

Response to Questions on the FY 2013 Budget

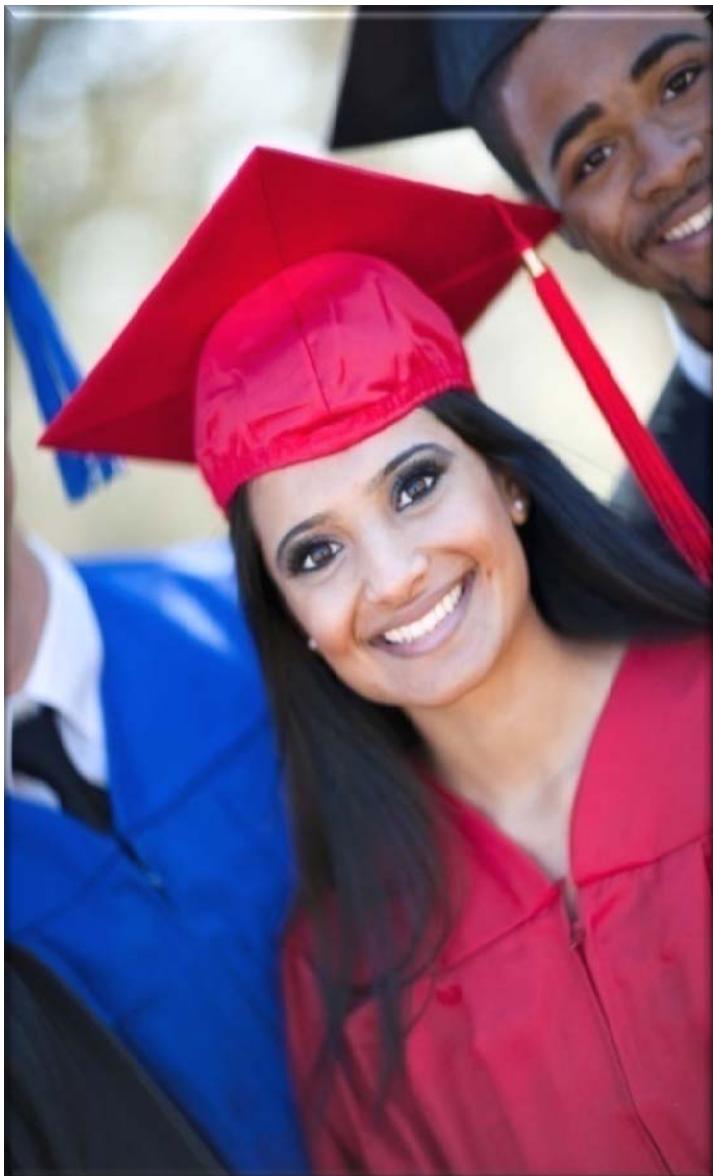
Request By: Supervisors Hudgins and Gross

Question: Please provide the detailed FCPS report on the issue of dropouts, noted at the March 13 Board Budget Committee meeting.

Response: The following response was prepared by Fairfax County Public Schools (FCPS):

Attached is the FCPS dropout analysis report. In addition, following is a link to the annual dropout report created by FCPS. The school data is in this report.

www.fcps.edu/it/studentreporting/historical/pdfs/dropouts/drop0910.pdf



Final Report:
**Superintendent's
High School Graduation
Task Force**

**Richard Moniuszko, Ed.D.
Chair**

June 13, 2011

Office of the Superintendent
Fairfax County Public Schools



Introduction

Graduation rate, or its converse, dropout rate, has been a significant national and local issue for a number of years. Although FCPS has traditionally had a low dropout rate when compared to other school systems, even a small percentage of “non-graduates” results in a significant number of students who leave school unprepared for their future. Beginning with school year 2011-2012, the Virginia Department of Education will use each high school’s Graduation and Completion Index (GCI) as one component of school accreditation. In fall 2010, Superintendent Jack Dale provided an FCPS Task Force on High School Graduation with the following charge:

- Review FCPS Graduation Rate Using Both State and Local Measures
- Develop a Profile of FCPS Students who do not complete high school on time
- Identify the reasons why FCPS students are not graduating on time
- Make recommendations to address the issues identified

Dr. Richard Moniuszko, Deputy Superintendent was assigned to chair the Task Force, which started meeting in January 2011, and completed its work in June 2011.

Task Force Composition

Dr. Richard Moniuszko, Deputy Superintendent(Chair)

Assistant Superintendents:

- Terri Breeden, Professional Learning & Accountability
- Kim Dockery, Special Services

Central Office Staff:

- Lillian Grady, SOL and Remediation
- Greg Hood, School Counseling Services
- Frances Ivey, PreK-12 Curriculum and Instruction
- Jim Johnson, PLA Special Projects
- Kathy Oliver, Student Testing
- Mary Ann Panarelli, Intervention and Prevention Services
- Teddi Predaris, Language Acquisition and Title 1
- Michelle Rahal, Test Analysis and Administration
- Laura Robinson, IT Decision Support

School-Based Staff:

- Bruce Butler, Principal, South Lakes HS
- David Czarnecki, Director, Student Services, Holmes MS
- Andrea Garris, Principal, Annandale Terrace
- Jennifer Glaser, Director, Student Services, Fairfax HS
- Penny Gros, Principal, Key MS
- Abe Jeffers, Principal, Lee HS
- Larry Jones, Principal, Bryant Alternative HS
- Nardos King, Principal, Mount Vernon HS
- Eric Kinneman, Director, Student Services, Mountain View HS
- Mary McNamee, Principal, Lynbrook ES
- John Ponton, Principal, Annandale HS
- Doug Tyson, Principal, Kilmer MS

External Staff:

- Kerin Hilker-Balkissoon, Director, Pathways to the Baccalaureate Program, NVCC

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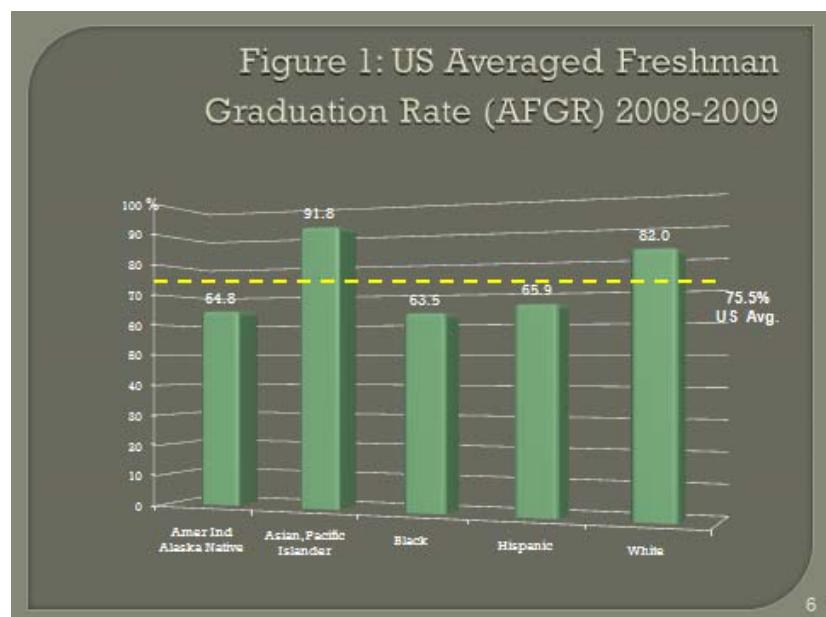
I. THE NATIONAL VIEW

During the past decade, nearly one-third of all public high school students failed to graduate. Close to five million American 18- to 24-year-olds lack a high school diploma.¹ Among developed nations, the U.S. ranked about 20th out of 28 in high school graduation rates.²

A. A Nationwide Problem

Although some indicators suggest a modest improvement in the last few years, the rate at which American students complete high school has remained essentially the same for 30 years. Students from historically disadvantaged minority groups (Hispanic and Black) have little more than a fifty percent chance of finishing high school with a diploma. By comparison, graduation rates for Whites and Asians are 75 and 77 percent nationally.³ The national graduation rate among students of color hovers around 25 percentage points below their White peers. Males graduate from high school at a rate eight percentage points lower than female students. The pace of successful high school completion for males from historically disadvantaged minority groups consistently falls at or below the 50 percent mark. Students in grades 10 through 12 from low-income families drop out at four times the rate of students from high-income families.⁴

More recent graduation data, shown in Figure 1, reflect some improvement in these outcomes. For comparability, the national graduation rate information provided here and elsewhere in this report refers to the “Averaged Freshman Graduation Rate” (AFGR) as defined by the National Center for Educational Statistics. That statistic estimates the percent of students entering grade nine in any given year who graduate four years later with a regular or advanced high school diploma.⁵ There are three other four-year cohort methods for calculating graduation rate that directly impact FCPS:



¹ David Hurst, Dana Kelly, and Daniel Princiotta, *Educational Attainment of High School Dropouts 8 Years Later*, (Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2004).

² Organization for Economic Co-Operation and Development, 2006.

³ Editorial Projects in Education, *Diploma Count 2010: Graduating by the Number: Putting Data to Work for Student Success*, special issue (2010).

⁴ U.S. Department of Education, NCES, *Digest of Education Statistics 2009*.

⁵ To minimize the effects of historically high grade 9 retention rates, the AFGR establishes the base “freshman” cohort by averaging the enrollment of that class in grades 8-10.

1. Federal Graduation Indicator (FGI), which is used at the high school level to calculate Adequate Yearly Progress for No Child Left Behind;
2. Virginia Graduation and Completion Index (GCI), which will be used beginning 2011 for high school accreditation by the Virginia Department of Education; and
3. Virginia On-Time Graduation Rate (OGR), which was used to generate the four year “non-graduate” FCPS data in this report.

See Appendix 1 for a detailed description of each of these cohort graduation rates.

Using the AFGR methodology to facilitate comparisons, no state had higher than an 88 percent graduation rate, and 10 states had rates below 66 percent. Graduation rates in the Northeast (73 percent) and Midwest (77 percent) were higher than the overall national figure, while graduation rates in the South (65 percent) and West (69 percent) were lower than the national figure. Virginia's 2007-08 four-year graduation rate, at 77 percent, is slightly above the national experience.

More than half of the Nation's dropouts come from ten percent of its high schools. Termed “dropout factories” in *Building a Graduation Nation*, these schools have grade 9 graduation

rates four years later of 60 percent or less.⁶ They are found in virtually every state and are especially concentrated in poor urban and isolated rural areas. All Fairfax County Public Schools' (FCPS) high schools have graduation rates that are well above the threshold definition for dropout factories.

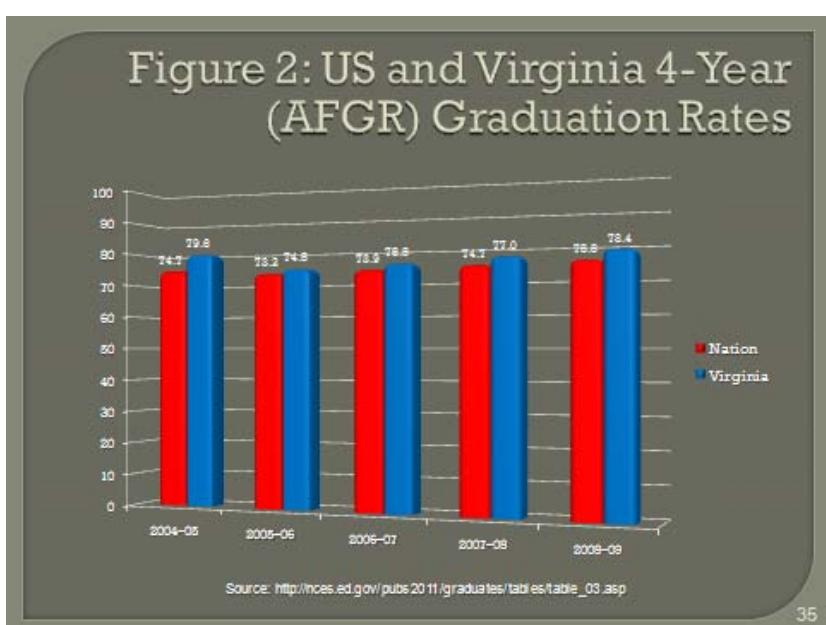
B. Why Be Concerned?

The earnings of a high school dropout are only about 70 percent those of high school

graduates. Over a lifetime, a high school dropout earns an average \$636,000 less than a college graduate and \$260,000 less than high school graduates.⁷

⁶ Robert Balfanz, John M. Bridgeland, Laura S. Moore, Joanna Horning Fox; *Building a Grad Nation: Progress and Challenge in the High School Dropout Epidemic*; Civic Enterprises, Everyone Graduate Center (Johns Hopkins University), America's Promise Alliance; November 2010

⁷ Henry Levin, Clive Belfield, Peter Muennig, and Cecilia Rouse, *The Costs and Benefits of an Excellent Education for All of America's Children* (New York, N.Y.: Columbia University, Teachers College, (2007).



Dropouts pay about 42 percent of what high school graduates pay in federal and state income taxes each year (\$1,600 and \$3,800, respectively). Over a lifetime, the difference in the discounted (2007) present value of federal and state income tax revenues is about \$60,000 per dropout. These estimates suggest a yearly “loss” on the order of \$36 billion in state and federal income taxes.

The Bureau of Justice Statistics reports that 68 percent of the nation’s state prison inmates are dropouts. Higher crime rates among dropouts, of course, imply additional innocent victims, together with their added pain and economic loss. Dropouts constitute 62 percent of White inmates, 69 percent of Black inmates, and 78 percent of Hispanic inmates.⁸ Furthermore non-graduates require substantially higher levels of welfare support, subsidized medical services, and other forms of publically financed assistance. It is estimated that U.S. taxpayers could save \$45 billion annually in “social costs” if the number of high school dropouts were cut in half.⁹

C. Common “Causes” Nationwide

Dropping out is more a long-term process than an event – a process that, for some students, begins early in their academic careers. Research has found that as early as elementary school, dropouts differ from students who graduate from high school.¹⁰ The first five years of development are a critical period for learning. When children enter school without a basic knowledge of the world around them and their place in it, they are at a disadvantage. Early deficits in the vocabulary and spatial skills they need to take the next steps in learning can have negative effects that persist throughout their school careers.

Following nearly 13,000 Philadelphia students, Balfanz and Herzog (2006) found that 48 percent of all sixth-grade students had four school-related risk factors associated with an increased likelihood of not completing high school: course failure in English; course failure in Math; unsatisfactory behavior; and poor attendance (80% or less).¹¹ Sixty percent of these students eventually left school without graduating. More recent research has defined even earlier markers for potentially dropping out, as shown in results of a just released study by Donald J. Hernandez of Hunter College at City University of New York¹². He found that students who cannot read at-level by grade 3 are four times less likely to graduate by age 19 than those who read proficiently. If those students also come from impoverished backgrounds they are 13 times less likely to graduate.

These findings suggest that schools could build “early warning” data systems to identify potential dropouts while there is still time to implement appropriate, targeted interventions.

⁸ U.S. Department of Justice 2004, 2009.

⁹ Henry Levin, Clive Belfield, Peter Muennig, and Cecilia Rouse, *The Costs and Benefits of an Excellent Education for All of America’s Children* (New York, N.Y.: Columbia University, Teachers College, (2007).

¹⁰ Russell W. Rumberger, *Early Predictions of High School Graduation and Dropout* (2007).

¹¹ Robert Balfanz and Lisa Herzog, *Keeping middle grades students on track to graduation* (2006).

¹² Preview of “Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation” by Donald J. Hernandez, published in Education Week, April 8, 2011.

There is a difference between the exact moment when students leave school and the process of disengaging from school, often beginning well before they arrive at the point of their decision to quit. A lack of engagement with school is considered a precursor to dropping out. Signs of disengagement may provide the best indicators of when to target resources for dropout prevention, particularly if students are not yet failing core coursework. For prevention to be effective, schools must engage all students in learning, and they must focus specifically on the problem of re-connecting students who have become disengaged from classroom learning.

The impact of another strong risk factor, *retention*, varies depending upon when it occurs. Retention in any grade has a negative impact on a student's odds of making it through the ninth grade, but retention in the middle grades is particularly problematic.¹³ Once students get off-track by grade 9, bringing them to successful high school graduation is extremely difficult. If these students reach middle school already overage for their grade, then experience a second grade retention in the middle grades, they begin to disengage from schooling altogether. And as schools in the middle grades and beyond fill up with overage and under-motivated students, school cultures themselves become vulnerable to depressed expectations and mediocre practice.

Teachers appear divided about the effect of retention on students' self-concept and whether retention for an extra year for growth and maturity is justified.^{14,15} In a survey of views on grade repetition, teachers and principals described common characteristics of retained children as under-motivated and developmentally immature. At the same time they agreed that emotional immaturity is an appropriate rationale for retention.¹⁶ Tomchin and Impara (1992) believe that it is critical for schools to implement staff development in which teachers (a) examine their own beliefs about retention, (b) are presented with research evidence about the short- and long-term effects of retention, and (c) are trained in school-wide classroom intervention strategies.

The risk factors commonly found by researchers to best predict dropout for high school students are high absenteeism, being over-age by two years, having low grades, and having a child. Using these factors should help identify a group of students with the highest probability of dropping out. Dynarski and Gleason (1998) found that these factors would, in fact, identify a group where one in three students would actually drop out.

¹³ Alexander, K. L., Entwistle, D. R., & Kabbani, N. S. , *The dropout process in life course perspective: Early risk factors at home and school*, Teachers College Record, 103, 760–822. (2001).

¹⁴ Tanner, C.K., & Combs, F.E., *Student retention policy: The gap between research and practice.*, Journal of Research in Childhood Education, 8, 69–77, (1993).

¹⁵ Tomchin, E.M., & Impara, J.C., *Unraveling teachers' beliefs about grade retention*. American Educational Research Journal, 29, 199–223, (1992).

¹⁶ Byrnes, D., & Yamamoto, K.Y., *Academic grade retention of elementary pupils: An inside look*. Education, 106, 208–214, (1985).

In summary, current research has identified three major groupings of risk factors that can be modified to improve school outcomes and enable school personnel to create early interventions that hold some promise of changing the trajectory of many students.¹⁷

- *Academic Failure:* The results of poor basic skills become more obvious as students move through the school system, often culminating with failure on high-stakes tests or in key courses at the secondary level. A cycle of failure and boredom ensues that leads to poor academic self-esteem and renewed efforts by failing students to escape from school as soon as possible.
- *Disinterest in School:* Many students do not have access to either role models or good advice for school success. Often, these students are isolated by economics, social status, or geography from communities in which they might encounter positive, non-family role models. Many of the adults they actually see are struggling with the economic and employment consequences of their own school failure and are poorly equipped to give effective guidance for school success.
- *Social and Economic Pressures:* The negatives range from: lack of family support for education; to family economics that depend on student earnings or their provision of child care; to other issues such as divorce or mobility that interfere with a student's ability to attend to school requirements. These factors are strongly influenced by the broader social context of schools, families, and communities.

A detailed listing of factors found in one or more studies to be significantly associated with high incidences of dropouts at the several school levels is provided in Figure 3.

¹⁷ Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., and Smink, J., *Dropout Prevention: A Practice Guide* (NCEE 2008–4025). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, (2008).

FIGURE 3
SIGNIFICANT RISK FACTORS BY SCHOOL LEVEL¹⁸

RISK CATEGORY AND RISK FACTOR	Elementary School	Middle School	High School
Individual Background Characteristics			
• Has a learning disability or emotional disturbance		x	x
Early Adult Responsibilities			
• High number of work hours		x	X
• Parenthood			X
Social Attitudes, Values, & Behavior			
• High-risk peer group		X	x
• High-risk social behavior		X	x
• Highly socially active outside of school			x
School Performance			
• Low achievement	X	X	X
• Retention/over-age for grade	X	X	X
School Engagement			
• Poor attendance	X	X	X
• Low educational expectations		X	X
• Lack of effort		x	x
• Low commitment to school		x	X
• No extracurricular participation		x	X
School Behavior			
• Misbehavior	x	x	X
• Early aggression	x	x	
Family Background Characteristics			
• Low socioeconomic status	X	X	X
• High family mobility		X	
• Low education level of parents	x	x	X
• Large number of siblings	x		x
• Not living with both natural parents	x	x	X
• Family disruption	x		
Family Engagement/Commitment to Education			
• Low educational expectations		X	
• Sibling has dropped out		x	x
• Low contact with school		X	
• Lack of conversations about school		X	x

KEY: "x" indicates that the risk factor was found to be significantly related to dropout in one study.
 "X" indicates that the risk factor was found to be significantly related to dropout in two or more studies.

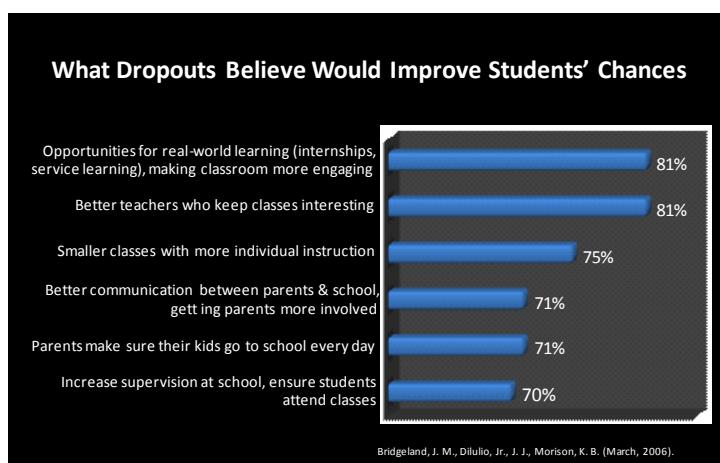
¹⁸ Adapted from "Dropout Risk Factors and Exemplary Programs"; Cathy Hammond, Dan Linton, Jay Smink, and Sam Drew; National Dropout Prevention Center/Network and Communities in Schools, Inc.; May 2007.

II. POTENTIAL SOLUTIONS

A. What Dropouts Say

Clues as to what might be effective dropout prevention strategies can be found in the research into what students, themselves, say. According to a landmark 2006 study of the issue, "The Silent Epidemic: Perspectives of High School Dropouts":¹⁹

- *Supportive Relationships* – Only 56 percent of dropouts said they could go to a staff person for school problems, and just 41 percent had someone in school to talk with about personal problems.
- *Outside Support* – More than three out of five (62 percent) said their school needed to do more to help students with problems outside the classroom.
- *Quality Instruction* – Four out of five dropouts (81 percent) wanted better teachers, and three-fourths wanted smaller classes with more individualized instruction.
- *Added Time to Learn* – More than half (55 percent) felt that more needed to be done to help students who had problems learning, and 70 percent believed more tutoring, summer school, and extra time with teachers would have improved their chances of graduating.
- *Real World Connections* – Four out of five (81 percent) said there should be more opportunities for real-world learning, and some called for more experiential learning. They said students need to see the connection between school and getting a good job.
- *Parental Involvement* – Seventy-one percent of dropouts surveyed felt that the keys to keeping students in school were better communications between parent and school and increased parental involvement in their child's education.



¹⁹ John M. Bridgeland, John J. Dilulio, Jr., Karen Burke Morrison, *The Silent Epidemic: Perspectives of High school Dropouts*, Civic Enterprises and Peter D. Hart Research Associates, March 2006.

B. What Works – District Level

A substantial body of disciplined research into what strategies are effective at helping students to graduate on-time has recently emerged. Much of what students say would be helpful has been borne out by this research. The essence of these findings is:

- *Use Early Warning Data Systems to Identify Students Likely to Drop Out* – Louisiana has pioneered the development of a state early warning data system. It flags students as at risk of dropping out if: they are absent 10 percent of the days enrolled; their disciplined days are 7 percent or greater; their current grade point average is 1.00 or less; their GPA has dropped by at least 0.50 points; or they are overage for grade.²⁰ Virginia is currently piloting a similar system that might be adapted and extended for use in FCPS.
- *Target Investments to Promising Dropout Prevention Strategies* – Research suggests that reducing class sizes from 25 to 15 for kindergarten through grade 3 could increase cohort graduation rates 11 percentage points.²¹ Improving teacher quality and early reading skills have similarly been linked to decreased dropout rates.²²
- *Connect Students to Supports* – Since Georgia launched its graduation coach initiative, the percentage of dropouts per year fell from 4.7 percent to 3.7 percent. After a year of work with graduation coaches, 40 percent of the students at risk no longer demonstrated attendance problems.²³ Alabama provides another example in a similar program that will provide \$1.7 million in funding to 25 pilot schools to hire dropout prevention advisors.²⁴
- *Create Pathways for All Students to Graduate from High School* – Clear connections to postsecondary and workforce interests, including dual enrollment, internships, and apprenticeships, keep students engaged in school with a focus on their future goals.

C. What Works – School Level

In *Gaining Traction, Gaining Ground* (2005), the Education Trust reported on actions principals can take at the school level to make substantial improvements for struggling students.²⁵ These strategies have produced results well above state averages for achievement, graduation, and college attendance. All are linked to improving success and educational opportunities for the most challenged high school students. Figure 4 summarizes these results, showing how high-impact high schools differ from average schools in ten key

²⁰ Patricia Merrick, *Louisiana Dropout Early Warning Systems (DEWS)* (2009).

²¹ Henry Levin, Clive Belfield, Peter Muennig, and Cecilia Rouse, *The Costs and Benefits of an Excellent Education for All of America's Children*, New York, N.Y.: Columbia University, Teachers College, (2007).

²² Dolores A. Stegelin, *Early Literacy Education: First Steps Toward Dropout Prevention: Effective Strategies for School Improvement and Dropout Prevention*, Clemson, S.C.: National Dropout Prevention Center, (2002).

²³ Georgia Department of Education, *Georgia Graduation Coach Initiative: 2007-2008 Report*, (2009).

²⁴ Alabama Department of Education, 'Statewide Pilot Programs Aimed to Boost Graduation Rates, news release (2007).

²⁵ Stephanie Robinson, Amy Stempel, Isis McCree. The Education Trust, *Gaining Traction, Gaining Ground: How Some High Schools Accelerate Learning for Struggling Students*, 2005.

leadership domains. Virtually all of these practices are employed to some degree in most FCPS schools. The challenge is to achieve focus and consistency in their application.

Figure 4 School-Level Actions to Improve Graduation Rates

Action	High Impact School Practice	Average Impact School Practice
Teacher Placement	Principals are more likely to consider student achievement data to determine which classes teachers will be assigned. They review and analyze achievement data, observe teachers' strengths and weakness to ensure struggling students get the teachers who can best accelerate learning.	Principals are more likely to assign teachers to classes based on teacher preference and seniority. For example, department heads often teach only honors and AP classes, while struggling students are taught by less experienced teachers.
Support for New Teachers	Support for new teachers is structured and focuses on curriculum and instruction. New teachers are given model lesson plans, are paired with veteran teachers who teach the same class, and given opportunities to observe master teachers.	Support for new teachers tends to focus on personal support. For example, new teachers meet with administrators to chat about how things are going. The focus is on teacher motivation, rather than helping teachers to develop skills to better serve their students.
Hiring Practices	Principals work within their district system, but aggressively and proactively identify and recruit highly qualified teachers. They may conduct informal interviews and urge good candidates to apply through the district. They may even raid other school faculties, looking for good teachers who will support the school's culture.	Principals tend to feel constrained by district procedures and do not feel empowered to work creatively with it. They tend to take the list of candidates provided by the district and choose the "best of the bunch" from among them, seldom recruiting teachers that they think might be a good fit.
Support for Students	Student support programs tend to be mandatory and are triggered by assessments that signal the student is struggling – participation in the programs is not an option.	Student support programs tend to be voluntary –students and parents are notified of availability of help, but the decision to participate is generally left up to them.
Early Warning Systems	Schools have "early warning" systems to catch students before they fail. Counselors analyze seventh and eighth grade student test scores for entering ninth-graders to identify students who are struggling. Identified students are assigned to a variety of supports, including mandatory summer school, freshman academy classes, or after-school tutoring.	Schools tend to offer support after students have failed a course – e.g., getting an "F" in a course may result in participation in a computerized skill-acquisition course.
Grade Level Support	If possible, academic support programs for students are not remedial, but support concurrent grade-level courses, which allows students sufficient time over four years to complete the college preparatory sequence of courses.	Academic support services for students tend to be remedial in nature. Struggling ninth-graders are placed in remedial courses, delaying access to grade-level work, thus limiting the time available to students to take the necessary sequence of college-preparatory courses.
Use of Data	Principals tend to be hands-on when it comes to analyzing data. They use data to actively supervise and oversee teacher and student performance. Principals institute formal methods of analyzing data with teachers to determine course content, strengths and weaknesses. Principals may review each student's transcripts to ensure correct placement or to recognize students who have improved performance.	Principals tend to rely on teachers and departments to use data to monitor student performance and are not as involved in the analysis. At one school, for instance, the principal copied data for teachers and asked them to analyze it, but did not work directly with departments to sort out the reasons behind student achievement or how to improve results.
Class Sizes	Administrators tend to make class sizes smaller for struggling students, even if this means larger class sizes for honors and AP classes.	Class sizes are relatively uniform, with no proficiency level having smaller classes than another.
Consistency	Teachers collaborate to ensure that course content is consistent no matter who is teaching.	Teachers work individually to determine class content.
Use of Time	Students who arrive behind in ninth grade spend more time in courses with substantial reading than do students who are proficient. Administrators also act vigorously to protect time by limiting announcements over the PA system to emergencies, prohibiting students from being pulled from class except for emergencies, and requiring instruction to be "bell to bell".	Administrators tend to consent to intrusions into academic time, such as announcements calling students to the office and early release for athletes.

Source: Robinson et al., 2005

D. What Works – Effective Program Models

The previously cited authors of the meta study, “Dropout Risk Factors and Exemplary Programs,” identified 50 strategies and programs which research has shown in multiple instances to be effective at preventing dropouts.²⁶ Among the more familiar of these were: Advancement Via Individual Determination (AVID); Big Brothers, Big Sisters; Career Academies; and Success for All. The full listing, together with their descriptions, can be found in Appendix G of that report.

These programs applied a combination of 22 intervention strategies aligned with the risk factors shown in Figure 3 above. The strategies are listed below:

Academic support	Gang intervention/prevention
Adult education	Life skills development
Afterschool	Mental health services
Behavioral interventions	Mentoring
Career development/job training	Pregnancy prevention
Case management	School/classroom environment
Conflict resolution/anger mgmt	Service-learning
Court advocacy/probation/transition	Structured extracurricular activities
Family engagement	Substance abuse prevention
Family strengthening	Teen parent support
Family therapy	Truancy prevention

Those most commonly and effectively used were: life skills development, family strengthening, academic support, behavioral interventions, and family therapy. Each of these key strategies is described below:

- *Academic Support* – Help with remediation; support learning other than tutoring (e.g., computer labs); academic skills enhancement programs using instructional methods designed to increase student engagement in learning (e.g., cooperative learning techniques and “experiential learning” strategies); other activities to increase bonding to the school; and homework assistance and tutoring.
- *Behavioral Interventions* – Individualized interventions designed to decrease a specific behavior by shaping and reinforcing a desired replacement while tracking changes over time; also those interventions designed to improve the individual’s overall quality of life (i.e., student development).

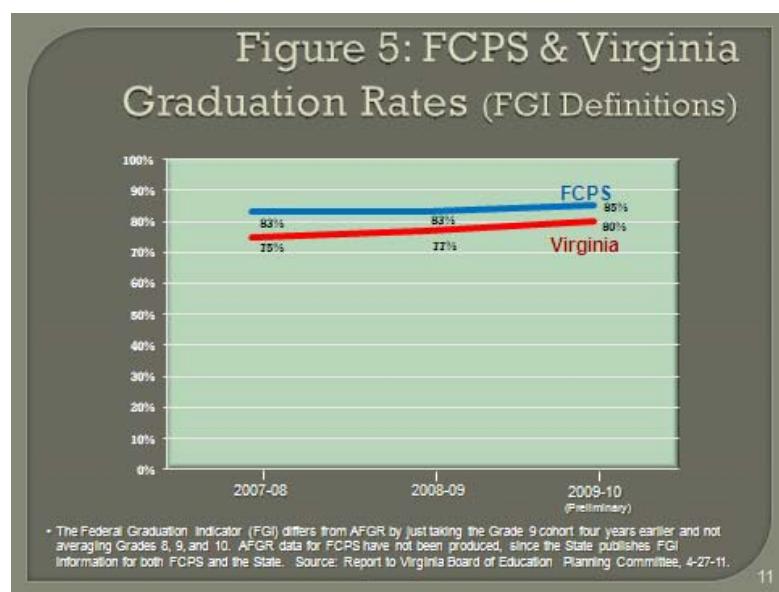
²⁶ Cathy Hammond, Dan Linton, Jay Smink, and Sam Drew, “Dropout Risk Factors and Exemplary Programs”, National Dropout Prevention Center/Network and Communities in Schools, Inc.; May 2007.

- *Family Strengthening* – Parents educated on specific parenting, management, and communications skills; education on various topics such as abuse and sexuality; training on ways to assist the child academically.
- *Family Therapy* – Modifications to maladaptive patterns of family interaction and communication.
- *Life Skills Development* – Communication skills; ability to cope effectively with relationships; problem solving/decision making; critical thinking; assertiveness; peer selection; low-risk choice making; self-improvement; stress reduction; consumer awareness; peer resistance; recognition and appropriate response to risky or potentially harmful situations; appreciation of diversity; social influences on behavior; conflict resolution skills and social skills; leadership skills/training; and health education.

III. Who Graduates in FCPS?

A. FCPS and State High School Completion

The four-year Federal Graduation Indicator (FGI) rates of Virginia and FCPS students for the classes of 2008 through 2010 are shown in Figure 5. Although the FCPS rate has been essentially the same over the past three years, at just below 85 percent, it has remained at a level ranging from five to ten percentage points *above* both the state and national rates.²⁷



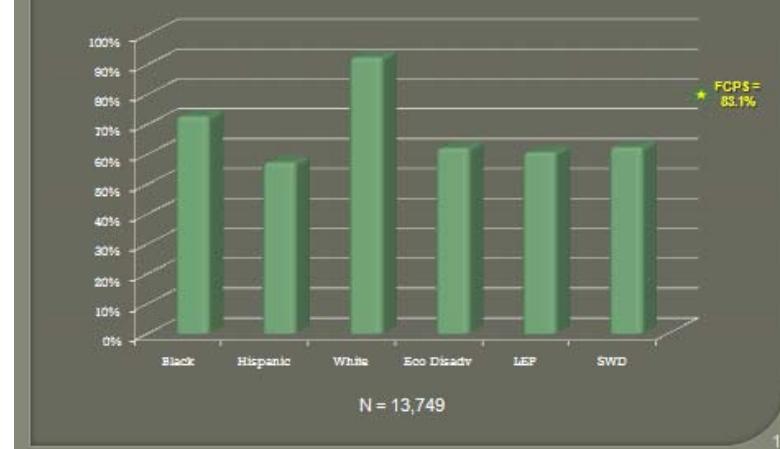
²⁷ NOTE: the FGI differs from the AFGR by using only the grade 9 enrollment four years earlier to define the cohort, rather than averaging enrollment at grades 8, 9, and 10 for the same cohort. It includes only those students who graduate with either regular or advanced diplomas four years after they enter grade 9. This graduation measure offers the Virginia and FCPS graduation data that are most closely aligned with the Federal AFGR information provided in this report.

However, the graduation rates for all FCPS student subgroups are not at the same level. The Division's 2009 four-year graduation rate for Hispanic students was more than 35 percentage points below FCPS' overall rate. It was also about nine percentage points below the national Hispanic average. (See Figure 6)²⁸

A significant difference between FCPS and national data is the graduation rate for Black students, who graduated at a rate of nearly 73 percent compared, with the US mean for Black students at 64 percent.

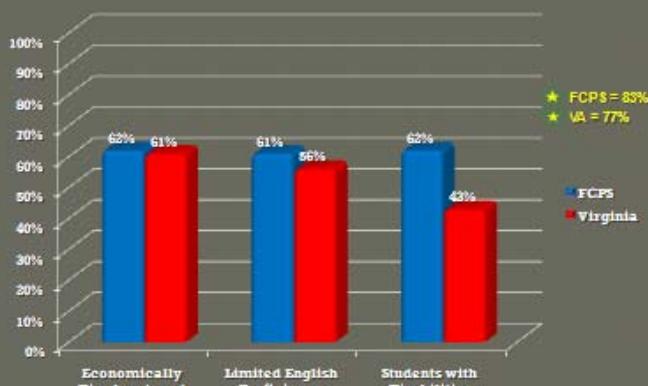
FCPS students facing other circumstances that could hinder their achievement also graduated at four-year rates somewhat lower than the overall Division average, but still substantially above state comparisons. For example, nearly 62 percent of the class of 2009's Students with Disabilities graduated within four years. (Figure 7) That this rate is nearly 20 percentage points below the FCPS average is not surprising, since students with "late" graduations and Modified Diplomas are not included. But that figure also is almost 20 percentage points above the comparable state rate. Our students with Limited English

Figure 6: FCPS 4-Year FGI Graduation Rate 2008-2009



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Figure 7: Four-Year (FGI) Graduation Rates Selected Virginia and FCPS Students



Proficiency also graduated at rates about 20 percentage points below the total (but still well above the state rate), while FCPS' Economically Disadvantaged students similarly graduated at a rate about 20 percentage points below the overall FCPS figure, while marginally above the state's disadvantaged student rate.

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²⁸ Education Week has just published new graduation information based on the Common Core of Data showing Montgomery and Fairfax Counties as having the highest graduation rates among large districts. See: [Education Week \(premium article access compliments of EdWeek.org\)](http://Education Week (premium article access compliments of EdWeek.org))

Students With Disabilities and English Language Learners who entered school in Virginia for the first time after reaching their twelfth birthday are entitled to a free public education through age 22. Since some of these students need additional time through a fifth or sixth year of high school to complete graduation requirements, a more comprehensive comparison of graduation rates includes a sixth year cohort. According to VDOE's most recent On Time Graduation Rate (OGR) six-year calculation (2008 cohort), FCPS ELLs had a graduation rate of 81 percent, compared with 64 percent in Arlington, 69 percent in Prince William, and 79 percent in Loudoun for the comparable ELL cohort. Similarly, the six year graduation rate for FCPS students with disabilities was 89 percent, compared with 86 percent in Arlington, 83 percent in Prince William, and 94 percent in Loudoun.

B. Profiles of FCPS Students Who Did Not Graduate in Four Years

To examine the nature of students in FCPS who do not graduate four years after entering 9th grade, data were collected on the 2009-10 cohort of FCPS students who started high school in September 2006. The cohort was selected using the Virginia On-Time Graduation Rate (OGR), which groups “Non-Graduates” into three categories:

- *Completer* - Students who earned a Certificate of Program Completion or GED through FCPS
- *Dropout* - Students coded as dropouts and students who remain unconfirmed. Many unconfirmed students were coded by schools as transfers to other VA public schools, but VDOE has no record of these students enrolling in another Virginia public school after leaving FCPS
- *Still Enrolled* - Students enrolled in FCPS as of the end of the 2009-10 school year, plus long-term absence students who were expected to return to FCPS. Not all of these students subsequently enrolled in FCPS for the 2010-11 school year

The OGR calculation reassigns eligible English Language Learners (ELLs) and students with a disability to a future cohort if they are school-aged (22 and under) and enrolled for a fifth or sixth year of high school. Consequently, these students are not included in the four-year cohort data provided in this report.

FCPS Non-Graduate and Total Membership Sub-Groups		
	% of Non-Graduates	% of Total FCPS Population
Asian	11.8%	19.0%
Black	15.1%	10.4%
Hispanic	44.2%	18.7%
White	24.8%	45.3%
Other	4.1%	6.6%

The resulting four-year cohort of “non-graduates” totaled 1172 students, 185 who were still enrolled in school, 200 who were “completers”, and 787 students who were listed as “dropouts”. For each of these 1172 students who were enrolled in a traditional or alternative high school, data on student risk factors were compiled. The factors considered are listed in Figure 8.

For those four-year cohort students still enrolled, the ethnic distribution was fairly even – with Black, Hispanic, and White students each comprising 25 to 30 percent of the total, while other sub-groups were substantially less represented. The majority of FCPS dropouts were Hispanic (53.2%); the White sub-group comprised the next largest percentage (18.3%), and Black students were 14.1 percent of the total. It was noted that Black students are dropping out of FCPS at significantly lower rates than both Virginia and the nation.

Figure 8: Data Reviewed for Non-Graduates

- | | |
|---------------------------------|---|
| • ELL | • Credits Attempted |
| • Special Education | • GPA |
| • Disadvantaged | • Participation in Activities/Athletics |
| • Last Grade Attended | • Recommended for Expulsion |
| • Age | • HS SOL Reading P/F |
| • Years in FCPS | • HS SOL Math P/F |
| • Gender | • 8 th grade SOL Reading P/F |
| • Ethnicity | • 8 th grade SOL Math P/F |
| • Days Absent | • Number of verified credits |
| • Days Present | • Retained? Y/N |
| • % time in attendance | • Reason for leaving school |
| • Alternative School attendance | |

The demographic composition of these non-graduates, compared with their representation in overall 2009-10 FCPS enrollment, is presented in the adjoining table.

Figure 9 summarizes the key risk factors associated with the 2010 cohort of FCPS dropouts versus completers and those still enrolled. These findings begin to offer clues as to why some of our students do not graduate – clues mirroring many of the conclusions from the body of national research.

Figure 9**Selected Characteristics of 2010 FCPS Non-Graduates**

Indicator	Enrolled + Completers	Dropouts
Percent ELL	12.7%	48.3%
Percent Special Ed	9.9%	16.4%
Average Years in FCPS	8.6	5.9
Percent Male	57.4%	59.0%
HS Attendance Rate (%)	87.7	82.7
% Attended Alternative School	64.7%	48.3%
Average Credits Earned	15.4	12.1
Average GPA	1.67	1.59
Percent Participated in Activities	7.5%	3.0%
% Recommended for Expulsion	10.1%	10.4%
Percent Passed SOL, Reading	43.9%	14.6%
Percent Passed SOL, Math	74.5%	37.5%
Percent Disadvantaged	32.2%	33.0%
Percent Retained	66.8%	50.8%

Among the more striking of these observations is that:

- English Language Learners (ELLs) comprised 48.3% FCPS dropouts (381 of 790 students) in the four-year cohort. However, it also should be noted that there were 1028 school-age ELL students still enrolled and working on graduation requirements beyond the four-year time period. Research has demonstrated that these students often require additional time to develop academic language proficiency in order to complete graduation requirements. These students were reassigned to an appropriate, later cohort.
- A large percentage of dropouts were unable to pass Math and Reading SOLs (62 percent and 85 percent respectively).
- Few in any non-graduate category participated in extra-curricular activities; a third were economically disadvantaged; and over half of dropouts had been retained in at least one grade. These retention figures, however, may be under-reported, since those appearing in a cohort of non-graduates are very likely to have been retained at some point in their educational careers.

The Task Force requested further analysis of the middle school achievement data regarding these 1172 FCPS students. This analysis revealed that 24.2 percent did not pass their Virginia SOL Reading test in grade 8, and 49.7 percent were unable to pass their Virginia SOL Mathematics test in grade 8. The Task Force also requested additional data on language proficiency. That information showed that, among those listed as “dropouts,”

Spanish was the most common first language among ELL students (49.9%), followed by Vietnamese at 2.8%, and 33 other first languages listed in even lower concentrations.

The following narratives describe in greater detail the circumstances faced by representative FCPS dropouts, completers, and students who are still enrolled:

Who are our dropouts?

AB:

- Born in the United States but moved with his parents to El Salvador at a young age where he did not have any formal schooling for approximately seven years. He was sent back to the United States to live with an aunt and entered middle school as an 8th grader where he began receiving ESOL services. The aunt could no longer care for him he was withdrawn from FCPS to live with family in Prince William County, where he completed grades 9 and 10. A family friend took over guardianship and he was re-enrolled in FCPS as a 11th grader during the 08-09 school year. He never returned to school for 2009-10. While at high school, he was referred to Local Screening, but not eligible for special education services.
- Primary risk factors: ELL, mobility, academic gaps, economically disadvantaged

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Who are our completers?

EF:

- EF raised in a single family home, and was frequently absent from school during his 9th grade year (16 days). Although academically capable his 9th grade GPA was 1.4. Sophomore year he was removed from honors classes, and showed some improvement in his grades (GPA 2.28). He was hospitalized at Dominion Hospital in the Spring of 2009 for depression, with 40 discipline referrals during his school career, dating back to elementary school. His junior and senior year, his GPA declined significantly although his attendance increased. He was referred to Alternative High School and graduated there.
- Risk factors: Attendance, alternative schools

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Who are those still enrolled?

GH:

- GH attended two different FCPS high schools after the family moved here from New York State. His mother was ill and died shortly after the family moved to this area. While in HS, the student had significant absences and reportedly was not engaged while present for classes. He lived with a blended family that included his aunt and cousins; the other children in the household reportedly exhibited similar attendance and behavioral concerns. He was enrolled in a regular high school for only a month, before referral to Adult High School in November 2010, where he currently attends.
- Primary Risk factors: Attendance, Alternative School, Average GPA, Retained

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Who are those still enrolled?

DJ:

- DJ attended two different FCPS high schools after the family moved here from New York State. His mother was ill and died shortly after the family moved to this area. While in HS, the student had significant absences and reportedly was not engaged while present for classes. He lived with a blended family that included his aunt and cousins; the other children in the household reportedly exhibited similar attendance and behavioral concerns. He was enrolled in a regular high school for only a month, before referral to Adult High School in November 2010, where he currently attends.
- Primary Risk factors: Attendance, Alternative School, Average GPA, Retained

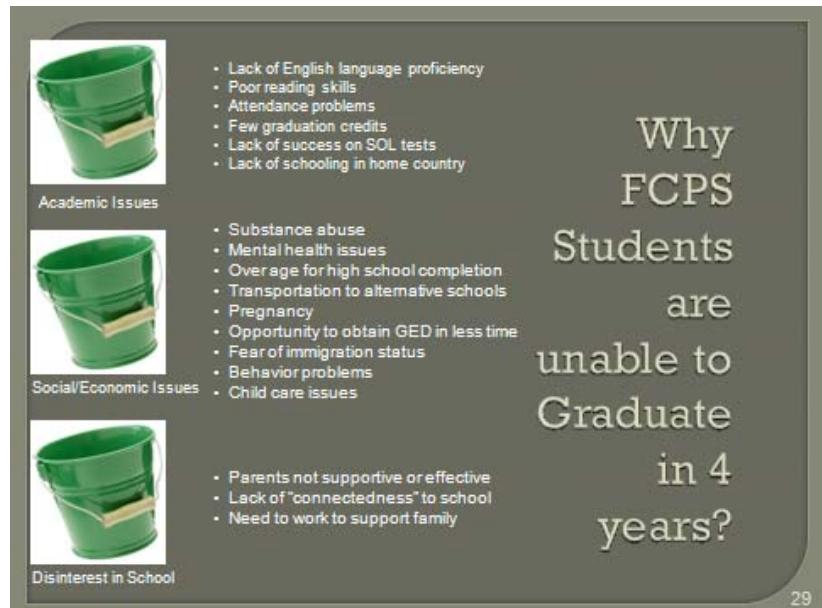
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C. Task Force Conclusions – Reasons for FCPS Students' Non-Graduation

To understand why FCPS students, in particular, do not successfully complete high school, the Graduation Task Force reviewed the relevant research and analyzed the statistical characteristics of 1172 class of 2010 non-graduates, as reported above. The Task Force also asked affected high school principals and counselors to provide further information from their direct work with a random sample of non-graduates representing each of their high schools. This information, when evaluated through the eyes of Task Force members similarly experienced with students facing such challenges, produced findings reflecting both objective fact, and subjective understanding of students' personal circumstances. As a result, the FCPS Graduation Task Force concluded that FCPS students do not graduate for three broad categories of reasons, similar to the reasons reflected in the national research: Academics, Socio-Economic Factors, and Disinterest in School. Specific concerns within these categories were:

Academics:

- level of English language proficiency
- poor reading skills
- attendance problems
- few graduation credits
- lack of success on SOL tests
- lack of schooling in home country



Socio-Economic Factors:

- substance abuse
- mental health issues
- over-age for high school completion
- lack of transportation to alternative schools
- pregnancy
- opportunity to obtain GED in less time
- fear of immigration status
- behavior problems
- child care issues

Disinterest in School:

- parents not supportive or effective
- lack of "connectedness" to school
- need to work to support family

Five of these characteristics are infrequently mentioned in the research, reflecting the differences between the Fairfax community and the national data.

- level of English language proficiency
- lack of schooling in home country
- lack of transportation to attend an alternative school
- opportunity to obtain GED in less time, and
- fear related to immigration status

IV. RECOMMENDATIONS FOR ACTION

Recommendation #1 – Utilize Data Systems to Identify Students At-Risk of Dropping Out and to Monitor Progress:

The Task Force examined the Virginia Early Warning System (VEWS), recently made available to school divisions by the Virginia Department of Education. It is conceptually well-founded, but not scalable to a school division of FCPS' size. The Task Force recommends the design and implementation of an early warning system based on the new FCPS student information system (ISIS). This early warning system should include the risk factors identified by the Task Force. Periodic school and district-level reports should be compiled to reflect student outcomes with respect to these risk factors. Additionally, the Task Force identified a number of problems that must be corrected in the data used to calculate the Virginia On-Time Graduation Index to ensure accurate calculation of the dropout rate. Associated detailed recommendations are:

Develop an FCPS early warning system that includes academic and social risk factors in an ISIS-based program:

- Provide periodic school-/district-level reports on new students and current students identified by these factors as at-risk
- Use reports to continually monitor at-risk students' academic/social performance
- Identify elementary, middle and high school students for specific interventions to address their risk factors

Ensure that information regarding student withdrawals and re-entry is accurate:

- Establish consistent terminology and clear definitions regarding reasons for students' exiting school
- Provide training for student information system operators and administrators who monitor data to ensure full understanding and consistent application of the defined reasons for exiting
- Request changes to the Graduation and Completion Index (GCI) to reflect the high mobility and multi-national nature of FCPS students

Recommendation #2 – Provide Targeted Academic Intervention to Students At-Risk of Dropping Out

In reviewing the data for FCPS students who were unable to complete high school in four years, the Task Force found that many students enter high school with Reading skills inadequate to completing their coursework. Although a number of these students came to FCPS from other countries and had limited educational experiences, some attended school in FCPS for eight years or more. Reading and Language interventions should address the needs of both groups of students. The specific recommendations are:

- Expand pre-K programs to ensure students enter with more comparable language and experiences
- Require intervention for students in grades K-3 to ensure reading at grade-level
- Provide diagnostic reading tests for middle school students who are unable to pass the Reading SOL
- Provide training for high school teachers on how to teach reading in content areas
- Provide an intensive Reading class for grade 9 students who did not pass the grade 8 SOL Reading Test
- Encourage high school principals to employ a Reading Specialist
- Establish “credit recovery” programs for students who are in danger of failing core courses
- Investigate expansion of the Transitional High School concept to provide an intensive “catch-up” program for students who need both academic support and English language literacy
- Provide intensive professional development for HS teachers in differentiation of instruction in content, literacy, and culture for English Language Learners
- Explore employing “Graduation Advisors” for at risk students in middle and high school
- Implement goal-setting as part of Student Learning Plans for at-risk students

Expand access to FCPS Alternative School programs to meet student needs:

- Provide transportation for students who wish to attend FCPS Alternative School Programs

- Investigate the use of “Transition Support Resource Centers” (TSRC) as “school-within-a-school” programs

Action Recommendation #3 – Provide targeted social/emotional intervention for students and families

Many FCPS students were unable to graduate on-time because of substance abuse, depression, and other social/emotional issues that interfered with learning. Academic and social intervention at an earlier age should be used to mitigate the need for grade retention. FCPS alternative school programs can address some of these needs, but transportation to these schools can be problematic for some students. Specifically, FCPS should:

- Expand mentoring and advocacy programs (including advisory groups) for middle and high school students
- Coordinate internal resources with Fairfax County and other community agencies, expanding community partnerships to provide services to students at-risk of not graduating on time
- Use a “case management” approach to share information on student services and to monitor progress
- Engage parents as educational partners (K-12) through PIQE, PEP or other program models²⁹

Action Recommendation #4 – Improve Student “Connectedness” to School

Many FCPS students who do not finish high school lack adult guidance and support for the successful completion of education. Parents may work multiple jobs, be unfamiliar with the American system of education, or fear discovery of their immigration status. Accordingly, the Task Force recommends that FCPS:

- Explore the concept of a “graduation advisor” for every high school student identified as at-risk to not graduate
- Encourage and monitor student participation in school activities to ensure school connectedness
- Ensure that students set aspirational academic and career goals, and review them on a regular basis
- Provide multiple paths to graduation as needed, including GED and alternative programs (e.g., Woodson AHS, Bryant, etc.)

²⁹ Parent Institute for Quality Education

- Establish student mentoring programs, pairing at-risk students with successful peers
- Expand programs to more school sites for parents from other cultures to reinforce the necessity of high school completion (e.g. Parents as Educational Partners)

APPENDIX 1

The several graduation and dropout measures discussed in this paper are defined as follows:

- *(U.S.) Averaged Freshman Graduation Rate (AFGR):* “The averaged freshman graduation rate (AFGR) provides an estimate of the percentage of public high school students who graduate on time – that is, 4 years after starting 9th grade –with a regular [or advanced (ed)] diploma. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and aggregate counts of the number of diplomas awarded 4 years later. The incoming freshman class size is estimated by summing the enrollment in 8th grade for 1 year, 9th grade for the next year, and 10th grade for the year after and then dividing by 3. The averaging is intended to account for higher grade retention rates in the 9th grade.”³⁰
- *Federal Graduation Indicator (FGI):* T FGI Graduates are defined as students who earn Advanced Studies, Standard, or IB Diplomas. On-time graduates are graduates who earn one of these three diplomas within four years of the first time they entered the 9th grade. The formula for the Federal Graduation Indicator equals [on-time graduates in year x] divided by [(first-time entering 9th graders in year x minus 4) plus (transfers in) minus (transfers out)]. Four-, five-, and six-year federal graduation indicators are calculated in a manner that is consistent with the federally prescribed methodology.
- *Virginia On-Time Graduation Rate (OGR):* The Virginia On-Time Graduation Rate expresses the percentage of students in a cohort who earned a Board of Education-approved diploma within four years of entering high school for the first time. Percentages are based on longitudinal student-level data and account for student mobility and retention and promotion patterns. Students with disabilities and students who are limited English proficient who were still enrolled in school were moved into next year's cohort, consistent with the formula approved by the Virginia Board of Education. Completions counted include Regular, Advanced, GED, Modified Standard, and Special diplomas.
- *(Virginia) Graduation and Completion Index (GCI):* Beginning with accreditation ratings announced by the Virginia Board of Education in fall 2011, high schools must earn a minimum of 85 points on the graduation and completion index – as well as achieve the required pass rates on state tests in English, history/social science, mathematics and science – to be *Fully Accredited*. The Graduation and Completion Index awards:³¹

³⁰ <http://nces.ed.gov/pubs2011/dropout08/findings6.asp>

³¹ www.doe.virginia.gov/support/.../superintendent_presentation_1.ppt

- 100 points for students who graduate with a(n)
 - Advanced Studies Diploma
 - Standard Diploma
 - Modified Standard Diploma
 - Special Diploma or General Achievement Diploma
 - 75 points for students who earn a GED
 - 70 points for students still in school
 - 25 points for students who finish high school with a Certificate of Completion
- Schools awarded 85 points are “fully accredited”. Those awarded 80-84 points are “provisionally accredited”, and those awarded 79 points and lower are “accredited with warning”.

For purposes of computing the index, qualified ELL and students with disabilities are reassigned to later cohorts.

The following table provides a summary comparison of these three graduation measures.

Table A
Federal and State Graduation Rate Comparison

Based on Year of Entry in Ninth Grade	Virginia's On-Time Graduation Rate (OGR)	Federal Graduation Indicator (FGI)	Graduation and Completion Index (GCI, New)
	Four, Five and Six Year Rates	Four, Five and Six Year Rates	Four Year Rates
	INCLUDED AS GRADUATES		
Standard Diploma	YES	YES	YES
Standard Technical Diploma *	YES	YES	YES
Advanced Diploma	YES	YES	YES
Advanced Technical Diploma *	YES	YES	YES
Modified Standard Diploma	YES	NO	YES
Special Diploma	YES	NO	YES
General Achievement Dipl **	YES	NO	YES
Special Certificates	NO	NO	Reduced Point Value (25 pts)
GED	NO	NO	Reduced Point Value (75 pts)
Still in School	NO	NO	Reduced Point Value (70 pts)
ADJUSTMENTS			
Adjustment for Disabled	YES (moved to later cohort)	NO	Moved to later cohort
Adjustment for ELL	YES (moved to later cohort)	NO	Moved to later cohort

* Begins for Class of 2016. ** Not currently used in FCPS. SOURCE: Adapted from <http://www.vaascd.org/VirginiaGraduationRates.pdf>