# GRADE-LEVEL FEASIBILITY STUDY: EXECUTIVE SUMMARY

Prepared for Alexandria City Public Schools

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## INTRODUCTION

#### **Project Background**

At the request of Alexandria City Public Schools (ACPS), Hanover Research conducted several studies as part of a multi-phase research initiative to explore the feasibility of several grade configuration options for the division's schools. Overall, the multi-phase study addresses the following research questions:



What strategies do districts use to address growing enrollment, and how do districts navigate changes in grade configuration?



What do current demographics trends suggest about the need to change grade configurations in Alexandria City?



What impact does grade configuration have on student outcomes according to research?



How do teachers perceive the current split-campus model of TC Williams High School?



## INTRODUCTION

#### **Project Background**

To complete the multi-phase study, Hanover approached the research questions using a mixed-methods approach through the following projects:

**Literature Review** – Reviewed secondary literature surrounding grade configuration at the elementary and secondary levels.



**Benchmarking Study** – Identified strategies school districts use to address rapidlygrowing student enrollment, including grade configuration changes.



**Environmental Scan** – Examined recent population trends in Alexandria City and compared grade configuration scenarios using current enrollment figures.

**In-Depth Interviews - Teachers** – Gathered school-based staff perceptions of the current high school grade configuration model used at ACPS.



# QUESTION ONE: What strategies do districts use to address growing enrollment?



#### Capital and Non-Capital Strategies

The literature review and district interviews identified a variety of capital and non-capital strategies to alleviate over-crowding in schools, including:



ACPS has pursued many of these strategies over the last several years in order to address its rapid enrollment growth.



## STRATEGIES FOR GROWING ENROLLMENT



#### **Reconfiguring Schools**

"The first question to ask is how do we, as educators, make the decision on what composition the school needs to be? That decision typically is related to how many students are actually going to be projected per household in that new growth area."

> -Terry Worcester, Scottsdale Unified



Among the five interviewed districts, three implemented a grade reconfiguration at the K-8 grade levels for either programmatic or capacity reasons:

- Among these three, two transitioned from traditional elementary schools to K-8 models.
  - Aurora Public Schools (CO)
  - Charlotte-Mecklenburg Schools (NC)
- One district transitioned from K-8 schools to a traditional K-5/6-8 model.
  - Scottsdale Unified (AZ)
- Notably, none of the interviewed districts altered grade configuration at the high school level.

## **QUESTION TWO:**

What do current demographics trends suggest about the need to change grade configurations in Alexandria City Public Schools?



#### **Population Growth**

The number of ACPS students, in grades pre-K through 12 increased by **18.9 percent** between 2011 and 2015.

The number of children ages 0 to 17 in Alexandria City grew by **15.5 percent** between 2011 and 2015.

The number of families in Alexandria City increased by **10.8 percent** between 2011 and 2015.  Alexandria City experienced growth in family residency as well as sizable increases in student-aged populations from 2011 to 2015.



 The largest growth was observed in Alexandria West (22311), Potomac West (22305), and Van Dorn (22304)





#### Diversity

Based on projection estimates released by the VEC, an increasing minority population is expected to make up Alexandria City's residents between 2020 and 2040<sup>1</sup>

- The racial composition of Alexandria City's zip code areas among those ages 0 to 17 drastically differ and have grown more segregated during the 2011 to 2015 period.
- Disparities in the median household income between Alexandria City's zip code areas have also grown wider over time.

[1] "Virginia Community Profile: Alexandria City." Virginia Employment Commission, December 30, 2016. p. 8. http://virginialmi.com/report center/community profiles/5104000510.pdf

## ALEXANDRIA CITY DEMOGRAPHIC TRENDS



#### ACPS Capacity and Over-Enrollment

For additional insight, Hanover also compared ACPS's 2015 enrollment figures to the district's estimated 2020 school capacity, running a variety of grade configuration scenarios for students in Grades Pre-K-8.<sup>1</sup> This analysis found:



Creating a specialized Pre-K Center at an existing elementary school site would allow the district to free some space in existing K-8 and K-5 schools to accommodate a larger number of older students.



Finally, varying grade configurations for schools that students serve in Grades PK-8 may be pursued for instructional purposes; however, this will not alleviate capacity due to the capacity deficit for ACPS existing across all grade levels.

<sup>1</sup> Varying grade level configuration scenarios for high school were not reviewed as part of this work.



QUESTION THREE: What impact does grade configuration have on student outcomes according to research?

## STUDENT OUTCOMES



#### **Overall Findings**

Evidence on benefits of different grade configurations is typically mixed and often inconclusive. Overall, the literature suggests that school quality plays a stronger role in academic outcomes than any particular grade configuration.



Evidence suggests that the number of transitions that a student experiences (or the number of times a student changes schools) has a negative impact on student achievement. However, districts can support students through comprehensive school transition programs.



Because no one grade configuration has consistently demonstrated improvements in academic achievement, some experts argue that schools should focus on improving overall school quality, particularly for students in the middle grades (6-8).



Additionally, research generally finds that smaller schools and class sizes are beneficial for student achievement. A 2009 review of school size studies found that students benefit from a maximum school size of 600 students at the elementary level and 1,000 students at the secondary level.





## Impact of Specific Grade Configuration Models – 1 of 4







PK/K-5 schools are the most common configuration for public elementary schools; however, PK-6 schools may have some benefits for Grade 6 students.

Elementary Schools

- In two recent studies, researchers found academic and behavioral benefits for Grade 6 students in PK-6 schools compared to peers in 6-8 schools.
- Districts transitioning to a K-6 grade configuration will need to consider the logistics of increased student enrollment in elementary schools.





## Impact of Specific Grade Configuration Models – 2 of 4





K-8 Schools vs. Middle School Studies comparing student outcomes at K-8 schools and middle schools have found conflicting results. Overall, research is inconclusive.

- Several studies found improved academic and behavior outcomes for K-8 students compared to middle school students, while others found no difference in outcomes between K-8 and middle school students.
- Evidence suggests that **classroom quality** and the **social environment** are better predictors of student outcomes for middle grades students.





## Impact of Specific Grade Configuration Models – 3 of 4

РК	К	1	2	3	4	5	6	7	8	9	10	11	12
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Few studies compare the impact of middle school (6-8) vs. junior high (7-9) grade configurations.

- While at least one study found positive results for junior high over middle school, other studies have found grade span is not associated with Middle School **negative academic or behavioral outcomes** at this grade level. vs. Junior High
  - Once again, studies find that **classroom quality** and the **social environment** are better predictors of student outcomes for middle grades students.



Research on the impact of Grade 9 Academies is inconclusive.



Grade 9

**Academies** 

- While some studies have found that students attending such academies • have higher achievement levels than students in typical high schools, other studies have found no differences.
- Districts implementing a Grade 9 Academy should consider the relatively high cost compared to a traditional high school, as distinct administrative structures and resources are required.



## Impact of Specific Grade Configuration Models – 4 of 4





7-12 High

**Schools** 

Studies and anecdotal evidence suggest that 7-12 schools are difficult to implement and may not benefit students.

- 7-12 schools minimize student transitions and allows younger students to access high school facilities and advanced coursework.
- However, lower-secondary and upper-secondary students have different needs. Schools that implement this configuration model typically use a school-within-a-school model to serve students in Grades 7 and 8.





- There is little to no research surrounding alternative secondary school grade configurations (including 9-10/11-12 campuses).
- 9-12 schools are by far the most prevalent type of upper-secondary school configuration.

Traditional High Schools



QUESTION FOUR: How do teachers perceive the current split-campus model of TC Williams High School?

#### Methodology





To gather more information about the impact of the current grade configuration of T.C. Williams High School, Hanover conducted 16 indepth interviews with teachers at the Minnie Howard and King Street campuses. All participating teachers remain anonymous in the analysis.

Hanover uses a qualitative coding process to identify trends in participant responses.

Note that Hanover **did not** provide or solicit direct recommendations regarding high school grade configuration during the interview process.





Thoughts on the Grade 9 Academy at Minnie Howard Campus

"Because we are smaller and more focused, we can be more engaged with the students."

- Minnie Howard Staff

"Having a smaller group, we do get to know the kids really well, but then they leave."

- Minnie Howard Staff

- Teachers indicated that the smaller setting of the Minnie Howard campus allows for students to receive more attention.
- Teachers felt the smaller setting of Minnie Howard encourages collaboration with teachers in the same building.
- Teachers noted that a smaller setting provides the opportunity to develop close relationships and understandings of their students, which is then lost when they move on to the main campus.





#### Thoughts on the Grade 9 Academy at Minnie Howard Campus

"We seem to be more of a stepchild to the other school. They always kind of forget about us."

- Minnie Howard Staff

"Most students think of [The Minnie Howard Campus] as an extension of their middle school years."

- King Street Staff

"Sometimes you can't maintain uniformity if you're separate. It's just not practical in many instances."

- Minnie Howard Staff

- Dividing students along grade levels leads to the perception that the Grade 9 school not being "real" high school, a lack of vertical planning among teachers, and logistical challenges for students.
- Teachers prefer that their campus has its own administrators and decisionmaking power, but seek a sense of unity and school spirit between the two campuses.
- Teachers note the need for additional communication and collaboration across the two campuses.





### Thoughts on Proposed Grade Configuration Changes

"You couldn't have a situation where kids are traveling between buildings so you would need to fully staff two buildings with teachers who could teach all of the different courses that we offer in our program of studies because that would just mean more travel otherwise and more

- Minnie Howard Staff

- In general, teachers do not support the formation of a 9/10 and 11/12 grade configuration.
- Instead, teachers tend to support the creation of one large or multiple smaller comprehensive high schools.
- Teachers acknowledge challenges related to diversity, but believe that schools can be equitably divided.
- Grade 9 teachers note that the intimacy and focus of the Grade 9 Academy can be recreated within a larger school.



# **KEY FINDINGS AND IMPLICATIONS**

## **KEY FINDINGS**



**Over the last five years, the student-age population in Alexandria has grown rapidly.** At the same time, the city has become more diverse and, in some neighborhoods, more segregated. These findings suggest that the equitable distribution of resources and careful planning to ensure school integration will be important factors in the grade reconfiguration process.



A review of the literature surrounding grade configuration finds that the empirical data does not universally support any specific configuration as "the best" for students. Instead, much of the support (or not) for individual configuration models is based on anecdotal and descriptive literature. However, there is some evidence that the number of school transitions a student makes can negatively impact student achievement.



**If implementing a new grade configuration, divisions should:** engage all stakeholders, consider the costs and resources needed for each model, and commit to student achievement and wellbeing.



Feedback from teachers at TC Williams indicates that there are a number of challenges to the current split-campus model, including a lack of consistency across the two campuses, a lack of vertical planning across the high school grades, and a lack of older role models for Grade 9 students, as well as logistical challenges for students and staff.

## IMPLICATIONS

#### **Implications for Practice**

- Hanover recommends that, whichever grade configuration model is chosen, division leaders:
  - ✓ Involve parents, students, and staff in the decision-making and implementation process.
  - ✓ Create comprehensive transition support programs when students change schools.
  - Carefully review the impact that school boundary and grade configuration changes will have on school integration and diversity.
  - Assess and consider all operating and capital budgetary needs to implement and maintain a proposed new grade configuration.
- The school-based staff qualitative analysis supports ACPS's consideration of either one large or multiple smaller, comprehensive high schools. Thus far, feedback from teachers highlights the difficulties of TC Williams' current split-campus model, and teachers generally do not support the formation of separate 9-10 and 11-12 campuses. Furthermore, the research generally supports reducing the number of school transitions that students must make to promote academic achievement.



## **KEY FINDINGS**



#### Process for Implementing New Grade Configurations



Districts typically solicit feedback from stakeholders when deciding whether to adopt new grade configurations.

Capital and operating costs including renovations, transportation, materials and supplies, and structural needs for different age groups are a key issue for districts when considering new grade spans.

Educators, researchers, and district leaders emphasize that a commitment to "sound educational practices" should be the underlying goal of any grade reconfiguration.



# QUESTIONS

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