OIR

Office of Institutional Effectiveness and Student Success

NOVA Northern Virginia Community College

RESEARCH BRIEF

No. 01-18 January 2018

Identifying Low-Income Prospective Students in the NOVA Service Area

Introduction

Community colleges serve as gateways to socio-economic mobility and opportunity for students. However, low-income, or underserved, students often lack the guidance and support they need to prepare for college, apply to college, obtain financial aid, enroll in courses, and graduate. Often times, these students are the first in their family to apply to college and may require more guidance and resources to successfully navigate college.

This Brief provides data on low-income student populations from NOVA's service area by ZIP code and public high school in order to determine which populations may need more support to successfully apply to and navigate through college.

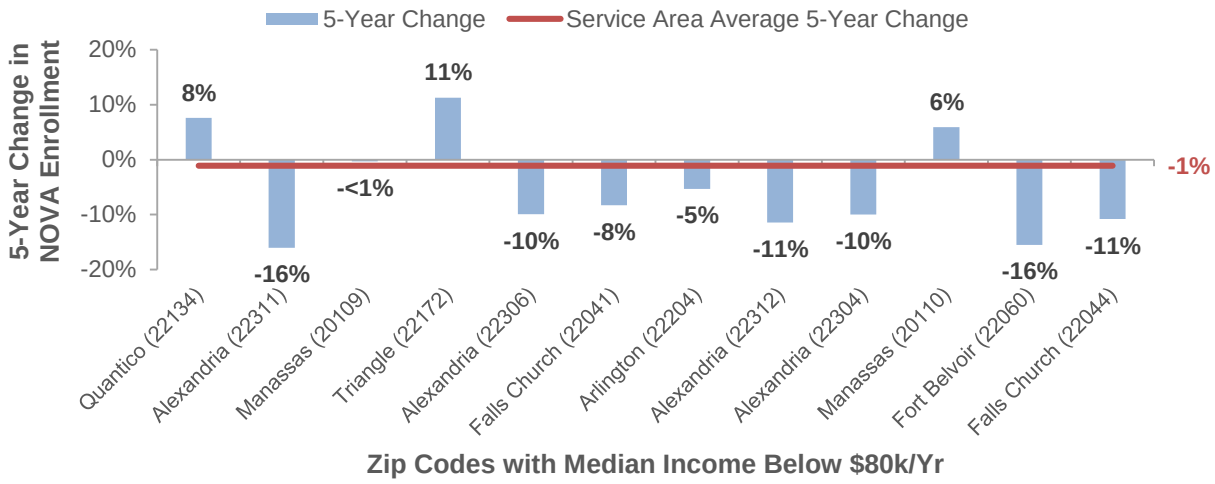
This Brief will help identify the public high schools or geographic areas that may benefit from additional recruitment efforts that would enhance NOVA's impact in low-income communities. Strategies to increase enrollment and retention of low-income students are presented. It is in NOVA's interest to advance both access to higher education for low-income students and success once they enroll.

Section 1. Low-Income ZIP Codes within NOVA's Service Area

By analyzing the population and median income by ZIP code for all localities within NOVA's service area, NOVA can begin a targeted recruitment initiative. In addition, this would allow NOVA to provide student support though the application, financial aid, and enrollment processes, as well as enhanced advising services, financial stability services, and guidance through graduation for this population of students.

- Enrollment at NOVA from the 13 ZIP codes with the lowest median incomes in the NOVA service area (less than $80,000/year) **decreased** over the five-year period from Fall 2012 to Fall 2016.
- In 9 of the 13 ZIP codes, the decrease was greater than the average for the whole NOVA service area (which was -1%). (See Figure 1, next page)

Figure 1. Five-Year Change in NOVA Enrollment by Zip Codes with Lowest Median Household Income (Below $80k/Year): From Fall 2012 to Fall 2016

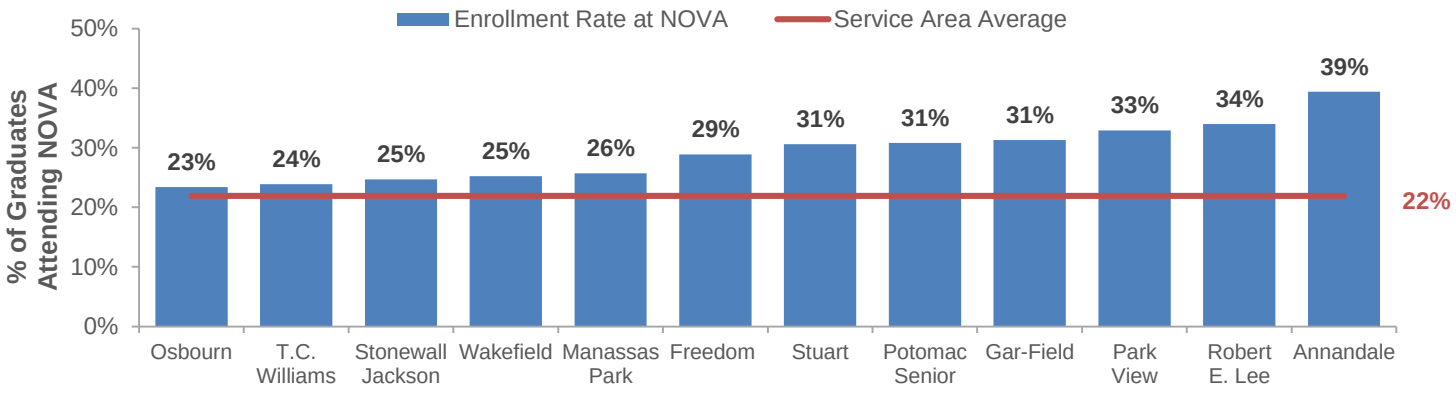


Section 2. Public High Schools in NOVA's Service Area with Economically Disadvantaged Students

Public high schools in the NOVA service area classify students as *economically disadvantaged* if they are eligible for free and reduced-price meals, receive temporary assistance, are eligible for Medicaid, are migrants, and/or are homeless. By focusing on high schools with the largest numbers of students who are classified as economically disadvantaged, NOVA can devise enrollment strategies with attention to low-income high school students.

- Figure 2, below, shows the NOVA enrollment rates at the 12 high schools in the NOVA service area with an economically disadvantaged student population of 40 percent or more.
- Each high school enrolls graduates at NOVA at a rate higher than the average for the entire NOVA service area (22 percent).

Figure 2. Area High Schools with the Highest Populations of Economically Disadvantaged Students by Enrollment Rate at NOVA: Fall 2016

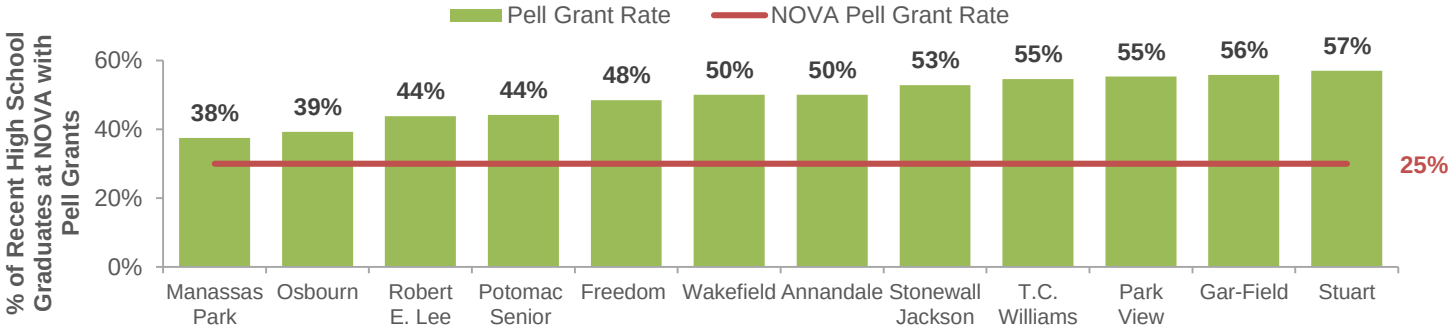


Section 3. Pell Grant Recipients

The Federal Pell Grant Program provides need-based grants to low-income students to promote access to undergraduate education.[1] Approximately one-third of undergraduate students nationwide received a Pell Grant in 2015-16.[2] According to a report by the Georgetown University Center on Education and the Workforce, the vast majority (about 73 percent) of Pell Grant recipients come from families with an annual income of $30,000 or less. As a result, the proportion of students receiving Pell Grants has become a widely acknowledged proxy for how many low-income students a college or university is serving.[3]

- Figure 3, below, shows the percentage of recent high school graduates enrolled at NOVA who have received a Pell Grant. This figure includes the 12 high schools in the service area with economically disadvantaged student populations of 40 percent or more.
- Twenty-five percent of students at NOVA received a Pell Grant during 2015-16, placing NOVA in the 17th percentile among all two-year, public, postsecondary institutions in the nation for Pell Grants awarded.[4] Each of these 12 high school has a Pell Grant rate higher than the overall rate for NOVA (25 percent).

Figure 3. Area High Schools with the Highest Populations of Economically Disadvantaged Students by Pell Grant Rate at NOVA: Fall 2016



- The percentage of NOVA students who have received a Pell Grant was low compared to other colleges in the Virginia Community College System (VCCS) (see Figure 4, next page) and peer institutions in the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) region. NOVA's peer institutions include 14 SACS colleges with similar institutional profiles (size, locale, etc.). (See Figure 5, next page)
- Eighteen of 22 VCCS schools and 13 of 14 of the SACS peer institutions enrolled a higher percentage of Pell Grant recipients than did NOVA. This is likely attributed to the higher median income of Northern Virginia's population compared to the locations of other colleges in the VCCS. Many students in the NOVA service area may not qualify for a Pell Grant based on their family's household income.

[1] U.S. Department of Education. https://www2.ed.gov/programs/fpg/index.html
[2] Source: College Board
[3] Carnevale, A.P. and Van Der Werf, M. (2017). *The 20% Solution: Selective Colleges Can Afford to Admit More Pell Grant Recipients.* Georgetown University Center on Education and the Workforce.
[4] Source: IPEDS

Figure 4. Percentage of Pell Grant Recipients and Median Household Income by VCCS College: 2015-16

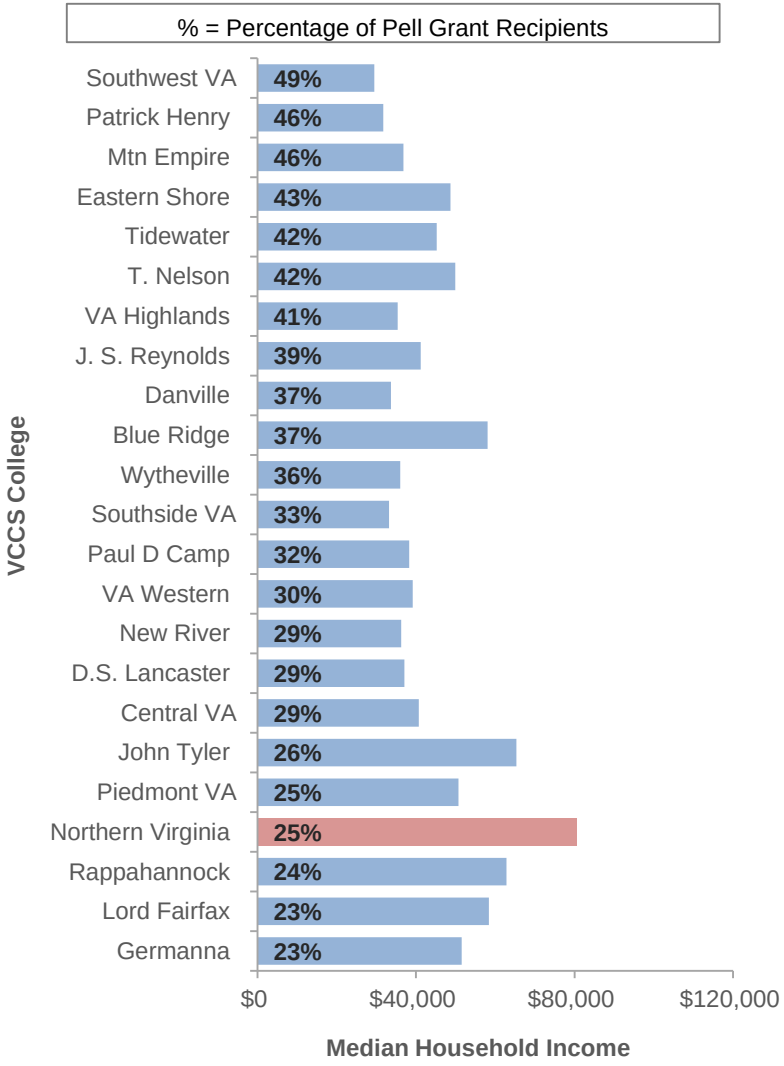
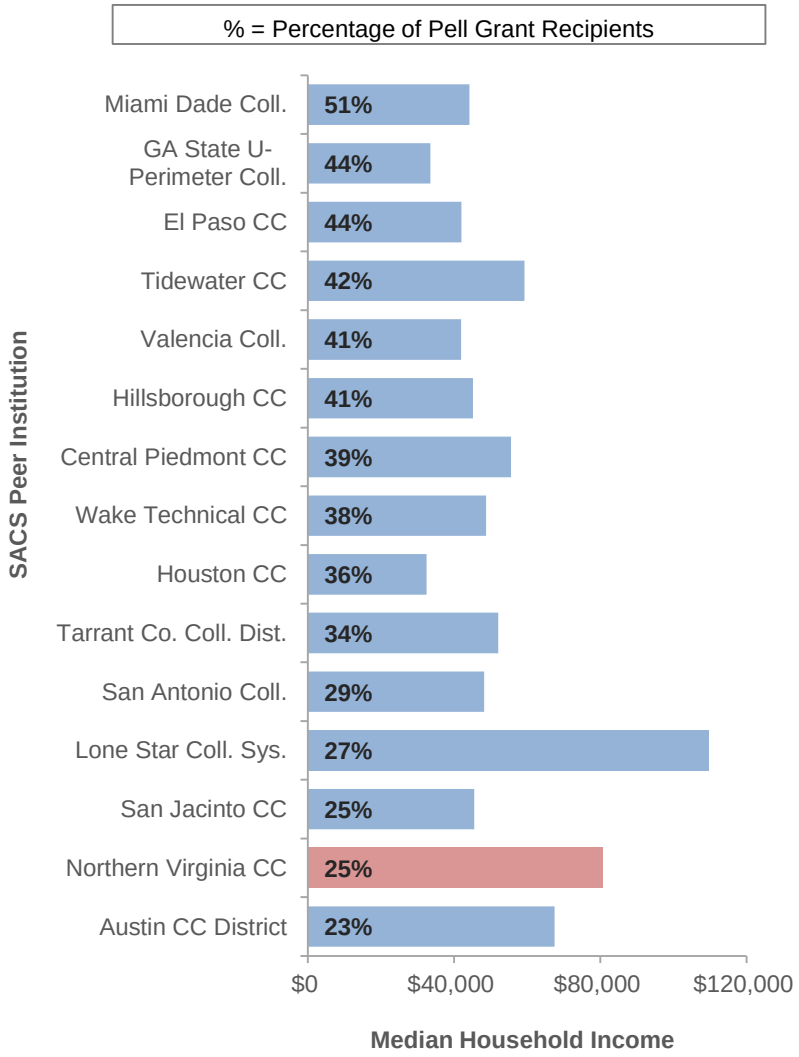


Figure 5. Percentage of Pell Grant Recipients and Median Household Income by SACS Peer Institution: 2015-16

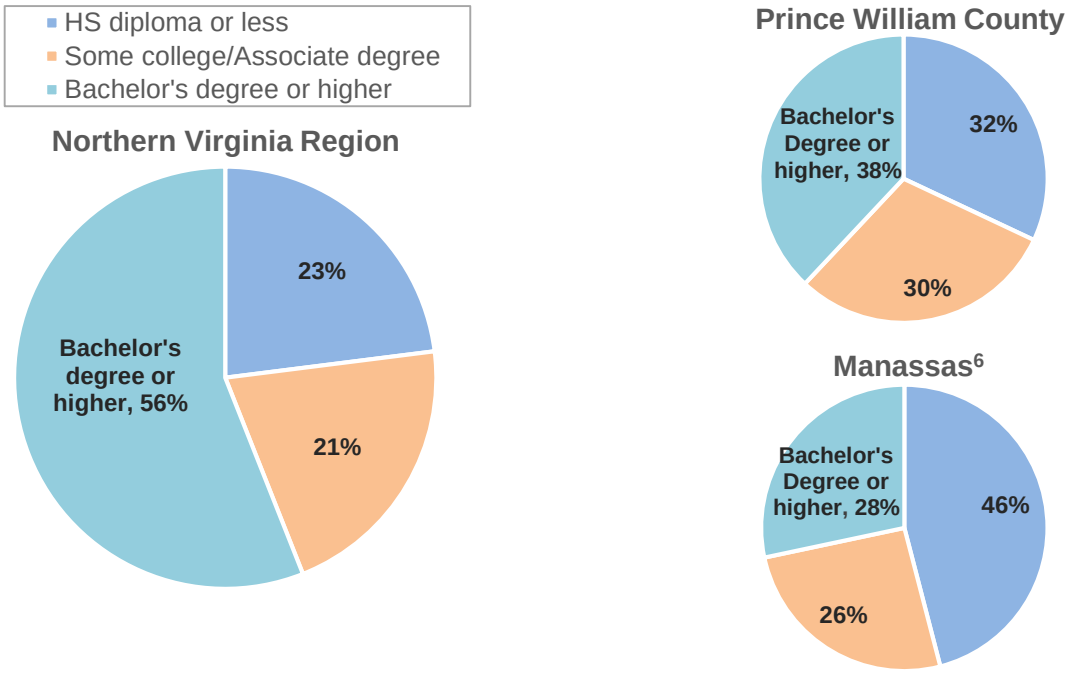


Section 4. Islands of Disadvantage in Northern Virginia

The report *Getting Ahead: The Uneven Opportunity Landscape in Northern Virginia* reveals wide economic variation across communities in Northern Virginia. It delves deeply, at the census tract level, into a wide range of social and economic factors that contribute to "islands of disadvantage."

- Interspersed among the region's affluent communities are 15 "islands of disadvantage," which are clusters of census tracts where residents face multiple challenges, including poverty, poor education, unaffordable housing, and lack of health insurance.[5]
- In Northern Virginia, 56 percent of adults aged 25 and older have a Bachelor's degree or higher—including 93 census tracts where more than 80 percent have Bachelor's degrees or higher.
- **However, the Northern Virginia region also includes 26 census tracts where fewer than 25 percent of adults have at least a Bachelor's degree and 23 tracts where nearly half of adults never attended college.**
- Many of these tracts are in Prince William County or Manassas. Attainment of a Bachelor's degree or higher is 38 percent in Prince William County and only 28 percent in Manassas (including Manassas City and Manassas Park City), compared to 56 percent in the region overall. (Figure 6, below) [5,6]

Figure 6. Educational Attainment by Region: 2016



[5] *Getting Ahead: The Uneven Opportunity Landscape in Northern Virginia* available at https://novahealthfdn.org/getting-ahead-report/

[6] Manassas City/Manassas Park City data were extracted utilizing the Economic Modeling Specialists International (EMSI) product EMSI Analyst.

Section 5. Increasing Enrollment and Retention of Low-Income Students

A. *Increasing College Opportunity for Low-Income Students* Report

The 2014 White House report *Increasing College Opportunity for Low-Income Students* cites the following statistics about college access and attainment:[7]

- Half of all people from high-income families have a bachelor's degree by age 25, compared to only 10 percent from low-income families.
- **When students in the bottom fifth of the income distribution get a college degree, their chance of making it to the top nearly quadruples, and their chance of making it out of the bottom increases by more than half**.
- While the number of applicants to four-year colleges has doubled since the 1970s, the number of available slots has changed very little. Institutions have grown more competitive, restricting college access. Therefore, the role of the community college, with its open enrollment, is increasingly important.

B. Increasing Enrollment and Retention of Low-Income Students at NOVA

Once the geographic regions and high schools with higher populations of low-income students are identified, NOVA can implement strategies to support students with enrolling, succeeding, and achieving their goals at NOVA. The following is a selection of possible strategies:

- **Paperwork**: Reducing the amount of additional paperwork has been shown to encourage students to apply to college.[8]
- **FAFSA**: Low-income students are less likely to apply for FAFSA (Free Application for Federal Student Aid).[9] Providing hands-on FAFSA guidance as well as financial aid information has been shown to increase college enrollment and persistence.
- **Text Messages**: Reminders sent by text message between high school graduation and the start of the fall semester have been shown to increase two-year college enrollment. In particular, students who qualified for free or reduced-price lunch (FRL) who received text message reminders were even more likely to enroll in two-year schools than FRL students who did not receive reminders.[10]
- **Financial Stability Program:** Once students are enrolled, NOVA is able to further support low-income students through its Financial Stability Program and food pantries on each campus.
- **Remedial Education**: The Community College Research Center (CCRC) revealed in a case study of community college remedial education that participation in a review course for the placement test shifted 35 percent more students into higher level math and 60 percent into higher level English.[11]

---

[7] The Executive Office of the President. (2014). *Increasing College Opportunity for Low-Income Students: Promising Models and a Call to Action.*
[8] Smith, J. (2013). The Effect of College Applications on Enrollment. *B.E. Journal of Economic Analysis and Policy Contributions*. December 2013, 14(1): 151-188.
[9] Chen, Grace. (2017) The Poorer the Student, the Less Likely to Apply for Aid. *Community College Review*.
[10] Castleman, B. and Page, L.C. (2013). *Summer Nudging: Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?* Center on Education Policy and Workforce Competitiveness.
[11] The Executive Office of the President. (2014). *Increasing College Opportunity for Low-Income Students: Promising Models and a Call to Action.*

Data Tables

Table A1. Northern Virginia Public High Schools by Percentage of Economically Disadvantaged Students, Enrollment at NOVA, and Pell Grant Rate: 2015-16

High School	School District	% Economically Disadvantaged 2015-16	2015-16 HS Grads	Enrolled at NOVA Fall 2016			
				Recent HS Grads		Recent HS Grads With Pell Grant	
				#	% of All HS Grads	#	% of Recent HS Grads at NOVA
Park View	Loudoun County	66.2%	258	85	32.9%	47	55.3%
T.C. Williams	Alexandria City	61.7%	728	174	23.9%	95	54.6%
Freedom	Prince William County	60.0%	436	126	28.9%	61	48.4%
Gar-Field	Prince William County	55.8%	550	172	31.3%	96	55.8%
Wakefield	Arlington County	52.2%	437	110	25.2%	55	50.0%
Stonewall Jackson	Prince William County	50.2%	498	123	24.7%	65	52.8%
Stuart	Fairfax County	43.3%	396	121	30.6%	69	57.0%
Manassas Park	Manassas Park City	43.2%	218	56	25.7%	21	37.5%
Robert E. Lee	Fairfax County	42.7%	403	137	34.0%	60	43.8%
Potomac Senior	Prince William County	42.1%	390	120	30.8%	53	44.2%
Osbourn	Manassas City	41.8%	457	107	23.4%	42	39.3%
Annandale	Fairfax County	40.7%	538	212	39.4%	106	50.0%
Mt. Vernon	Fairfax County	38.8%	436	87	20.0%	28	32.2%
Falls Church	Fairfax County	37.1%	387	122	31.5%	57	46.7%
Bryant Alternative	Fairfax County	36.8%	123	18	14.6%	14	77.8%
Washington-Lee	Arlington County	35.3%	545	82	15.0%	46	56.1%
West Potomac	Fairfax County	33.1%	499	95	19.0%	51	53.7%
C. D. Hylton	Prince William County	32.7%	617	163	26.4%	68	41.7%
Woodbridge	Prince William County	32.3%	690	214	31.0%	83	38.8%
Dominion	Loudoun County	28.9%	370	89	24.1%	26	29.2%
Herndon	Fairfax County	28.6%	490	118	24.1%	39	33.1%
Mountain View Alt.	Fairfax County	26.7%	131	34	26.0%	11	32.4%
Edison	Fairfax County	26.2%	428	117	27.3%	54	46.2%
Osbourn Park	Prince William County	25.3%	674	164	24.3%	50	30.5%
Forest Park	Prince William County	24.5%	535	135	25.2%	37	27.4%
Tuscarora	Loudoun County	24.5%	451	92	20.4%	18	19.6%
Potomac Falls	Loudoun County	23.4%	379	72	19.0%	18	25.0%
Hayfield	Fairfax County	23.1%	485	144	29.7%	54	37.5%
South Lakes	Fairfax County	22.2%	526	119	22.6%	44	37.0%
Heritage	Loudoun County	20.2%	311	70	22.5%	17	24.3%
Fairfax	Fairfax County	19.2%	631	176	27.9%	65	36.9%
Centreville	Fairfax County	19.1%	558	131	23.5%	56	42.7%
Arlington Community	Arlington County	18.9%	53	12	22.6%	5	41.7%
Westfield	Fairfax County	18.3%	653	154	23.6%	58	37.7%
Loudoun County	Loudoun County	17.6%	363	68	18.7%	19	27.9%
Yorktown	Arlington County	17.5%	454	49	10.8%	18	36.7%
Broad Run	Loudoun County	17.2%	455	108	23.7%	33	30.6%
Rock Ridge	Loudoun County	14.9%	138	27	19.6%	9	33.3%
South County	Fairfax County	13.9%	527	119	22.6%	39	32.8%
Chantilly	Fairfax County	12.8%	634	133	21.0%	45	33.8%

High School	School District	% Economically Disadvantaged 2015-16	2015-16 HS Grads	Enrolled at NOVA Fall 2016			
				Recent HS Grads		Recent HS Grads With Pell Grant	
				#	% of All HS Grads	#	% of Recent HS Grads at NOVA
Lake Braddock	Fairfax County	12.4%	654	130	19.9%	38	29.2%
George Marshall	Fairfax County	12.0%	426	76	17.8%	21	27.6%
Loudoun Valley	Loudoun County	11.8%	310	46	14.8%	7	15.2%
John Champe	Loudoun County	11.6%	322	62	19.3%	13	21.0%
Patriot	Prince William County	11.4%	642	150	23.4%	26	17.3%
Fairfax County Adult	Fairfax County	11.3%	88	7	8.0%	4	57.1%
Brentsville	Prince William County	10.2%	224	49	21.9%	5	10.2%
Battlefield	Prince William County	10.0%	596	134	22.5%	24	17.9%
Oakton	Fairfax County	10.0%	562	73	13.0%	25	34.2%
Freedom	Loudoun County	9.8%	371	73	19.7%	24	32.9%
Riverside	Loudoun County	8.9%	-	-	-	-	-
W.T. Woodson	Fairfax County	8.6%	583	94	16.1%	24	25.5%
Stone Bridge	Loudoun County	8.5%	450	69	15.3%	12	17.4%
James Madison	Fairfax County	8.4%	498	47	9.4%	9	19.1%
West Springfield	Fairfax County	8.2%	542	119	22.0%	30	25.2%
Woodgrove	Loudoun County	8.2%	367	55	15.0%	8	14.5%
Robinson	Fairfax County	7.9%	655	124	18.9%	28	22.6%
George Mason	Falls Church City	7.1%	187	15	8.0%	4	26.7%
McLean	Fairfax County	6.9%	523	66	12.6%	19	28.8%
Briar Woods	Loudoun County	4.8%	478	75	15.7%	10	13.3%
Thomas Jefferson	Fairfax County	1.6%	457	2	0.4%	0	0.0%
Langley	Fairfax County	1.3%	456	39	8.6%	7	17.9%
Cedar Lane	Fairfax County	-	-	2	-	1	50.0%
Colgan	Prince William County	-	-	-	-	-	-
Total		**-**	**27,243**	**5,962**	**21.90%**	**2,171**	**36.4%**

Sources: Virginia Department of Education and NOVA PeopleSoft Data

Table A2. Northern Virginia Service Area ZIP Codes with the Lowest Median Income (Less than $80k/year): 2015-16

ZIP Code	City	Jurisdiction	Total # Households	Median Household Income	NOVA Enrollment		
					Fall 2012	Fall 2016	5-Year Change
22134	Quantico	Prince William	1,545	$60,186	131	141	7.6%
22311	Alexandria	Alexandria City	7,882	$61,993	618	519	-16.0%
20109	Manassas	Prince William	12,914	$62,106	772	770	-0.3%
22172	Triangle	Prince William	3,344	$65,909	203	226	11.3%
22306	Alexandria	Fairfax	11,551	$68,993	728	656	-9.9%
22041	Falls Church	Fairfax	10,627	$69,318	676	620	-8.3%
22204	Arlington	Arlington	21,576	$76,071	1,125	1,065	-5.3%
22312	Alexandria	Fairfax	11,171	$76,245	919	814	-11.4%
22304	Alexandria	Alexandria City	21,248	$76,883	1,106	995	-10.0%
20110	Manassas	Manassas City	14,069	$77,669	954	1,010	5.9%
22060	Fort Belvoir	Fairfax	2,791	$79,790	187	158	-15.5%
22044	Falls Church	Fairfax	5,489	$79,872	249	222	-10.8%

Source: OIR IRIS files. U.S. Census Bureau American FactFinder.