# VALERY SCHNEIDER

Master of Public Policy Candidate Frank Batten School of Leadership and Public Policy

# IMPROVING ON-TIME ENROLLMENT RATES IN RICHMOND PUBLIC SCHOOLS





# Table of Contents

Executive Summary	3
Introduction	4
Background	6
Existing Evidence	9
Evaluative Criteria	13
Alternatives	15
Outcomes Matrix	21
Recommendation	22
Implementation	23
Appendix A: Enrollment Increase Calculations	27
Appendix B: Cost Calculations	28
References	29

# **Acknowledgements**

This APP would not be finished were it not for the help of so many people who made it and me better. Thank you to Kaytee Wisley for being my unofficial writing partner in the fall, not getting sick of me, and still wanting to be my official writing partner come spring. I still hope you win best APP. Thank you to Erin Melly for asking great questions and pushing me to think harder. Lizzy Padhi and Allisa Coles—you gave thoughtful feedback and kept me sane enough to finish this thing. Thanks to Professor Andy Pennock for putting us all together, helping us talk through our problems, accepting our frustrations, and letting us (okay me) cry.

Thank you also to Andrew Bishop whose experiences with both Batten and RPS have been invaluable for many years now. I have so appreciated your mentorship and guidance.

To Max—we've grown and learned so much more than I ever expected when we decided to go into this program together. Thanks for helping me with econ, keeping me laughing, eating innumerable frozen pizzas, and never letting me give up. I truly could not have done this without you.

# Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

## Honor Statement

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.

# **Executive Summary**

As of September 23, 2021, Richmond Public Schools (RPS) had a total of 918 outstanding enrollments. Those delayed enrollments accounted for 18.3% of RPS's 5,026 enrollments for the 2020-2021 school year (Bishop, 2021). Students are unable to attend school until their caregivers have completed the enrollment process and students are fully enrolled. This means that 918 students were unable to attend school nearly three weeks into the school year. These absences can lead to learning loss, lack of access to school-provided meals and services, and parents having to miss work to take care of their children. Additionally, there are significant negative financial implications for RPS because of these delayed enrollments.

This analysis includes a literature of the factors that lead to delayed enrollment as well as potential avenues by which to increase the number of on-time enrollments.

In this project, I propose four alternatives for RPS to consider as it attempts to solve the problem of delayed enrollments:

- Maintain the status quo
- Create a rolling enrollment process, wherein enrollment personnel go directly to community members to help them enroll
- Implement preschool enrollments events to ensure all RPS preschoolers are reenrolled in time for kindergarten
- Implement direct mail and telephone outreach to help community members enroll on time

After evaluating each alternative based upon its likelihood of increasing enrollment, cost, administrative feasibility, and equity, I recommend RPS pursue Alternative 2: Enrollment on Wheels. Despite the administrative challenges it may pose, Enrollment on Wheels combines affordability and equity with a high likelihood of increasing on time enrollments.

The final section of this report recommends steps for implementation of this alternative as well as considerations RPS should take with respect to community stakeholders and upcoming city and divisional changes.

# Introduction

#### Problem Statement

Too many students miss school during the month of September due to difficulties with Richmond Public Schools' enrollment process. Students are unable to attend school until their enrollment has been fully processed. It is especially critical that student enrollments are processed by September 30, when enrollment information is sent to the state for funding purposes. There are significant financial losses associated with delayed enrollments. As of September 23, 2021, RPS had 918 outstanding enrollments, or 18.3% of all enrollments (Bishop, 2021). Of the 5,026 enrollments completed or in process at that time, about one third were kindergarten students, just under a third were prekindergarten students, and under one third were students in grades 1 through 12 (Bishop, 2021).

It is difficult to determine exactly how much money RPS stands to lose through these delayed enrollments. However, during the pandemic, a Virginia school division was accused of overstating its annual enrollment by 100-150 students. This overstatement was alleged to have resulted in \$700,000 in state-related funding fraud (Merod, 2021). If this is accurate, a one student increase in Average Daily Membership (described in detail below), is equivalent to between \$4,667 and \$7,000 per student.

#### An Overview of RPS

Richmond Public Schools is a mid-sized school division in Central Virginia. During the 2020-2021 school year, about 28,000 students were enrolled in RPS. Of those students, about 55% identified as Black, 21% identified as White, 19% identified as Hispanic, with the other 5% identifying as multiple races or other races. (Virginia Department of Education School Quality Profiles, 2022). The number of Hispanic students in RPS has been steadily increasing from 3% of students in the 2004-2005 school year (Reid, 2015) to its current rate of about 19%. Additionally, about 13% of students in RPS are identified as having disabilities and over half of students are identified as being economically disadvantaged (Virginia Department of Education School Quality Profiles, 2022).

#### RPS's Role in Enrollment

Richmond Public Schools controls the majority of the enrollment process and how it is communicated. As such, they are uniquely positioned to enact positive change in this area. Though delayed enrollment doesn't fit squarely into any of the top 10 goals in

RPS's Strategic Plan, Dreams4RPS, it furthers work towards Goal 5: equity, Goal 7: enrollment, and Goal 10: funding (Page & Kamras, 2018).

Goal 5 states a desire to "decrease the gaps in proficiency and advanced rates – by race, economic status, ELL status, and IEP status" (Page & Kamras, 2018). Because I have received an indication from RPS that delayed enrollments are more likely to occur in schools with larger shares of students for whom English is not their first language and students with low socioeconomic status, it stands to reason that this problem is working against their equity ambitions. Missing school due to delayed enrollment means that students have less time in school to work towards academic proficiency.

RPS also has a goal to "increase student enrollment – overall and for each subgroup" (Page & Kamras, 2018). If the goal is to increase enrollment overall, it seems that having systems in place to decrease instances of delayed enrollment could help RPS reach this goal.

Finally, RPS hopes to "increase funding from local, state, federal, and philanthropic sources" (Page & Kamras, 2018). The Fall Membership Count (discussed in depth below) determines the amount of funding the Virginia Department of Education (VDOE) requests from the General Assembly. Having an accurate number of students will ensure that VDOE requests the correct amount of money. If RPS ends up with more students in the spring Average Daily Membership count (discussed in depth below), they will have less money to spend per student which is the antithesis of their stated goal. Additionally, accurate counts will ensure that RPS receives the most money possible from federal sources, much of which is directly tied to educating students who are English Language Learners and of low socioeconomic status.

# Background

#### **Enrollment Process**

The process of enrollment is fairly streamlined, and RPS has worked to make it as efficient as possible. Interestingly, enrollment moved entirely online due to the COVID-19 pandemic. After students returned to in-person schooling, RPS continued using the online only enrollment model. Prior to the pandemic, caregivers could enroll in person at the school their child would attend.

In order to enroll in RPS, caregivers must visit the RPS website and complete the online form using either an email address or a phone number. The site has a sample enrollment form caregivers can use to see what information is needed as well as a list of document requirements. After filling out the online form, SIS operations staff at the student's assigned schools check the enrollment form for accuracy and call caregivers to bring in their child's birth certificate. According to §22.1-3.1 of the Code of Virginia, the birth certificate must be presented in person (Virginia LIS, n.d.). Additionally, students must enroll in kindergarten even if they previously attended an RPS preschool.

# Fall Membership Report and Average Daily Membership

The VDOE uses two main counts to determine how much money each school division in the commonwealth receives per year. The first count is called the Fall Membership Report. It is tallied on September 30 each year. This is a head count of all the students in Virginia on that date. VDOE uses this information to determine how much money to ask the Virginia General Assembly to allocate to public schools in the following year's budget. Direct funds that are allocated using Fall Membership include English as a Second Language funds, early reading intervention, K-3 class size reductions, SOL algebra readiness, and Virginia Preschool Initiative (VDOE, 2018).

The Average Daily Membership (ADM) is a count of the number of students who were members of a school division on average for each day school was in session that year (VDOE, 2017). This number determines how the money from the General Assembly is allocated to each school division throughout the Commonwealth. Programs funded using ADM are all Standards of Quality funds, which include basic aid, special education, career and technical education, gifted education, and textbooks. ADM is also used to determine the at-risk add-on, which is additional funding for students determined to be at risk based on demographic factors, and supplemental lottery per pupil allocation (VDOE, 2018).

There is also an End of Year Membership Count, but this count is not related to the funding of public schools in Virginia.

Figure 1: Enrollment Processes in Comparable Districts

What are comparable districts doing?			
	RPS	Dayton, Ohio	Birmingham, Alabama
District Enrollment	28,240	12,571	25,104
Percent Black Students	55%	67%¹	96%
Percent White Students	21%	25%	1%
Percent Hispanic Students	19%	3%	3%
Percent of Students with Free Reduced Lunch	71%	71%	79%
Enrollment Process	1. Create enrollment account 2. Complete online enrollment form 3. Upload required documents 4. Submit form 5. Wait to hear from child's school 6. Take birth certificate to child's school	1. Complete online enrollment form 2. Gather required documents 3. Make an appointment with the enrollment center to complete enrollment in person <sup>2</sup>	<ol> <li>Create enrollment site account</li> <li>Complete online enrollment form</li> <li>Upload required documents</li> <li>Submit form<sup>3</sup></li> </ol>

<sup>&</sup>lt;sup>1</sup> Demographic information for Dayton, OH and Birmingham, AL acquired from the Stanford Education Data Archive (SEDA)

<sup>&</sup>lt;sup>2</sup> Enrollment process information from Dayton Public Schools website <sup>3</sup> Enrollment process information from Birmingham Public Schools website

#### Potential Barriers to On-Time Enrollment

One potential barrier to on-time enrollment is caregivers not knowing about the need to enroll or the process of enrollment. RPS announces enrollment on its website and through its established communication channels—social media, newsletters from school, and the Remind app, which is an app teachers can use to communicate with caregivers without using their personal phone number. These methods are only useful for caregivers who already interact with RPS. If a caregiver does not have an existing relationship with RPS, it is unlikely that they will learn about enrollment through these methods.

Another barrier to on-time enrollment is the portion of the enrollment form that requires families to upload documents including two proofs of residency, immunization records, and a recent physical examination. RPS reports that a large portion of enrollment dropoffs occur when caregivers are asked to upload documents. Caregivers without technology access or technology literacy may struggle with this step in the process.

# **Existing Evidence**

This section describes existing literature on the take up of social benefit programs. It discusses factors that decrease the likelihood of take up and how they relate to the problem of delayed enrollments. It goes on to explore strategies that have been used successfully to increase take up of social benefits. Finally, there is discussion about how those strategies might be applied to the problem of delayed enrollments.

#### Literature Limitations

Despite the implications of missing school due to a delayed enrollment, very little research has been conducted on ways to increase on-time enrollment in public schools. As such, the research in this literature review draws on information from other domains. I will discuss how it can be applied in the context of public school enrollment throughout the paper.

# What We Know About Take-Up

Take-up refers to the likelihood that those eligible for a service actually use that service. It is generally used in conversation with social benefits. These are typically optional and require application and eligibility confirmation to receive. Although public school is mandatory rather than optional, it does confer benefits through attendance. Lessons from the broader literature on take-up of social benefits can be applied to on-time enrollment in public schools.

Research suggests that stigma, level of program benefits, inconvenience and lack of information generally impact whether or not eligible participants take up services (Remler & Glied, 2002; Currie, 2004; Stuber et al., 2000). Level of program benefits refers to the amount of financial or societal gain participants can expect to receive should they qualify. If the level of program benefits are relatively low, it is less likely that those who are eligible will complete the process it takes to receive those benefits (Daponte, Sanders, & Taylore, 1999). It seems unlikely that stigma and level of program benefits are at play in the case of enrollment, as there is little stigma attached to attending public school and the level of program benefits don't typically vary within a district.

Inconvenience and lack of information are more salient to the problem of delayed enrollment. One study surveyed 1,400 low-income families received health care at community health-care centers. The authors found that those who perceived the Medicaid application as confusing, long, or complicated were 1.8 times more likely to be eligible but not enrolled and those who felt Medicaid office hours were inconvenient were 1.7 times more likely to be eligible but unenrolled compared to those who did not cite these concerns (Stuber et al., 2000). This indicates that an inconvenient process can deter eligible recipients from taking up beneficial services. The same study found that participants who expressed confusion about whether or not they were eligible for Medicaid were 1.8 times less likely to be eligible but unenrolled than those who did not express those concerns (Stuber et al., 2000). This indicates that information on eligibility and the process of how to enroll could help decrease the gap in those who are eligible for a social benefit and those who enroll in it.

Other studies echo the power of information to increase take up of social services. One study on food stamps found that information on program benefits increased take up of the service by 36 percentage points (Daponte, Sanders, & Taylor, 1999). It is important to note that the sample in this study was quite small, so small increases in take up led to large gains. Another study found that participation in the Qualified Medicare Beneficiary Program (QMB), was largely predicted by knowledge of the program. Authors found that only 7% of eligible beneficiaries had heard of the program; of those, 60% were participating in the program compared to 40% of those who had not heard of QMB. Additionally, 16% of those who were eligible but not enrolled in QMB cited not knowing about the program as their reason for not using it (Neumann, Bernardin, Evans, & Bayer, 1995). It is interesting that those who hadn't heard of the program were enrolled at all; however, this indicates that simply knowing about a program can increase its take-up.

#### Door-to-Door Outreach

Door-to-door canvassing is a method traditionally used to mobilize voters during elections. One study suggests that face to face contact drastically increases the likelihood of someone voting in six different cities in the United States (Green, Gerber, & Nickerson, 2003). Another study in California found that face to face contact during a school board race increased voter turnout when the canvasser and the respondent were of the same race (Michelson, 2003).

Another instance of door-to-door outreach resulting in an uptake of social services occurred in Durham, North Carolina. Researchers conducted 15 outreach events in neighborhoods where recent LatinX immigrants lived. These were primarily in urban neighborhoods throughout the county. Local community members were trained in the content and then went door-to-door to talk with participants about HIV testing. Of those contacted, 75% consented to rapid HIV testing (Seña et al., 2010).

In both canvassing during elections and public health outreach, it was important that contact was made by someone of a similar race and that materials were provided in the participants' native language. These are lessons RPS could heed if it considers using door-to-door outreach to increase early enrollment. Though it may not be possible to meet these conditions in all cases, it should be considered.

#### Direct Mail Outreach

Public information campaigns can take the form of radio, television, or social media advertisements, telemarketing, or direct mail (Wakefield et al., 2010). Regardless of the medium, public information outreach must succeed in four tasks: capturing the attention of the right audience, delivering a credible message, delivering a message that influences the audience, and creating social contexts that lead to desired outcomes to be effective (Weiss & Tschirhart 1994).

There is some evidence that outreach efforts have increased take-up of social safety net initiatives such as Supplemental Nutrition Assistant Program (SNAP) or the Earned Income Tax Credit (EITC). One 2018 study suggested that receiving an informational mailer increased take-up of SNAP by five percentage points, to 11%. Further, receiving an informational mailer and a phone call with filing assistance increased enrollments to 18% (Finklestein & Notowidigdo, 2019).

Another study found that low awareness and complexity accounted for low take-up of the EITC. A mailer with information on the program's benefits and a simple filing worksheet resulted in 31% of participants filing of the EITC compared to 23% of those who received a simple notice (Bhargave & Manoli, 2015). This indicates that any mailers should be simple enough to understand and should highlight the benefits provided by the service. Closer to home, results were less striking. In a 2012, researchers found that public assistance recipients who received an informational mailer and phone call were 2.4 percentage points more likely to file taxes but only 0.9 percentage points more likely to claim the EITC, a difference that was not statistically significant (Beecroft, 2012).

Additionally, it is important to note that SNAP and EITC are not perfectly analogous to school registration, as they are additional benefits for which one must be eligible whereas school is mandatory and available to all. However, this evidence of increased take-up can be cautiously applied to the problem of delayed enrollments.

#### Conclusion

This section explored reasons why eligible individuals might not enroll in programs that would benefit them. The literature on take up echoes the concerns that lead to delayed enrollments, namely a lack of information and a complicated process. It seems likely that inconvenience and lack of information are large drivers of the problem of delayed enrollment. As such, it is prudent to take lessons from the literature on ways to increase take up.

For one, it seems clear that information and assistance with the process is more likely to increase take-up than is information alone. Additionally, information should be presented in a simple, easy-to-read manner to ensure that everyone is able to understand it. This could include presenting information in multiple languages to ensure broad access to the information. Information should highlight the benefits of any programs so that participants understand the upsides to enrolling. Finally, information about the program seems not to be enough. It will be vital to include information about how to enroll in any information sent out to those who are eligible.

# **Evaluative Criteria**

Each proposed alternative will be rated on four criteria: expected enrollment increase, administrative feasibility, cost, and equity. Each criterion will have its own measurement system, which will be indicated in its description below. The criteria are weighted equally to allow for a holistic evaluation of each alternative.

Enrollment increase and equity are drawn directly from RPS's strategic plan, Dreams4RPS, which asserts a desire to increase funding from all sources and decrease gaps in proficient and advanced rates by race, economic status, and ELL status (Page & Kamras, 2018). Administrative feasibility was chosen to measure the capacity that would be required within RPS to complete each alternative. Cost is considered as RPS is facing budget shortfalls following the onset of the COVID-19 pandemic (Graff, 2022).

#### Enrollment Increase

Effectiveness will measure the expected decrease in delayed enrollments as a result of each policy alternative. Each alternative's effectiveness will be evaluated by considering the effectiveness of past similar interventions, information from experts in the field, and input from my client. Where similar interventions are unavailable, I will use information gathered in interviews with other districts.

# Administrative Feasibility

Administrative feasibility will inform whether the alternative is possible within the current RPS structure. I will consider how many teams would need to collaborate to implement the alternative as one aspect. If it requires no collaboration outside of the enrollment department it will receive a score of high. If it would require collaboration between 2-3 departments, it will receive a score of medium. If it would require collaboration between more than four departments, it will receive a rating of low.

# Cost

This criterion will measure how much money it would take RPS to implement each alternative. This will include salaries, internal operating costs, and external spending required. I will use publicly available RPS data to determine salaries. Additionally, I will use market research to determine the financial costs of external spending.

#### **Equity**

RPS's stated goals include increasing equity within their school division. Additionally, it is hypothesized that this issue has a greater impact on students in specific areas of the

city—specifically south of the James River and in the East End. As such, this criterion will measure the degree to which each alternative will serve those parts of the city. Equity will be rated as high, medium, or low based on its ability to serve various parts of the city.

# Alternatives

# Alternative 1: Status Quo

Currently, RPS enrollment opens on March 1. This is one month earlier than previous years, when enrollment opened on April 1 of each year. Caregivers can log onto the EnrollRPS website, complete demographic information forms, and upload proof of residency documents, students' physicals, and immunization records. After completing the forms, caregivers wait to get approval from the students' school. At that time, caregivers take a physical copy of a student's birth certificate to the child's school.

#### **Enrollment Increase:**

Because RPS recently moved the enrollment date from April 1 to March 1, it seems reasonable to assume that there may be a modest increase in on-time enrollments.

## Administrative Feasibility:

This alternative would not require any changes from RPS in terms of implementation. Administrative feasibility is rated **high** for this alternative.

#### Cost:

The infrastructure for this alternative is already in place. As such this alternative is cost neutral.

#### Equity:

The status quo has resulted in the most delayed enrollments being at schools south of the James River. As of September 23, 2021, three of the top four sites with delayed enrollments were South of the river. As such, equity for this alternative is ranked as **low**.

#### Alternative 2: Enrollment on Wheels

Enrollment on Wheels is most similar to door-to-door outreach. Door-to-door canvassing is a method traditionally used to mobilize voters during elections. In this case, it would look like enrollment personnel teaming up with bus drivers to take enrollment to communities where delayed enrollments are most likely to occur. This would require looking at historical data to determine which neighborhoods to visit. After determining those areas, enrollment staff would work with the Community Engagement Team to get out information about what is required to enroll. The Community Engagement Team would pass out informational fliers on their bi-weekly community walks.

Additionally, this would require collaboration with an information technology (IT) team. They would ensure that laptops, iPads, and hot spots were available and in good working condition for the enrollment team to take out with them.

This would take place in the summer and perhaps once per week. Each week, the buses could go to different areas in Richmond to ensure that each area is getting an opportunity to take advantage of this service. It would be important to advertise these services beforehand as well as informing caregivers of what paperwork they would need to fully enroll their student in school. This could be done with either traditional media channels mentioned above or through partnerships with community experts.

As the bus goes through the neighborhoods, caregivers could bring their materials to the bus to enroll their students in school. They could also show their birth certificates to enrollment professionals at this time. This would reduce the need for families to physically take their birth certificates to their assigned schools. This alternative would also decrease the impact of a lack of technology access and technology literacy, as there would be employees on site to help with the process.

#### **Enrollment Increase:**

One voting outreach study found that voters who were contacted via face-to-face outreach were between .2 and 14.4 percentage points more likely to vote than those who were not contacted. Voting impacts were significant in every site but one—Raleigh at 0.2 percentage points (Green, Gerber, & Nickerson, 2008). Another study found that doorto-door canvassing increased voter turnout among Latino voters by between 1.6 and 7.1 percentage points when they emphasized civic duties and between 1.3 and 3.1 percentage points among non-Latino voters (Michelson, 2003). It seems likely that enrollment on wheels will have a less significant impact that direct door-to-door canvassing but that it could still have a significant impact on delayed enrollment.

We can conservatively estimate that these interventions will increase on time enrollment by 98 students based on low estimates from the interventions above (2 percentage point increase). If the intervention trends more towards the higher end of similar programs (7 percentage point increase), we might expect to increase on-time enrollment by 350 students.

## Administrative Feasibility:

This intervention would require significant collaboration between departments within RPS. It would require the enrollment team, the transportation team, the information technology department, and the community engagement team. As such, administrative feasibility for this alternative is ranked as **low**.

#### Cost:4

Assuming one 3-hour trip per week of the summer, this would take about 27 hours. A bus driver's hourly rate in the summer is about \$25.62, which would cost about \$691.86. Fuel costs would be about \$138.02. 27 hours of an enrollment specialist's time would cost about \$766.35. RPS could use existing laptops and hotspots, so those would not cost additional money. This alternative would cost \$1,596.23.

# Equity:

This alternative is poised to reach those who need enrollment help the most. It has the potential to reach all parts of Richmond and could reach any of the highest needs neighborhoods. As such, equity for this alternative is ranked as **high**.

#### Alternative 3: Preschool Enrollment Events

Of the nearly 5,800 enrollments RPS received this year, about 1,800 of them were kindergarten enrollments. All rising kindergarteners must enroll even if they attended an RPS preschool. Of those 1,800 kindergarten enrollments, my client estimates that about 1,000 of them, or 55% were students who had attended RPS preschools. As such, capturing RPS preschool students before school lets out for summer could be a vital tool in decreasing the number of delayed enrollments. RPS currently has five preschool sites. There are about 15 weeks between the opening of the enrollment window and the last day of school.

Once per week, RPS enrollment staff could visit each preschool site to help caregivers complete the online enrollment form and upload their documents. This would require coordination with the sites to get information to caregivers about bringing the documents to school at the correct time. Translators would likely need to be available as well. It would be important to determine with the schools which days and times would work best for families at their school to allow these events to reach as many families as possible. It is important to note that this alternative would only reach existing RPS

<sup>&</sup>lt;sup>4</sup> All cost calculations can be found in Appendix A

families; however, since many of the delayed enrollments come from kindergarten, this could significantly impact the total number.

#### **Enrollment Increase:**

Of the 918 enrollments that were not complete on September 23, only one of the top four sites with outstanding enrollments was an elementary school. Dividing the 918 by the four schools would be about 230 delayed enrollments per school. I then divided that number by six to account for each grade in an elementary school. Doing so indicates that this alternative would capture about 38 students.

## Administrative Feasibility:

This alternative would require collaboration between the enrollment team and individual schools. As such, this alternative is ranked as **medium**.

#### Cost:

It would cost about \$1,703.40 for two enrollment specialists to attend 15, 2-hour events.

## Equity:

This alternative would be most useful for families with students already attending RPS preschools, similar to the current enrollment efforts. It seems unlikely that this alternative would reach many new families. However, it could be targeted to areas of the city that see the most delayed enrollments. As such, this alternative is ranked medium.

#### Alternative 4: Informational Outreach

Informational outreach would entail RPS creating a mailer to go to every household within the city of Richmond. RPS should include information on how to determine your child's school, how to register children for school, documents necessary to register, and the website. RPS could consider adding a QR code to the mailer to send recipients directly to the enrollment page. It would be important for the mailer to be in languages other than English to meet the needs of the growing immigrant community. The next most spoken language in Richmond is Spanish (Data USA, n.d.).

In the most recent census, there were 90,301 households in Richmond (Census Bureau, 2021). Sending to each household rather than each household with children would mitigate the chance of missing households with children or those who moved after the census. Additionally, it would remit the need for research on which households have children. After sending out the information on how to go about enrolling their children in school, RPS could then call with assistance to anyone who begins an enrollment but

does not complete it within two weeks. This timeline would ensure that RPS is not calling everyone who begins the process and may have simply taken a break but does allow RPS to reach those who may be having trouble with the enrollment process.

#### **Enrollment Increase:**

We could conservatively estimate that these interventions will increase on time enrollment by 98 students based on low estimates from the interventions above (2 percentage point increase). If the intervention trends more towards the higher end of similar programs (8 percentage point increase), we might expect to increase on-time enrollment by 400 students.

# Administrative Feasibility:

This intervention could be implemented solely by the enrollment team. As such, it would require no cross-departmental collaboration. However, since document upload has been stated as a sticking point for enrollments, this could result in enrollment teams needing to undertake a large amount of phone calls. This alternative is rate high in terms of its administrative feasibility.

#### Cost:

According to a study completed in Virginia, mailers cost about \$0.35 each (Beecroft, 2012). Given the 90,301 households in Richmond, it would cost about \$31,605.35 to send all mailers. If it is true that delayed enrollment is primarily an issue south of the river, it seems plausible mailers may only need to be sent to that area, which would cost much less. Assuming about half of the households are south of the James and in the East End, that would be about \$15,802.68.

Follow up phone calls to caregivers who had begun the application but not completed it within two weeks could be completed by enrollment staff members. Assuming each of the 918 delayed enrolments would require a 20-minute trouble-shooting phone call, it would require about 306 hours of calls. This would cost about \$8,687.34 given an hourly rate of \$28.39 for enrollment specialists. This alternative would cost \$40,292.69 overall.

#### Equity:

Because informational mailers would be sent to every household in the city and phone calls would be made to those who begin but do not complete the enrollment process within two weeks, it is likely that this intervention would be more useful for those who either do not have the technological literacy or ability to complete the process. However, the phone calls would not capture those who simply do not begin the enrollment process despite receiving the informational mailer. Additionally, as the population that is thought to be most impacted by delayed enrollments is somewhat transitory, a one-time mailer risks missing some of these households. As such, the equity of this alternative is rated medium.

# **Outcomes Matrix**

	Status Quo	Enrollment on	Preschool	Informational
		Wheels	Enrollment	Outreach
			Events	
Enrollment	1-10 students	98-350	38 students	98-400
Increase		students		students
(Low and High				
Estimates				
Shown)				
Administrative	high	low	medium	high
Feasibility				
Cost	\$0	\$1,596.23	\$1,703.40	\$40,292.69
Equity	low	high	medium	medium

# Recommendation

Based upon the above analysis, I recommend that RPS implement Alternative 2: Enrollment on Wheels. Though the logistics of planning and executing such a process may be difficult, it combines a relatively high impact on increased on-time enrollments, a lower cost, and a relatively high level of equity that make it the most promising avenue to pursue. The high costs of information outreach could make it an unreasonable option, despite its administrative feasibility. RPS has indicated a desire to pursue cheaper alternatives due to impending budget cuts. Pre-school enrollment events, while promising in that each preschooler must re-enroll for kindergarten, seem less effective. This is because it is hard to imagine that those already enrolled in RPS will not be willing to do so again. Additionally, these caregivers have the most access to existing RPS communication and institutional knowledge. Finally, though the status quo has recently changed in that enrollment will open earlier, it is hard to imagine that without further outreach efforts more on-time enrollments will be achieved.

# **Implementation**

To move forward with Enrollment on Wheels, enrollment specialists should work to bring in stakeholders from various departments. This endeavor would require collaboration between many departments. It would be vital to bring in the heads of each involved department: Chief Engagement Officer Dr. Shadae, Chief Operating Officer Alana Agosto Gonzalez, and Director of Strategic Planning Luke Hostetter. Once a plan is in place, it would be presented to Superintendent Jason Kamras.

## *Implementation Steps*

In order to begin enrollment on wheels, RPS should take the following steps:

- 1. Determine where exactly most delayed enrollments occur. This could be done using previous enrollment data or by considering the schools at which this problem is most likely to occur.
- 2. Work with the community engagement team to determine potential sites and/or for rolling enrollment visits. For example, it may be beneficial to visit an apartment complex where many recent immigrants tend to live or complexes that tend to have high eviction rates and thus resident turnover.
- 3. Work with the IT department to determine which equipment can be used and whether any technology upgrades need to be made to existing equipment in order to be used for this process. Equipment required would likely include laptops to fill out the enrollment form, hotspots to connect to the internet, and iPads or iPhones to take and upload pictures of documents required for enrollment. It is possible that RPS could use just iPads or iPhones if they are available.
- 4. Create schedules and work with the community engagement team to pass out flyers on their weekly community walks so that residents know when to expect the rolling enrollment centers to visit their neighborhoods.
- 5. Publish schedules on existing RPS social media channels and possibly work with local news networks to get the word out about the efforts.
- 6. Determine which enrollment specialists will go out on these trips and ensure they are trained to use the required technology.
- 7. Put in a request with the transportation team to get a bus that will meet the needs of the team. It is possible that something like the Lit Limo, which already travels to community members to pass out library books, would be the best vehicle for the job. If so, additional collaboration with media specialists would be required.

## Stakeholder Perspectives

Aside from the stakeholders presented in the steps above, there are other perspectives that may need to be considered.

Caregivers of families who would not be served by this effort: If Enrollment on Wheels does not visit every neighborhood in Richmond, it is possible that those who are not served would feel resentful of the opportunities provided to others. RPS would do well to communicate the reasons they choose the sites they do to increase transparency with the whole RPS community. Additionally, RPS could emphasize how targeting specific areas would benefit the whole school division through increases in overall funding by getting accurate enrollment counts.

RPS School Board Members: The Richmond City School Board serves to make decisions about how RPS schools are run day-to-day as well as approving the budget. It seems likely that they would be supportive of efforts to increase the level of state funding available to the division. However, they may wish to understand why exactly certain parts of the city will be prioritized over others. It will be important to emphasize the benefits that would accrue to the whole division by solving this problem.

Community partners: Community leaders could be leveraged in this effort as experts on the needs of their neighbors. Additionally, this could help strengthen the bond between RPS and the communities it serves. Local daycares, churches, apartment complexes and businesses could serve as locations to host enrollment events and perhaps offer incentives for caregivers to come enroll their students.

#### Risks and Considerations

It is important to note that there is potential for setbacks and risks associated with implementing Enrollment on Wheels. Additionally, there are upcoming changes in Richmond that could impact enrollment generally and Enrollment on Wheels specifically. This section will discuss considerations for minimizing the impact of these risks, should they occur.

Going to the wrong areas: It is possible that past trends may not hold in making decisions about where enrollment on wheels should visit. This could mean that the efforts to increase on-time enrollments could be fruitless or could result in even more delayed enrollments. It will be important to ensure that the right sites are chosen. To guard against this, RPS could choose to make more trips or visit many parts of the city regardless of previous enrollment trends.

Broken technology: It is possible that technology used in these efforts could be harmed or broken beyond repair. RPS should invest in protective cases to ensure that this is not likely. However, it should also consider what it would do if the technology was rendered useless. Perhaps setting aside some money for replacements could be considered.

Budget cuts: RPS currently faces the potential of a nearly \$20 million deficit (Graff, 2022). It is possible that RPS will not be able to expend funding on new efforts. However, this effort seems to be relatively inexpensive and could bring in significant funding if it were to be successful. RPS should consider that the funds raised through increased on-time enrollments would help offset lost funds.

## Implications of Upcoming Changes

#### Universal Pre-K:

Richmond Public Schools currently offers Pre-K for students who are eligible through the Virginia Preschool Initiative, Early Head Start, Head Start, and Early Childhood Special Education. In September of 2020, Richmond Mayor Lavar Stoney announced plans for universal Pre-K in the city of Richmond byt 2025. This would include additional public preschools throughout the city (Freeman Jr., 2020). It is unclear whether all of these preschools would be in Richmond City Public Schools, as universal Pre-K often includes a variety of providers including public schools, private providers, and head start centers (Reid et al., 2019).

One news network in Richmond estimated that there are at least 700 Richmond City children not currently enrolled in preschool (NBC12, 2020). Since about one-third of delayed enrollments were in preschool, it seems likely that increasing the pool of preschoolers would also increase the number of delayed enrollments. However, with universal Pre-K, RPS may be better able to target children entering kindergarten, who are required to re-enroll in school by state law so that the problem does not persist.

## Year-Round School:

In March of this year, the RPS School Board committed to a year-round schedule for the 2022-2023 school year (Coleburn, 2021). All four proposed options would see school starting in August on either the 15th, 22nd, or 29th (2022-2023 Calendar, n.d.). School typically starts the Tuesday after Labor Day, so any of the proposed start dates would be at least a week earlier. This could significantly reduce the amount of time RPS to increase enrollment between the first of April and the start of school. It is unclear whether this would increase the length of delayed enrollments or simply push them to an earlier month. It does not seem likely that the earlier start date would decrease the number of delayed enrollments on its own.

# Appendix A: Enrollment Increase Calculations

Alternative 2 Effectiveness Calculations

5,026 total enrollments; 918 delayed (18.3%); 4,108 on time (81.7%)

Increase	New on-time	Number of on-time	Increase in on-time
	enrollment rate	enrollments	enrollments
2 percentage	83.7%	4,206	98 students
points			
7 percentage	88.7%	4,458	350 students
points			

Alternative 3 Effectiveness Calculations

918 incomplete enrollments on September 23, 2021 x .25 = 229.5

229.5/6 (grades in an elementary school) = **38.25** student increase

Alternative 4 Effectiveness Calculations

5,026 total enrollments; 918 delayed (18.3%); 4108 on time (81.7%)

Increase	New on-time	Number of on-time	Increase in on-time
	enrollment rate	enrollments	enrollments
2 percentage points	83.7%	4,206	98 students
8 percentage points	89.7%	4,508	400 students

# Appendix B: Cost Calculations

# Alternative 2 Cost Calculations

Mailer cost	\$31,605.35	\$0.35 per mailer <sup>5</sup> x 90,301 households
Phone calls	\$8,687.34	\$28.39 <sup>6</sup> per hour of enrollment specialists time x 306 hours of phone calls
		cans
Total cost	\$40,292.69	

# Alternative 3 Cost Calculations

Bus driver cost	\$691.86	\$25.62 per hour x 27 hours
Enrollment specialist cost	\$766.35	\$28.39 per hour x 27 hours
Fuel cost	\$138.02	\$5.112 <sup>7</sup> per gallon of diesel x 270 miles
		of driving at $\sim \! 10$ miles per gallon $^8$
Total cost	\$1,596.23	

# Alternative 4 Cost Calculations

2 enrollment specialists	\$1,703.40	(\$28.37 per hour x 30 hours) x 2
costs		specialists
Total cost	\$1703.40	

<sup>&</sup>lt;sup>5</sup> Cost from Beecroft, 2021 <sup>6</sup> Hourly salaries from RPS Salary schedules <sup>7</sup> Diesel costs from AAA on March 15, 2022 <sup>8</sup> Miles per gallon from Motor Ask

# References

- § 22.1-3.1. Birth certificates required upon admission; required notice to the local law-enforcement agency. (n.d.). Virginia LIS. Retrieved November 29, 2021, from https://law.lis.virginia.gov/vacode/22.1-3.1/
- 2022-2023 Calendar—Richmond Public Schools. (n.d.). Richmond Public School. https://www.rvaschools.net/news/22-23-calendar
- AAA Gas Prices. (2022, March 15). AAA. https://gasprices.aaa.com/?state=VA
- Andrews, M. (2021, May 26). School Bus Mileage (Everything You Need To Know). MotorAsk. https://motorask.com/school-bus-mileage/
- Beecroft, E. (2012). EITC Take-Up by Recipients of Public Assistance in Virginia, and Results of a Low-Cost Experiment to Increase EITC Claims (p. 26). Virginia Department of Social Services. https://www.dss.virginia.gov/files/about/reports/financial assistance/eitc/2012/The Effectivenes s of EITC Outreach 2012-05-29.pdf
- Bhargava, S., & Manoli, D. (2015). Psychological Frictions and the Incomplete Take-Up of Social Benefits: Evidence from an IRS Field Experiment. American Economic Review, 105(11), 3489-3529. https://doi.org/10.1257/aer.20121493
- Bishop, A. (2021, September 23). Interview with Andrew Bishop re. State of the Problem [Personal communication].
- Coleburn, C. (2021, March 16). Richmond school leaders push back year-round school plan [News]. WTVR 6 News Richmond. https://www.wtvr.com/news/local-news/richmond-school-leaderspush-back-year-round-school-plan-to-2022-23
- Currie, J. (2004). The Take Up of Social Benefits (Working Paper No. 10488; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w10488

- Daponte, B. O., Sanders, S., & Taylor, L. (1999). Why Do Low-Income Households not Use Food Stamps? Evidence from an Experiment. The Journal of Human Resources, 34(3), 612–628. https://doi.org/10.2307/146382
- Enrollment and Records. (n.d.). [Education]. Dayton Public Schools. https://www.dps.k12.oh.us/students-parents/enroll/
- Finkelstein, A., & Notowidigdo, M. J. (2019). Take-Up and Targeting: Experimental Evidence from SNAP\*. The Quarterly Journal of Economics, 134(3), 1505–1556. https://doi.org/10.1093/qje/qjz013
- Freeman Jr., V. (2020, September 17). Richmond Mayor announces universal pre-K plan [News]. WTVR 6 News Richmond. https://www.wtvr.com/news/local-news/stoney-announces-universalpre-k-plan-receives-endorsement-from-virginia-leaders
- FY22 Salary Schedule September 13 2021.pdf. (2021, September 13). Richmond Public Schools. https://drive.google.com/file/d/1DVAL2Kr10WqhJdPlJL0rrWFMMTc LuOq/view?usp=embed facebook
- Graff, H. (2022, February 23). Richmond Public Schools facing potential \$19.5 million budget deficit [News]. NBC12. https://www.nbc12.com/2022/02/23/richmond-public-schools-facing-potential-195-million-budget-deficit/
- Green, D. P., Gerber, A. S., & Nickerson, D. W. (2008). Getting Out the Vote in Local Elections: Results from Six Door-to-Door Canvassing Experiments. The Journal of Politics, 65(4), 1083.
- Merod, A. (2021, July 8). WPS attendance policy amid pandemic did not follow state guidelines [News]. The Winchester Star. <a href="https://www.winchesterstar.com/winchester-star/vdoe-wps-">https://www.winchesterstar.com/winchester-star/vdoe-wps-</a> attendance-policy-amid-pandemic-did-not-follow-state-guidelines/article 15ffc182-19ca-50e9abe0-d6a26301fac5.html

- Michelson, M. R. (2003). Getting Out the Latino Vote: How Door-to-Door Canvassing Influences Voter Turnout in Rural Central California. *Political Behavior*, 25(3), 247–263. https://doi.org/10.1023/A:1025167607369
- Neumann, P. J., Bernardin, M. D., Evans, W. N., & Bayer, E. J. (1995). Participation in the Qualified Medicare Beneficiary Program. Health Care Financing Review, 17(2), 169–178.
- Newsroom, N. (n.d.). *Mayor Stoney proposes universal pre-K in Richmond*. Https://Www.Nbc12.Com. Retrieved November 19, 2021, from https://www.nbc12.com/2020/09/17/mayor-stoney-proposes-universal-pre-k-richmond/
- Page, D. C., & Kamras, J. (2018). Dreams 4RPS: The 2018-23 RPS Strategic Plan (p. 20) [Strategic Plan]. Richmond Public Schools. https://resources.finalsite.net/images/v1628623046/rvaschoolsnet/lnw0srtlvbvvy9izxgth/Dreams 4RPS-English.pdf
- Reardon, S., Kalogrides, D., Ho, A., Shear, B., Fahle, E., Jang, H., & Chavez, B. (2021). Stanford Education Data Archive (SEDA) (Version 4.1). Stanford Education Data Archive (SEDA). https://exhibits.stanford.edu/data/catalog/db586ns4974
- Registration and Student records / Registration. (n.d.). [Education]. Birmingham City Schools. https://www.bhamcityschools.org/Page/http%3A%2F%2Fwww.bhamcityschools.org%2Fsite%2 Fdefault.aspx%3FPageID%3D35255
- Reid, J. L., Melvin, S. A., Kagan, S. L., & Brooks-Gunn, J. (2019). Building a unified system for universal Pre-K The case of New York City | Elsevier Enhanced Reader. Children and Youth Services Review, 100, 15. https://doi.org/10.1016/j.childyouth.2019.02.030

- Reid, Z. (2015, April 19). Growth in Hispanic enrollment brings new challenges. Richmond Times-Dispatch. https://richmond.com/news/local/growth-in-hispanic-enrollment-brings-newchallenges/article 64cf37da-0571-58b2-a694-f0689a26f5f5.html
- Remler, D. K., & Glied, S. A. (2003). What Other Programs Can Teach Us: Increasing Participation in Health Insurance Programs. American Journal of Public Health, 93(1), 67–74. https://doi.org/10.2105/AJPH.93.1.67
- Richmond, VA. (n.d.). Data USA. Retrieved March 30, 2022, from https://datausa.io/profile/geo/richmond-va-31000US40060#demographics
- Stuber, J. P., Maloy, K. A., Rosenbaum, S., & Jones, K. C. (2000). Beyond Stigma: What Barriers Actually Affect the Decisions of Low-Income Families to Enroll in Medicaid? (Issue Brief No. 53; Health Policy and Management Issue Briefs, p. 19). The George Washington University.
- U.S. Census Bureau QuickFacts: Richmond city, Virginia. (2021, July). https://www.census.gov/quickfacts/fact/table/richmondcityvirginia/PST045221
- VDOE. (2018, September 19). Overview of Virginia K-12 Funding Formulas and Formula Approaches to Recognize Student Need. https://www.doe.virginia.gov/boe/meetings/2018/worksession/09-sep/overview-of-virginia-k12-funding-formulas.pptx
- *VDOE*: February 2017 Tip of the Week. (2017, February). https://www.doe.virginia.gov/info management/data collection/student record collection/tipof-the-week/2017/02-feb.shtml
- Virginia Department of Education School Quality Profiles. (2022, April 3). [VDOE]. Virginia School Quality Profiles. <a href="https://schoolquality.virginia.gov/divisions/richmond-city-public-schools">https://schoolquality.virginia.gov/divisions/richmond-city-public-schools</a>

- Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. Lancet (London, England), 376(9748), 1261-1271. https://doi.org/10.1016/S0140-6736(10)60809-4
- Weiss, J. A., & Tschirhart, M. (1994). Public Information Campaigns as Policy Instruments. Journal of Policy Analysis and Management, 13(1), 82–119. https://doi.org/10.2307/3325092