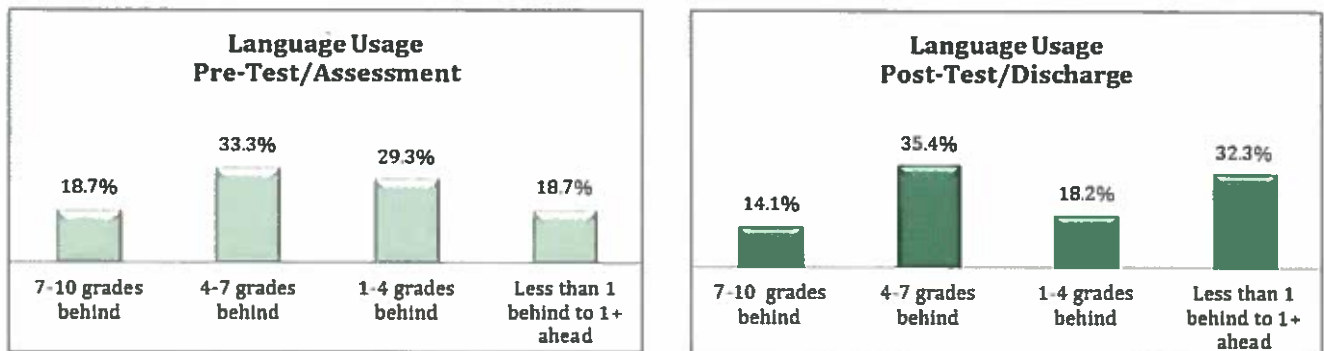
The assessment test data for the Language Usage test indicate the following:

- 52% of students were 4 or more grade levels behind their grade-by-age level expectancy.
- 29.3% of students were 1 to 4 grade levels behind their grade-by-age level expectancy.
- 18.7% of students were 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy.

In comparison, the post-test data for the Language Usage test indicate the following:

- 49.5% of students were 4 or more grade levels behind their grade-by-age level expectancy, a 6% improvement from pre- to post-test.
- 18.2% of students were 1 to 4 grade levels behind their grade-by-age level expectancy, a 38% improvement from pre- to post-test.
- 32.3% of students were 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy, a 68% improvement from pre- to post-test.

Figure 9. FY17: Pre and Post-Test Comparison for Language Usage.



Generally speaking, most newly committed students who completed both a pre- and post- test (52%) were four or more academic grade levels behind at the time of assessment. In contrast, at the time of discharge, 32% of students were within one grade level of what is typically expected based on a student's age. On average, newly committed students have an average Length of Service (LOS) of 20.3 months. In other words, this means that while students arrive at an average age of 16.8, most (52%) perform at or below the 7th grade academically, and in fewer than two calendar years these students have improved by multiple grade levels.

In addition to these broad bands of results, student results were examined to determine growth in Language Usage. These data indicate:

- 4% of students showed no change in grade level.
- 15% of students improved up to one grade level.
- 67% of students improved more than one grade level.
- 14% of students demonstrated a negative grade level change.

Figure 10. FY17: Number of students demonstrating neutral, positive, or negative change.

2016-17 Discharged Students		Language Usage
	N=	198
Number of students who showed no change in grade level		8 (4%)
Number of students who improved up to one grade level		29 (15%)
Number of students who improved more than one grade level		133 (67%)
Number of students who showed negative grade level change		28 (14%)

Mathematics Test Results

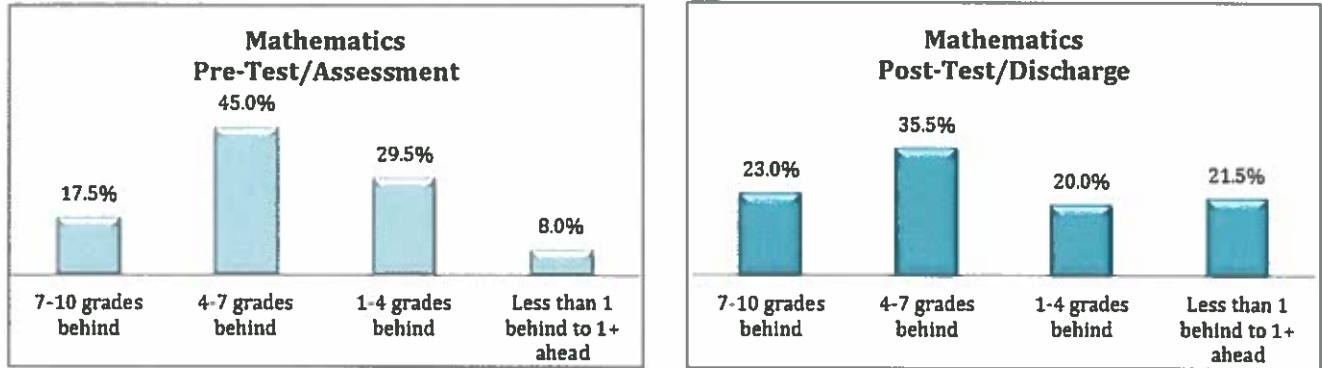
The assessment test data for Mathematics indicate the following:

- 62.5% of students were 4 or more grade levels behind their grade-by-age level expectancy.
- 29.5% of students were 1 to 4 grade levels behind their grade-by-age level expectancy.
- 8% of students were 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy.

The post-test data for Mathematics indicate the following:

- 58.5% of students were 4 or more grade levels behind their grade-by-age level expectancy, an 11% decline in performance from pre- to post-test.
- 20% of students were 1 to 4 grade levels behind their grade-by-age level expectancy, a 33% improvement from pre- to post-test.
- 21.5% of students were 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy, a 175% improvement from pre- to post-test.

Figure 11. FY17: Pre and Post-Test Comparison for Mathematics.



In addition to these broad bands of results, student results were examined to determine growth in Mathematics. These data indicate:

- 5.5% of students showed no change in grade level.
- 20% of students improved up to one grade level.
- 63% of students improved more than one grade level.
- 11.5% of students demonstrated a negative grade level change.

Figure 12. Number of students demonstrating neutral, positive, or negative change.

2016-17 Discharged Youth		Math
	N=	200
Number of youth who showed no change in grade level		11 (5.5%)
Number of those youth who improved up to one grade level		40 (20%)
Number of youth who improved more than one grade level		126 (63%)
Number of youth who showed negative grade level change		23 (11.5%)

Reading for Information Test Results

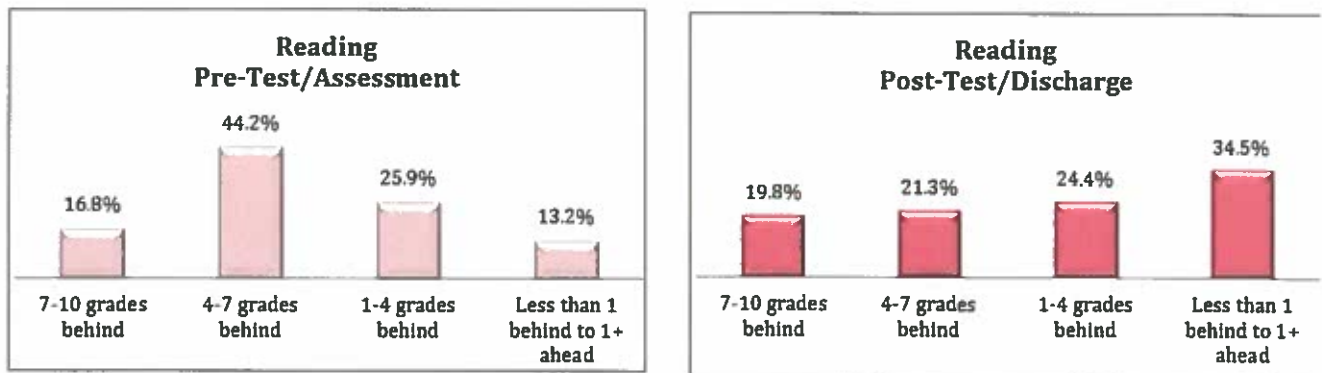
The assessment test data for the Reading for Information test indicate the following:

- 61% of students were 4 or more grade levels behind their grade-by-age level expectancy.
- 25.9% of students were 1 to 4 grade levels behind their grade-by-age level expectancy.
- 13.2% of students were 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy.

The post-test data for the Reading for Information test indicate the following:

- 41.1% of students were 4 or more grade levels behind their grade-by-age level expectancy, a 33% improvement from pre- to post-test.
- 24.4% of students were 1 to 4 grade levels behind their grade-by-age level expectancy, an 8% increase from pre- to post-test.
- 34.5% of students were less than 1 grade level behind and up to 1 grade level above their grade-by-age level expectancy, a 169% increase from pre- to post-test.

Figure 13. FY17: Pre and Post-Test Comparison for Reading for Information.



In addition to these broad bands of results, student results were examined to determine growth in Reading for Information. These data indicate:

- 7% of students showed no change in grade level.
- 12% of students improved up to one grade level.
- 66% of students improved more than one grade level.
- 15% of students demonstrated a negative grade level change.

Figure 14. Number of students demonstrating neutral, positive, or negative change.

2016-17 Discharged Youth		Reading
	N=	197
Number of youth who showed no change in grade level		14 (7%)
Number of those youth who improved up to one grade level		24 (12%)
Number of youth who improved more than one grade level		130 (66%)
Number of youth who showed negative grade level change		29 (15%)

In summary, newly committed students who completed both a pre- and post-test score demonstrated the greatest deficits on the Reading for Information section of the assessment, with more than two-thirds scoring as four or more grade levels behind at assessment. At post-test, however, more than a third of students tested within one grade level of what is typically expected based on a student's age. In addition, more than three-quarters of these youth (78%) improved at

least one grade level from pre- to post test, with more than two thirds (66%) improving more than one grade level (see Figure 14). Many of these students had experienced multiple school failures in the past, making the observed increase in academic performance even more compelling.

C-STAT EDUCATION MEASURE

Eligible Youth Who Have a GED or High School Diploma by Discharge

When the Department's C-Stat initiative was adopted in mid-2012, the performance monitoring and improvement model was simultaneously rolled out across each Division. While C-Stat was once an "initiative," over the last six years it has become a well-ingrained program. Since the program's inception, it has been utilized to communicate the Division's trends, accomplishments and challenges over time.

During implementation, DYS was charged with developing and selecting a standard set of measures that would be analyzed each month, with action items assigned based upon improving or declining performance. These measures have and continue to serve as a dashboard of agency success.

The following listing and figures provide a detailed description of how this measure is reviewed each month. Eligibility criteria are explained, as well as the rationale behind each criterion utilized.

The measure is presented for review each month as a percentage. The basic percentage calculation is as follows:

- **Numerator:**
Number of eligible youth who receive a GED or high school diploma by the time they discharge
- **Denominator:**
Number of eligible DYS clients discharged in a specific month

Eligibility (or reasons for inclusion or exclusion in the measure calculation) is dependent upon the following criteria:

1) Age Eligibility

Criterion: Any youth who is 17.999 or younger at discharge is not eligible for inclusion in the measure. Only youth who are exactly 18 years of age or older (≥ 18.000) at discharge are eligible for inclusion.

Rationale: A youth would generally be too young to possess a GED or Diploma if younger than 18 years of age. In the U.S. public school system, the majority of students are age 18 at time of high school graduation.

2) School or Class Enrollment Eligibility

Criterion: Any youth who is enrolled full- or part-time in school of any kind at discharge is not eligible for inclusion.

Rationale: A youth who is actively working towards their GED or Diploma at discharge should not be considered as having met or not met the measure, but should be considered ineligible.

3) Discharge Placement Eligibility

Criterion: Any youth who discharged directly to the adult corrections system (Department of Corrections, or DOC) or was deported is not eligible for inclusion.

Rationale: In the days and months leading up to either an adult system transfer/discharge or deportation, youth often reside in detention or jail placements awaiting movement. In these circumstances, the Division has reduced opportunity and access to youth to provide educational services that would meaningfully impact educational attainment. Furthermore, these youth are not released back into the community, where educational attainment directly influences successful reintegration.

4) Discharge Type Eligibility

Criterion: Any youth who had his or her commitment sentence reconsidered, vacated, or terminated by the court are not eligible for inclusion.

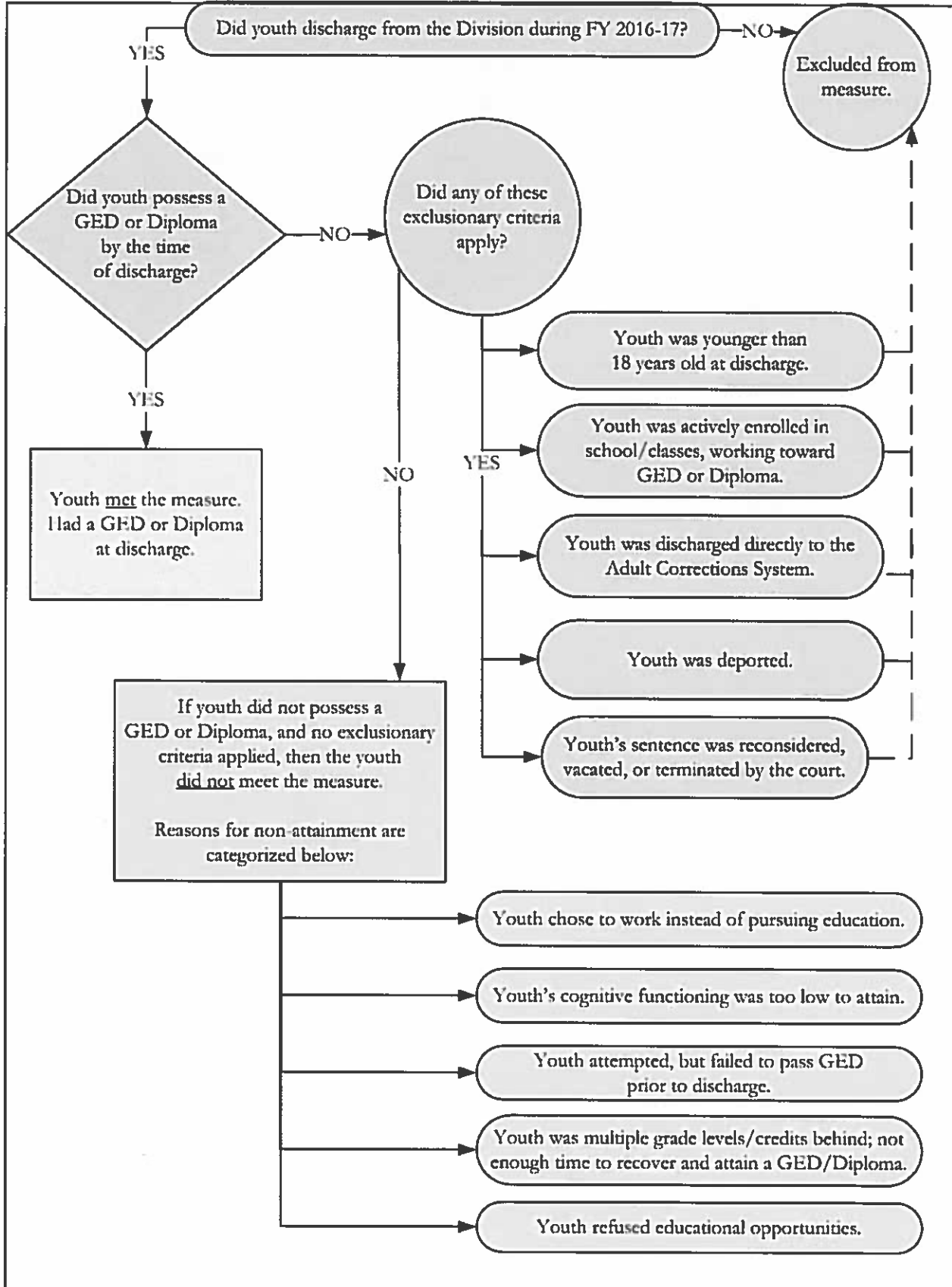
Rationale: Youth who had their sentences reconsidered, vacated, or terminated by the court are generally not under the Division's custody long enough to have attained a GED or Diploma.

An important factor to consider is youth that enter DYS commitment with a GED or Diploma. These youth are included in the measure (eligibility criteria are not applied to these youth). In fact, eligibility criteria are not applied to any youth who have attained a GED or Diploma by the time of discharge. The criteria are utilized after determining who possessed and did not possess a GED or Diploma, and only applied to those who did not possess one or the other.

An ongoing focus of success within DYS is determining how many youth "meet" each measure. Youth who do not meet the measure are flagged, and reasons are provided for those who fail to do so.

The following figures provide a visual representation of the measure, and how the data are calculated.

Figure 15. Decision Tree for DYS C-Stat Educational Attainment Measure.

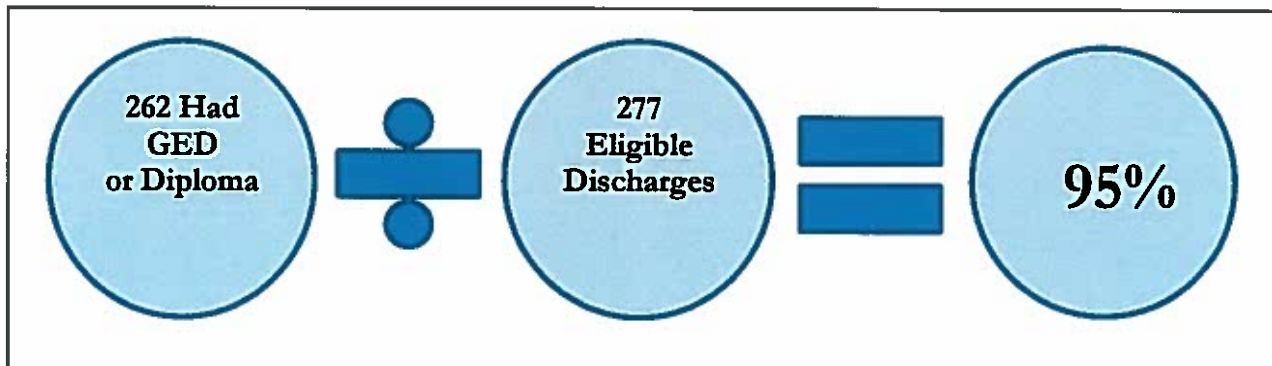


When monthly C-Stat education measure data are aggregated for the full fiscal year 2016-17 discharges ($n = 436$), the following results emerge.

Two hundred sixty two (262) youth possessed a GED ($n = 124$) or a high school Diploma ($n = 138$) at time of discharge, whereas fifteen (15) youth did not. In total, one hundred fifty-nine (159) youth were ineligible for inclusion in the measure, based upon the exclusion criteria:

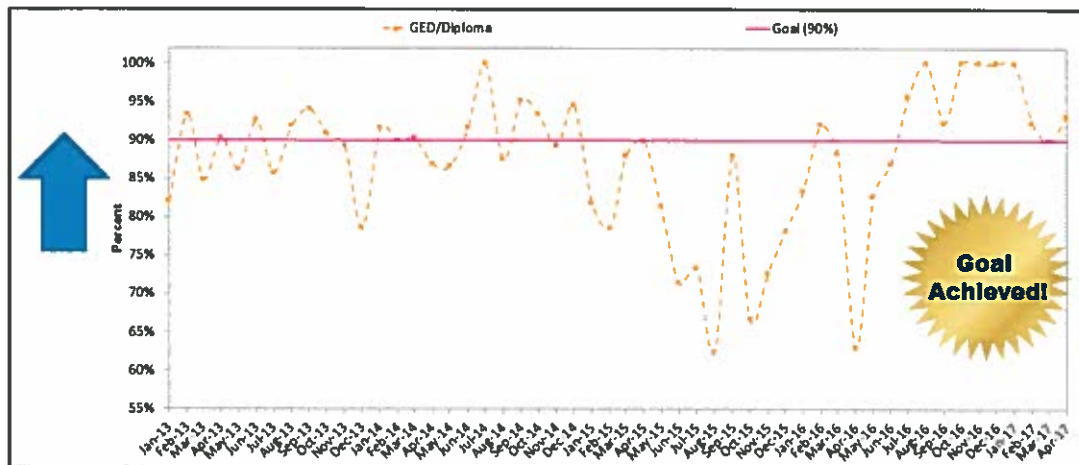
- 78 youth were under the age of 18;
- 56 youth were actively enrolled in school or classes, working towards a GED or diploma;
- 22 youth were discharged directly to adult corrections system;
- One (1) youth was deported;
- Two (2) youth had their sentences terminated by the court.

Figure 16. DYS C-Stat Educational Attainment Calculation (monthly data aggregated for FY 17)



Starting in July of 2017, this specific C-Stat measure was dash-boarded (not included in the main slide deck), after attaining the goal of 90% for ten consecutive months. Figure 17 illustrates this achievement.

Figure 17. DYS C-Stat Educational Attainment Measure



Any questions concerning this report may be directed to:

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Colorado Department of Human Services

Office of Children, Youth and Families