Bellwether Education Partners

RPS Budget Analysis

Full report for discussion

Fall 2016

Recap on project goal: Increase understanding of the RPS budget and help identify opportunities to optimize the budget

This project is designed to…

- ✓ Help to provide a **clear, understandable picture** of revenue and expense categories in the RPS budget
- ✓ **Show how RPS compares to benchmark districts** in terms of per-pupil spending, staffing, building utilization, and other dimensions
- ✓ **Help to identify opportunities** to optimize the budget to **maximize student success**
- ✓ Help to surface what it would take to realize the opportunities including **potential tradeoffs & considerations**

Working definition of success:
The community and RPS have a shared understanding of the RPS budget and a platform for engaging stakeholders in future decisions

Executive Summary

- Due to economic and legislative factors, **Richmond City holds a relatively high level of responsibility for funding public education** vs. peer districts where the state contributes more

- **Of the total RPS budget of ~$350M, only about $150M is "addressable"**
  - E.g., funds for school nutrition & special education cannot be used for any other purpose
  - Within the addressable categories, the majority of spend is salaries for instructional positions

- According to federal and state formulas, **the cost to educate Richmond's student population is fundamentally higher than in neighbor or peer districts**[1]
  - **78%** of RPS students are economically disadvantaged (vs. 32% for district neighbors, 64% for peers)
  - Share of RPS students with disabilities is also high at **18%** (vs. 12% in neighbor and peer districts)

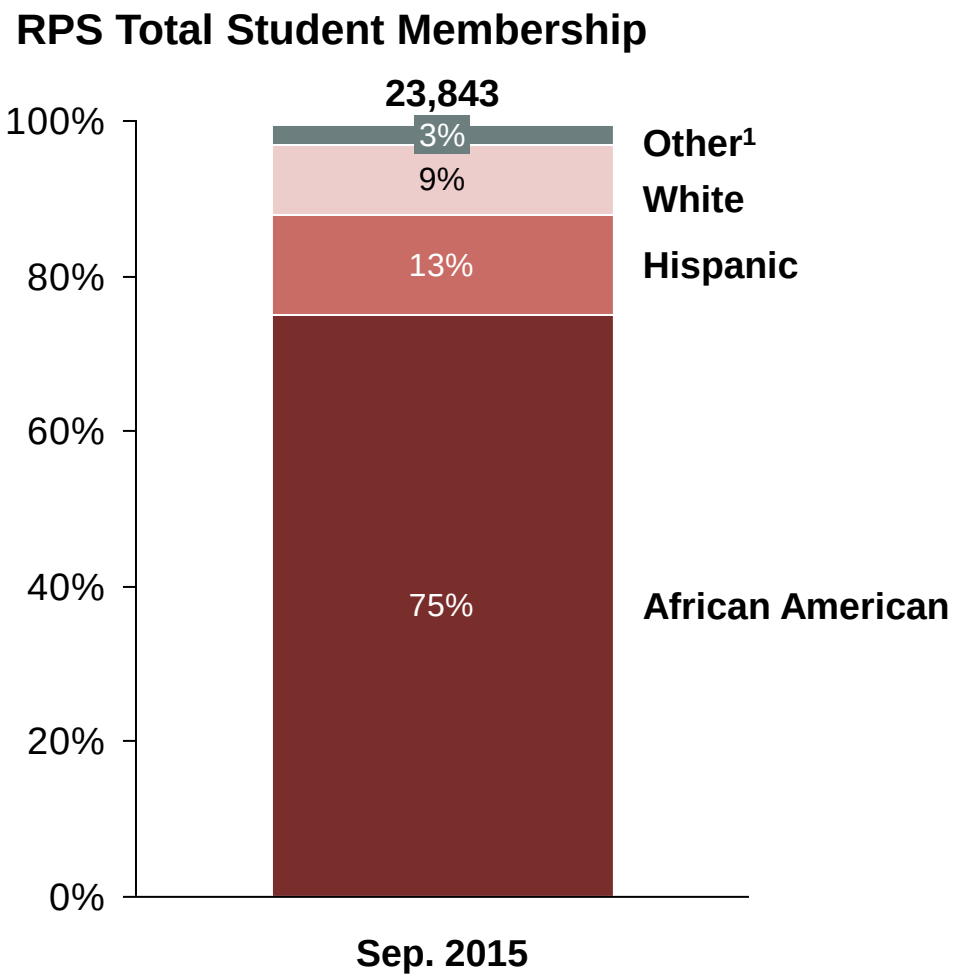
- Aside from the student population, key budget drivers are school size & capacity and staffing levels
  - Many of RPS **school buildings are small**, which can be up to twice as expensive to operate per-pupil when compared to RPS's larger schools
  - The **current facilities footprint is misaligned with demand** from families: enrollment decline starting in elementary school contributes to under-utilization of some middle and high schools
  - RPS offers **small class sizes** -- particularly in schools where the majority of students are economically disadvantaged -- which results in more teachers

- As a result of the above, majority of Richmond's **additional spend is on instruction and school model**
  - While there are opportunities to make different strategic choices, implementation takes time and involves buy-in from stakeholders

1. Neighbor districts include Chesterfield, Henrico, and Hanover. Peer districts include Norfolk, Newport News, and Portsmouth

Contents

Richmond City Public Schools serves ~24,000 students of diverse backgrounds



Notes:

- Total enrollment has been gradually increasing in recent years (up 4% since 2009)
- ~24,000 students includes students in pre-K. The number of students in K-12 is ~22,000

Sources: Richmond Public Schools, Virginia Department of Education
Note: Includes grades PK – 12
1) Asian, Native American, Hawaiian, and all Other

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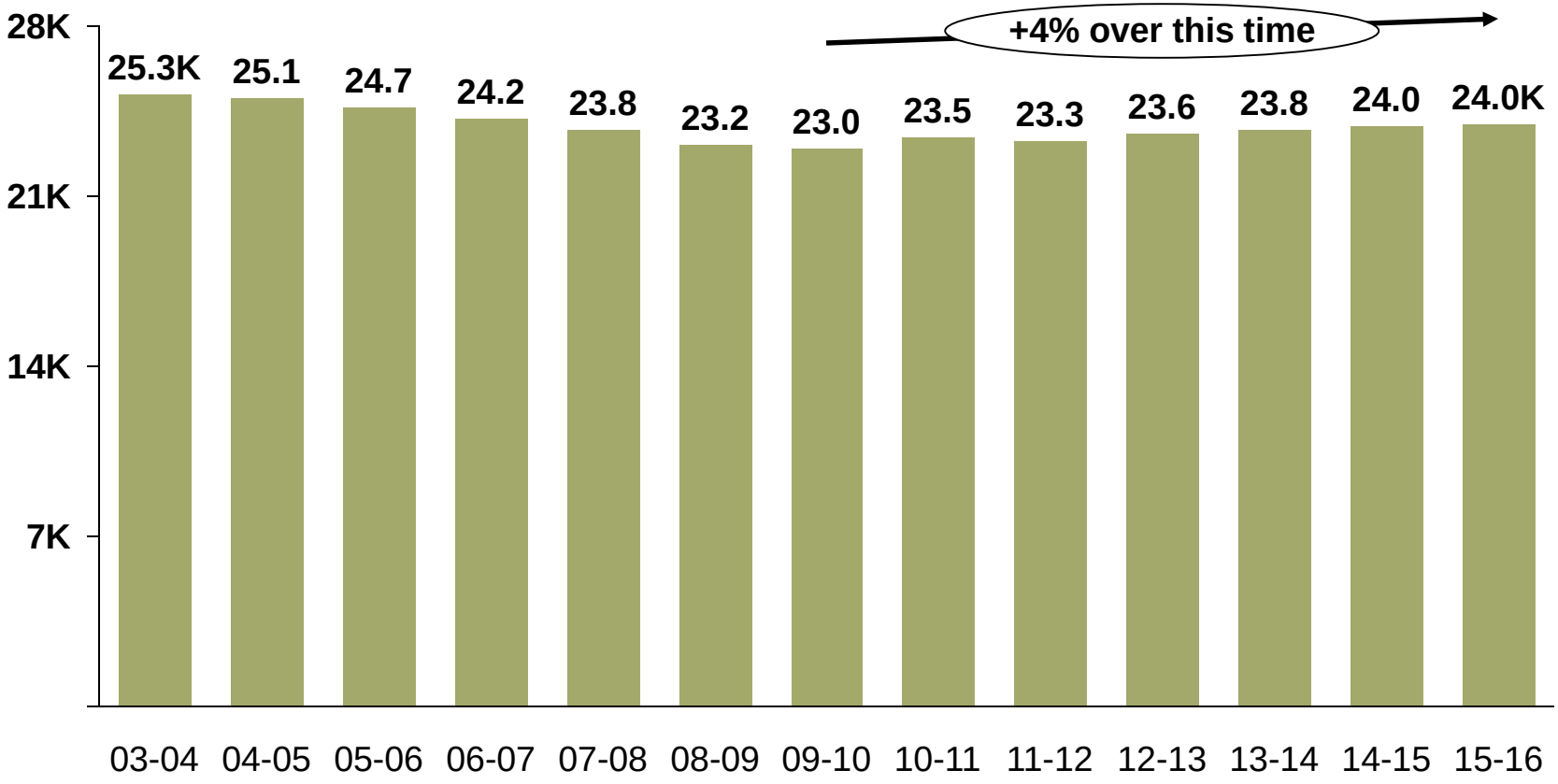
Total RPS enrollment has grown about 4% since 2009

RPS Total Fall Membership by School Year

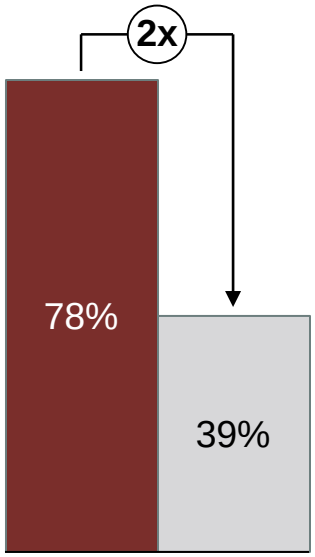
Thousands of students



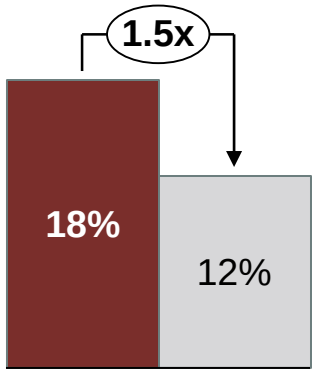
Source: Virginia Department of Education

Relative to the state, RPS has a high share of economically disadvantaged students and students with disabilities

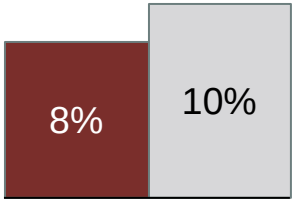
Economically Disadvantaged[1]
% of total enrollment



Students with Disabilities
% of total enrollment



Limited English Proficiency
% of total enrollment



Both national and state governments recognize that there are **additional costs required** to effectively educate students in these groups

Source: VA DoE 2015-16 Enrollment
RPS: Richmond Public Schools
VA Avg: Virginia State Average
1) Based on 3-year Average of FY13, FY14, FY14 using CEP guidance

In order to look at Richmond in context, we have selected three "peer" districts based on student demographics

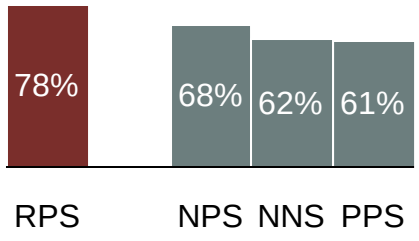
"Peer" districts[1] based on student demographics

Norfolk City (NPS)
Newport News (NNS)
Portsmouth (PPS)

Relative to these peers, RPS has a **higher share of economically disadvantaged** and Limited English Proficient students and a **much higher share of students with disabilities**

Economically Disadvantaged[2]

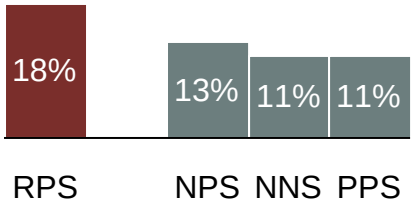
% of total enrollment



District neighbors: 32%

Students With Disabilities

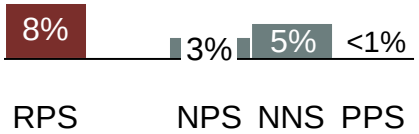
% of total enrollment



District neighbors: 12%

Limited English Proficiency

% of total enrollment



District neighbors: 7%

All three of these districts show **higher student achievement** compared to RPS on the Standards of Learning (SOL) tests in 2014-15, overall and for most sub-groups

Source: VA DoE 2015-16 Enrollment, VA DoE SOL Test Results 2014-15

1. Peer districts have total enrollment between 15K – 32K
2. Based on 3-Year average used by VDOE

District neighbors include Chesterfield, Henrico, and Hanover

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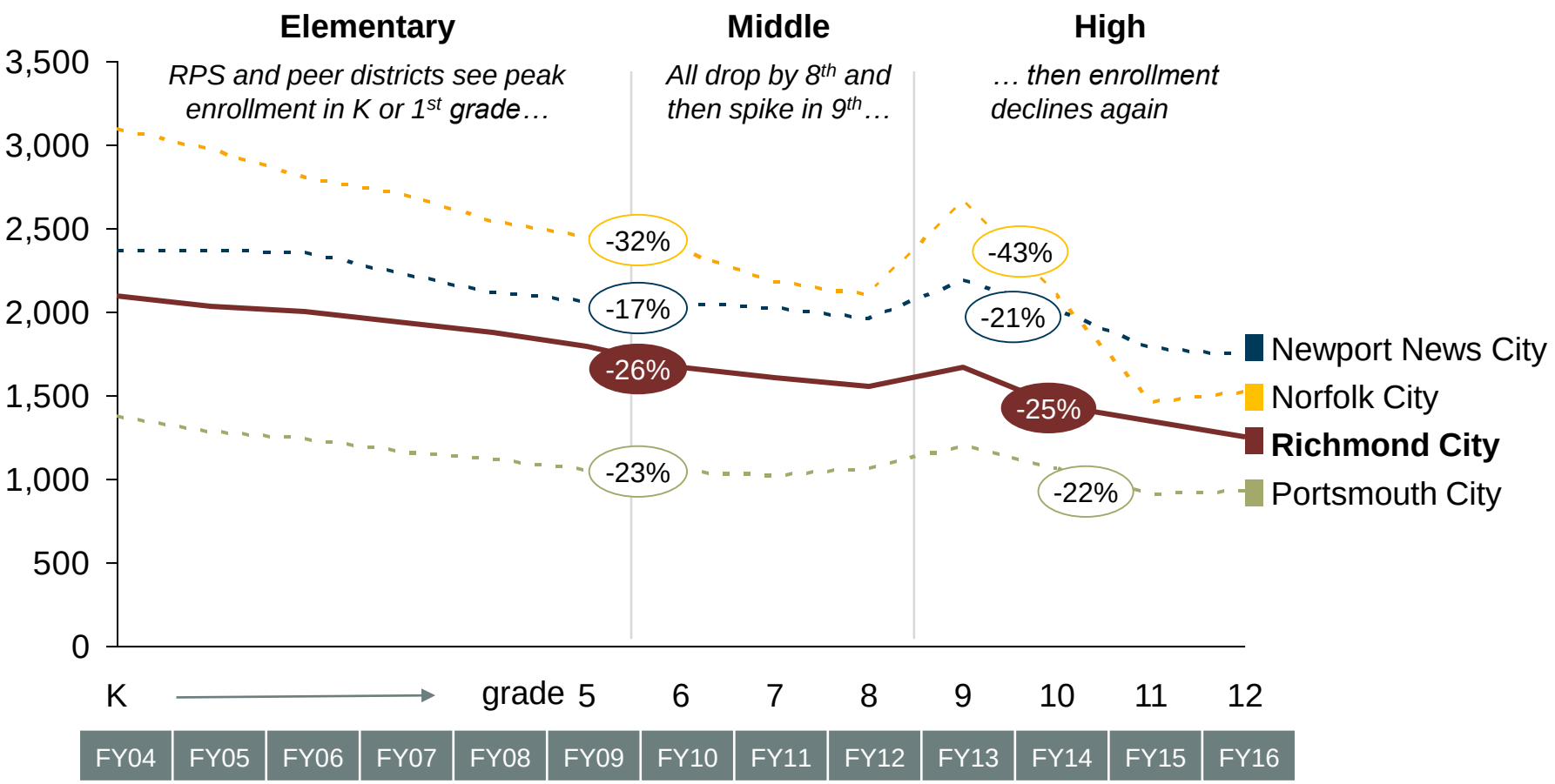
RPS, like peer districts, sees a steady enrollment decline from K to 8th grade and again during high school

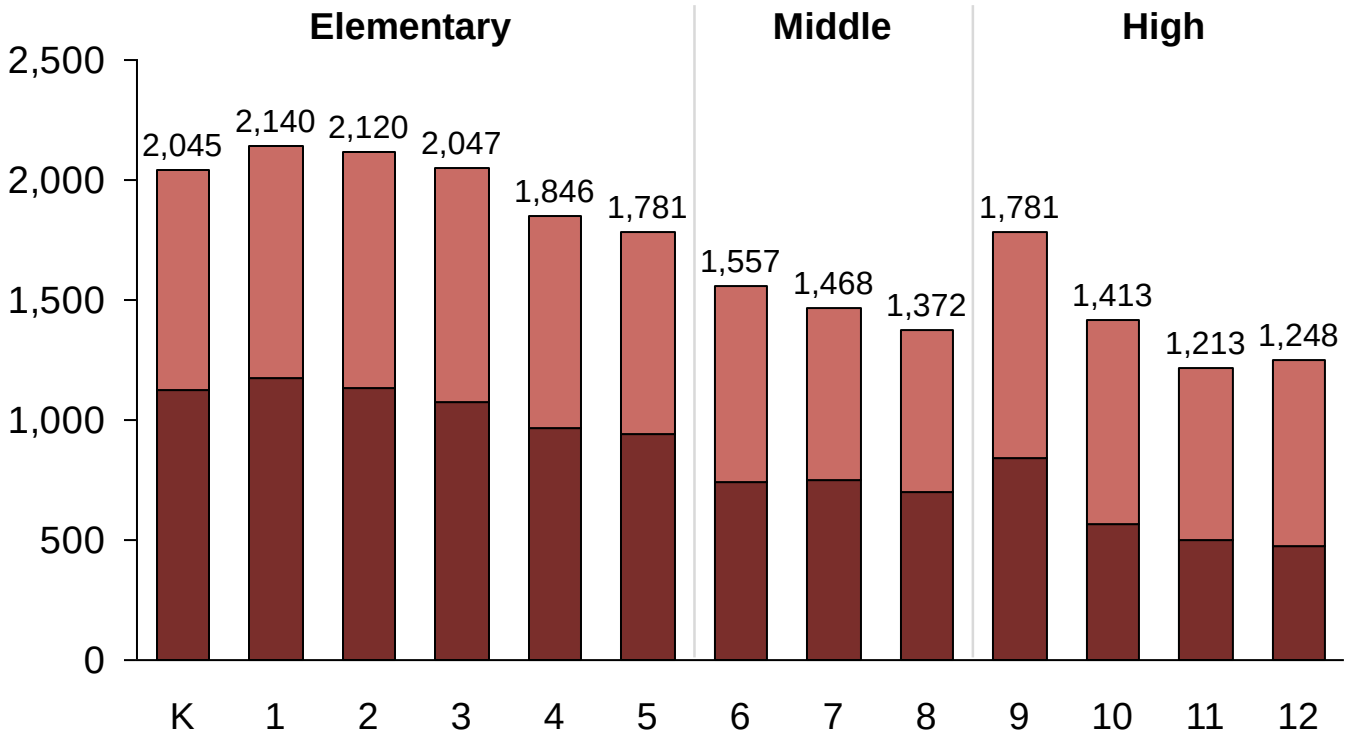
Enrollment over time: Students in Kindergarten in 2003-04 who are now in 12th grade



Source: Virginia Department of Education

For the current school year, RPS has over 2,000 students in early elementary grades and ~1,250 high school seniors

RPS Current Snapshot: FY16 Student Enrollment by Grade Level



At this snapshot in time…

- North side schools have **16% fewer** students in 12th grade vs. Kindergarten
- South side schools have **58% fewer** students

Enrollment volatility is seen in many urban districts – and can contribute to inefficiencies, particularly when school facilities were designed for a different enrollment pattern

Source: Virginia Department of Education

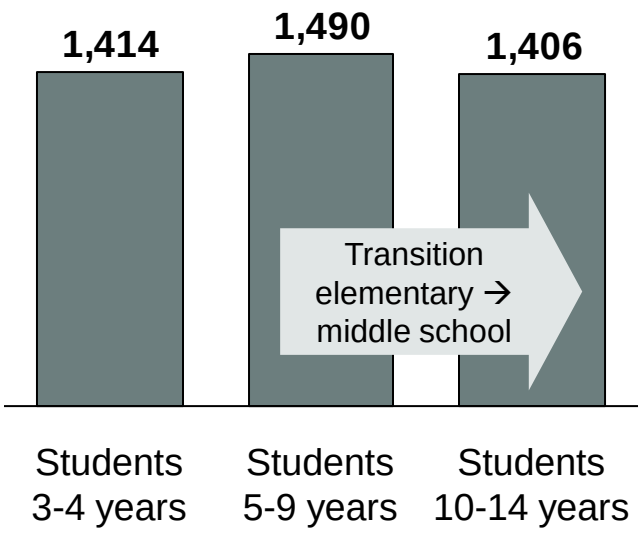
It appears that many students who leave RPS in late elementary or middle school go to schools outside Richmond

Private school enrollment does not increase from elem. → middle school…

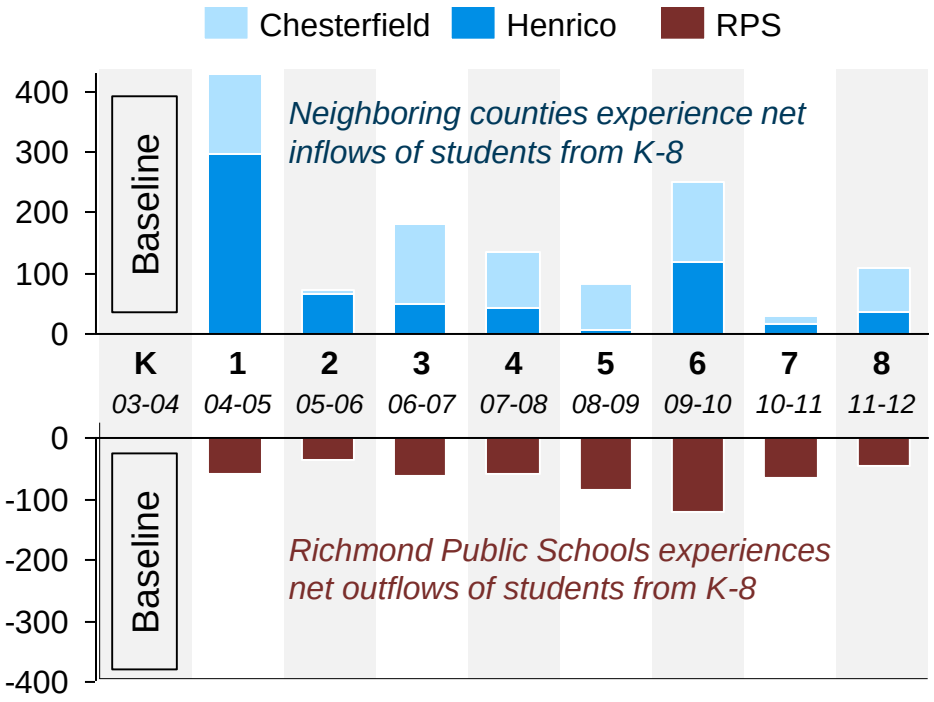
... however, neighboring counties see an inflow of students while RPS sees an outflow

Richmond Private School Enrollment[1]

From U.S. Census Survey, 2014



Change in Enrollment by Cohort Over Time



This does not suggest that students do not ever leave RPS to attend a Richmond private school, only that private school is not the primary explanation for students who start and then exit RPS

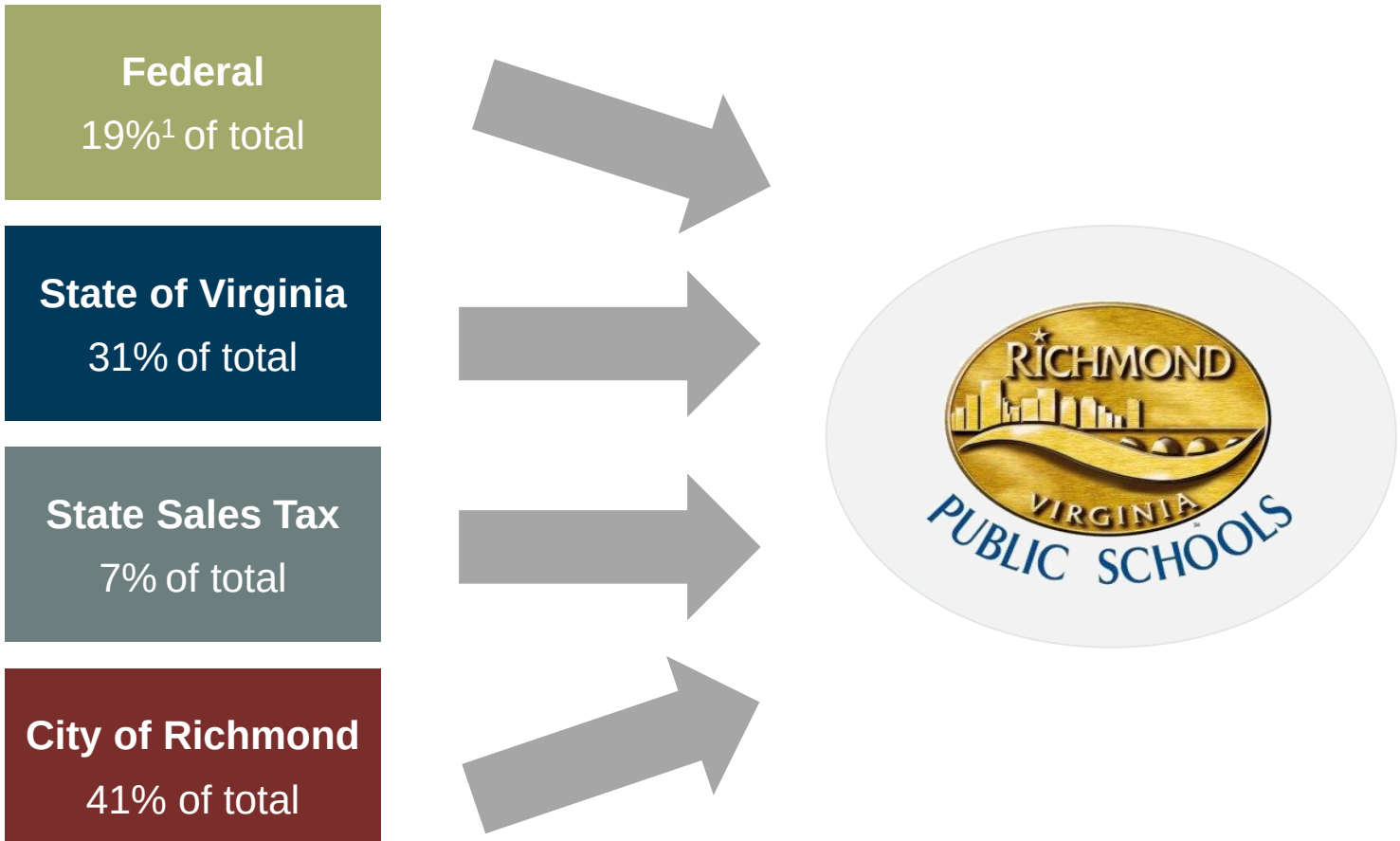
Source: Virginia Department of Education,

1. From U.S. Census, 2014 American Community Survey. This chart represents students ages 3 – 14 (does not include high school) for the purpose of illustrating whether there is a material change in enrollment from elementary to middle school grades. An earlier school-by-school analysis suggests ~6,000 total students in Richmond private schools in grades PK – 12.

Contents

Four sources provide the vast majority of funding for Virginia's public schools

Funding System of Richmond Public Schools



In addition, RPS receives revenue through local sources and donations (2%)

Source: Richmond Public Schools FY16 total budget

1) Includes federal grant funding and child nutrition

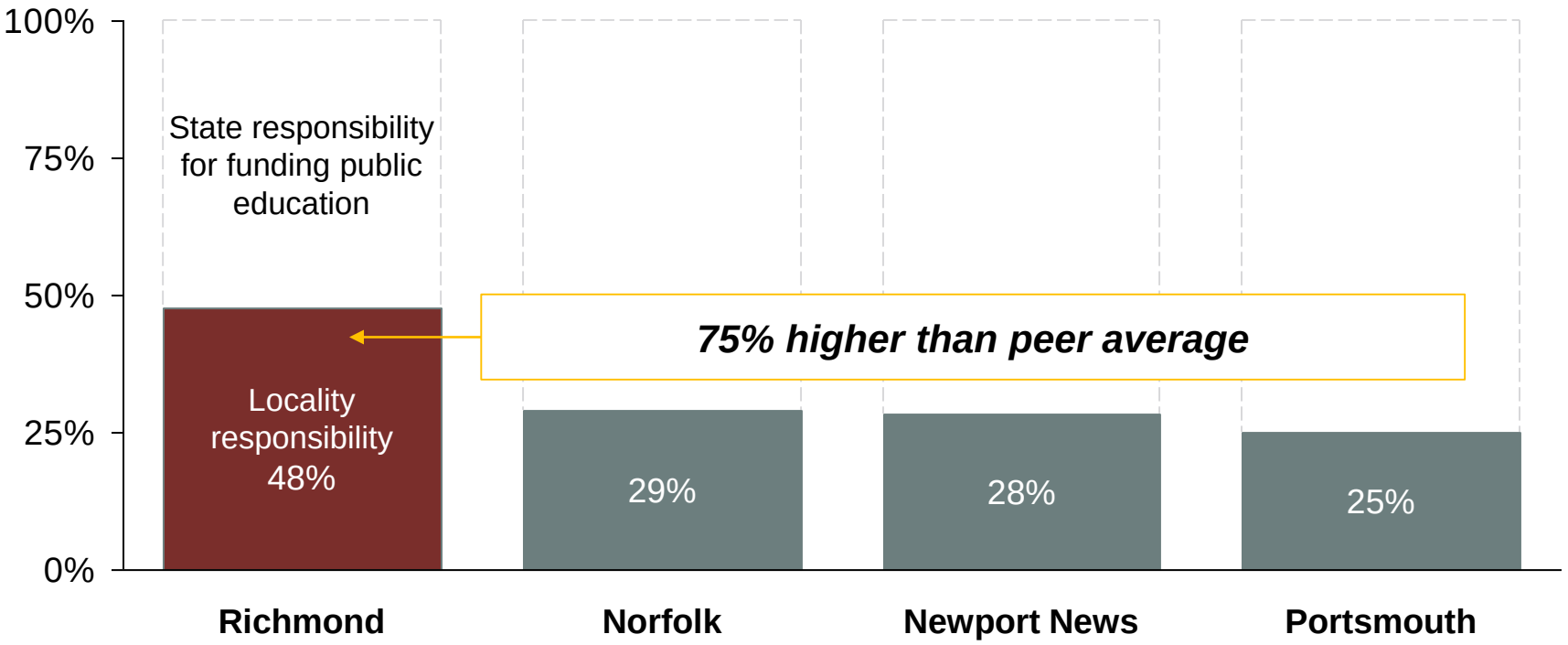
Richmond City has a greater share of responsibility for funding public education (vs. peers) due to several factors

Premise	• The state and locality share legal responsibility for funding education • Some localities have greater ability to fund education than others, known as ***fiscal capacity*** • Each locality's responsibility to fund education is based on their fiscal capacity. This is based on three factors:

		Where Richmond Stands	Implications for City
90% of the formula	True Value of Property	High total property values	**Greater share of responsibility**
	Adjusted Gross Income	High total income generated by Richmond residents	**Greater share of responsibility**
10% of the formula	Taxable Retail Sales	High taxable retail sales	**Minimal impact** (though still contributes to greater responsibility)

As a result of property values and gross income, the state calculates that Richmond has a high "ability to pay" vs. peers

FY16-18 Virginia Composite Index of Local Ability to Pay[1]



Richmond is unique in having one of the highest wealth factors while concurrently serving a greater concentration of high needs students

Source: Virginia Department of Education

1. Composite Index determines the minimum required local effort. All Virginia localities contribute additional funding beyond the local share.

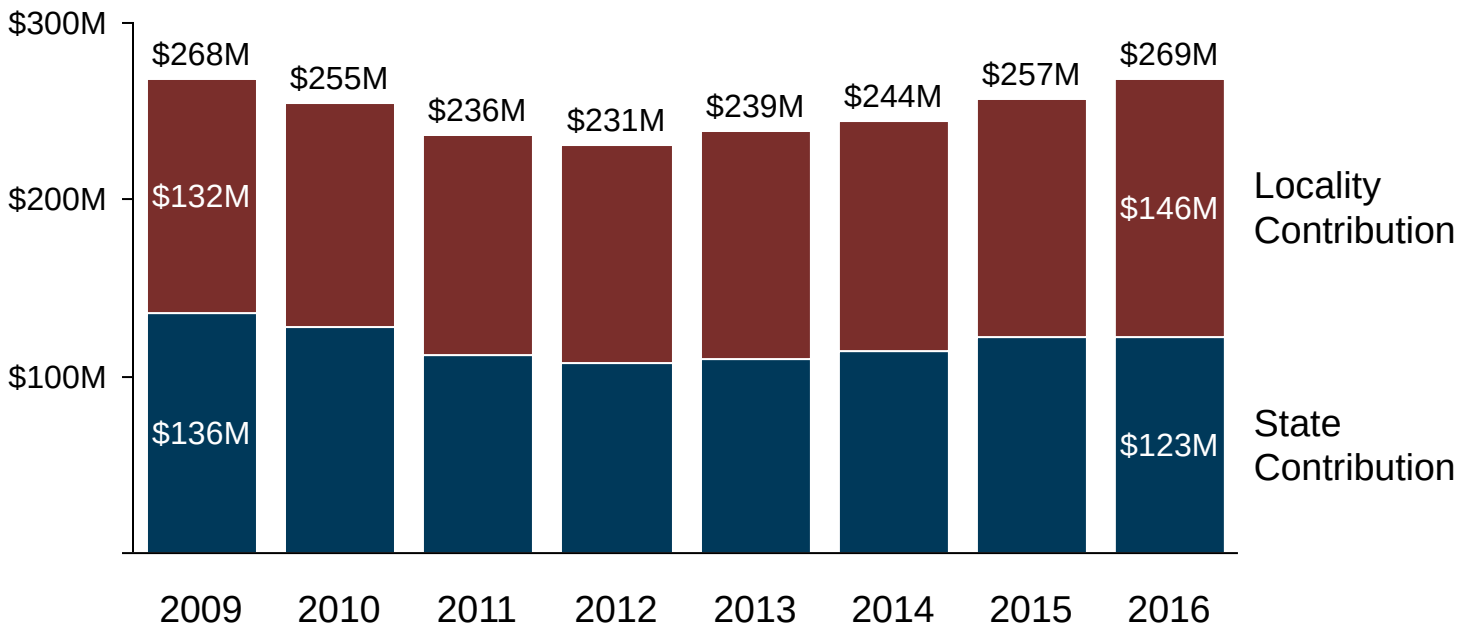
Since 2009, Richmond City has provided a greater share of public funding as state funding has declined

Total funding has only just returned to 2009 levels

(note: state funding is still down $13M as enrollment has increased, which has diluted the impact of City's additional effort)

RPS Operating Revenue Over Time – *State and Local sources only*

In millions USD



	2009	2010	2011	2012	2013	2014	2015	2016
Locality %	49%	50%	53%	54%	54%	53%	52%	54%
Enrollment	23K	+4% over 8 years						24K

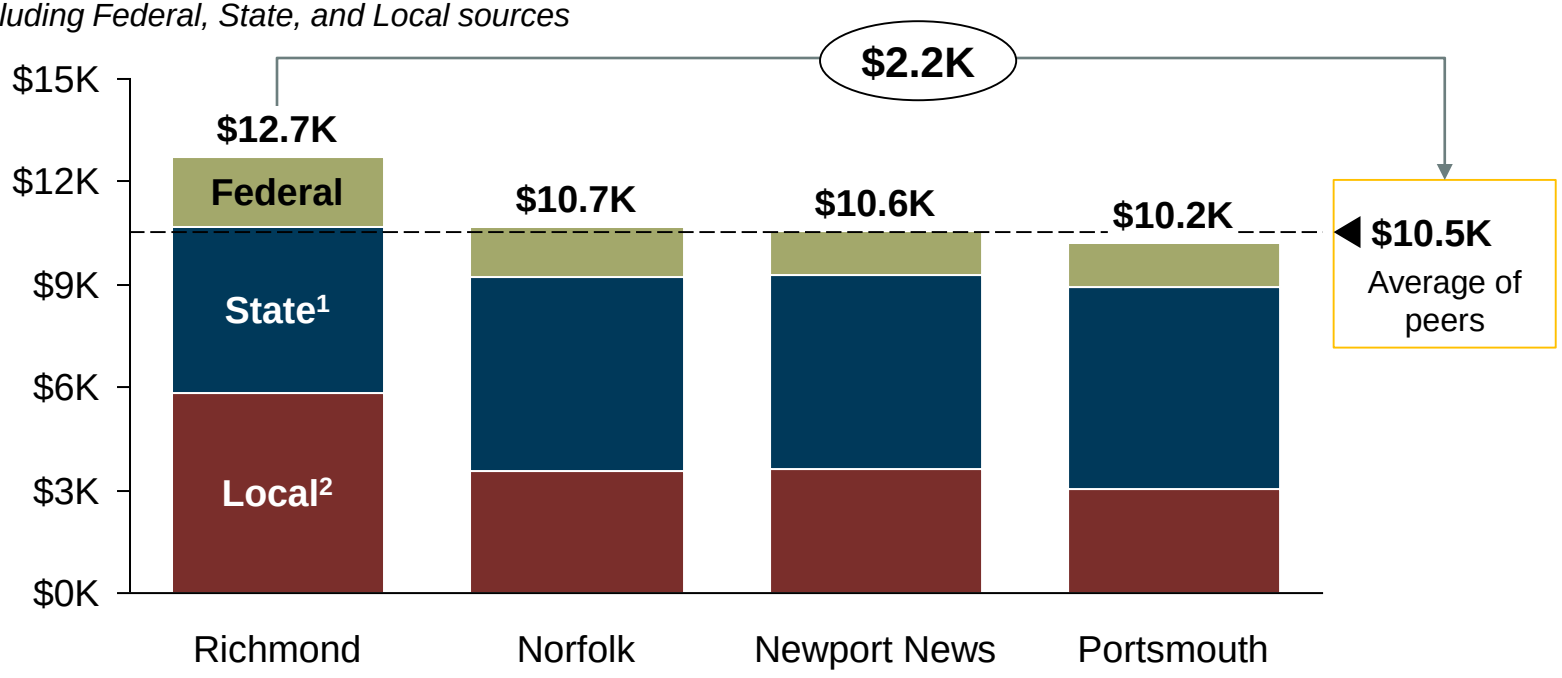
The city has provided a greater share as state funding has declined

Source: RPS report of historical revenue

Relative to peers, Richmond receives ~$2.2K in additional revenue per pupil from public sources

Total Public Revenue Per PreK – 12 Pupil[1]

Including Federal, State, and Local sources



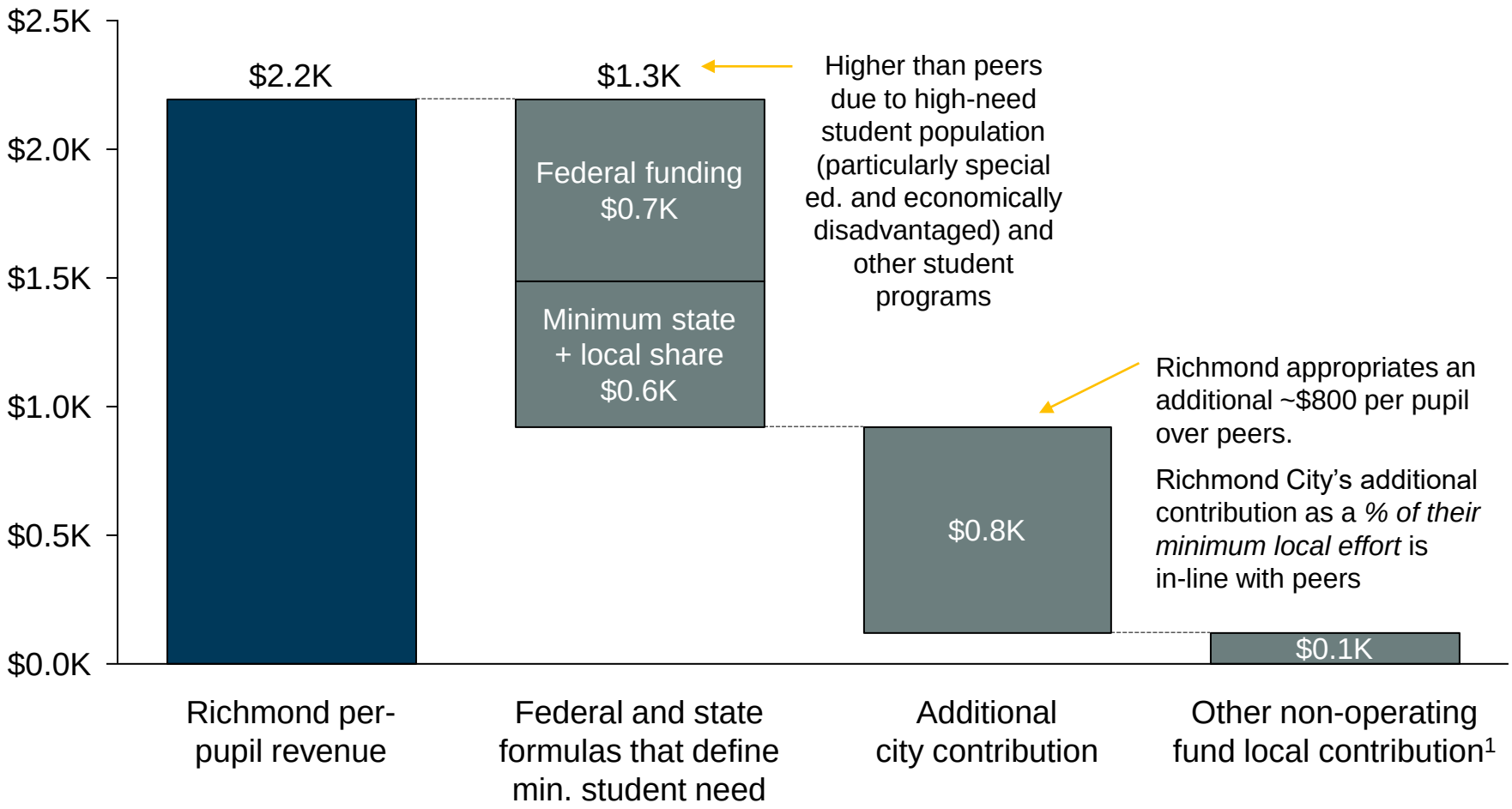
For Richmond, both the Federal government & City contribute more dollars per-pupil vs. peers while the State contributes less

Source: Virginia DoE FY 2014, Table 15.

1) Includes revenue from state retail sales and use tax
2) VDOE reports total local contribution of $138M for Richmond in FY14 and $128M from the City of Richmond. The incremental $10M includes revenue for non K-12 programs, facilities, and transfers

Key drivers of the difference in revenue is Richmond's high-need student population & additional city contribution

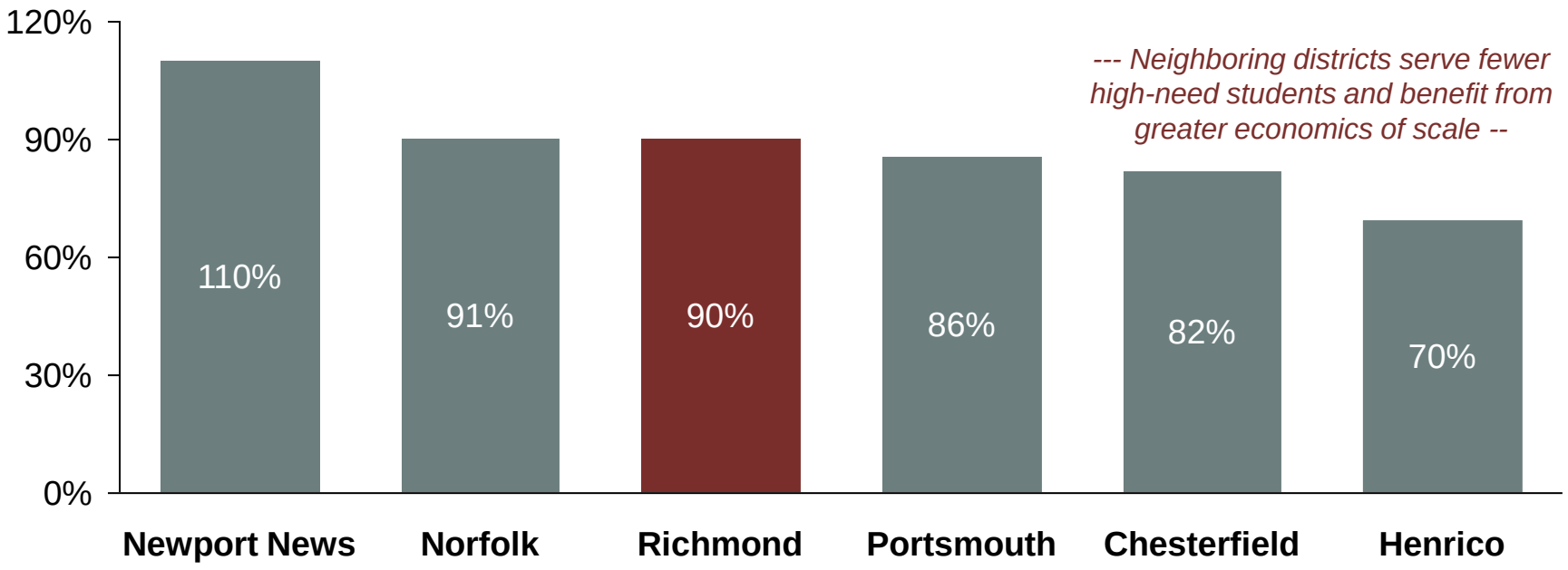
Gap between Richmond and peers: public revenue per PreK-12 pupil in FY14



Source: Virginia DoE FY 2014, Table 15 and RLE Table.
Peer group includes a weighted average of Norfolk City, Newport News, and Portsmouth
1. VDOE reports ~$10M in "local revenue" beyond the Richmond City contribution for non-K12 programs, facilities, and debt transfers

Richmond City's additional contribution as a % of the required effort is in-line with peers

Local Contribution Above Required Local Effort



Across Virginia, districts find that the minimum state + local share is not sufficient to meet student needs

All Virginia localities contribute additional funding, ranging from 9% to 221% above their required local effort

Source: FY14 Virginia DoE Superintendent's Report

Of the total RPS budget of $354M, only some categories are flexible or "addressable"

Fund	Example Expenses	FY16 Adopted
General Fund	Basic Instruction Guidance Programs Health Services School Leadership Finance & HR Facilities Operations & Maintenance Transportation Technology	$272M
Federal Revenue Funds	Title I, IV, VI Special Education Vocational Education	$47M
Other Funds	School Nutrition Early Childhood / Head Start Donations & Grants	$35M
Total Revenue		**$354M**

This is the fund to which the City contributes and is **most flexible.**

Within this category, **82% of spend is personnel, primarily for instruction**

Most Allocation Flexibility | Some Allocation Flexibility | Least Allocation Flexibility

Source: Richmond Public Schools 2015-16 Adopted Budget

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Contents

The RPS budget is comprised of "function categories" with distinct drivers

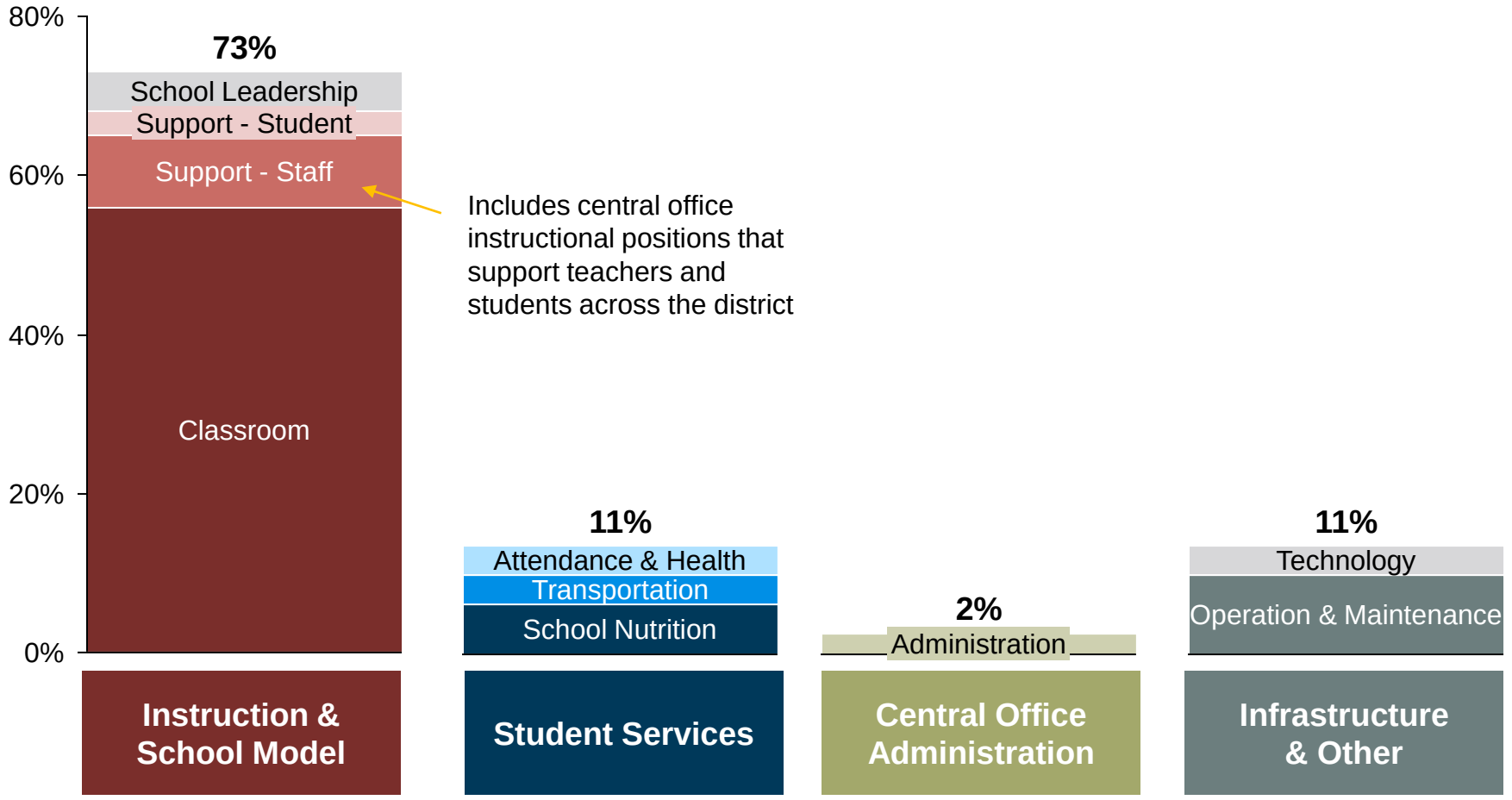
Types of Expenses	Function Category	Description
Instructional & School Model	1) Classroom Instruction	Resources to directly support students in the classroom: teachers, aides, classroom supplies & materials…
	2) Instructional Support - Student	School-based support for students: guidance counselors, social workers, homebound instruction…
	3) Instructional Support - Staff	Resources to support teachers: central office academic and instructional support, clerks…
	4) School Leadership	Principals, Assistant Principals, clerical staff…
Wraparound Student Services	5) Attendance & Health	Nurses, psychologists, attendance specialists…
	6) Pupil Transportation	Bus drivers, monitors, bus maintenance, fuel, tolls
	7) School Nutrition Services	Food, food service staff, supplies, and equipment
Central Office Functions[1]	8) Administration	Board, Superintendent, finance, HR, procurement, audit…
Infrastructure	9) Operation & Maintenance	Custodial staff & supplies, tradesmen, building maintenance, building security, rent, repairs, utilities…
	10) Facilities	Construction managers, resources to comply with ADA
	11) Technology	Tech. analysts, programmers, support technicians, computer hardware & software, telecom & internet
Other	12) Debt Service & Transfers	Primarily transfer of funds related to instruction (e.g., funding to the charter school)

Source: Richmond Public Schools 2015-16 Adopted Budget

1. This category includes Central Office administrative functions only, not central support related to instruction.(captured in #3)

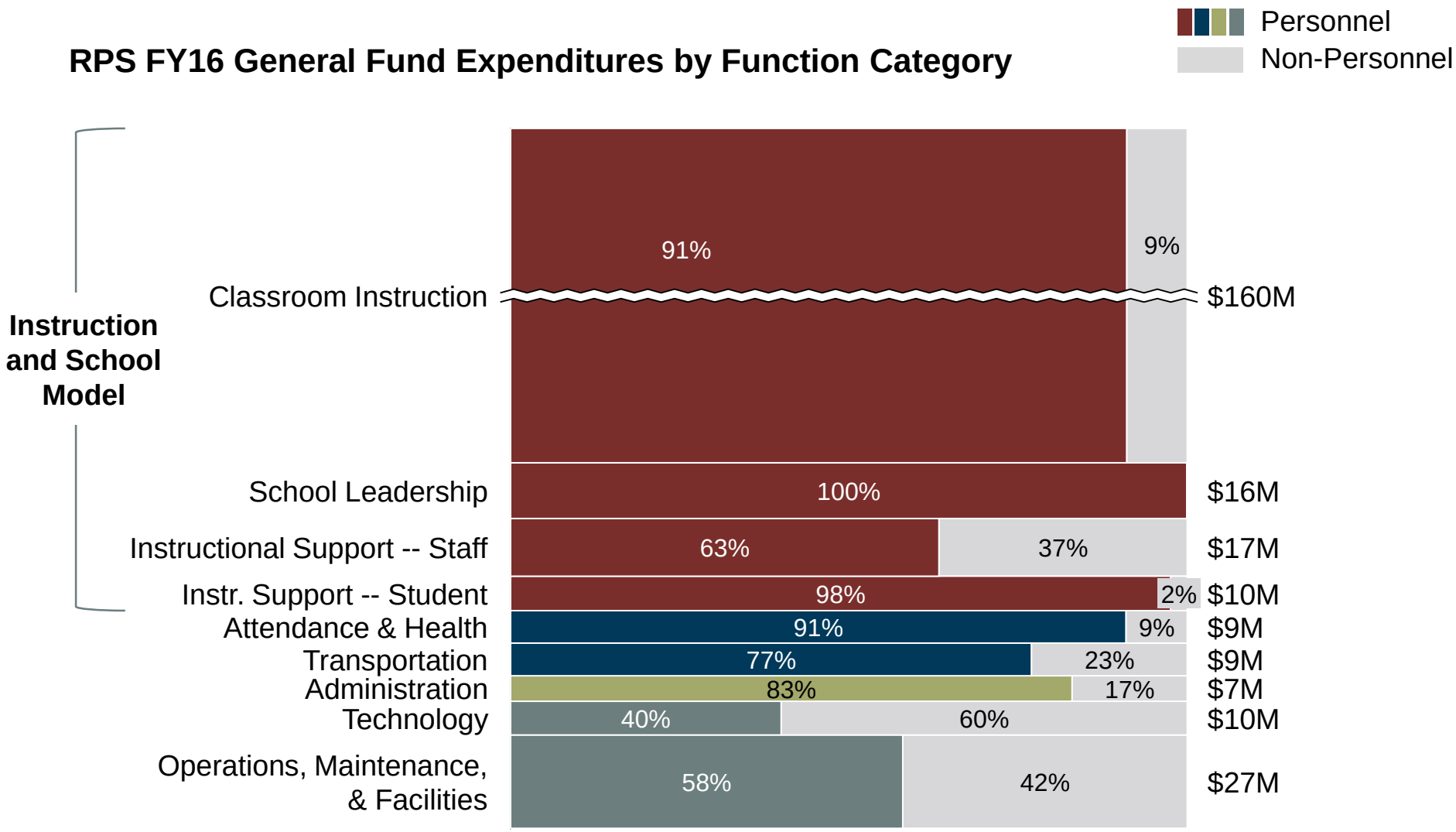
Classroom instruction, instructional support, and school leadership together comprise 73% of the total RPS budget

Share of Total Richmond Budget Expenditures



Source: Richmond Public Schools Adopted FY16 Budget, General Fund, School Nutrition, Title and IDEA Funds only
Note: Total may not add to 100% due to rounding
Note: Additional 2% of budget composed of fund transfers (e.g. instructional funds to charter school)

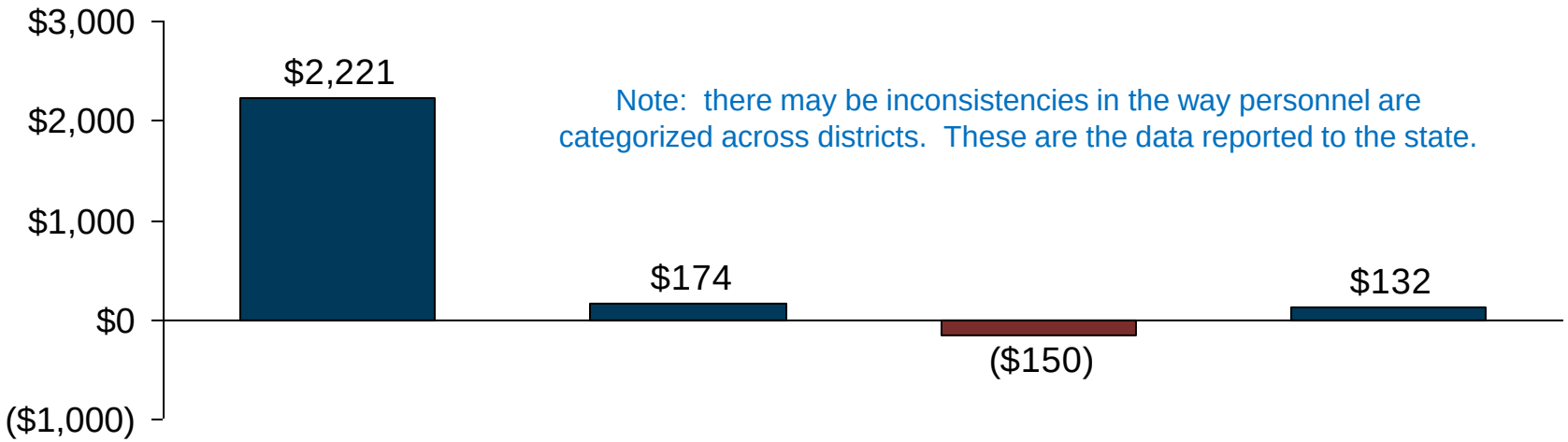
Personnel costs comprise the majority of expenses in all major General Fund categories



Source: FY16 RPS Budget

RPS spends $2.2K more per-pupil on instruction vs. peer districts and is similar in other categories

Richmond Per Pupil Expenses[1] vs. Peer[2] Weighted Average



Factors that can impact spend

Instruction & School Model	Student Services	Central Office Administration	Infrastructure
• Classroom and school-level staffing & salaries • School buildings, size, and capacity • Student needs (e.g., # students with disabilities)	• Transportation Expenses • Health Services & Supports • Attendance & Truancy	• District departmental staffing levels • District administration salaries	• Total facilities footprint • Facilities age and condition • Maintenance staffing & salaries

Source: FY14 Superintendent's Annual Report for Virginia

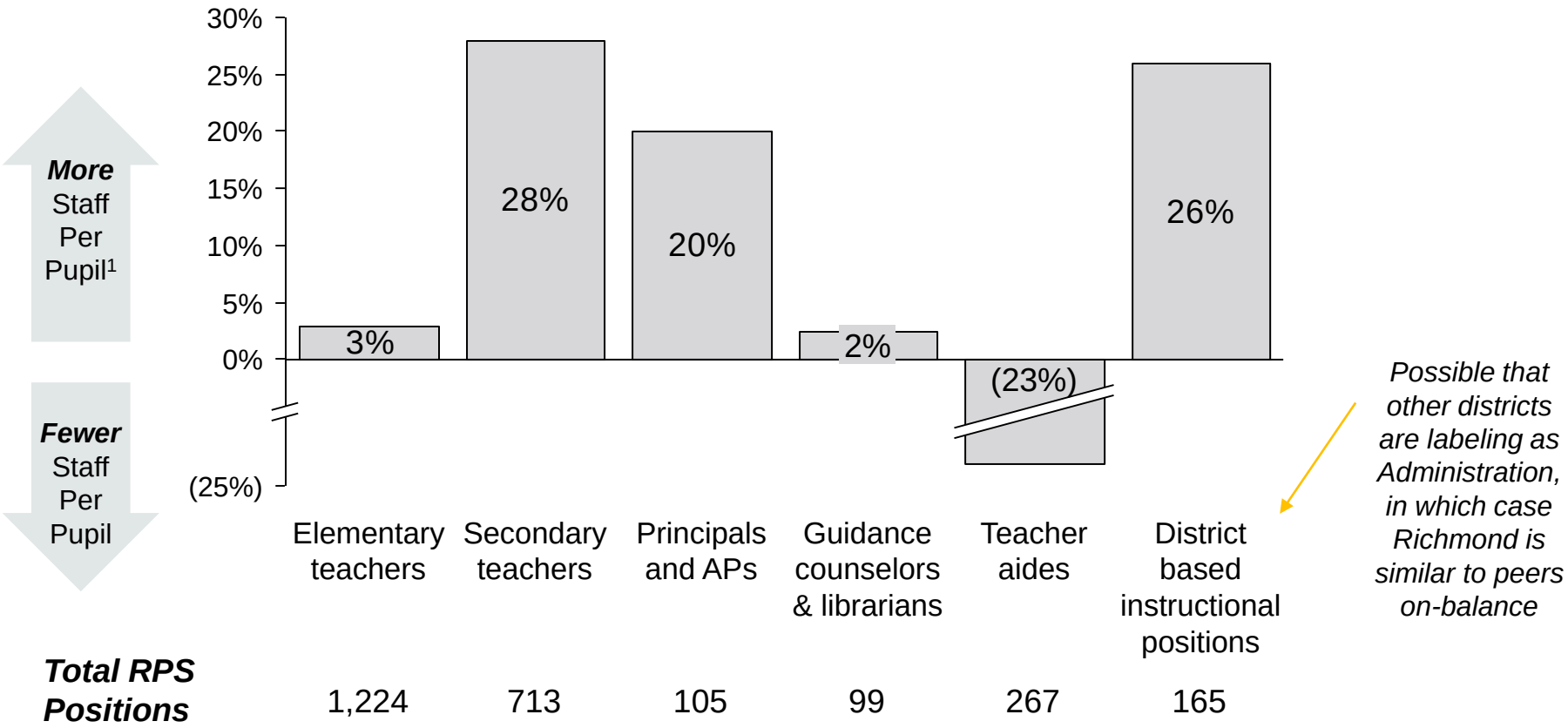
1) Expenses for Operations of Regular Day School only, excludes summer school, adult education, Pre-K, and other programs

1) Includes Norfolk, Newport News, Portsmouth

For most instructional positions, Richmond has more staff per pupil compared to peer districts

Note: Each district might classify positions slightly differently; these are the data reported to the state

Relative Staff Per Pupil Compared to Peer Districts



	Elementary teachers	Secondary teachers	Principals and APs	Guidance counselors & librarians	Teacher aides	District based instructional positions
Total RPS Positions	1,224	713	105	99	267	165

Several drivers of Richmond's higher staffing levels, discussed on the following pages

Source: VDOE Superintendent's FY14 Report. Peer district is calculated based on weighted average of Norfolk, Newport News, Portsmouth.
1. "Per pupil" calculation includes elementary pupils only for elementary teachers, secondary pupils only for secondary teachers, and all K-12 pupils for other categories. Elementary teachers includes grades K-7; secondary includes 8 – 12.

Staffing levels vary by school depending on three factors

1. **Student population**: Specific needs of the student population

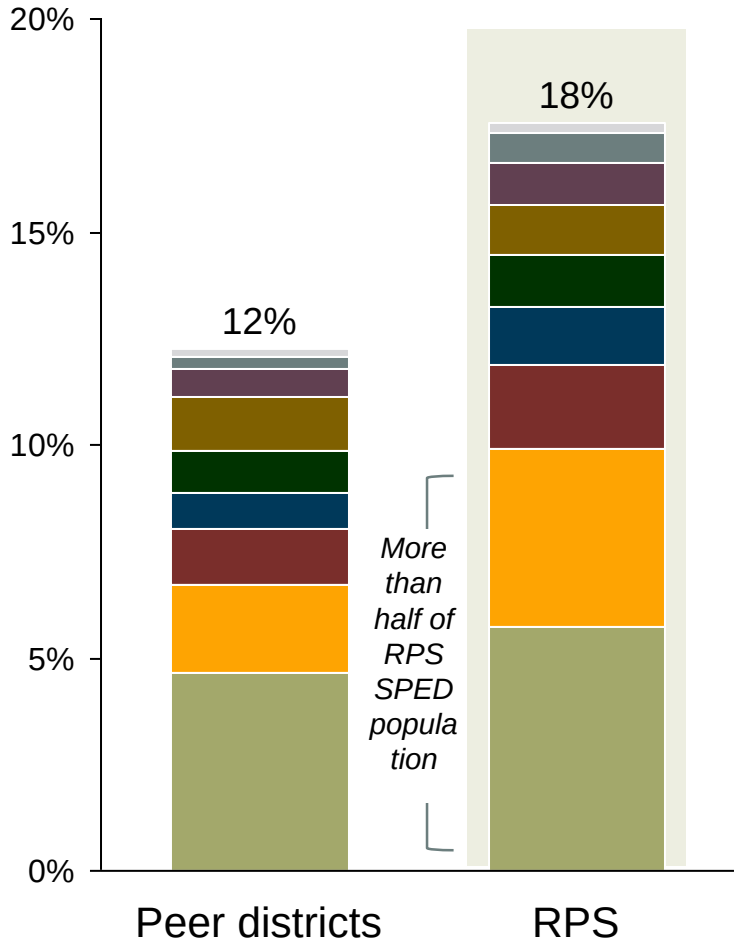
2. **School buildings, size, and utilization**: Number of buildings, students enrolled, and enrollment relative to school capacity

3. **Instructional decisions:** Decisions around student-teacher ratio, scheduling, elective offerings, etc.

1

Richmond serves a higher share of students with disabilities than peer districts, which requires more resources

Students with disabilities



- Other
- Multiple Disabilities
- Emotional Disturbance
- Autism
- Developmental Delay
- Intellectual Disabilities
- Speech or Language Impairments
- Other Health Impairments
- Specific Learning Disabilities

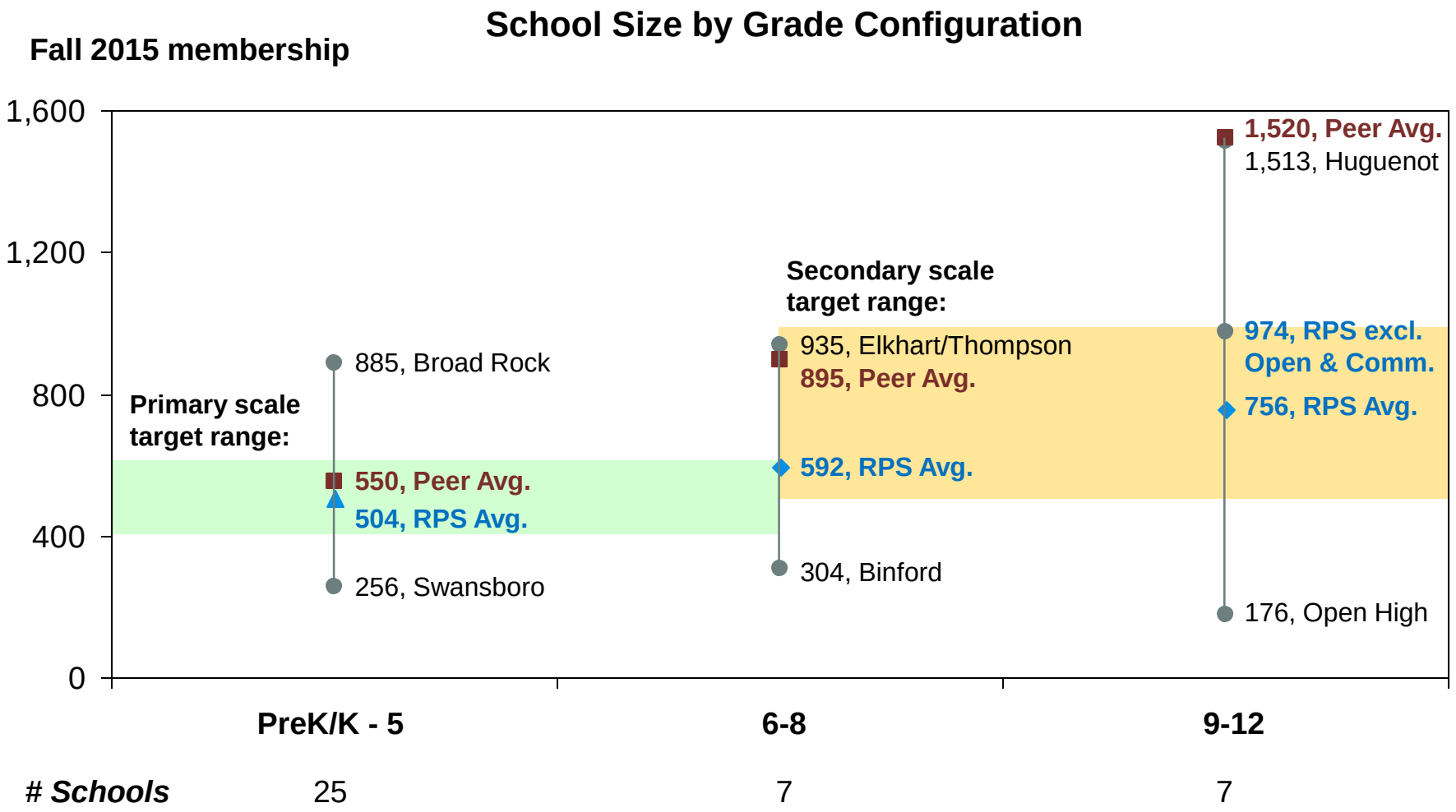
Examples include: Asthma, ADHD, Diabetes, Epilepsy

Examples include: Dyslexia (Reading Disability), Dyscalculia (Mathematics Disability)

http://www.doe.virginia.gov/special_ed.

2

RPS schools vary widely in size and are typically much smaller than the peer average at the secondary level

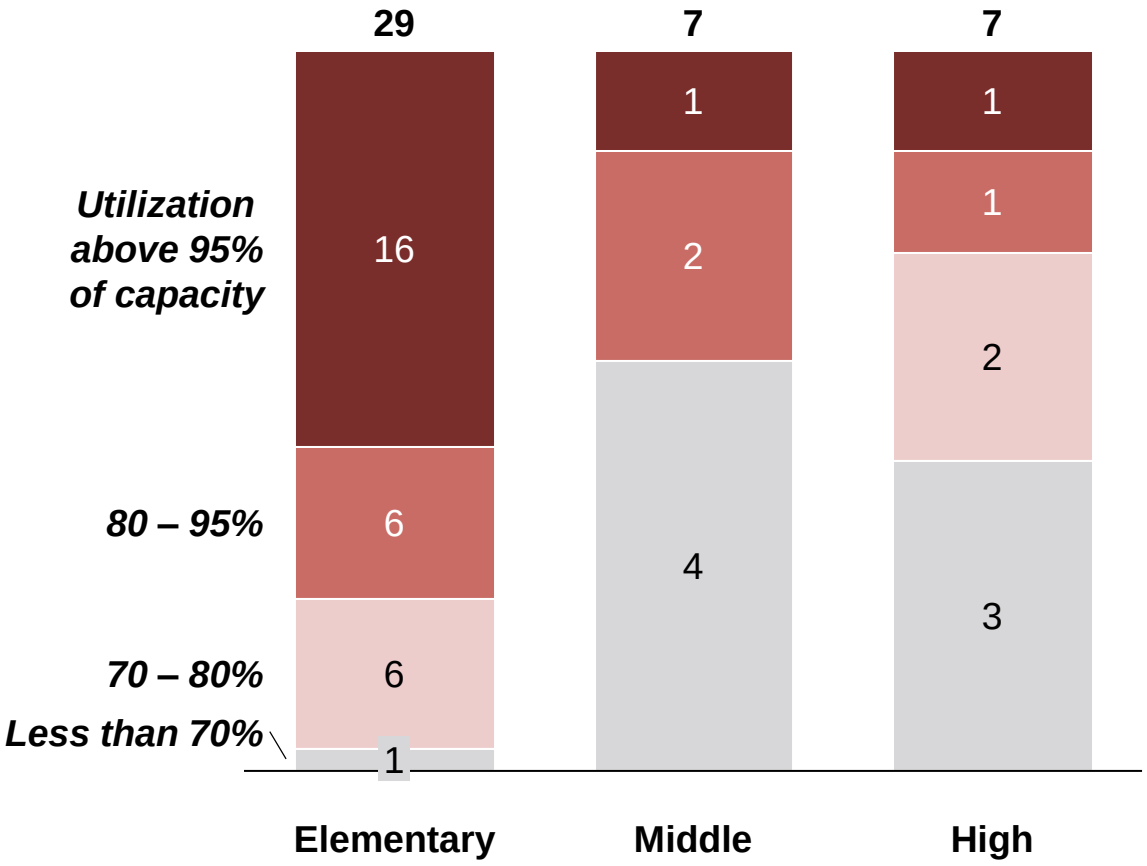


Source: Virginia Department of Education FY16 Membership Reporting. Peer averages from FY13
Note on "target range": Schools (not school buildings) of approximately 400 – 600 primary students and 500 – 1000 secondary students are the found to be most effective and efficient (Odden and Picus, School Finance: A Policy Perspective, 2008)

2

More than half of elementary schools are close to full capacity, while some middle & high schools under-utilized

Distribution of RPS schools by utilization level



Observations

- **Overall utilization is 84%** based on RPS assumptions around capacity of each school building
  - If changed assumptions to the district or state maximum -- which would mean more students per classroom -- utilization would be lower
- **Low utilization of some middle- and high-schools** is related to enrollment decline after elementary school
- This picture suggests a mismatch between current facilities footprint & "demand" from families

Source: Richmond Public Schools capacity analysis

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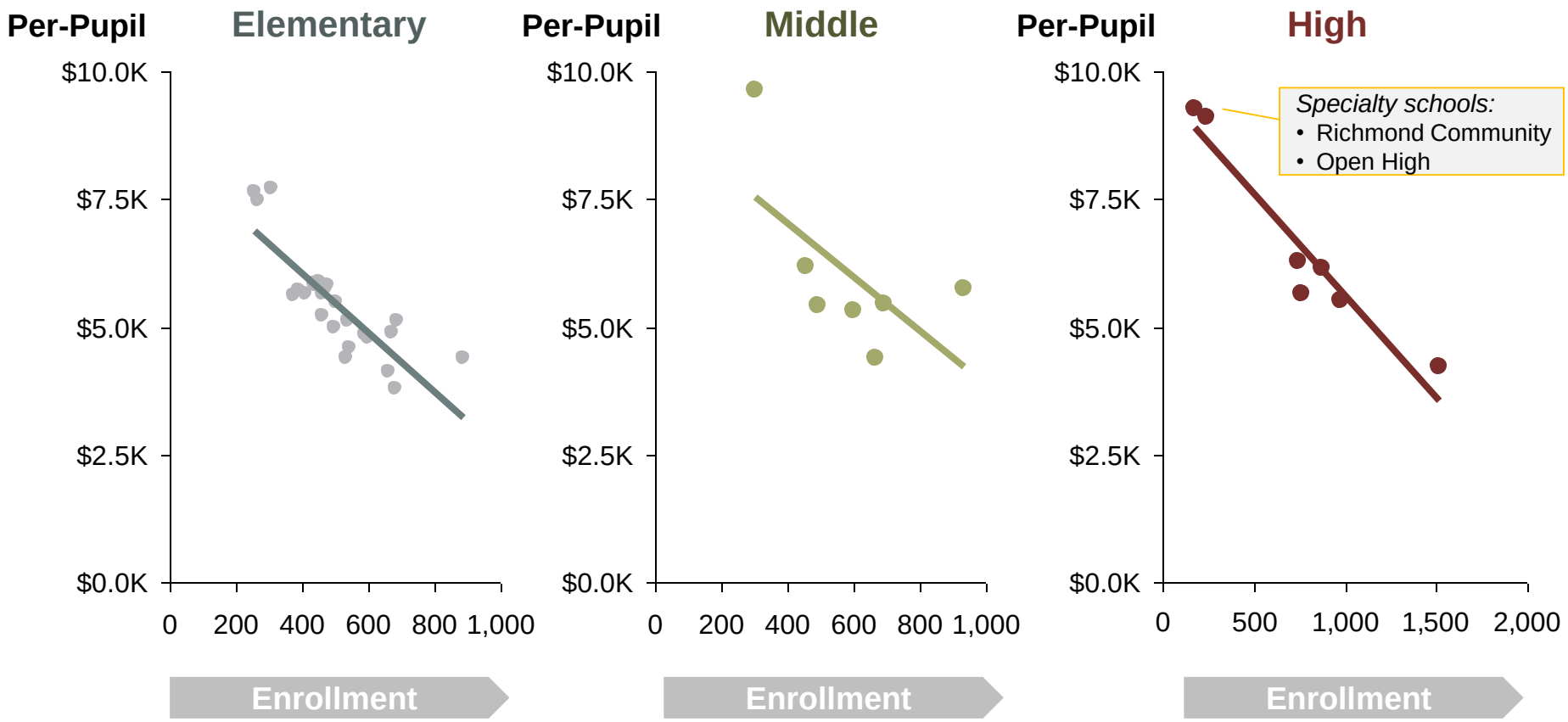
2

Across the district, smaller schools are more costly to operate per-pupil than larger schools

Enrollment vs. Per-Pupil Expenditure[1] by School Type

Excludes all Special Education spending and Title spending



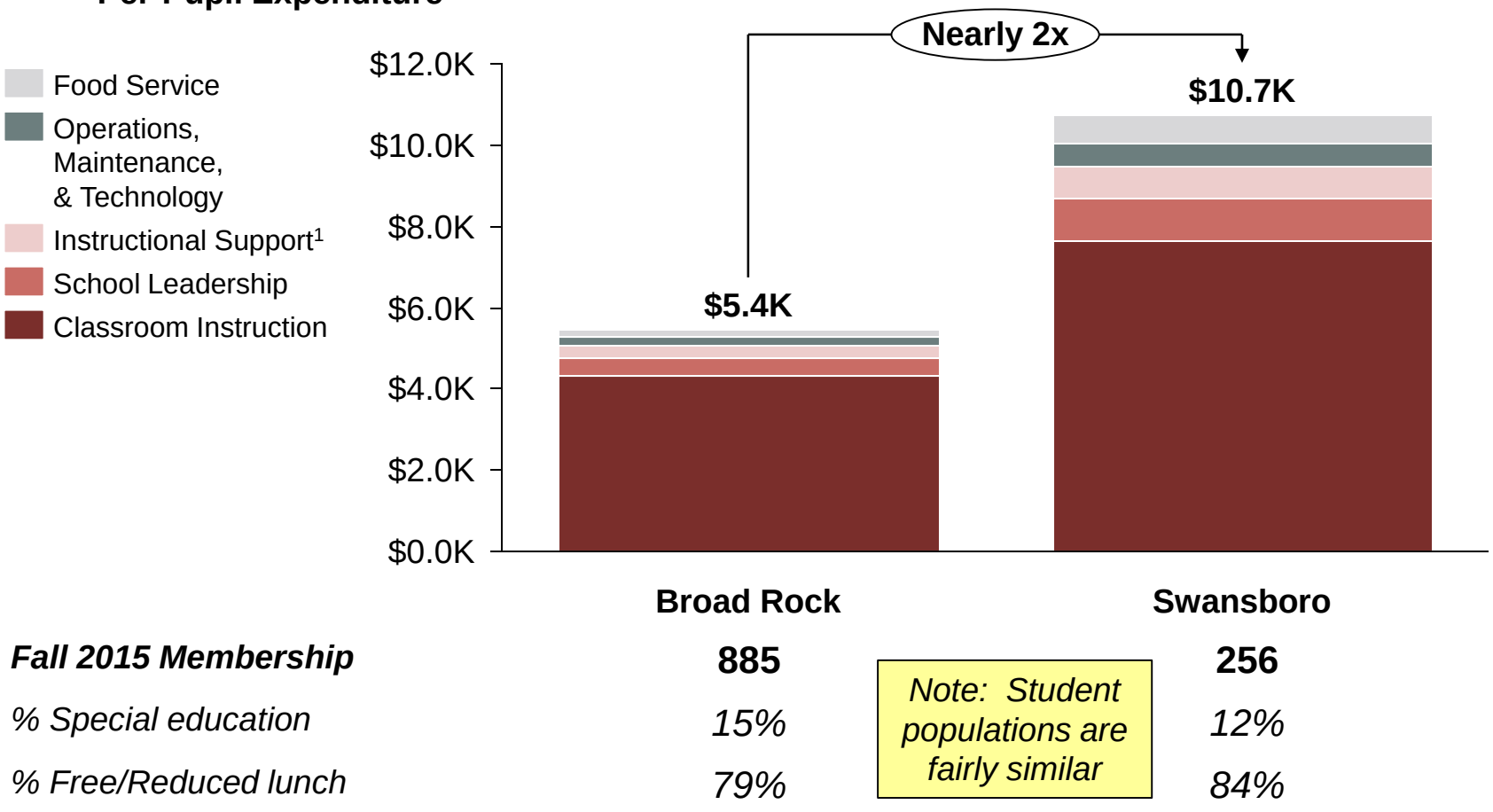
Source: FY16 VDoE Fall Membership, Richmond Public Schools FY16 School Budget

1) Based on General Fund school operating expenditures only and excludes all special education program expenditures

Note: Charts do not include Amelia Street, Richmond Alternative, or Franklin Military Academy as they span multiple grades

2

Elementary school comparison: Per-pupil cost at Swansboro is almost 2x higher than at Broad Rock, which is over 3x larger



	Broad Rock	Swansboro
Fall 2015 Membership	**885**	**256**
% Special education	*15%*	*12%*
% Free/Reduced lunch	*79%*	*84%*

Note: Student populations are fairly similar

Certain costs including Principals, Resource Teachers (Art, Music, etc.) and other costs are "fixed" and thus are higher on a per-pupil basis when schools are small

Source: RPS FY16 Budget, Virginia DoE FY16 Enrollments
1) Includes Attendance & Health

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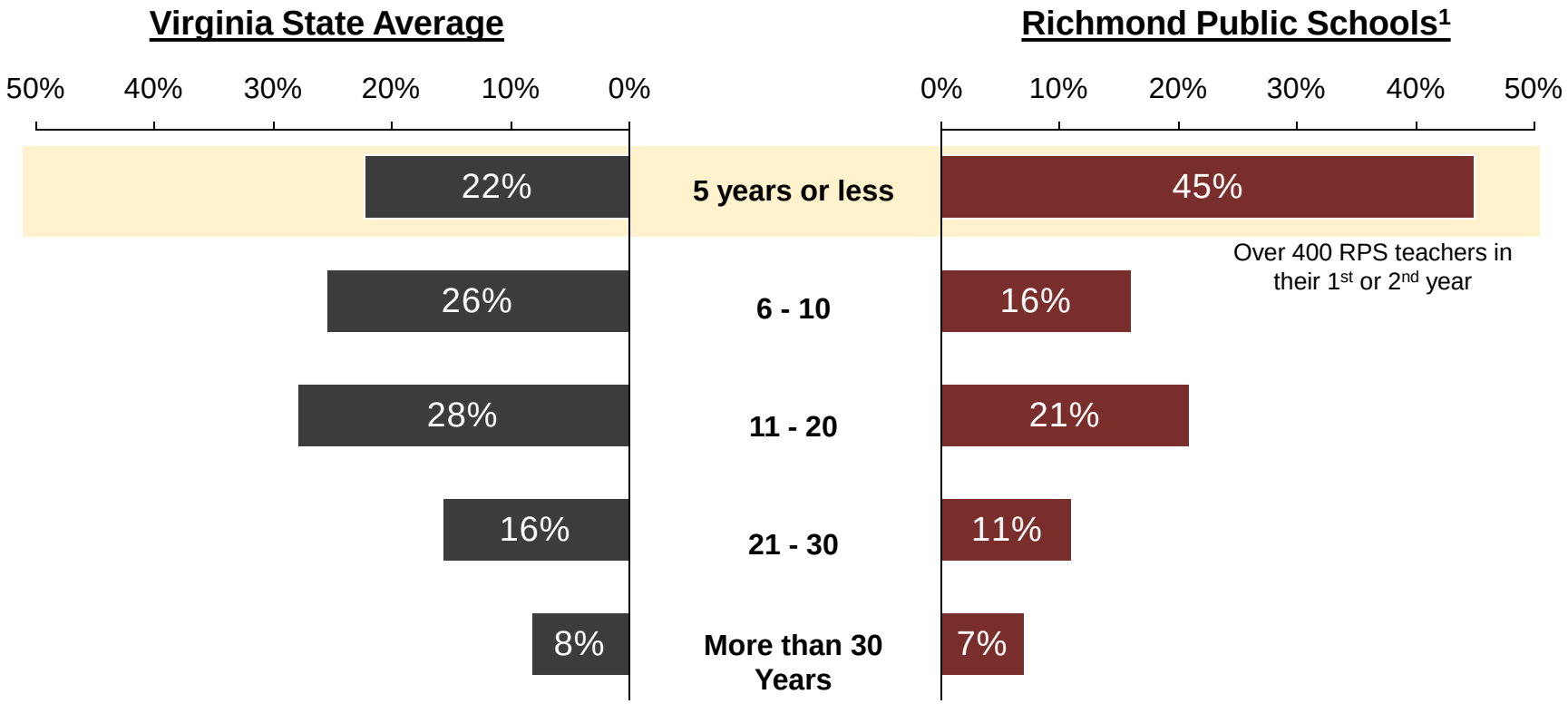
3

Almost half of RPS teachers are in their first 5 years of teaching, which is an important consideration for staffing

Distribution of Teaching Staff by Years of Experience



It is common to see this type of pattern in urban districts with a high-need student population. Districts that are less high-need tend to have a more stable teaching workforce

Source for Virginia state average: National Center for Education Statistics, Schools and Staffing Survey, Public Teachers Data File 2011-12.
1. RPS distribution based on analysis of FY16 FTEs by tenure. Distribution includes teachers with 200-day and 210 contracts who have Bachelor's and Master's Degrees (~2,000 teachers total).

3

Student-teacher ratio is an important strategic choice that impacts students, teachers, and the budget

Note: A student-teacher ratio is the average number of students for every teacher

Implications of a lower student-teacher ratio

- Fewer students in each classroom
- Easier to provide differentiated instruction for students
- Potential "selling point" in recruiting teachers (fewer students to manage)
- More teachers needed
- With more teachers, limited ability to raise salaries while staying budget neutral

Implications of a higher student-teacher ratio

- More students in each classroom
- Potential increased difficulty in maintaining student discipline
- Potential hurdle in recruiting teachers if ratio is higher than neighbors
- Fewer teachers needed
- With fewer teachers, flexibility to offer higher salaries and be more selective in hiring

Student achievement is driven by multiple factors. Some research[1] suggests teacher quality is a more significant driver than ratios or class size, however this may differ by local context

1. Teacher Quality and Student Achievement: A Review of State Policy Evidence, Jan 2000

3

There are important constraints and incentives that inform choices about ratios and class sizes

1. **Richmond Public Schools is required by state law to maintain class sizes below a certain threshold**
   - Thresholds are calculated by dividing the number of students within a class by the number of instructional personnel
   - Instructional personnel excludes special education teachers, principals, assistant principals, counselors, and librarians
     - Grade K: max division ratio 24:1, no class larger than 29 students
     - Grades 1-3: max division ratio 24:1, no class larger than 30 students
     - Grades 4-6: max division ratio 25:1, no class larger than 35 students
     - English classes in grades 6-12: max division ratio is 24:1
     - For all other classes and grades 6-12, max school ratio 21:1

2. **The state offers financial incentives to maintain small class sizes and small school-wide ratios in grades K-3 based on the student poverty indicator**
   - For most RPS schools, this ratio is 14 students:1 teacher at the school-level, including resource teachers (e.g. art, music, PE, reading) as well as librarians
   - For the K-3 incentive there is a maximum individual class size of 19, as determined by the poverty indicator of % students qualifying for Free & Reduced Lunch

Virginia DOE Max Class Size guidance
Virginia DOE K-3 Primary Class Size Reduction Program

3

Richmond orients toward low student-teacher ratios

Key drivers are student population, school size / utilization, and instructional decisions

Elementary grades (K-7)	Student: teacher ratio
Richmond	12.2
Newport News	14.4
Norfolk City	12.0
Portsmouth	10.8

Secondary grades (8-12)	Student: teacher ratio
Richmond	9.3
Newport News	13.7
Norfolk City	11.5
Portsmouth	10.0

Differences are due to…

- **Student population needs** (e.g. economically disadvantaged, students with disabilities, limited English proficiency)
- **School size and utilization**
- **Instructional decisions** (e.g., class sizes, scheduling, elective offerings)

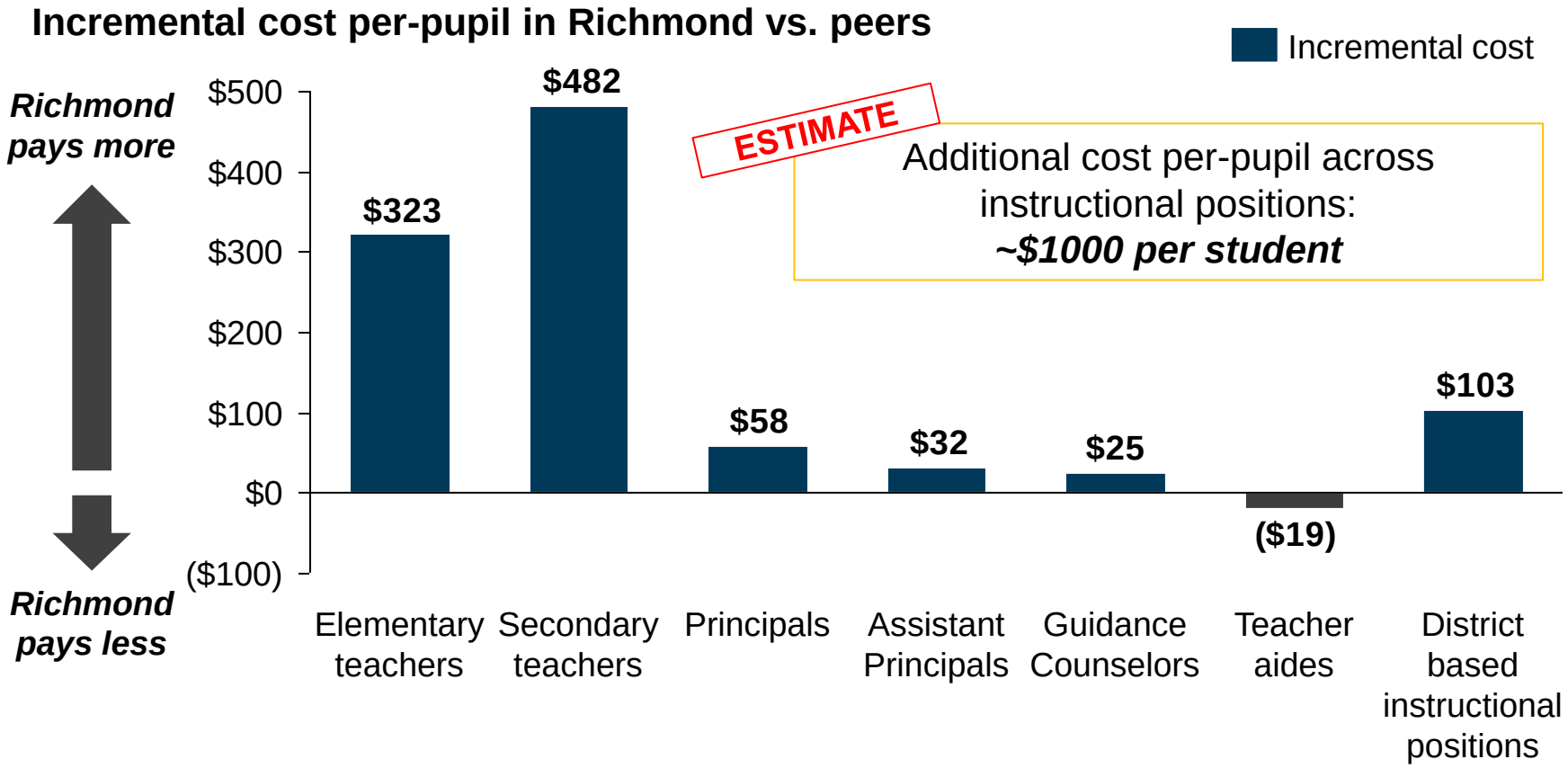
Note: These ratios reflect total students divided by total teachers. A district's student-teacher ratio is different than average class size as the ratio includes resource teachers (e.g. art, music) and others who are not dedicated to a specific classroom.

Source: FY14 Superintendent's Report, Table 17a. Teachers included in the ratio calculation include general education classroom teachers, resource teachers (art, music, etc.), special education teachers, homebound, media, and technology instructional teachers. Ratios do not include guidance counselors or librarians.

3

Richmond's staff ratios and salaries result in ~$1000 in additional per-pupil spending on instruction vs. peers

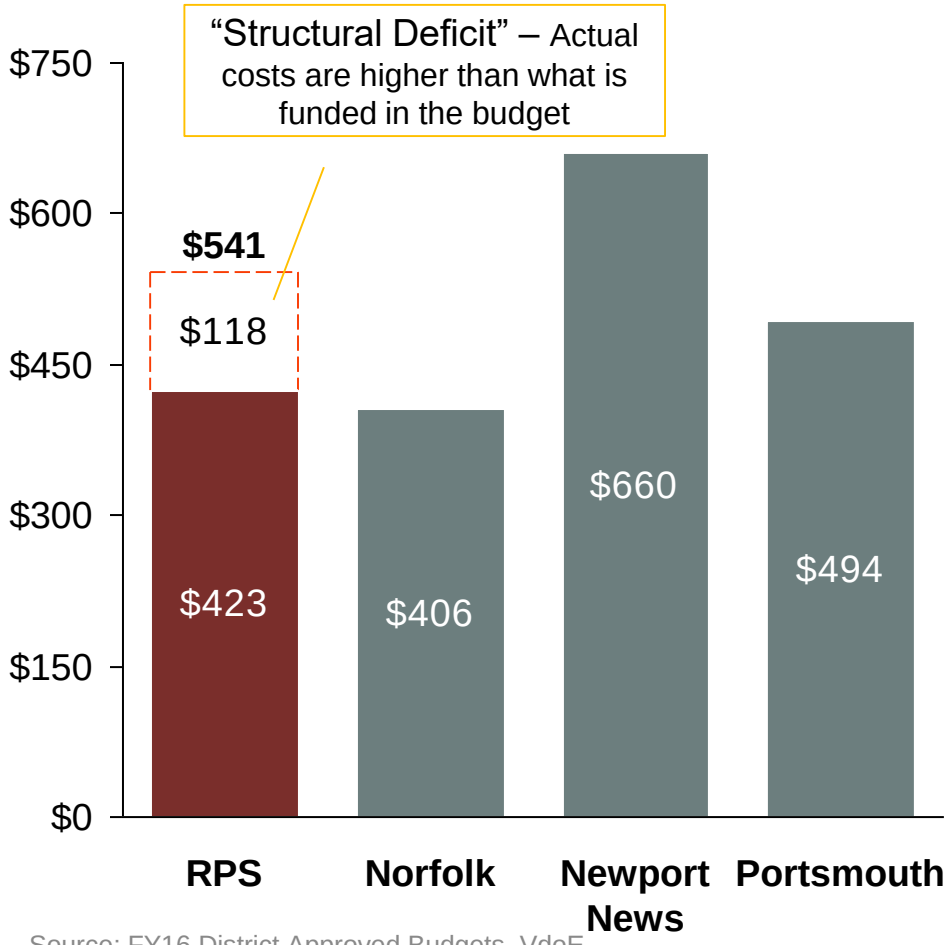
Note: Each district might classify positions slightly differently; these are the data reported to the state



Source: VDOE Superintendent's FY14 Report
Note: Peer district is calculated based on weighted average of Norfolk, Newport News, Portsmouth
Includes applied benefit rate of 42% for all districts

Per-pupil transportation costs are higher than in Norfolk and Portsmouth but lower than in Newport News

K-12 Budgeted Per-Pupil Spend on Transportation



Notes

- Several factors drive pupil transportation expense, including:
  - Student participation (including students with special transportation requirements)
  - Network size and design (including number of pick-up and drop-off points)
  - School start-and-end times and ability to use buses for multiple schools
  - Fleet size, make-up, and age

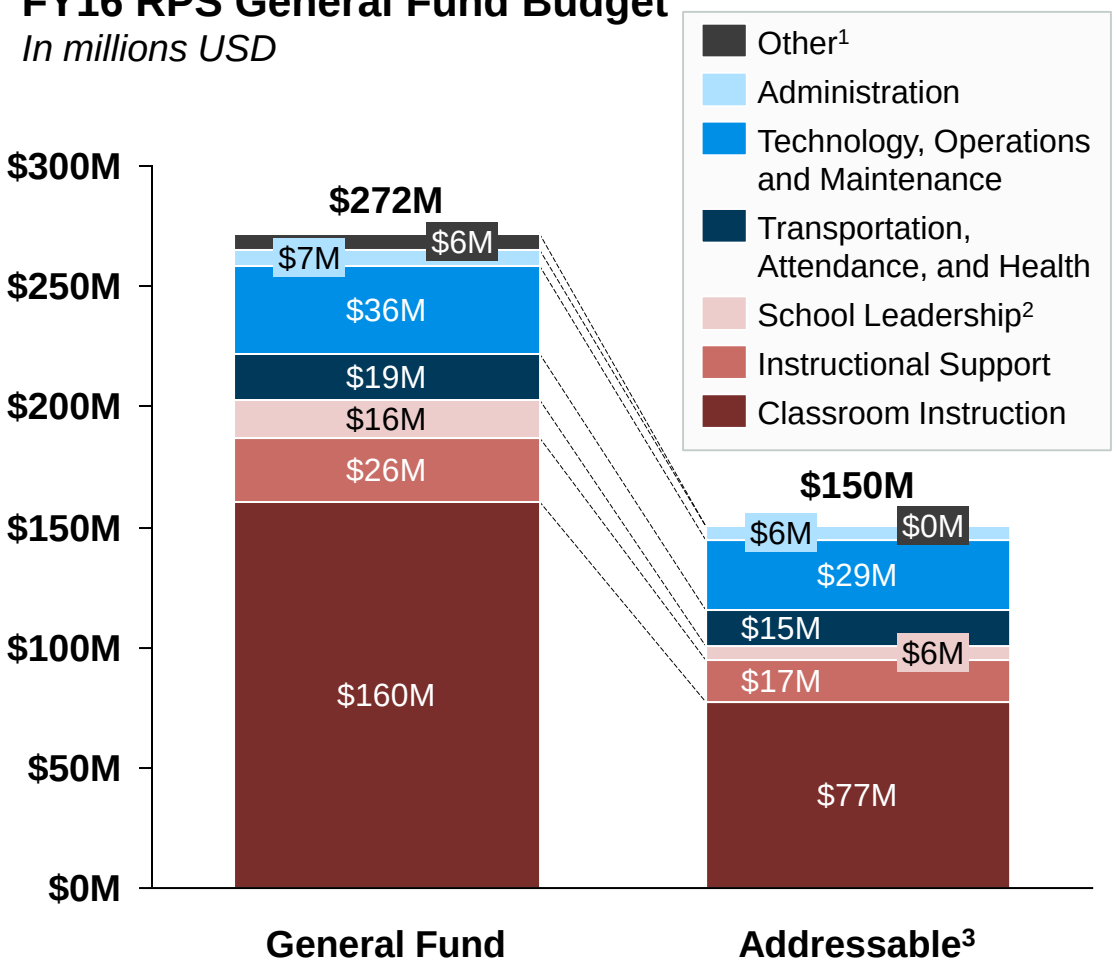
Source: FY16 District Approved Budgets, VdoE
Actual spend in other districts not available for FY15, however historical actuals are similar to budgeted actuals

Contents

Our starting point: ~$150M of the $272M general fund is considered "addressable" for district budgeting choices

FY16 RPS General Fund Budget

In millions USD



Non-Addressable Components

- Minimum staffing levels mandated by state Standards of Quality in:
  - Teachers
  - Principals & Ass't Principals
  - Counselors & Librarians
  - Instructional Technology
- All charter payments & transfers
- All debt service
- All board-related expenses & support staff
- Minimum staff, supplies, and other expenses to support district operations[3]

Source: FY16 Richmond Public Schools Budget

1) Debt Service & Fund Transfers
2) School leadership expenses for 34 of 42 schools are considered non-addressable (e.g., each school must have a principal). Based on RPS utilization analysis, we have assumed the configuration of up to 8 schools could be changed.
3) We estimate that at minimum 20% of expense categories are non-addressable beyond those explicitly stated as such by law

Within the addressable budget, there are potential levers that could create additional flexibility for strategic priorities

Potential budget impact

Category	Potential near-term levers for district to evaluate
Classroom Instruction	• Consolidate schools to achieve more efficient staffing levels • Optimize use of teacher time, e.g., by adjusting the master schedule or by shifting responsibility to aides for non-instructional duties • Establish minimum enrollment requirements for elective classes
Operations & Maintenance	• Reduce facilities footprint, e.g., by consolidating into existing buildings • Increase focus in preventative maintenance to reduce high-cost expenses
Instructional Support	• Evaluate central office instructional support model
Attendance & Health	• Increase delivery of wraparound services by community partners • Share nursing positions between small, nearby schools
Transportation	• Partner with city public transport, where possible, for bus services • Increase # daily routes per bus (e.g., by changing the school start/end time or by reducing the number of bus stops)
School Leadership	• Combine AP position at small schools with part-time teaching role
Administration	• Increase adoption of tools to support efficiency

Districts similar to RPS have acted on many of the above levers. Evaluation of these levers must be taken in context of past budget reductions and breadth of impact on the district and community

There are two types of district budgeting choices

1. **Choices that impact the budget in a very discrete way**
   - e.g., if a certain department decided not to back-fill its open positions
   - Typically the district is in the best position to make these decisions

2. **Choices that are multi-faceted and have a broad impact on the district and community**
   - Here, understanding and buy-in from stakeholders is essential

In recent years, RPS has made several discrete budget choices to increase efficiency

Actions taken to increase efficiency

1. Reduced teaching and instructional aid positions that did not impact Standards of Quality
2. Reduced employee benefit & retirement contribution
3. Reduced salary & bonus expenditure
4. Reduced administration staffing levels
5. Renegotiated and rebid external service and procurement contracts
6. Eliminated or reduced non-core educational program budgets (e.g., driver's education)

Budget reduced by $22M from FY09 to FY14

While enrollment grew by 600 students

Other activities considered

1. Evaluate feasibility of outsourcing transportation services
2. Evaluate outsourcing of facilities management services
3. Increase participation in food services and associated revenues
4. Shorten length of contract lengths for non-teaching school staff
5. Reduce or eliminate pre-school program, extended-day programs, IB programs
6. Shorten length of instructional school year

Would have significant impact on instruction

Source: Robert Bobb Group, Richmond Public Schools.
See Appendix for snapshot of specific examples of reductions

Decisions around Richmond's facilities are an example of choices that will broadly impact the community

Illustrative

Recall: the **facilities footprint** **spans multiple budget drivers:**

- **Administrator staffing** -- higher cost per-pupil for Principal, AP, clerks, etc. when enrollment is low
- **Teacher staffing** -- difficult tradeoffs to make around whether to offer courses, programs, and after-school activities (with equity considerations)
- **Operations and maintenance** – more buildings and infrastructure to maintain, more cafeterias to run, more custodians, etc.
- **Transportation** -- More buses running to more schools
- …

RPS has defined three key challenges related to facilities

Facilities challenges defined in RPS Needs Report

High cost to run many small schools

- Underutilization of several buildings based on 10-year enrollment forecasts
- High per-pupil operating costs in small and underutilized buildings; cannot achieve scale efficiencies

Capacity Constraints

- Immediate growth issues in several elementary schools on the south side of the district
- Growth issues over the next three years with middle schools

Need for Renovation

- 82% of facilities are over 20 years old, driving greater maintenance expense in immediate term
- 23 out of 44 schools require major or complete renovation

Source: RPS Facilities Needs Report, Bellwether analysis

Facilities plans can have multiple goals related to equity, efficiency, and attracting and keeping families in the city

Common goals of a facilities plan

- **Superior and more equitable learning environment**
  - Students have access to a broader array of programs and courses when schools are at scale
  - Students learn from specialized teachers who do not need to manage multiple subjects or grade levels
  - Students and teachers can be more innovative when physical space matches 21st century learning

- **Reduced operating costs**[1] when schools at greater scale & target utilization with proactive management of ongoing maintenance and capital spend

- **Attract families to the city and keep students in the district**

- **Attract and retain strong teachers** to support student achievement

*… and do so in an **affordable way***

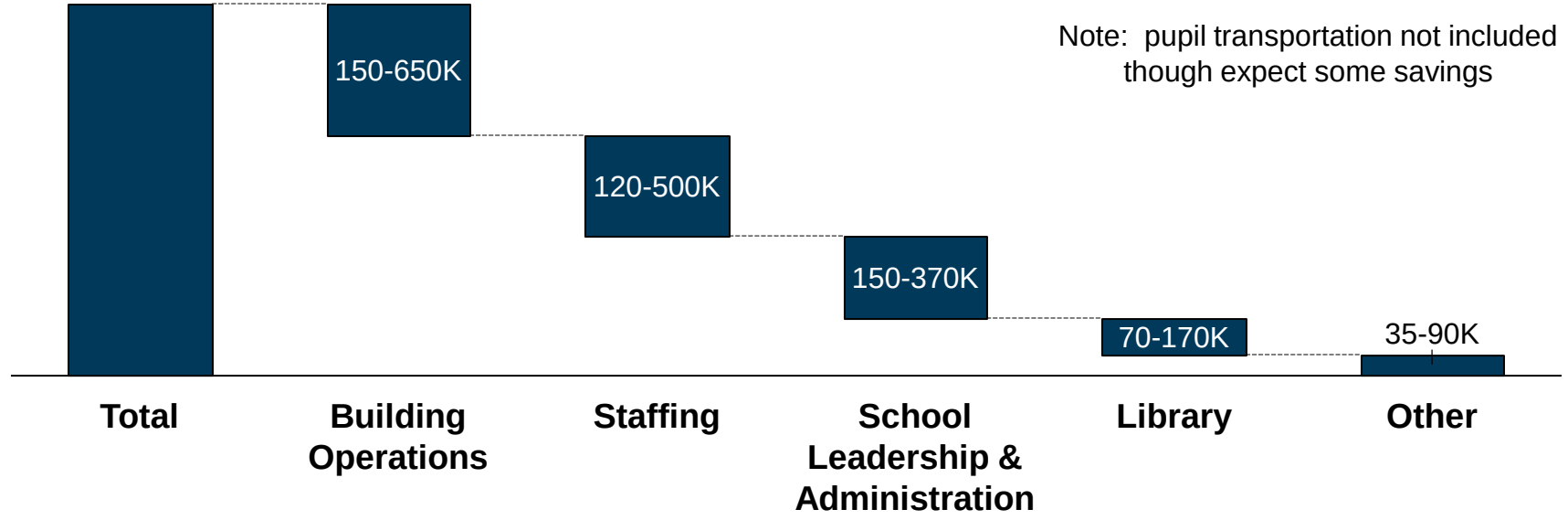
1. Efficiency gains when consolidating into an existing building estimated at $500-700K / year for elementary school, $700-900K/year for middle school, and $1.0 – 1.8M per year for high school. Based on analysis of under-utilized elementary and middle schools of ~300 students and under-utilized high school of ~700 students

Backup: Illustration of potential efficiency gains from closing a school and consolidating into an existing building

School Closure Annual Savings Estimate

Lower bound = min estimate for an elementary school, upper bound = max for a high school

$500K – $1.8M
per building per year



Note: pupil transportation not included though expect some savings

Assumptions of efficiency gains	Building Operations	Staffing	School Leadership & Administration	Library	Other
	• 100% utilities • 80% on custodial services	• 10% from inefficiencies in teacher allocations	• 100% Principal • 50% for Ass't. Principal and clerical staff	• 100% for librarian	• 100% for Food Service Mgr • 20% for food service workers

Source: RPS FY16 Budget, Bellwether Education Partners Analysis
Note: Based on analysis of under-utilized elementary and middle schools of ~300 students and under-utilized high school of ~700 students

All four of RPS's newest buildings are at or over capacity; two met state goals for Student Learning Objectives

Met or surpassed state goal for academic performance

Did not meet goal

	Utilization (% functional capacity)	Cost Per Pupil	Students passing SOL objectives *Reading, Math*	Notes
Broad Rock *Elementary*	97%	**Lowest** of all elementary schools	81, 83	• Largest elementary school in RPS with 885 students enrolled • High economically disadvantaged population (84%)
Oak Grove *Elementary*	81%	average	41, 56	• High economically disadvantaged population (87%)
Martin Luther King Jr. *Middle*	94%	average	26, 25	• High economically disadvantaged population (90%) • High Special education population (31%)
Huguenot *High*	101%	**Lowest** of all high schools	80, 85	• Largest high school with ~1,500 students enrolled • Relatively lower economically disadvantaged population (53%)

Source: RPS, Virginia Department of Education

... Consolidation also comes with several important considerations and tradeoffs

Considerations and tradeoffs associated with school consolidation

- Consolidation decisions must consider district-wide **feeder patterns** (elementary → middle → high)
- Can be a difficult **transition** for students assigned to a new school (esp. if not all students are re-assigned to same school)
- Students may have longer **commute** to their newly assigned school
- Must be mindful of **student safety** (e.g., gang lines) when drawing new zones
- Schools that are gaining kids may experience impact on **school culture**
- Savings primarily achieved through **reduction of positions** – which can often happen through attrition – but not always

Where to from here?

Summary of current state

- RPS serves a high need student population including 78% who are economically disadvantaged, 18% with disabilities, and 8% with limited English proficiency
- RPS spends more on instruction per-pupil than other districts, in large part due to its high-need student population
- Another key factor driving higher per-pupil cost is RPS's facilities footprint
  - Small schools are more costly to run than larger schools
  - Enrollment decline starting in early elementary school contributes to under-utilization of some middle and high schools

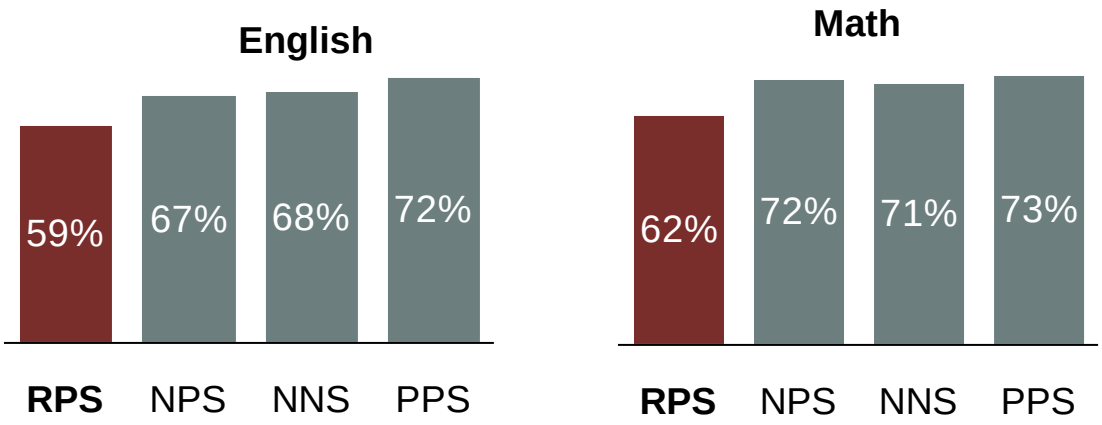
Next steps for group discussion

- Evaluate and move forward wherever possible with near-term levers to optimize the budget within the existing parameters
- Support a productive dialog around Richmond's collective investment in a district that supports outstanding student outcomes through efficient and effective schools

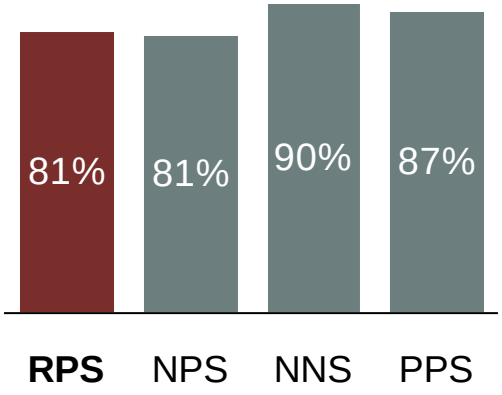
Appendix

RPS has lower outcomes compared to peer districts on academic performance indicators and graduation rates

Students Passing Standards of Learning (SOL) Annual Measurable Objectives



Four-Year On-Time Graduation Rates



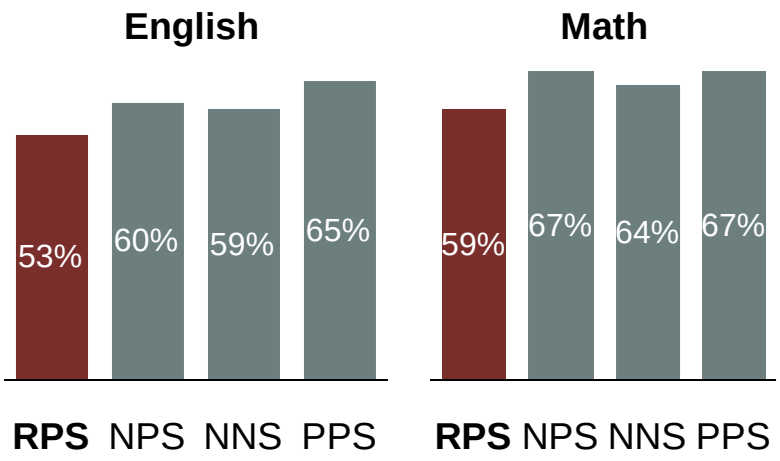
Student Demographics

	RPS	NPS	NNS	PPS
Economically disadvantaged	**78%**	68%	62%	61%
Students with Disabilities	**18%**	13%	11%	11%
Limited English Proficient	**8%**	3%	5%	<1%

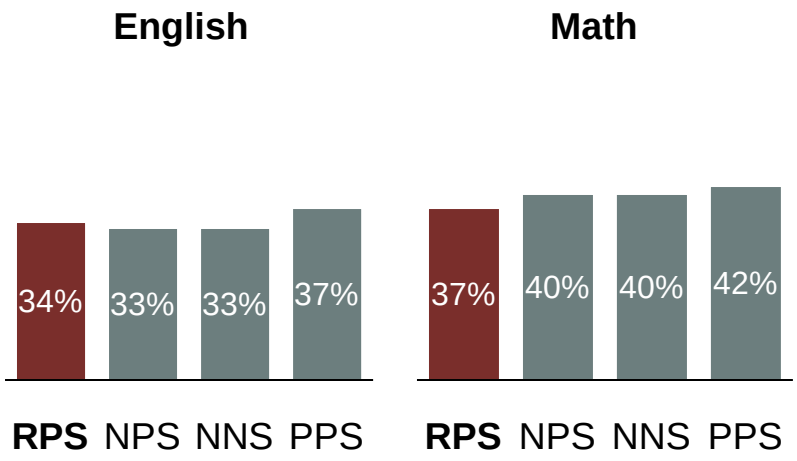
Source: Virginia Department of Education

Students with disabilities and economically disadvantaged students perform on-par with or below peer district students

Economically Disadvantaged Students
Passing Annual Measurable Objectives



Students With Disabilities
Passing Annual Measurable Objectives

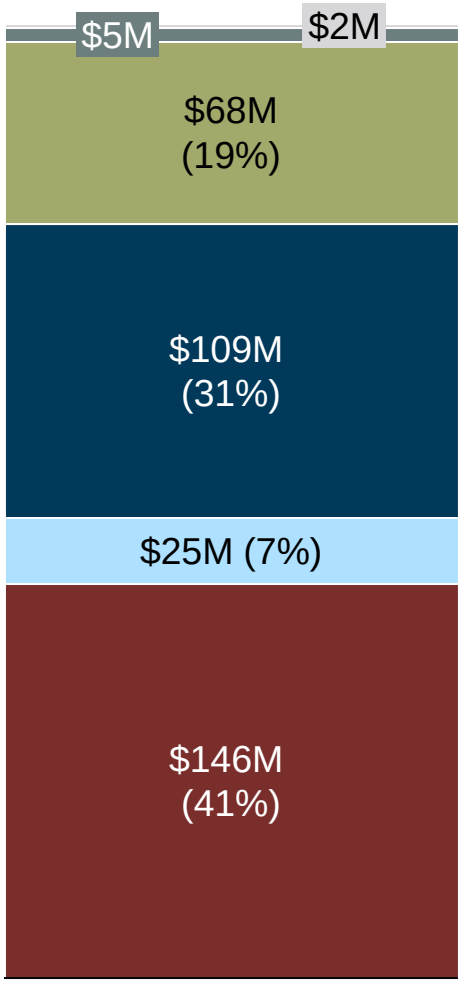


Source: Virginia Department of Education

There are four key factors that drive per-pupil funding

Funding Factors	Description
Public Funding Levels	• Total funding appropriated for public education by government entities, namely U.S. Congress, the Virginia State Legislature, and local governing bodies (e.g. cities, counties, and towns)
Total District Size	• Districts receive basic levels of funding based on how many students they have enrolled, and how many attend school
Student Needs & Characteristics	• Students at Risk (e.g. economically disadvantaged, students with disabilities, limited English proficiency, etc.) receive additional funding to support the additional costs of their education
Programs Offered	• Programs in addition to basic education receive specific funding to support their expenses (e.g., Pre-K programs, adult education, Career & Technical Education, Talented & Gifted)

The largest contributor to the Richmond Public Schools budget is the City Appropriation at 41% of total revenues



Funding Source	What It's Based On
Prior Year Fund Balance	• Prior year savings due to lower expenditures than budgeted supporting one-time non-recurring expenditures only
Local & Philanthropic Sources	• Sales of supplies, food & beverage, rent • Donations from individuals & foundations
Federal Revenues	• Participation in Federal Programs (e.g. Child Nutrition, Head Start, Adult Education) • Enrollment of disadvantaged students
State Revenue	• State legislature education appropriations • Locality "Ability to Pay" formula
State Sales Tax	• **Actual sales tax revenue** collected state-wide and allocated on basis of projected student population in each locality
City Appropriation	• Minimum appropriation determined by the state of Virginia • Additional locality appropriations

FY2016 Adopted Budget

Backup: Snapshot of detailed RPS budget review conducted in 2012 and revisited in 2015 and 2016

This represents 3 of 17 opportunities evaluated

#	Recommen-dation	Department Impacted	Opportunity Size	Opportunity Description	Current Status
S-3	Reduction in Central Office Expenses	Administrative (Central Office)	$500K	Reduce Central Office by 8 FTE through attrition including retirements and turnover.	8 FTE eliminated in FY13
S-4	Reduction in Custodial Expenses	Custodians	$1.6M	This will impact the 49 most junior custodians in the system and a total of 49 positions at an average cost of $33,000 per employee. Cutting custodian services by 49 positions would result in an increase in square footage responsibility per custodian.	Partially implemented. 36 Custodial / Maintenance Positions Eliminated in FY2012-13 per review of positions
S-5	Reduction of 13 security officers	Security	$443K	This will impact 13 out of 75 total positions. RPS can pursue further cost savings through a managed competition process. New building technologies can also enhance student and building security. [4/16/12: Implementing this new security technology would require an investment of approximately $10,000 per school.]	7 security positions were eliminated in FY2012-13; Now have 63 security guards (down 12 positions from 75 identified).

Source: Robert Bobb Group Analysis

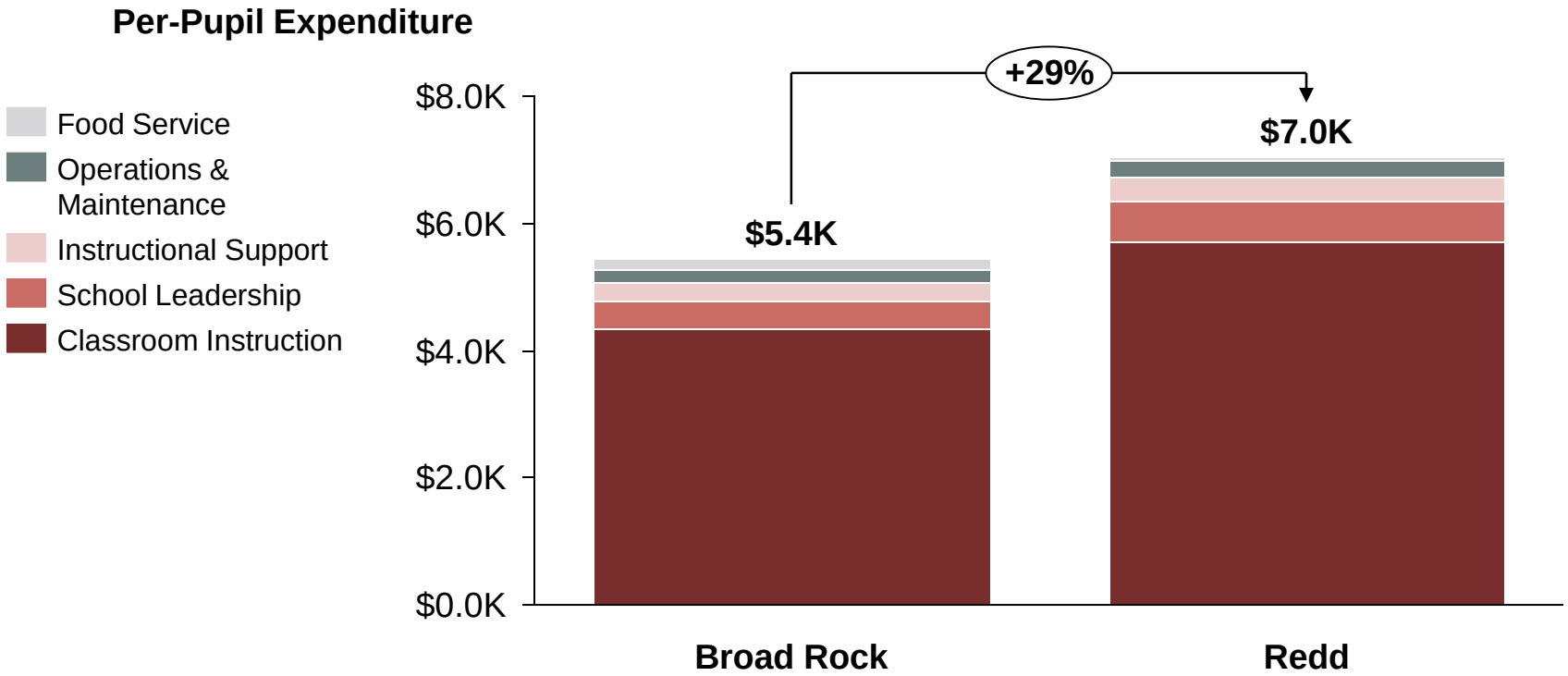
Backup for school size analysis: 39 RPS schools included in the analysis of school size and cost

	Elementary[1] *25 included*		**Middle** *7 included*	**High** *7 included*
Included	• Bellevue • Blackwell (including PreK) • Broad Rock • Carver (including 13 Acres) • Cary • Chimborazo • Fairfield Court • Fisher • Fox • Francis • Ginter Park • Greene • Holton	• Jones • Mason • Munford • Oak Grove • Overby-Sheppard • Redd • Reid • Southhampton • Stuart • Swansboro • Westover Hills • Woodville	• Binford • Boushall • Brown • Elkhardt – Thompson • Henderson (including REAL) • Albert Hill • MLK Jr.	• Armstrong • Huguenot • Thomas Jefferson • John Marshall • George Wythe ***Specialty Schools*** • Open High School • Community High
Excluded*	• Mary Scott / MLK Jr. (PreK Center) • Maymont (PreK Center) • Amelia Street • Franklin Military Academy • Richmond Alternative		• Career Education & Employment • Appomattox (Governor's School) • Maggie Walker (Governor's School) • MathScience Innovation Center • Patrick Henry • Richmond Technical Center	

Source: Richmond Public Schools Website
1) Combination schools and Pre-K centers are treated as one school
* Schools excluded if not included as part of RPS budget, if they lack reported data from the VDoE, or if they cover more than one grade span

2

Elementary school comparison: Per-pupil cost at Redd is ~30% higher than at Broad Rock, which is ~ 2x in size



	Broad Rock	Redd
Total Enrollment	**885**	**475**
% Special education	*15%*	*14%*
% Free/Reduced lunch	*79%*	*76%*
% Limited English Proficiency	*26%*	*24%*

Note: Student populations are fairly similar

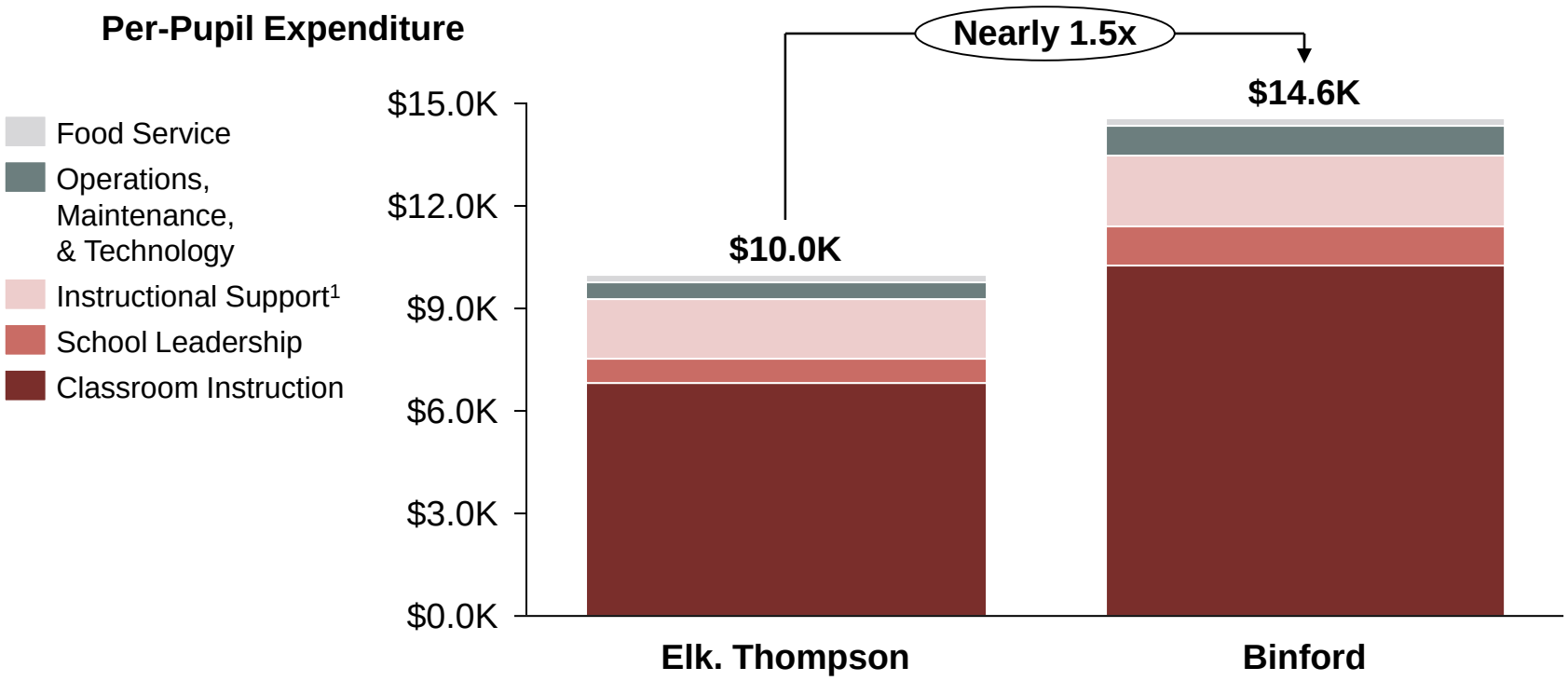
Certain costs including Principals, Resource Teachers (Art, Music, etc.) and other costs are "fixed" and thus are higher on a per-pupil basis when schools are small

Source: RPS FY16 Budget, Virginia DoE FY16 Enrollments

BELLWETHER EDUCATION PARTNERS

2

Middle school comparison: Per-pupil cost at Binford is 1.5x higher than at Elk. Thompson, which is over 3x larger



	Elk. Thompson	Binford
Fall 2015 Membership	**935**	**304**
% Special education	*22%*	*21%*
% Free/Reduced lunch	*70%*	*69%*

Note: Student populations are fairly similar

Certain costs including Principals, Resource Teachers (Art, Music, etc.) and other costs are "fixed" and thus are higher on a per-pupil basis when schools are small

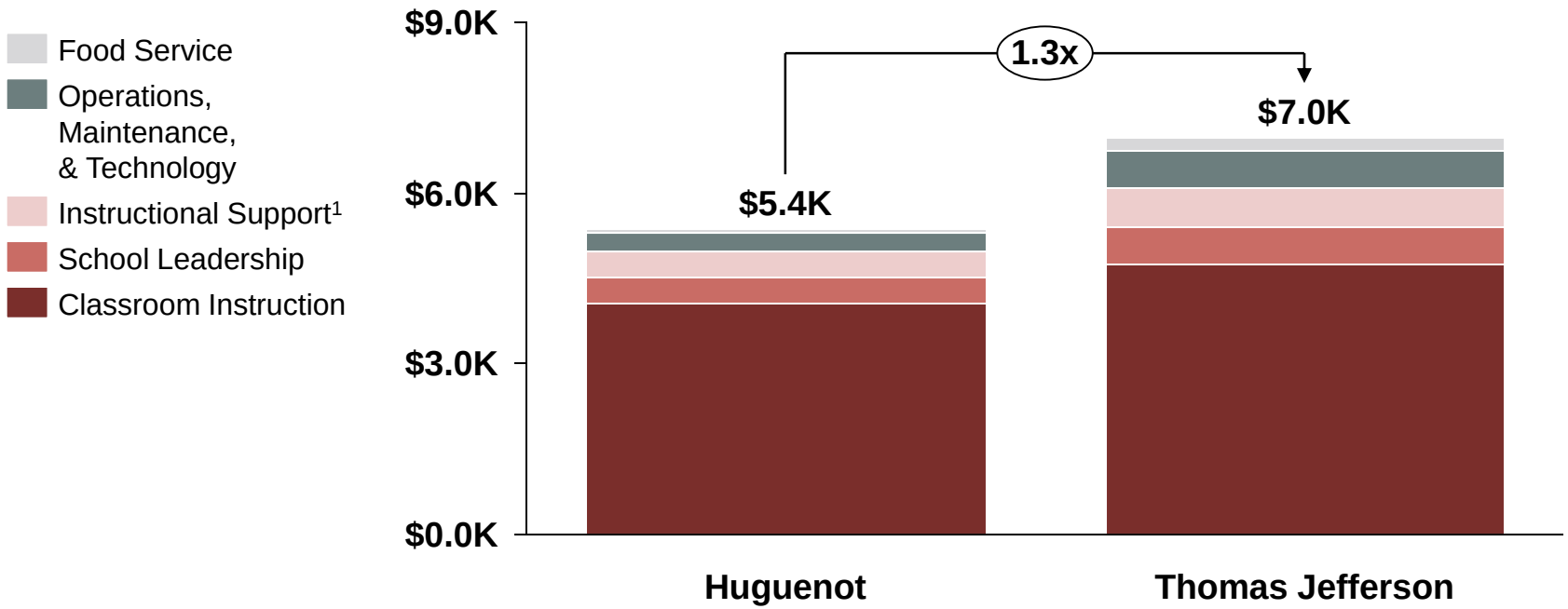
Source: RPS FY16 Budget, Virginia DoE FY16 Enrollments
1) Includes Attendance & Health

BELLWETHER EDUCATION PARTNERS

2

High school comparison: Per-pupil cost at Thomas Jefferson is 1.3x higher than at Huguenot, which is 2x larger

Per-Pupil Expenditure



	Huguenot	Thomas Jefferson
Fall 2015 Membership	**767**	**1,513**
% Special education	*18%*	*18%*
% Free/Reduced lunch	*53%*	*53%*

Note: Student populations are fairly similar

Certain costs including Principals, Resource Teachers (Art, Music, etc.) and other costs are "fixed" and thus are higher on a per-pupil basis when schools are small

Source: RPS FY16 Budget, Virginia DoE FY16 Enrollments
1) Includes Attendance & Health

BELLWETHER EDUCATION PARTNERS

Richmond is similar to peers in terms of school leadership per-school, but higher *per-pupil* due to small schools

FY14 School Leadership Staffing

	Richmond	Newport News	Norfolk	Portsmouth
Schools	45[1]	42	47	23
Total Principals	46	42	48	26
Total Students Per Principal	507	692	666	568
Total Principals Per School	1.0	1.0	1.0	1.1
Total Assistant Principals	59	76	59	31
Total Students Per Assistant Principal	399	382	542	473
Total Assistant Principals Per School	1.3	1.8	1.3	1.3
Total Principals & APs per 1000 students	**4.5**	**4.1**	**3.4**	**3.9**

Although the number of school leadership staff per school is consistent with peers, Richmond's smaller schools results in higher staffing across the district

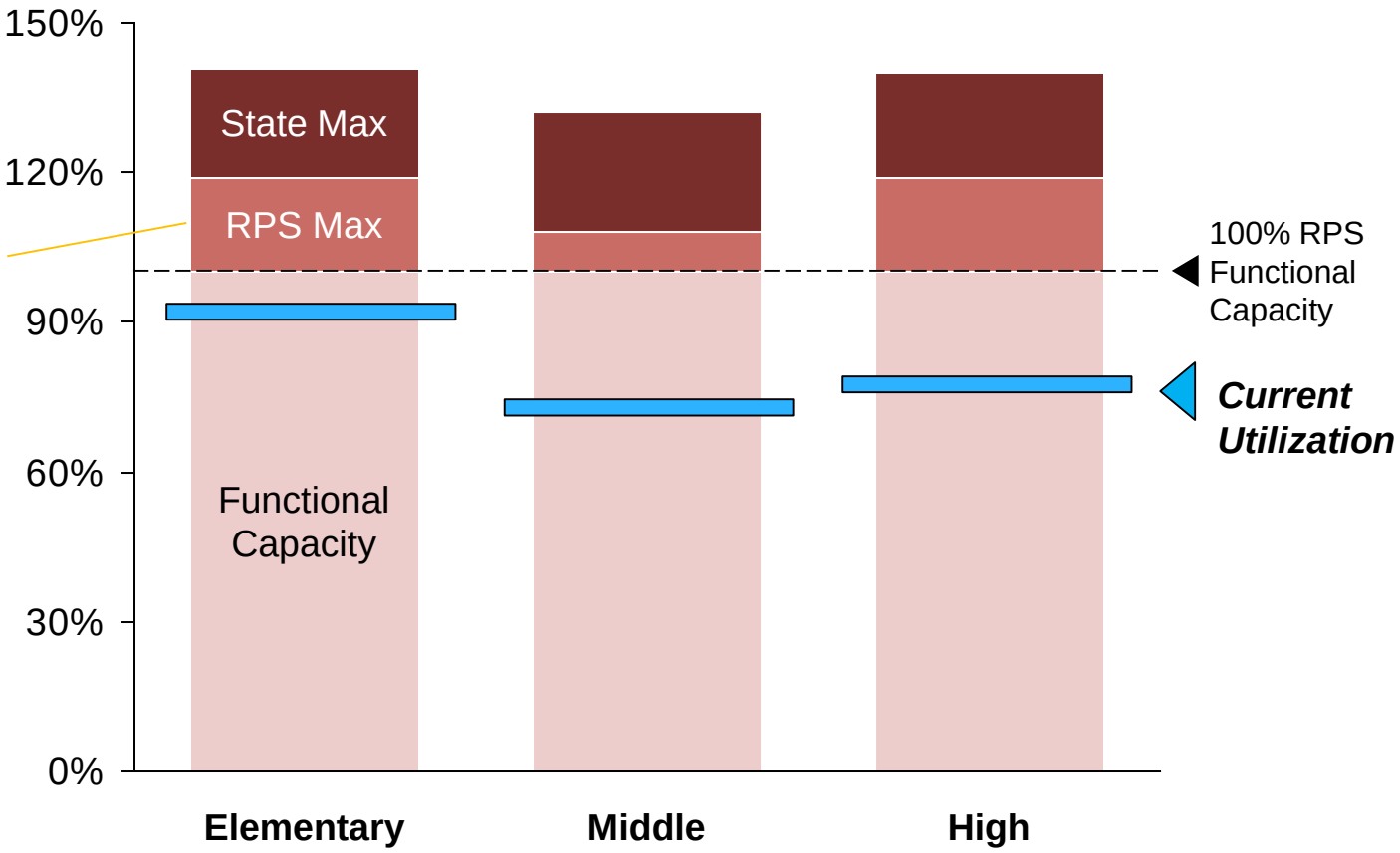
1) Excludes Richmond Career Education and Employment (Charter School)
Source: Virginia Department of Education FY14 Counts

While elementary schools are near functional capacity, a different definition of capacity would allow for more students

School Capacity Compared to Maximum Thresholds

The difference between "RPS Max Capacity" and Functional capacity is # students per classroom.

RPS Max Capacity assumes more students per classroom



Source: Richmond Public Schools

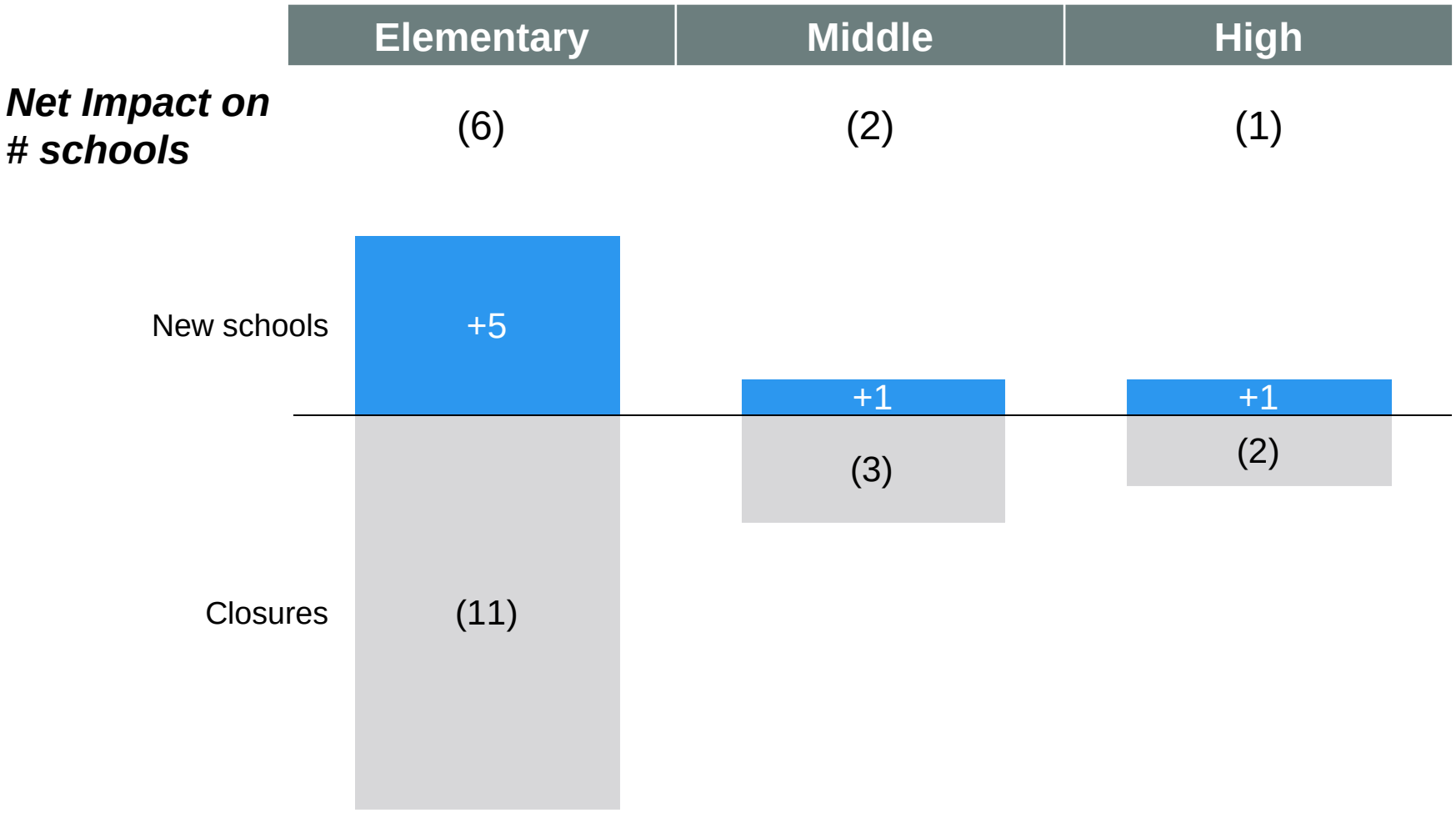
RPS has proposed a mix of strategies to address facilities concerns at the elementary and secondary levels

Option 5: Use of lower & higher cost tools

Elementary Strategies	Secondary Strategies
• Evaluate the establishment of Pre-K centers for all Pre-K programs • Rezone schools in over/under-crowded regions to balance utilization where it does not impact the community school concept • Consolidate 2 schools • Consolidate 1 school into an existing school with an addition • Combine 4 schools into 2 new schools • Combine 3 schools into 1 new school and 1 renovated / addition school • Create 1 new school, closing one • Rezone to achieve equitable split in the south • Renovate remaining existing buildings	• Consolidate 4 middle schools into 2 new middle schools • Consolidate 1 high school • Construct new high school to meet projections • Consolidate 4 secondary schools into 2 existing locations • Renovate remaining existing buildings

Source: RPS Facilities Needs Report

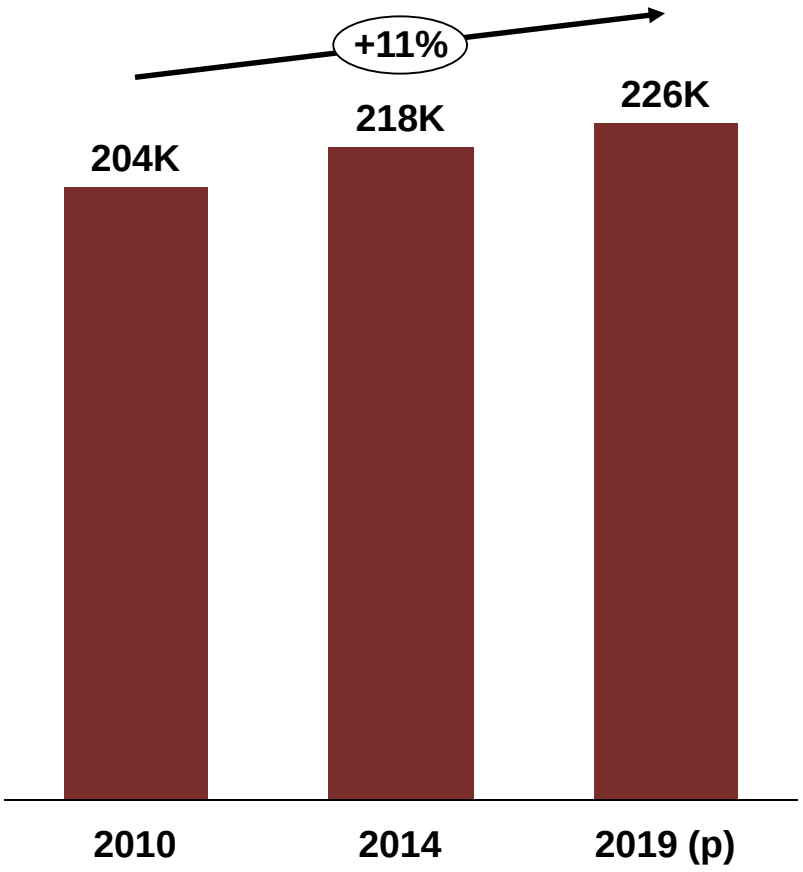
“Option 5” for a facilities plan calls for a reduction of 16 facilities, offset by 7 new constructions and 2 additions



Source: RPS Facilities Needs Report

Richmond's population is growing – families moving to the city will be deciding where to send children to school

Richmond City Population Over Time



"Pull" Factors Driving Growth

- 2016 Best Place to Travel - Travel + Leisure
- 5% lower cost of living compared to U.S. Average
- 13% lower housing expense compared to U.S. average
- Lower unemployment rate than U.S. Average
- Lower average commute time compared to U.S. Average

Source: Greater Richmond Partnership, ACCRA Cost of Living Index