

T.C. WILLIAMS: KING STREET CAMPUS

3330 King Street Alexandria, VA 22302

Year Built: 2007	Current School Floor Area: 461,147 sq ft	Current Lot Size: 19.88 acres
Zoning: R20	Floor Area Permitted by Zoning: 547,000	Floor to Area Ratio: 0.51 per DSUP
Classroom Count: 169	Ed Spec Capacity @ 86% Efficiency: 2,928	Projected Utilization (2022): 125%
Space Adequacy: Satisfactory: classrooms are within 10% +/- of the Ed Spec space requirements Borderline: classrooms are between 80% to 89% of space requirements Inadequate: classrooms are between 70% to 79% of space requirements Very Inadequate: classrooms are within less than 69% of space requirements Exceeds Space Requirements: classrooms are greater than 110% of space requirements	Non-Conforming Classrooms: 20 classrooms - 12% 75 classrooms - 44% 10 classrooms - 6% 26 classrooms - 15% 38 classrooms - 23%	Current Efficiency: Red-Day Schedule Average: 77% The average efficiency for A-Day is based on the following class periods: 1, 3, 5, and 7. Blue-Day Schedule Average: 78% The average efficiency for B-Day is based on the following class periods: 1, 2, 4, and 6.

Student Counts:

	FY 2017 Enrollment	FY 2022 Projected
Student Count	2943	3654
Capacity	2928	2928
Utilization Rate (Student Count / Capacity)	101%	125%

Enrollment projections for 2018 current boundaries provided by ACPS. Percentage values may not aggregate to 100% due to decimal place rounding.

Utilization Rate Categories:

Enrollment as % of Capacity	Definition
< 89	Underutilized
90 - 110%	Ideally Utilized
> 111 %	Over Capacity

Space Adequacy Categories:

Non-Conforming Spaces	As a % of SF
Satisfactory	Within 90 - 110%
Borderline	80% - 89%
Inadequate	70% - 79%
Very Inadequate	Less than 69%
Exceeds Space Requirements	Greater than 110%

BACKGROUND

T.C. Williams, Alexandria's only high school, is a comprehensive high school comprised of two campuses: the Minnie Howard Campus and the King Street Campus. In September 2016, T.C. Williams High School had a total enrollment of 3,754 students across both campuses. The Minnie Howard Campus serves grade 9 and the King Street Campus serves grades 10 – 12 and grade 9 students who participate in the International Academy program. Some 9th grade students from Minnie Howard travel to the King Street Campus during school hours on ACPS

provided buses to attend specific class offerings, often in the afternoon.

The King Street Campus was built in 1965 and modernized in 2007 with a new facility at its present site. The modernized building is a state-of-the-art facility that provides smaller learning communities, as well as flexible academic space capable of meeting the evolving secondary school curriculum requirements. In fall 2008, the second phase of the campus modernization project was completed and included an artificial turf sports field,

renovated stadium, new athletic track, new playing field, new bus driveway and a two-story parking garage. The project received a LEED Gold rating.

The academic program at T.C. Williams High School includes 188 courses in reading, language arts, mathematics, social studies and science, as well as fine arts, performing arts, physical education and health. The school also offers the following special academic programs:

- Academy of Finance
- Advanced Placement/Honors/Dual Enrollment
- International Academy
- Special Education/Inclusion Program
- STEM Academy
- Vocational Programs

ENROLLMENT AND UTILIZATION

The King Street Campus had a September 2016 enrollment of 2,943 students. The calculated capacity of the King Street Campus is 2,928 students based on an 86% efficiency rate, yielding a utilization rate (enrollment vs. capacity) of 101% in September 2016. Enrollment projections indicate the King Street Campus school population will increase to 3,654 by the year 2022, resulting in a utilization of 125% at the King Street Campus, which equates to a gap of 726 seats if seeking 100% utilization. ACPS considers ideal utilization as a range of 90% to 110%.

KEY FINDINGS

SUMMARY

The design of the King Street Campus was informed by older standards. ACPS has since developed Educational Specifications (Ed Specs) which were approved by the School Board in January 2017 and are reflective of current program and practices and represent ACPS's ideal 21st century high school.

Only 34% of classrooms meet or exceed the 2017 board approved educational adequacy benchmarks. The remaining 66% of classrooms are smaller than the prescribed minimum size requirements set in the Ed Spec. Additionally, based on the 2016-17 course schedule, the current use of classrooms averages below the ACPS benchmark efficiency rate of 86%.

EDUCATIONAL ADEQUACY

Educational Adequacy is the measure of existing educational spaces in comparison to ACPS's desired space

requirements and standards set forth in the 2017 School Board-approved high school Ed Specs. The educational adequacy assessment of the school also helps to calculate the capacity of the school. B&D performed the analysis and assessment in support of developing draft recommendations and priorities.

Based upon the data collected through B&D's assessment, only 34% of classrooms at the King Street Campus meet or exceed the educational adequacy benchmarks for an ideal 21st century high school. Spaces that are non-conforming to the Ed Specs impact the potential capacity of the school and utilization of space.

Of 169 total teaching spaces, only 20 spaces fall within 10% of the space requirements set forth in the Ed Specs. Despite having more room, larger spaces can only hold up to the maximize class size; therefore the 38 spaces that exceed the size requirement hold the same number of students as a standard Ed Specs classroom, as Board policy caps the class size per teacher. The remaining 111 classrooms are undersized. Per the Ed Specs, spaces that are smaller by more than 10% of the standard classroom space should hold fewer students.

SCHEDULE EFFICIENCY

Schedule efficiency examines how classroom spaces are used throughout the school day. ACPS's Ed Specs strive for an 86% utilization rate on a regular basis. Generally this rate means rooms are used seven out of eight periods a day and teachers utilize an alternative space such as a teacher collaboration suite for their planning period.

B&D's analysis of current course scheduling and room use reveals that T.C. Williams' instructional spaces are used slightly less than the desired rate. Classroom efficiency is specific to each day's schedule and can vary annually. T.C. Williams employs an Red/Blue block schedule, which impacts the instruction within a classroom each day. A classroom may be utilized for seven periods during Red-Day and only six periods during Blue-Day, depending on the scheduling need. The day-to-day utilization of a classroom impacts the average schedule efficiency for that day. The current average efficiency of classrooms at the King Street Campus during an Red-Day schedule is 77% while the average efficiency during a Blue-Day schedule is 78%. Opportunities to improve schedule efficiency should be explored.

RECOMMENDATIONS

The capacity of T.C. Williams High School cannot meet the projected growth in enrollment nor do the majority of classrooms meet the minimum recommended size requirements per the Ed Specs. Options to provide additional student capacity at one or both campuses or a new site should be explored. Work Group members and stakeholders emphasized their desire that short-term solutions, often identified as an early priority, do not become long-term solutions for the Division. Rather, short-term solutions should serve a specific purpose for a given timeframe. Based on the analysis of the data collected and meetings with the Work Group and stakeholders, the following recommendations for the King Street Campus are provided.

GROUP 1 — REQUIRED PLANNING

- Conduct site analysis to determine if the site can accommodate additional square footage to support more students. This analysis should include the impacts to shared and core spaces such as dining.
- Conduct further analysis of the master schedule and use of space at the King Street Campus to explore ways to maximize existing space. The analysis should include studying how to increase the number of teacher collaboration suites and/or reconfiguring existing space to improve the enrollment capacity.
- Study the potential outcomes of a shifted schedule (e.g. multiple tracks of students with alternating start and end times).
- Study the possibility of transporting 10 – 12 grade students to the Minnie Howard Campus for classes to relieve capacity constraints at T.C. Williams.
- Conduct an analysis of adjusting grade-level pairings throughout the Division (i.e., K-6, 7-9, 10-12).

GROUP 3 — SECOND PRIORITY

- If applicable, reassign grade-level pairings throughout the Division based on analysis and ACPS priorities.
- Build additional capacity for T.C. Williams High School at the King Street Campus, at the Minnie Howard Campus, and/or at another location within the City.

GROUP 2 — FIRST PRIORITY

- Continue and expand partnerships with local entities, such as with NoVA Community College, to increase off-campus learning opportunities. Determine how much capacity can be provided at off-campus locations to inform future utilization of T.C. Williams.
- If applicable, adjust the master schedule based on analysis performed.
- In order to maximize capacity at both campuses, explore how students can travel between campuses without significantly adding to the Division's transportation costs or local traffic levels.
- Utilize trailers to accommodate more students as enrollment increases.

GROUP 4 — LONG RANGE RECOMMENDATIONS

- New high school graduation requirements within the Commonwealth of Virginia are currently in development, known as the "Profile of a Virginia Graduate." The profile is the framework for the Virginia Board of Education's revision of graduation requirements, which will go into effect for freshmen entering high school in the fall of the 2018-19 (the graduating class of 2022). The requirements will likely affect the number of required program and support spaces, as well as the types of spaces needed for high school programs. Once the requirements are approved, the Division should conduct an analysis of high school spaces to ensure instructional spaces are in alignment with the new high school program requirements.

T.C. WILLIAMS: MINNIE HOWARD CAMPUS

3801 West Braddock Road, Alexandria, VA 22302

AT A GLANCE...		
<i>Year Built</i> 1954	<i>Current Floor Area</i> 130,435	<i>Floor Area Permitted by Zoning (SF)</i> ACPS/COA To Confirm
<i>Zoning</i> R-12(031.02-02-05)	<i>Lot Size (acres)</i> 6.6	<i>Floor Area Ratio</i> ACPS/COA To Confirm
POS	5.4	0.0

BACKGROUND

T.C. Williams, Alexandria's only high school, is a comprehensive high school comprised of two campuses: the Minnie Howard Campus and the King Street Campus. In September 2016, T.C.



Williams High School had a total enrollment of 3,754 students across both campuses. The Minnie Howard Campus serves grade 9 and the King Street Campus serves grades 10 – 12. A portion of 9th grade students travel to the King Street Campus during school hours on ACPS provided buses to attend specific class offerings.

The Minnie Howard School building was originally constructed in 1954 as an elementary school. There was a major classroom and gymnasium addition in 1969 when it was converted to a middle school. The facility served as the central administrative offices from 1981 to 1993, when it was again renovated and became the ninth grade center. ACPS has had several plans to modernize the Campus in recent CIPs and is currently looking to assess the feasibility of the site for a new high school building.

The academic program at T.C. Williams High School includes 188 courses in reading, language arts, mathematics, social studies and science, as well as fine arts, performing arts, physical education and health. The school also offers the following special academic programs:

- Academy of Finance
- Advanced Placement/Honors
- English as a Second Language
- Special Education/Inclusion Program
- STEM Academy

- Vocational Programs

ENROLLMENT AND UTILIZATION

The Minnie Howard Campus had a September 2016 enrollment of 811 students. The estimated capacity of the Campus is 883, yielding a utilization rate (enrollment vs. capacity) of 92%. Enrollment projections indicate the Minnie Howard school population will increase to 1,044 students by the year 2022, resulting in a utilization of 118%, which equates to a gap of 161 seats if seeking 100% utilization. ACPS considers ideal utilization as a range of 90 to 110%.

KEY FINDINGS#

EDUCATIONAL ADEQUACY

Educational adequacy is the measure of existing educational spaces in comparison to ACPS's desired space requirements and standards set forth in the 2017 School Board-approved high school Ed Specs. The educational adequacy assessment of the school also helps to calculate its capacity.

At the time ACPS prepared the scope of work for the Phase II update of the LREFP, several modernizations of the Minnie Howard Campus had been proposed. Since some of the proposed modernization solutions included a new facility, ACPS assumed that an assessment of educational adequacy was not needed; therefore, the educational adequacy of the Campus was not assessed as part of this phase of work. This work is recommended for future planning efforts in order to determine the calculated capacity of the Campus and compare current spaces to the desired requirements and standards for spaces. Given that the school was constructed over sixty years ago and as an elementary school, it can be anticipated that some spaces at the Campus would not achieve a satisfactory rating through the educational adequacy assessment.

SCHEDULE EFFICIENCY

Schedule efficiency examines how spaces are used throughout the school day. ACPS's Ed Specs strive for an 86% utilization rate of classroom use on a regular basis. Generally this rate means teachers use their assigned rooms seven out of eight periods a day and utilize an alternative space, such as a teacher collaboration suite for their planning period.

At the time ACPS prepared the scope of work for the Phase II update of the LREFP, several modernizations of the Minnie Howard Campus had been proposed. It was assumed that an assessment of schedule efficiency was not needed until a later date; therefore, the schedule efficiency of the Campus was not assessed as part of this phase of work. This work is recommended for future planning efforts in order to understand how spaces are used during the school day and identify opportunities for improvement.

RECOMMENDATIONS

The capacity of T.C. Williams High School cannot meet the projected growth in enrollment. Options to provide additional student capacity at one or both campuses or a new site should be explored. Work Group members and stakeholders emphasized their desire that short-term solutions, often identified as an early priority, do not become long-term solutions for the Division. Rather, short-term solutions should serve a specific purpose for a given timeframe. Based on the analysis of the data collected and meetings with the Work Group and stakeholders, the following recommendations for the Minnie Howard Campus are provided.

GROUP 1 — REQUIRED PLANNING

- Conduct site analysis to determine if the site can accommodate additional square footage to support more students. This analysis should include the impacts to shared and core spaces such as dining.
- Conduct an analysis of the master schedule and use of space at the Minnie Howard Campus to explore ways to maximize existing space. This analysis should include studying how to increase the number of teacher collaboration suites and/or reconfiguring existing space to improve enrollment capacity.
- Study the possibility of transporting 10 – 12 grade students to the Minnie Howard Campus for classes in efforts to relieve capacity constraints at the King Street Campus.
- Study the potential outcomes of a shifted schedule (e.g., multiple tracks of students with alternating start and end times).
- Conduct an analysis of adjusting grade-level pairings throughout the Division (i.e., K-6, 7-9, 10-12).

GROUP 3 — SECOND PRIORITY

- If applicable, reassign grade-level pairings throughout the Division based on analysis and ACPS priorities.
- Build additional capacity for T.C. Williams High School at the King Street Campus, at the Minnie Howard campus, and/or at another location within the City.

GROUP 2 — FIRST PRIORITY

- Determine future programs and priorities for the Minnie Howard Campus in alignment with analysis of the site's capacity.
- If applicable, adjust the master schedule based on the analysis performed.
- In order to maximize capacity at both campuses, explore how students can travel between campuses without significantly adding to Division's transportation costs or local traffic levels.
- Utilize trailers to accommodate more students as enrollment increases.

GROUP 4 — LONG RANGE RECOMMENDATIONS

- New high school graduation requirements within the Commonwealth of Virginia are currently in development, known as the "Profile of a Virginia Graduate." The profile is the framework for the Virginia Board of Education's revision of graduation requirements, which will go into effect for freshmen entering high school in the fall of the 2018-19 (the graduating class of 2022). The requirements will likely affect the number of required program and support spaces, as well as the types of spaces needed for high school programs. Once the requirements are approved, the Division should conduct an analysis of high school spaces to ensure instructional spaces are in alignment with the new high school program requirements.

EARLY CHILDHOOD EDUCATION (PRE-K)

BACKGROUND

ACPS does not currently provide universal early childhood education (pre-kindergarten, pre-K, preschool) programs. ACPS Early Childhood Programs consist of three components: Virginia Preschool Initiative (VPI), Preschoolers Learning Together (PLT), and Early Childhood Special Education (ECSE).

VPI is provided by a state grant and local funding. The purpose of VPI is to provide quality early childhood programs for children, whom the state of Virginia defines as “at-risk four-year olds.” VPI is a program designed for families who might not otherwise be able to access quality early childhood education opportunities.

PLT is a half-day preschool program offered to eligible children ages two years and six months thru four years (by September 30). This is an opportunity for developing children from the Alexandria community to be integrated into an early childhood special education (ECSE) classroom for the purpose of providing typical role models to students with disabilities.

ECSE provides special education services to students between the ages of two to five who are identified as having a developmental delay or disability.

ACPS also has partnerships with local early care providers such as the Campagna Center, which provides Head Start and other programs. Some of these programs occur within ACPS schools and partner locations.

Another related entity is the Early Care and Education Workgroup (ECEW), which is a cross-sector workgroup made up of leaders from across ACPS, City agencies, funders, and the non-profit community. The group was convened to explore how Alexandria can build an early care and early childhood education system that is high quality, culturally and financially accessible, and comprehensive (including health, education, socio-emotional, family and community support).

As shown in Table 1, ACPS currently offers early childhood education spaces in six elementary schools.

School	Table 1: Pre-K in ACPS Elementary Schools				
	ACPS Enrollment	HeadStart Capacity	Total	Ed Spec Pre-K Capacity	Ed Spec Pre-K Utilization
Charles Barrett	21	0	21	22	95%
Cora Kelly	3	36	39	33	118%
Jefferson Houston	49	78	127	116	109%
John Adams	123	74	197	144	137%
Patrick Henry	96	60	156	124	126%
William Ramsay	32	0	32	29	110%
Total	324	248	572	468	122%

Historically, the location of programs has been informed by available capacity and student demand within schools. In addition, there are currently six Early Head Start classes, 1.5 Head Start classes and 0.5 VPI class offered by partners at George Washington Middle School and at T.C. Williams High School’s King Street Campus.

Historically, Division-wide pre-K student forecasts have not been calculated as part of student projections since ACPS is limited in the amount of space that can be offered. ACPS currently provides as much space as possible throughout the City for current programs.

The State of Virginia uses a formula to project the number of disadvantaged four-year olds, which determines the amount of Virginia Preschool Initiative (VPI) slots to fund for a given municipality. The formula multiplies total kindergarten enrollment by the Division-wide free lunch percentage and subtracts the number of slots provided through Head Start. Using the state's formula, ACPS estimates there are 746 disadvantaged four-year olds in the City. In 2017, there were 569 pre-school slots provided through VPI and Head Start, leaving a deficit of 177. Projections indicate the disadvantaged four-year old population will increase to 790 by 2022, leaving a deficit of 209 if no additional slots are provided.

ACPS VISION FOR EARLY CHILDHOOD PROGRAMS

ACPS's Superintendent and senior leadership desire to make universal pre-Kindergarten available to all families. The Work Group sought to explore the best ways to provide the maximum amount of pre-K spaces throughout the Division. Programs could be provided within existing elementary schools, at regional centers, or a combination of both.

ACPS Educational Specifications (Ed Specs) provide the standards for classroom design. The standard for a pre-K room is the same for a kindergarten classroom due to the similar emphasis on play and programmatic needs in the two grade levels. The similar classroom configuration also allows for flexibility year-to-year as student enrollment and program needs change. At schools that house Head Start, classes can be held in standard pre-K or kindergarten classrooms, provided the classroom meets the licensing criteria.

ACPS developed Ed Specs for pre-K as part of the second phase of the LREFP. The Ed Specs outline space needs for a pre-K classroom and is used to evaluate current capacity within existing pre-K classrooms.

PRE-K WITHIN EXISTING ELEMENTARY SCHOOLS

Currently, ACPS elementary schools have limited capacity within existing permanent classrooms to accommodate larger enrollments, whether pre-kindergarten or kindergarten through grade five. For the current school year, no elementary school is being utilized at less than 90% and nine are above 100% utilization. ACPS considers ideal utilization as a range of 90% to 110%. Elementary student enrollment is projected to grow over the next 10 years by about 800 students, further constraining the use of existing classroom space for early childhood education without expansions or a new school. As additional elementary capacity is added and as

enrollments are updated based on boundary changes, ACPS should explore additional opportunities to provide pre-K spaces within existing elementary schools.

PRE-K WITHIN REGIONAL CENTERS

In addition to pre-K spaces within existing elementary schools, ACPS and its partners also desire to establish centers to increase services offered to families and create equity between programs. Though not currently proposed, it would be ideal for pre-K centers to add early childhood education seats in the future and to maximize enrollment Division-wide.

ACPS developed Ed Specs to outline space needs for a potential future center. The center would be designed to serve approximately 360 students in 20 classrooms and offer a range of wrap-around services.

The center model will promote joint professional development and collaboration of staff employed by the schools and the Campagna Center (Head Start) and support the Early Care in Education Workgroup's mission of seamless points of entry for parents seeking services. It will also promote joint program development and delivery within VPI, ECSE and Head Start while maintaining critical funding streams and other policy requirements required for state and federal funding.

RECOMMENDATIONS

The capacity of pre-K spaces throughout ACPS cannot serve the current or projected population of disadvantaged four-year olds. This reality is supported by the waitlists reported by ACPS partners. Additionally, ACPS desires to expand access to serve all families within the City.

Options to provide additional pre-K capacity at individual sites and/or a new regional pre-K center should be explored to meet this vision. Work Group members and stakeholders emphasized their desire that short-term solutions, often identified as an early priority, do not become long-term solutions for the Division. Rather, short-term solutions should serve a specific purpose for a given timeframe. Based on the analysis of the data collected and meetings with the Work Group and stakeholders, the following considerations for early childhood spaces are recommended:

GROUP 1 — REQUIRED PLANNING

- Analyze the impact of new elementary schools, new capacity projects, and redistricting for providing capacity at existing elementary schools and develop a potential distribution plan for early childhood classrooms.
- Study the available capacity within City-owned or privately-owned buildings for space conversion and potential co-location. If capacity exists, analyze whether spaces can be converted to meet Ed Spec standards.
- Study the possibility of co-location on City-owned sites. Perform feasibility analysis to see if build out can occur to provide space.
- Analyze the potential for and the impact of providing density increases to developers who accommodate additional school building capacity within new developments. Determine if development incentives can provide additional pre-K capacity.

GROUP 3 — SECOND PRIORITY

- Analyze the feasibility of previously identified sites for a new pre-K center that aligns with the Board-approved Ed Specs.
- Identify and analyze additional land acquisition, co-location, or leasing opportunities for a new pre-K center.

GROUP 2 — FIRST PRIORITY

- Maintain and expand, where possible, current pre-K capacity at existing elementary schools.
- Expand pre-K capacity with private partners. Determine the amount of additional capacity that private partners can provide.
- Promote multi-story and urban school models to optimize real estate and provide maximum pre-K spaces within elementary schools.

GROUP 4 — LONG RANGE RECOMMENDATIONS

- Build a pre-K center at a location to be identified within the City based on the School Board-approved Ed Specs.
- Configure spaces within existing elementary schools to meet Ed Specs for early childhood and/or incorporate into design for future capital projects.