



EDUCATIONAL OUTCOMES OF FOSTER YOUTH—BENCHMARKS

Over the last ten years, the Washington State Institute for Public Policy (Institute) has completed several research studies related to education outcomes of youth in foster care (see Appendix for list). These studies documented gaps in graduation rates, dropout levels, and assessment scores between foster youth and other students in Washington State. The research includes evaluations of various interventions designed to help foster youth succeed in and complete school.

This accumulation of research helps to illustrate that foster students are one of the most at-risk groups for poor school outcomes. Prior abuse or neglect, abandonment, and death or incarceration of a parent can impact the social, behavioral and educational trajectory of youth in foster care. While there have been a number of efforts at both the state and federal levels to improve the prospects of foster students,¹ there is still a need for consistent benchmarks and common definitions to monitor progress and track education outcomes for this population.

The Department of Social and Health Services (DSHS) Children’s Administration (CA) asked the Institute to develop outcome measures to establish how the educational prospects of foster students change over time. This report presents four outcome measures related to the educational status of foster students in Washington State between 2005 and 2010. Data definitions and limitations are also provided for each measure. The intent of this effort is to develop reliable metrics by which to gauge the educational status of foster youth in Washington State.

Executive Summary

Improvements in state educational data have resulted in the ability to track student progress since 2005. We can now look at historical trends for many of these outcomes to determine how results have changed over time. This report provides detailed definitions and results on four long-term measures related to the educational status of youth in foster care. These measures include:

- **School retention:** Nine out of ten foster youth re-enroll in the following school year.
- **Behind grade level:** 8% of foster youth are behind their expected grade level.
- **Adjusted cohort graduation rate:** Over a four-year period, the longitudinal graduation rate for youth in long-term foster care was between 45 and 55%.
- **Annual graduation rate:** Measured on an annual basis, the graduation rate for foster youth was 47%.

For each measure, results for foster youth were compared to other students in Washington State. These measures will also be updated in the future to assess improvements.

¹ S. Whiteman, R. Lieb, & M. Burley (2010). *Foster youth transitions to independence: Options to improve program efficiencies*. Olympia: Washington State Institute for Public Policy, Document No. 10-01-3901.

Suggested citation: Burley, M. (2012). *Educational outcomes of foster youth—benchmarks* (Document Number 12-12-3902). Olympia: Washington State Institute for Public Policy.

DATA SOURCES

Two data sources were used to develop the outcome measures presented in this report: 1) OSPI enrollment records, and 2) DSHS foster care placement data.

1. OSPI Enrollment Records

Each of the 295 school districts in Washington State regularly sends enrollment records to the Office of the Superintendent of Public Instruction (OSPI). The annual enrollment status (P210) data file provides an unduplicated report of all students in grades 7-12 who attended a public school at any time during the school year. We use the P210 file to track a student's enrollment status (i.e. transfer, dropout, graduate) over time. The 2009-10 school year is the latest year for which statewide enrollment data are available for this analysis.

In 2005, OSPI implemented a statewide student identifier (SSID) which allows individual students to be tracked over time and across school districts. DSHS provides OSPI with foster care records, and OSPI staff match those records to the enrollment files, removing all confidential student information before releasing the research dataset. The foster care dataset is described below.

2. FamLink (foster care placements)

In 2009, DSHS implemented a new case management system for foster care placements called FamLink.² Data recorded in FamLink includes the reason(s) the child was removed from the home, the duration and type of foster care placement, and the placement status or result. For this analysis, CA staff identified school-age youth with an out-of-home placement (foster care, group home, or with a relative) from 2004 to present.

² Prior to FamLink, foster care records were kept in the Case and Management Information System (CAMIS) system.

We examined outcomes for foster youth based on the length of foster care episodes that occurred during each school year. The following classifications were used for this analysis:

- *Temporary placement:* 1-89 days
- *Short-term placement:* 90-182 days
- *Ongoing placement:* 183-274 days
- *Full-year placement:* 275-365 days

Foster youth with a temporary placement (less than 90 days) are excluded in cases where results for 'all foster youth' are presented.

Across all five school years (2005-2010), the most accurate enrollment information was available for high school students (grades 9-12). Approximately 350,000 youth were enrolled in Washington State high schools each year during this time. Foster youth with an active placement represented less than one percent (about 0.6%) of the student population (see Exhibit 1).

Exhibit 1
High School Students Included in Educational Benchmarks: 2005–2010 School Years

School Year	Non-Foster Students	Foster Students
2005–06	350,589	2,123 (0.60%)
2006–07	349,982	2,271 (0.64%)
2007–08	335,924	2,084 (0.62%)
2008–09	347,438	2,198 (0.63%)
2009–10	347,038	1,950 (0.56%)

Exhibit 2 (next page) outlines the number of foster youth included in the analysis by length of time in placement.

Exhibit 2

Foster Students by Length of Time in Placement (2005-06 to 2009-10 School Years)

Time in Foster Care	2005-06	2006-07	2007-08	2008-09	2009-10
Temporary placement (less than 3 months)	447 (21%)	516 (23%)	403 (19%)	433 (20%)	460 (24%)
Short-term placement (3 to 6 months)	286 (13%)	305 (13%)	318 (15%)	561 (26%)	301 (15%)
Ongoing placement (6 to 9 months)	255 (12%)	275 (12%)	232 (11%)	247 (11%)	278 (14%)
Full year placement (9 to 12 months)	1,135 (53%)	1,175 (52%)	1,131 (54%)	957 (44%)	911 (47%)
Total	2,123	2,271	2,084	2,198	1,950

As shown in Exhibit 2, roughly one out of five students with an out-of-home placement remains in care for less than three months. Since these youth are in state care for a short period of time, we do not track educational results for these students in the reported outcome measures.

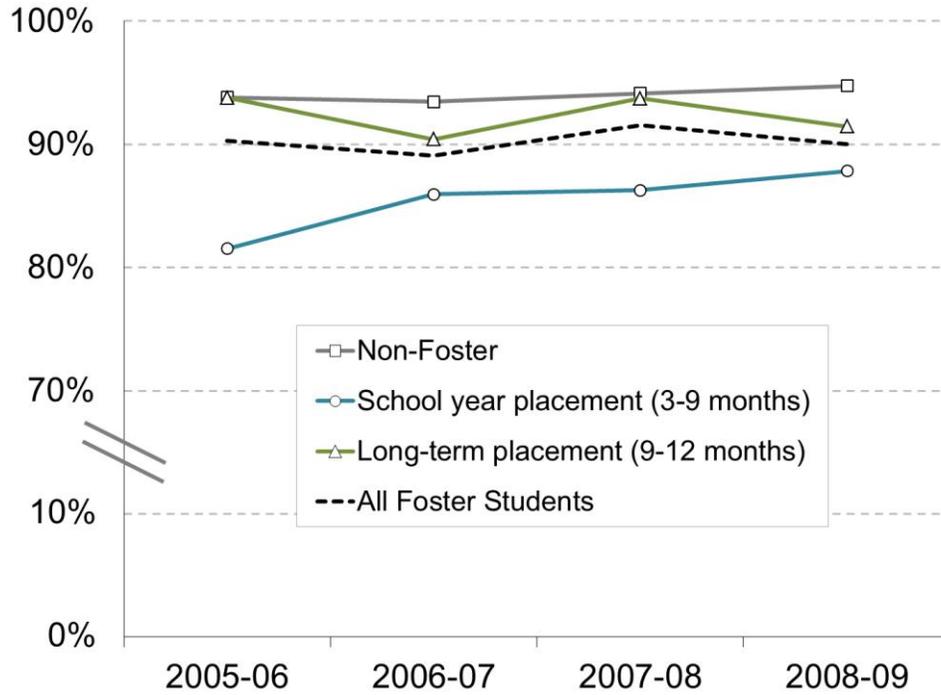
Among the remaining foster youth, between 900 and 1,200 students were in an out-of-home placement each year during the study period. These students are of particular interest since programs and interventions are primarily designed to assist foster youth with continuing and stable connections. Between 500 and 800 foster youth had placements lasting between three and nine months during the school year. These two groups (short-term and ongoing) are combined and referred to as ‘school-year placements’ for the remainder of this report.

MEASURE ONE: PERCENT OF STUDENTS CONTINUING IN SCHOOL FROM PREVIOUS YEAR

The number of youth that remain enrolled in school from year to year is an initial indicator of a student’s ability to complete high school. The first outcome measure reported here (percent retained) includes all students who were enrolled in a Washington State public high school on October 1st of each school year. We matched these students (in grades 9-11) to enrollment records from the next school year (grades 10-12) to determine the percentage of students retained. Students that were not enrolled in a Washington State public school, but had a confirmed transfer, are excluded from the analysis.

Comparatively, about 94% of non-foster students starting school in a given year were enrolled in any Washington State public high school during the subsequent school year (Measure 1). For all foster students, about 9 out of 10 remained enrolled in subsequent school years. This rate held constant over the course of the study period. Foster youth with a school-year placement (3-9 months) had a lower retention rate (82-88%), but this rate has improved in recent years.

Measure 1
Annual Retention (from Previous School Year) by Foster Care Placement Length



Time in Foster Care	2006-07		2007-08		2008-09		2009-10		p-value*
	N/Total	%	N/Total	%	N/Total	%	N/Total	%	
Non-Foster Retained/Total	233,318 /248,692	94%	232,018 /248,295	93%	228,713 /242,941	94%	233,498 /246,479	95%	0.19
School year placement (3-9 months)	296 /363	82%	336 /391	86%	333 /386	86%	462 /526	88%	0.08
Long-term placement (9-12 months)	859 /916	94%	857 /948	90%	882 /941	94%	749 /819	91%	0.72
All Foster Students	1,155 /1,279	90%	1,193 /1,339	89%	1,215 /1,327	92%	1,211 /1,345	90%	0.79

Data Notes: Includes enrollment records from OSPI P210 report for grades 9–12. Only schools that are listed as having ‘primary responsibility’ for the student are included. Student must be listed as enrolled on October 1 in order to be included in the analysis. If an enrolled student does not appear in the subsequent year (and has no record of a confirmed transfer), then they are considered to be not retained. Results exclude youth in foster care less than 90 days and students without subsequent re-enrollments that had a confirmed transfer.

* The p-value tests the statistical significance of the historical trend (linear regression line). For a p-value greater than 0.05, we cannot say with confidence that the slope of the observed line is different from zero (i.e., no significant trend is observed).

MEASURE TWO: PERCENT OF STUDENTS BEHIND A GRADE LEVEL

Students that fall behind in school are at an increased risk of dropping out and are less likely to graduate.^{3,4} Unfortunately, there is no standard definition for categorizing students that fall behind in school. Previous research conducted by the Institute identified students behind grade level based on their expected date of graduation.⁵ Using this definition, about 10% of students had an expected graduation that was behind their grade level cohort. A later report used only a student’s age and found that about 5% of students were older than other students in their grade level cohort (i.e. age 16 or older at start of 9th grade).⁶

We examined both a student’s age at the beginning of the school year *and* their expected year of graduation for this analysis. Youth that were older than other students in their grade or had repeated a grade (expected graduation year differed from peers) were considered ‘behind grade level.’ Using this approach, we found that approximately 10% of all students (and 16% of foster students) could be considered ‘behind grade level’ (Exhibit 3).

³ Jimerson, S. R., Anderson, G. E., & Whipple, A. D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools*, 39(4), 441-57.
⁴ Blackledge, A., Blodgett, C., Wagner, B., & Building Bridges. (2009). *Building Bridges dropout initiative, 2009-10 annual evaluation: Report to the Legislature*. Olympia, WA: Office of Superintendent of Public Instruction.
⁵ Burley, M. (2008). *Educational attainment of foster children: 2006 results* (Document No. 08-03-3901). Olympia, WA: Washington State Institute for Public Policy.
⁶ Mason Burley (2009). *Graduation and dropout outcomes for children in state care (2005–2008)*. Olympia: Washington State Institute for Public Policy, Document No. 09-11-3901.

**Exhibit 3
Percent of Students Behind Grade Level
(2009-10 School Year)**

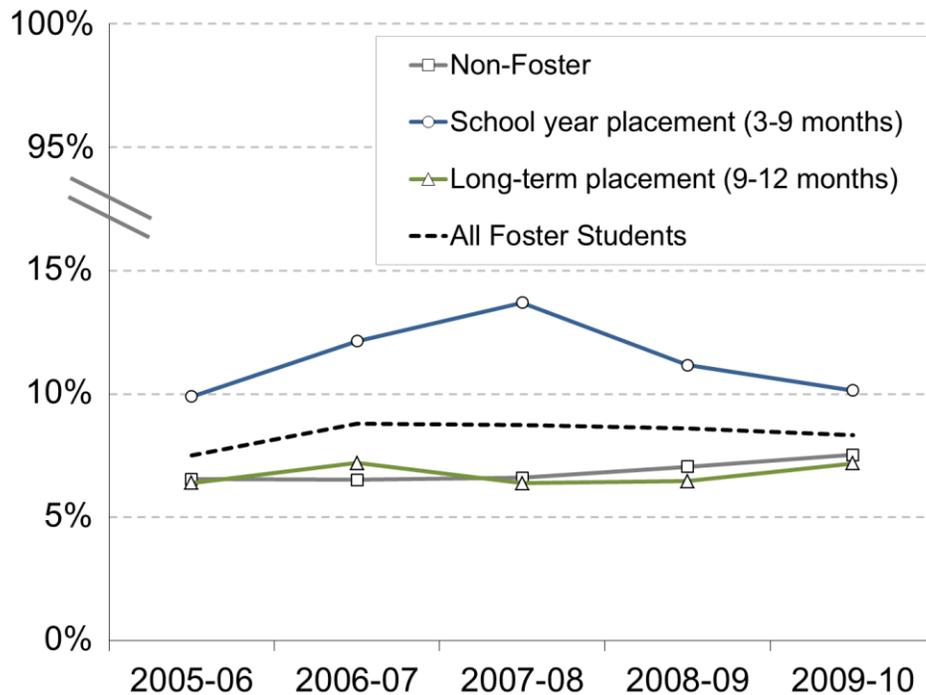
Foster Status	Behind Grade Level	Total
Non-Foster Youth	35,469 (10%)	339,848
School year (3 to 9 months)	92 (16%)	562
Full year (9 to 12 months)	139 (15%)	891

This definition, however, does not yet account for the fact that students without a high school diploma are eligible to remain in public schools through age 21.⁷ This most commonly occurs among students in migrant education, transitional bilingual instruction (English Language Learner), and special education programs.⁸ This extension is important for the purpose of this benchmark since special education students are disproportionately represented among the foster care population. According to OSPI enrollment records, 39% of the foster student population received special education services, compared to about 11% of non-foster students.

We revised the definition of ‘behind grade level’ to account for different graduation guidelines that apply to these students. If a student was classified as special education or an English Language Learner (ELL), we added three years to the acceptable limits for both expected graduation date and age-appropriate grade definition (see Measure 2, next page). When we account for these additional factors, the overall ‘behind grade level’ rate falls to approximately 7% of all students, with foster youth at a nearly identical rate compared to non-foster students.

⁷ WAC 180-51-115
⁸ See <http://www.k12.wa.us/GraduationRequirements/pubdocs/GraduationToolkit.pdf>.

Measure 2
Percent of Students Behind Grade Level by Foster Care Placement Length
(adjusted for special education and ELL status)



Time in Foster Care	2005-06	2006-07	2007-08	2008-09	2009-10	p-value*
Non-Foster	22,279 (7%)	22,220 (7%)	21,980 (7%)	23,923 (7%)	25,593 (8%)	0.04
School year placement (3-9 months)	52 (10%)	67 (12%)	73 (14%)	87 (11%)	57 (10%)	0.94
Long-term placement (9-12 months)	71 (6%)	83 (7%)	72 (6%)	61 (6%)	64 (7%)	0.61
All Foster Students	123 (8%)	150 (9%)	145 (9%)	148 (9%)	121 (8%)	0.48

Data Notes: See notes for Measure 1 for more information about inclusion criteria. Students are counted as 'behind grade level' if the age at which they enter school in the fall is older than other students in the cohort (grade 9–16, grade 10–17, grade 11–18, grade 12–19), *and* the student's expected year of graduation is one year (or more) before other students in their current grade (i.e. student in grade 12 was expected to graduate in prior school year). For more information about the assignment of expected graduation years, see <http://www.k12.wa.us/CEDARS/pubdocs/2011-12/2011-12CEDARSMannual.pdf> (page 7). This definition also provides for an additional three years to expected graduation for special education students and English Language Learners (ELL). Results exclude youth in foster care less than 90 days.

*The p-value tests the statistical significance of the historical trend (linear regression line). For a p-value greater than 0.05, we cannot say with confidence that the slope of the observed line is different from zero (i.e., no significant trend is observed).

MEASURE THREE: ADJUSTED COHORT (LONGITUDINAL) GRADUATION RATE

Starting in the 2011-12 school year, the United States Department of Education (DOE) will require state education agencies to report an “adjusted cohort graduation rate.” This rate is defined as the “number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the class.”⁹ The adjusted cohort class includes all students entering ninth grade for the first time in a given year, plus students (from the same age group) who transferred into the cohort. Students who exited from state public schools with a confirmed transfer are excluded from the calculations.

In September 2011, the Office of the Superintendent of Public Instruction (OSPI) issued guidelines about how the adjusted cohort graduation rate would be calculated for students in Washington State.¹⁰ The Institute calculated a cohort graduation rate for foster and non-foster students based on these guidelines.¹¹

Since this benchmark tracks students over the course of four years, we classify foster students by the number of years they were in a foster placement since entering ninth grade. Results are presented for the class of 2009 (entered in 2005) and the class of 2010 (entered in 2006).

Our calculated statewide adjusted cohort graduation rate for non-foster youth was 70.6% for the class of 2009 and 72.7% for the class of 2010. For the class of 2009 cohort, the rate for foster youth ranged between 33 and 55% (depending on number of years in care). Youth who were in foster care for three to four years had

a higher graduation rate in 2009 than those with fewer years in foster care (Measure 3a). The adjusted graduation rate for the 2010 cohort was more consistent, ranging between 42 and 49% (Measure 3b).

Since five years of enrollment history were available for the class of 2009, we also calculated an extended (five-year) graduation rate for this cohort. The non-foster extended graduation rate increased to 75%. For foster youth, this five-year graduation number is about seven to ten percentage points higher—except for youth in placement for all four years, whose extended graduation rate was about 20 percentage points higher.

We also obtained information on completion of General Educational Development (GED) certificates from the State Board of Community and Technical Colleges (SBCTC) for the purpose of this analysis. Data on GED completions were available through the 2009-10 school year. For the class of 2009 cohort, 30 foster youth earned a GED by age 19. This represents about 8% of all foster youth in the cohort, compared to 1% of non-foster youth. GED completers are included in the 2010 cohort; however, given that this cohort was one year younger and totals represent numbers completed by age 18, the figures are not directly comparable to the 2009 rates.

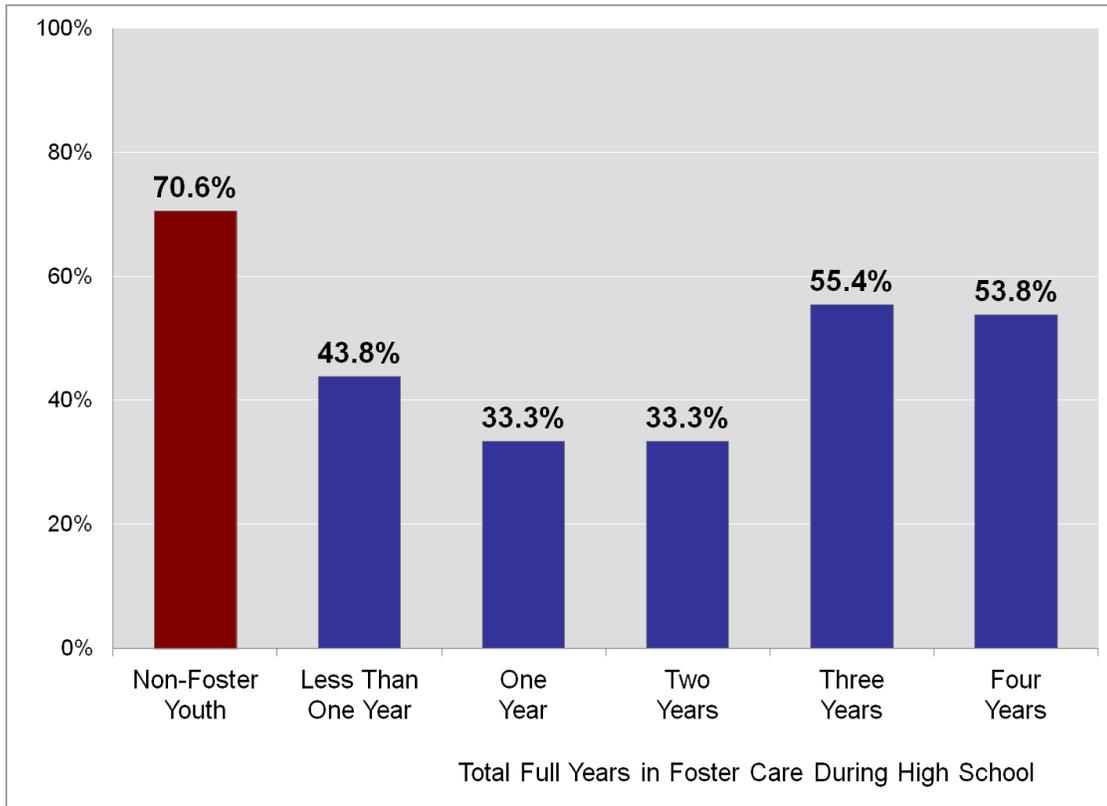
We do not yet know how longitudinal graduation rates for foster youth are changing because several years of data are necessary to measure graduation rates. More cohorts will need to be included to analyze trends.

⁹ U.S. Department of Education, High School Graduation Rate, Non-regulatory Guidance (2008): <http://www2.ed.gov/policy/elsec/guid/hsgrguidance.pdf>.

¹⁰ <http://www.k12.wa.us/BulletinsMemos/bulletins2011/B072-11Attach2.doc>.

¹¹ Analyses published in prior Institute publications were based on definitions developed by the National Governors Association (NGA). The NGA rules allowed special education students to be assigned to different cohorts which permitted additional time to graduate. The DOE calculations do not permit this cohort reassignment.

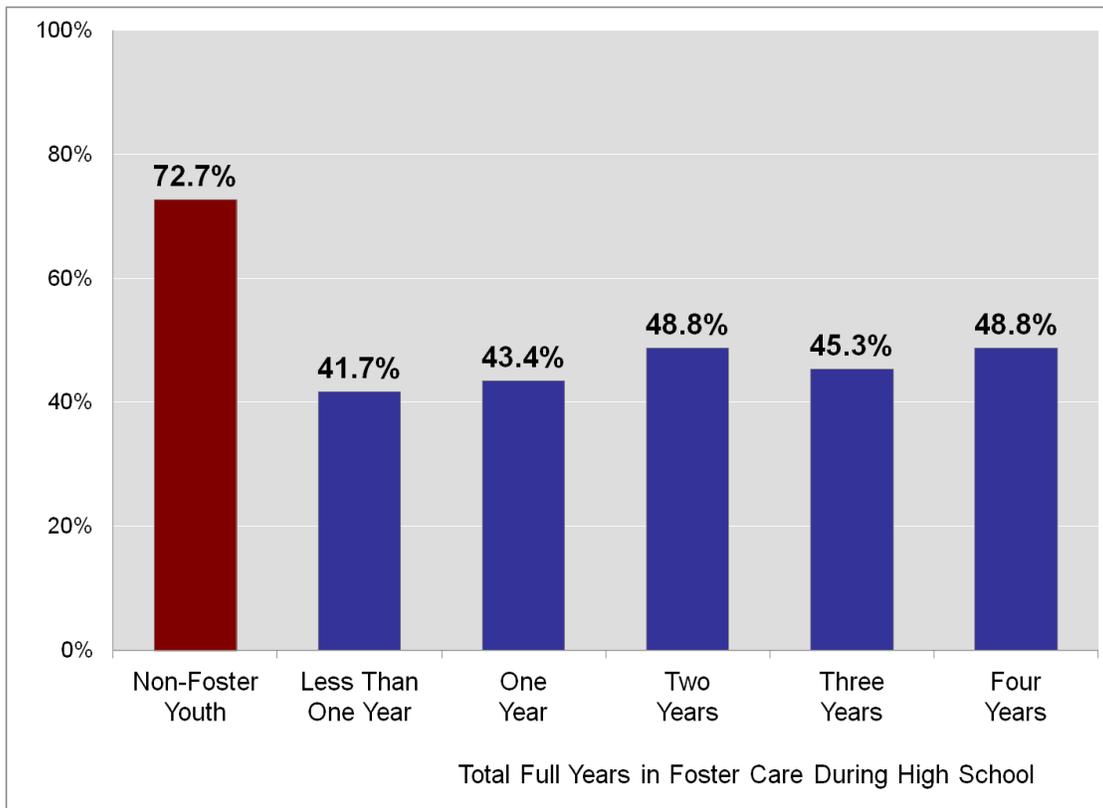
Measure 3a
Adjusted Cohort Graduation Rate by Foster Care Placement Length (Class of 2009)



Category	Years in Foster Placement During High School					Non-Foster Students in Cohort
	Less Than One	One	Two	Three	Four	
First-time 9th graders (2005)	232	166	115	105	20	79,626
All students entering cohort (grades 9-12) between 2005 and 2009 (a)	302	219	152	132	29	96,398
Students exiting with confirmed transfer (no subsequent enrollment record) (b)	140	75	59	40	3	14,122
Non-transfer students in cohort (x=a-b)	162	144	93	92	26	82,276
Total on-time graduates from cohort (y)	71	48	31	51	14	58,069
Adjusted Cohort Graduation Rate (y/x)	43.8%	33.3%	33.3%	55.4%	53.8%	70.6%
Extended Graduates (Five Year)	11	12	10	8	6	3,513
Extended Longitudinal Graduation Rate	50.6%	41.7%	44.1%	64.1%	76.9%	74.8%
GED certificates completed (by age 19)	13	7	8	2	0	923
Completion Rate - (Graduation, Extended Grad & GED – by age 19)	58.6%	46.5%	52.7%	66.3%	76.9%	76.0%

Measure 3b

Adjusted Cohort Graduation Rate by Foster Care Placement Length (Class of 2010)



Category	Years in Foster Placement During High School					Non-Foster Students in Cohort
	Less Than One	One	Two	Three	Four	
First-time 9th graders - 2006	209	142	139	94	43	79,005
All students entering cohort (grades 9-12) between 2006 and 2010 (a)	279	193	188	113	46	96,447
Students exiting with confirmed transfer (no subsequent enrollment record) (b)	116	71	63	38	5	13,748
Non-transfer students in cohort (x=a-b)	163	122	125	75	41	82,699
Total on-time graduates from cohort (y)	68	53	61	34	20	60,129
Adjusted Cohort Graduation Rate (y/x)	41.7%	43.4%	48.8%	45.3%	48.8%	72.7%
GED certificates completed (by age 18)	6	3	2	2	0	575
Completion Rate (Graduation & GED – by age 18)	45.4%	45.9%	50.4%	48.0%	48.8%	73.4%

Data Notes: The base cohort includes students that entered high school in ninth grade and were expected to graduate within four years. Students that entered in subsequent years were added to the cohort, while students with a confirmed transfer (and no enrollment in Washington State) were excluded from the calculations. The longitudinal graduation rate includes the total confirmed graduates divided by remaining students in the cohort.

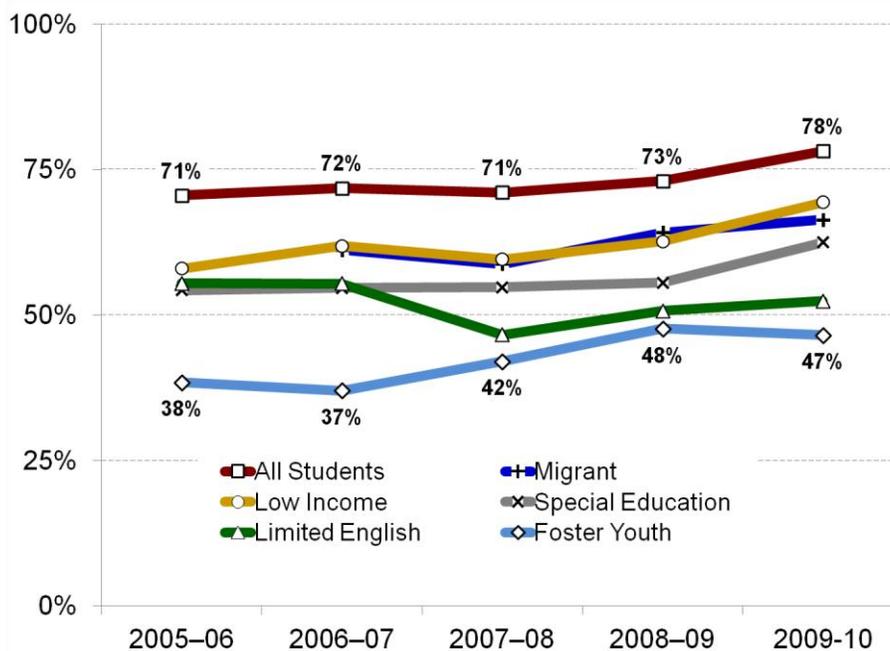
MEASURE FOUR: ON-TIME GRADUATION RATE

Each year, OSPI publishes graduation and dropout statistics for Washington State counties, districts, and schools. The definition of ‘on-time’ graduation in this measure is based on the formula provided by OSPI. This formula estimates an ‘on-time’ graduation rate by subtracting the successive dropout rate (in each grade level) from the total cohort of students expected to graduate in a given year.¹¹ OSPI also reports various sub-populations of students at-risk of not graduating, including low-income, special education, ELL, and migrant students.

Using the matched enrollment data described earlier, we used these OSPI definitions to calculate a graduation rate for non-foster and foster students. Exhibit 4 illustrates those calculated rates and the rates reported in previous OSPI publications.

Between 2005 and 2009, the on-time graduation rate for non-foster youth increased from 71% to 78%. The rate for foster youth rose as well—from 38% to 47%. Foster students, however, had the lowest graduation rate of all at-risk students. As shown in Measure 4 (next page), graduation rates for foster youth in long-term care were higher than foster students in care for 3-9 months.

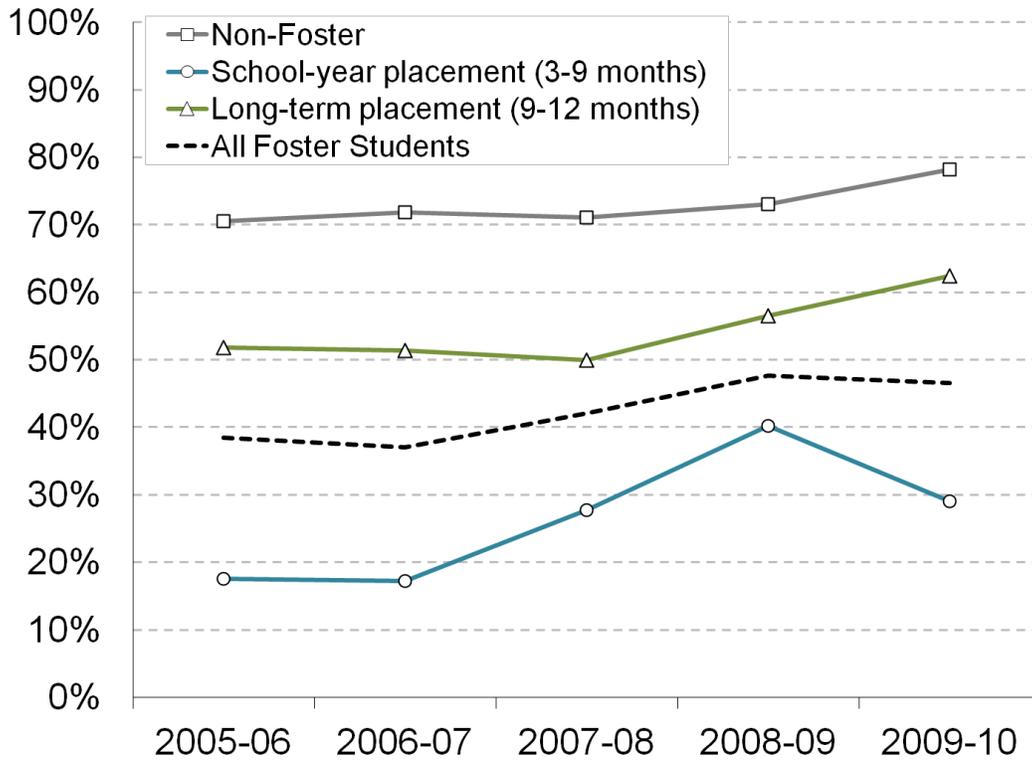
Exhibit 4
On-Time Graduation Rate by Student Sub-Population¹³



¹² On time graduation rate = 100*(1-grade 9 dropout rate)*(1-grade 10 dropout rate)*(1-grade 11 dropout rate)*(1-grade 12 dropout rate-grade 12 continuing rate).

¹³ Previous analyses conducted by the Institute reported annual graduation rates for foster youth that were 3 to 5% lower than the rates reported here. The accuracy of K-12 data maintained by OSPI has improved in recent years, improving the ability to track students across school districts (see <http://www.k12.wa.us/dataadmin/pubdocs/GradDropout/09-10/GraduationDropoutWashington2009-10.pdf>, p. 10). Consequently, the number students considered ‘dropouts’ has declined, and the graduation rate reported in this analysis increased.

Measure 4
On-Time Graduation Rate by Foster Care Placement Length



Time in Foster Care	2005-06	2006-07	2007-08	2008-09	2009-10	p-value*
Non-Foster	56,250 (71%)	58,375 (72%)	57,389 (71%)	57,143 (73%)	59,119 (78%)	0.07
School year placement (3-9 months)	30 (18%)	29 (17%)	35 (28%)	82 (40%)	39 (29%)	0.13
Long-term placement (9-12 months)	73 (52%)	74 (51%)	65 (50%)	37 (57%)	64 (62%)	0.09
All Foster Students	103 (38%)	103 (37%)	100 (42%)	119 (48%)	103 (47%)	0.04

Data Notes: Graduates include the number of students served, minus confirmed dropouts and continuing students. The on-time graduation rate is calculated as: $100 \times (1 - \text{grade 9 dropout rate}) \times (1 - \text{grade 10 dropout rate}) \times (1 - \text{grade 11 dropout rate}) \times (1 - \text{grade 12 dropout rate} - \text{grade 12 continuing rate})$. See <http://www.k12.wa.us/DataAdmin/default.aspx#dropoutgrad> for additional detail. The annual on-time graduation rate may be phased out in favor of the new adjusted cohort graduation rate, which will be reported starting in 2012. Results exclude youth in foster care less than 90 days.

*The p-value tests the statistical significance of the historical trend (linear regression line). For a p-value greater than 0.05, we cannot say with confidence that the slope of the observed line is different from zero (i.e., no significant trend is observed).

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*Washington State
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