# EXPANDING ACCESS TO COMMUNITY COLLEGE IN MONTGOMERY COUNTY

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# *Executive Summary*

This report was prepared for Montgomery County Councilmember Tom Hucker and his staff to analyze and evaluate the potential for Montgomery County to provide expanded access to Montgomery College, the county's community college system, for county residents. The high cost of college, and the debt that a student must take on to receive a post-secondary education, makes it unattainable for many. Realizing the financial challenges associated with attaining higher education, some states and localities have invested in programs that increase access to community college for residents. This report provides an overview of the target population in Montgomery County, the current demographic makeup of Montgomery College, as well as trends in the county and at the college. In addition, the report reviews how the federal government, and state and local governments across the United States, have explored and implemented ways to help residents attend, afford, and graduate from local community college. The report utilizes that information to provide recommendations for Montgomery County.

The report includes an economic analysis on last dollar scholarship programs dependent on the use of lottery funds, tax increases, and endowments to fund scholarships in Montgomery County. Additionally, included in the economic analysis is a Revenue-Expenditure Analysis that utilizes a combination of funding sources. This analysis finds that at the proposed scholarship levels, the last dollar scholarship program would benefit an average of 1,800 Montgomery County graduates per year attending Montgomery College. Furthermore, the analysis finds that, among enrolled students, it is estimated that a last dollar scholarship would benefit around 11,000 students annually. Uncertainty in this analysis is accounted for using Monte Carlo simulations.

The report explores several proposals as to how Montgomery County can expand access to Montgomery College. Specifically, these proposals are; (1) implementing a last dollar promise program and the potential to fund it through (a) lottery revenue, (b) private/endowment funded programs, or (c) by utilizing tax revenue; (2) an expansion of Montgomery College's work-study program; and (3) an expansion of Montgomery College's dual enrollment program.

This report recommends that Montgomery County implement a combination of strategies for achieving expanded access to Montgomery College.

- The County should implement a last dollar promise scholarship program. A last dollar program, funded through an endowment and tax revenue, may be the most suitable for Montgomery County as it would provide a solid base through the initial endowment, but allows for long-term stability through tax revenue inputs. Due to economic disincentives to seek out private funding that could arise because of a last dollar scholarship, Montgomery County could implement a cap on the last dollar scholarship or provide the scholarship in the form of a matching grant.
- In addition, this report recommends that Montgomery College expand the existing dual enrollment and work-study programs in order to increase access to community college for county residents.
- Finally, this report recommends that Councilmember Hucker and his staff not just consider cost as a barrier to college completion, but retention as well. This report recommends that mentoring programs continue to be funded and expanded to ensure student retention.

## INTRODUCTION: COLLEGE ATTENDANCE MUST EXPAND IN THE 21ST CENTURY ECONOMY

The cost of quality higher education, and the associated debt that students are forced to take on, has skyrocketed over the past generation. In recent years, tuition for in-state students at public four-year colleges has increased by 200 percent, and costs at community colleges have increased by 150 percent, after taking inflation into account.[1] As a result of these increased costs, many Americans have taken on unmanageable amounts of debt, while others have been hesitant to invest in higher education at all.[2] While college costs have increased, so has the competition in the global economy. Throughout the 20th century, the United States led the world in college attainment. Today, the U.S. is ranked twelfth among all other nations.[3] Now, more than ever, Americans need further education to succeed. In previous generations, a high school diploma was sufficient to secure a middle-class job.[4] However, economists now predict that by the year 2020, 35 percent of jobs will require a bachelor's degree and another 30 percent will require at least some college or skill training.[5] One way to promote higher education and skills training is through the nation's more than one thousand community colleges.[6] Community colleges currently enroll about 40 percent of the nation's college students each year and serve a high percentage of low-income, first-generation, and non-traditional adult students.[7] In addition, community colleges offer affordable tuition, open admission policies, and convenient locations.

Community colleges also provide a large return on investment to the nation's economy. For example, community college graduates make on average $10,000 more per year than those with just a high school diploma.[8] This number is even higher for individuals with a bachelor's degree.[9] The return on investment of the accumulated contribution of former community college students that were employed in the U.S. workforce in 2012 amounted to $806.4 billion in added income to the national economy.[10] Furthermore, every dollar invested in community college by federal, state and local governments is estimated to yield more than $25 in return to the national

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[1] College Board (2014). Trends in college pricing. Retrieved from http://trends.collegeboard.org/college-pricing.

[2] Hopkins, K. (2012, September 24). 'Fear Factor' Keeps Low-Income Students From College. Retrieved from http://www.usnews.com/education/best-colleges/paying-for-college/articles/2012/09/24/fear-factor-keeps-low-income-students-from-college

[3] U.S. Department of Education (n.d.). College affordability and completion: Ensuring a pathway to opportunity. Retrieved from http://www.ed.gov/college.

[4] Mitchell, T. (2015). America's college promise: A ticket to the middle class. The Official Blog of the U.S. Department of Education. Retrieved from http://www.ed.gov/blog/2015/01/americas-college-promise-a-ticket-to-the-middle-class/.

[5] Carnevale, A. P., Smith, N., & Strohl, J. (2014). Recovery, job growth and education requirements through 2020. Georgetown Public Policy Institute Center on Education and the Workforce. Retrieved from http://scs.georgetown.edu/departments/5/center-for-continuing-and-professional-education/news/1052/report-recovery-2020-job-growth-and-education-requirements-through-2020.

[6] Mitchell, T. (2015). America's college promise: A ticket to the middle class. The Official Blog of the U.S. Department of Education. Retrieved from http://www.ed.gov/blog/2015/01/americas-college-promise-a-ticket-to-the-middle-class/.

[7] Ibid.

[8] Economic Modeling Specialists Intl. (2014, February). *Where Value Meets Values: The Economic Impact of Community Colleges.* Moscow, ID

[9] Ibid.

[10] Ibid.

economy. As such, in order to increase college attainment and decrease costs, the federal government, as well as state and local governments, are exploring ways to expand access and affordability to quality community college programs.

As a result of these factors and others, Councilmember Tom Hucker is seeking options to implement a program that would allow more students to gain access, afford, and graduate from college in Montgomery County. Specifically, Councilmember Hucker is interested in providing free or reduced cost education for students attending Montgomery College, the county's only community college system. The report that follows provides an overview of the current federal proposal and outlines the state of Maryland's proposals to reduce the cost of community college for residents. In addition, this report analyzes several successful state and local programs, based on student eligibility criteria and funding mechanisms, in order to identify applicability in Montgomery County. Finally, this report provides recommendations to increase access to Montgomery College, supported by economic models behind affordable community college programs.

It is important to note that a comprehensive analysis was conducted to review demographic information of localities that have implemented a free or reduced cost community college program. However, few localities, which have implemented programs, had comparable demographics to Montgomery County, Maryland. As such, the authors of this report make note of where these demographics may not align with Montgomery County, and consider this factor in the final recommendations.

## Overview of the Target Population: Montgomery County and College Trends

### *Montgomery County Demographics*

According to the U.S. Census Bureau, Montgomery County, Maryland had a population of 1,030,447 in 2014, making it the largest county in Maryland. With Maryland having a population of 5,976,407 as a whole, Montgomery County accounted for roughly 17 percent of Maryland's total population in 2014.[11] Since 2010, Montgomery County has experienced a population growth rate of 6 percent. This growth rate is almost double Maryland's total growth rate of 3.5 percent, but a slightly slower growth rate compared with Howard County's nearly 8 percent growth rate.[12]

Montgomery County has a median household income of $98,221, while Maryland's median household income is $73,538, both of which are higher than the United States' median household income of $53,046. Montgomery County also has a higher percentage of residents with a high school degree (roughly 91 percent) than both Maryland (roughly 89 percent), as well as the United States (roughly 86 percent). Attainment of a Bachelor's degree is also higher in Montgomery County than Maryland and the United States. Yet, Montgomery County lags behind Howard County in high school degree attainment and Bachelor's degree attainment.[13]

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[11] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved November 2015 from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

[12] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD; Howard County, MD [Data File]*. Retrieved November 2015 from http://www.census.gov/quickfacts/table/PST045214/00,24,24031,24027.

[13] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

On average, Montgomery County has the same amount of residents under the age of 18 as the United States and Maryland; with all three averaging around 23 percent of each population. In terms of race, Montgomery County is more diverse than the United States as a whole, with residents who identify as "white alone" making up 62 percent of the population (compared with the United States' roughly 77 percent), residents who identify as "black or African American alone" making up roughly 19 percent of the population (compared with the United States' roughly 13 percent), and residents who identify as "Asian alone" making up 15 percent of the population (compared with the United States' roughly 5 percent). Montgomery County also has a large percentage of residents who speak a language other than English at home; accounting for 39 percent of the population. For comparison, in Maryland as a whole, roughly 16 percent of persons speak a language other than English at home, while about 20 percent of people in the United States speak a language other than English at home.[14]

## *How Montgomery County is Expected to Change Demographically*

Researchers at Montgomery College have analyzed how Montgomery County might change by 2023. They predict that Montgomery County will continue to experience a 6 percent growth rate for a total population of 1,081,436 individuals by 2023. In terms of race, Montgomery County is expected to see a 2 percent growth in the white population, a 10 percent increase in the black population, and a 12 percent increase in the Asian population.[15] The biggest single growth predicted for one demographic is in the Hispanic population, with an expected 19 percent growth by 2023. [16]

In terms of age, a useful statistic when analyzing community college trends is the population trends of children and traditional college-aged students, operationalized as residents 24 and under. For these ages, researchers expect to see a 24 percent increase from the 2013 population to 2023. However, about half of this increase is made up of an expected 12 percent increase in the population under five years old.[17]

Finally, Montgomery County is expected to see a 7 percent increase in educational attainment by 2023.[18] There is an expected 6 percent increase in residents with an Associate's Degree, an 8 percent increase in High School Diploma attainment, a 7 percent increase in some college attainment, a 5 percent increase in Bachelor's Degree attainment, and a 6 percent increase in Graduate Degree attainment.[19] The most striking increase comes in ninth to twelfth grade educational attainment, with researchers predicting a 26 percent increase.[20] Therefore, the total population, including the population of youth and those attending college, is expected to continue growing. It is vital for Montgomery County to expand educational opportunities, given the expected growth in the youth population.

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[14] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

[15]Montgomery County Demographic Data. (2015). Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=45574#content-area

[16]Ibid.

[17] Ibid.

[18] Ibid.

[19] Ibid.

[20]Ibid.

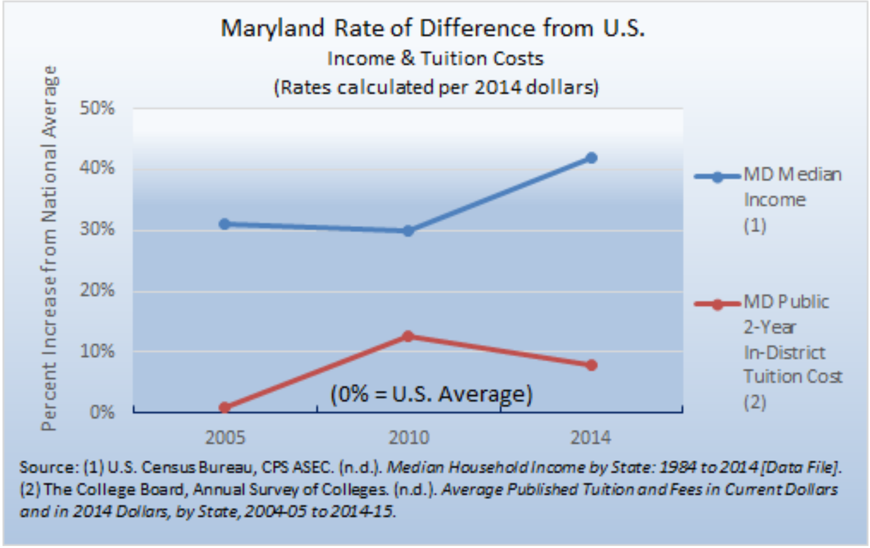
## *Montgomery College Demographics*

Next, it is important to analyze trends at Montgomery College. In this demographic analysis, average in-district tuition rates for two-year public colleges and household median income were the key variables examined with comparisons made to the state and national level. Community college students overall showed similar representations of race and gender to applicable populations, revealing no reportable significance through these population-descriptive variables. Limited availability of long-term data also impeded analysis of race and gender. While student citizenship status was not measured, notable shifts in domestic and international migration rates at all levels indicated major population changes in Montgomery County, and resulting impacts on future college attendance may be worthy of further review. Data used for demographic analysis can be found in the supplemental materials for this report, Appendix E.

As seen in Figure 1, Maryland's divergence between U.S. median income and costs for public two-year degree programs has shifted from a negative trend in 2010 to a positive one in 2014. When U.S. change rates in tuition and income are adjusted to 0 percent from 2005 to 2014, comparative economic changes in Maryland show the state consistently above the national average in these categories (see Figure 1). If U.S. change rates are considered a desirable baseline, then the comparatively adjusted Maryland change rates have been trending positive since 2010, with increasing change in income and decreasing change in tuition (see Figure 1).[21] When the rate of change in tuition is less than the rate of change in income, college increases in affordability. This positively signals Maryland's commitment to increasing college accessibility, especially as incomes rise.

[21] (1) U.S. Census Bureau, Current Population Survey, Annual Social & Economic Supplements. (n.d.). *Median Household Income by State: 1984 to 2014 [Data File]*. Retrieved from https://www.census.gov/hhes/www/income/data/statemedian/.
(2) The College Board, Annual Survey of Colleges. (n.d.). *Average Published Tuition and Fees in Current Dollars and in 2014 Dollars, by State, 2004-05 to 2014-15 [Data File]*. Retrieved from http://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-sector-and-state-over-time-1.

FIGURE 1: COMPARISON OF STATE TUITION & INCOME RATES ABOVE NATIONAL[22]




Unfortunately, tuition costs at the national average are still too high of a benchmark, since both the nation and Montgomery County have experienced reduced college affordability, which is one major result of divergence in tuition costs to median income. Figure 2 illustrates steady increases in unadjusted median income and tuition costs at the U.S., Maryland and Montgomery County levels.

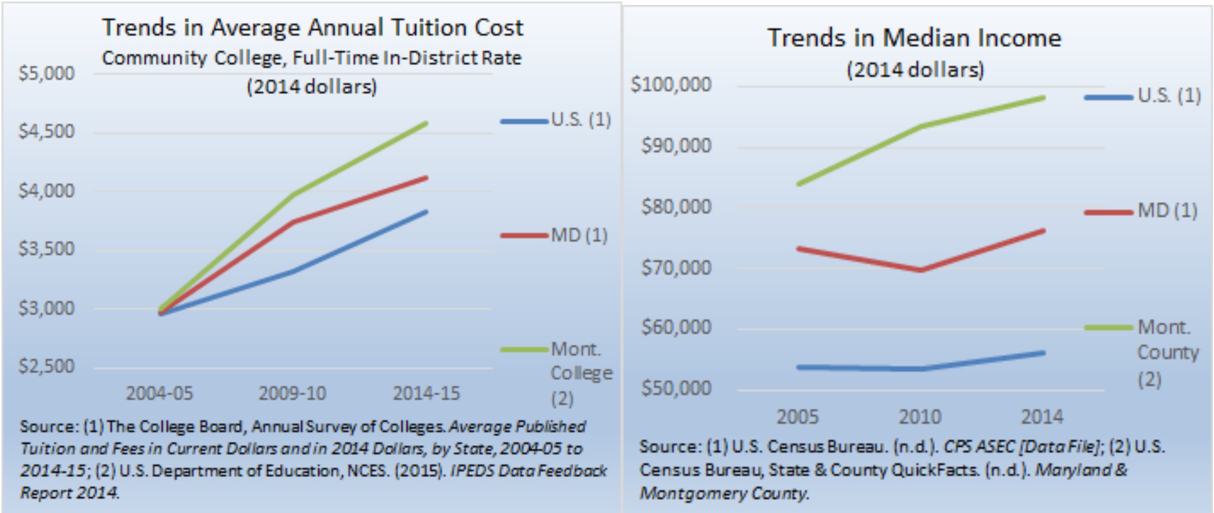
High average tuition costs for community college in Montgomery County may be financially alienating students from access to higher education. A ten-year average change from 2004 to 2014 in the county consisted of an increase of 52 percent in Montgomery College's tuition costs[23], this is more than double the 17 percent[24] increase in median household income. This is a difference similar to what is seen in national trends (see Figure 2). For families maintaining median earnings throughout this period, this results in a compounding average annual tuition cost increase of 3.5 percent. Similar trends at the state and national level infer that this continuous decrease in community college affordability is a widespread trend. Effectively, the greater the rate of change in tuition costs above that of median income, the greater portion of the population unable to attend.

[22] (1) U.S. Census Bureau, Current Population Survey, Annual Social & Economic Supplements. (2015). *Median Household Income by State: 1984 to 2014 [Data File]*. Retrieved from https://www.census.gov/hhes/www/income/data/statemedian/.
(2) The College Board, Annual Survey of Colleges. (2015). *Average Published Tuition and Fees in Current Dollars and in 2014 Dollars, by State, 2004-05 to 2014-15 [Data File]*. Retrieved from http://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-sector-and-state-over-time-1.

[23]Tuition and Fee Rates. (2015). Retrieved from http://cms.montgomerycollege.edu/edu/department2.aspx?id=20126

[24] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

FIGURE 2: COMPARATIVE RELATIONSHIP OF TRENDS IN TUITION[25] & INCOME[26] CHANGE




Comparison of change rate slopes in county, state and national median income and community college tuition costs shows that these rates tend to rise and fall concurrently, with tuition cost increases seemingly unaffected by the 2008 national economic crisis (see Figure 3). In the first half of the decade from 2004-05 to 2014-15, the nation experienced the second worst economic recession in the past century. Thus, the expectation of ten-year trends is that the rate of annual increase in tuition costs would have slowed to accommodate stalling median incomes in the first five years. Yet, linear rising public college tuition costs to local median income rise have shown to create reduced affordability.

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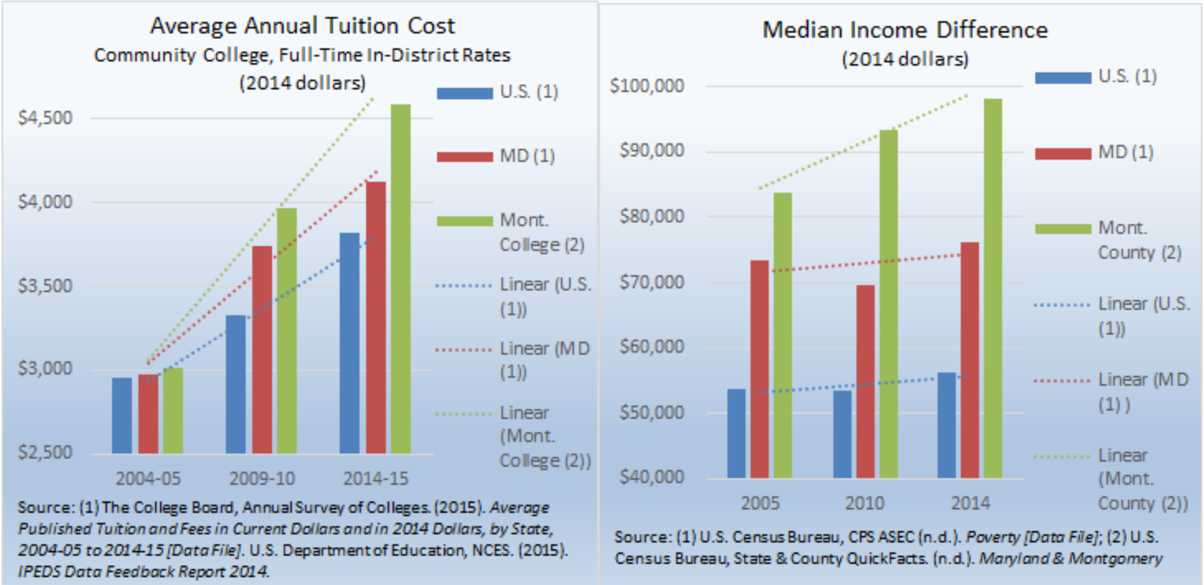
[25] (1) The College Board, Annual Survey of Colleges. (2015). *Average Published Tuition and Fees in Current Dollars and in 2014 Dollars, by State, 2004-05 to 2014-15 [Data File]*. Retrieved from http://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-sector-and-state-over-time-1.
(2) U.S. Department of Education, National Center for Education Statistics (NCES). (2015). *Integrated Postsecondary Education Data System (IPEDS) Data Feedback Report 2014*. Retrieved from https://nces.ed.gov/ipeds/.

[26] (1) U.S. Census Bureau. (n.d.). *Current Population Survey Annual Social and Economic Supplement (CPS ASEC) [Data File]*. Retrieved from https://www.census.gov/hhes/www/poverty/publications/pubs-cps.html.
(2) U.S. Census Bureau, State & County QuickFacts. (n.d.). *Maryland & Montgomery County [Data File]*. Retrieved from http://quickfacts.census.gov/qfd/states/24/24031.html.

FIGURE 3: COMPARATIVE RELATIONSHIP IN SLOPE OF TUITION[27] & INCOME[28] CHANGE




`One major impact of a steeper rate of change in tuition over income is that the population percentile, having experienced no increase in tuition costs, has continuously decreased towards the highest earners causing decreased affordability among an increasing portion of residents. Effectively, resident attendance at Montgomery College declined in the midst of this affordability divergence trend, falling sharply by nearly 10 percent from 2013 to 2014, followed by a 3 percent decline in 2015 (see Figure 4).[29] Further, the Montgomery County Office of Management and Budget (OMB) reported Montgomery College projections of continued decline in resident attendance from 2015 through 2019.[30]

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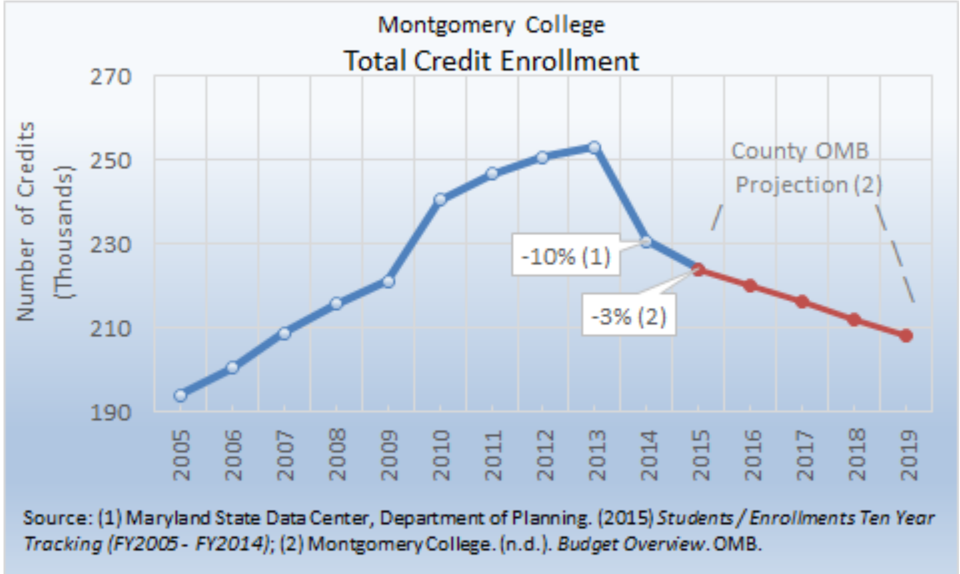
[27] (1) The College Board, Annual Survey of Colleges. (2015). *Average Published Tuition and Fees in Current Dollars and in 2014 Dollars, by State, 2004-05 to 2014-15 [Data File]*. Retrieved from http://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-sector-and-state-over-time-1.
(2) U.S. Department of Education, National Center for Education Statistics (NCES). (2015). *Integrated Postsecondary Education Data System (IPEDS) Data Feedback Report 2014*. Retrieved November 2015 from https://nces.ed.gov/ipeds/.

[28] (1) U.S. Census Bureau. (n.d.). *Current Population Survey Annual Social and Economic Supplement (CPS ASEC) [Data File]*. Retrieved from https://www.census.gov/hhes/www/poverty/publications/pubs-cps.html.
(2) U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

[29] Montgomery College. (n.d.). *Budget Overview*. OMB. Retrieved November 2015 from https://reports.data.montgomerycountymd.gov/reports/BB_FY16_REC/MCC.

[30] Ibid.

FIGURE 4: ANNUAL ENROLLMENT BY TOTAL CREDIT COURSE REGISTRATION[31]




Even with rising tuition costs, reduced attendance will likely impact the Montgomery College operating budget, which relies heavily on resident tuition. Analysis of the college's final operating budgets over the past five years revealed income trends common among state and national community colleges. According to Montgomery College reports, Adopted Operating Budget Requests from 2010 through 2015, tuition was the second largest source of income (roughly 40 percent) with County subsidy being the first (roughly 50 percent) (see Figure 5).[32] During this period, operating budget income from the county fluctuated broadly each year, with a change in 2011 of negative 12.0 percent,[33] in 2012 of negative 7.6 percent,[34] in 2013 of +0.4 percent,[35] and in 2014 of +4.7 percent.[36]

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[31] Maryland State Data Center, Department of Planning. (n.d.)). *Students / Enrollments Ten Year Tracking (FY2005 - FY2014) [Data File)*. Retrieved from http://planning.maryland.gov/msdc/.

[32] Montgomery College Budget Office. Operating Budgets (n.d.). Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=17480.

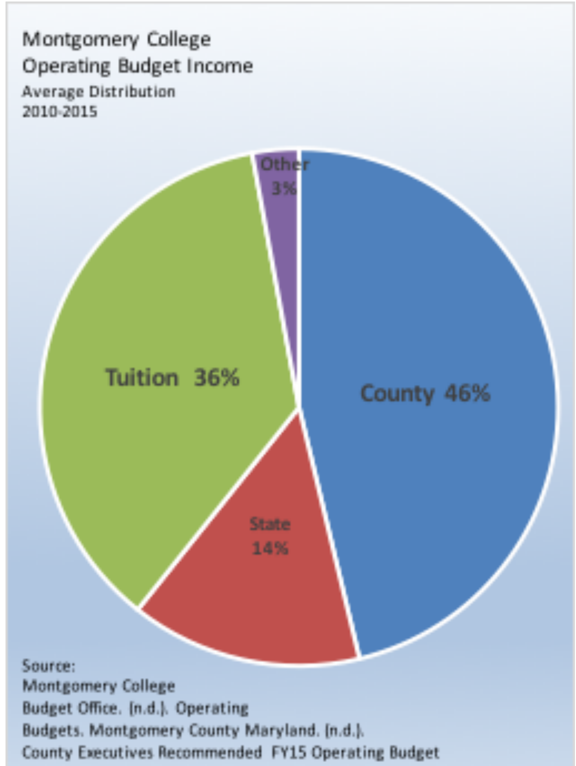
[33] Montgomery College, Press Release. (15 March 2010). *Montgomery College Interim President Reacts to Release of County Executive's FY11 Operating Budget*. Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=50466.

[34] Montgomery College, Press Release. (15 March 2011). *Montgomery College President Reacts to Release of County Executive's FY12 Operating Budget*. Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=50466.

[35] Montgomery College, Press Release. (17 May 2012). *Statement by Dr. DeRionne P. Pollard, President of Montgomery College, on the FY13 Operating and Capital Budget Actions of the Montgomery County Council*. Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=50466.

[36] Montgomery College, Press Release. (23 May 2013). *Statement by Dr. DeRionne Pollard, President of Montgomery College, on FY14 Operating and Capital Budget Actions by the County Council*. Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=50466.

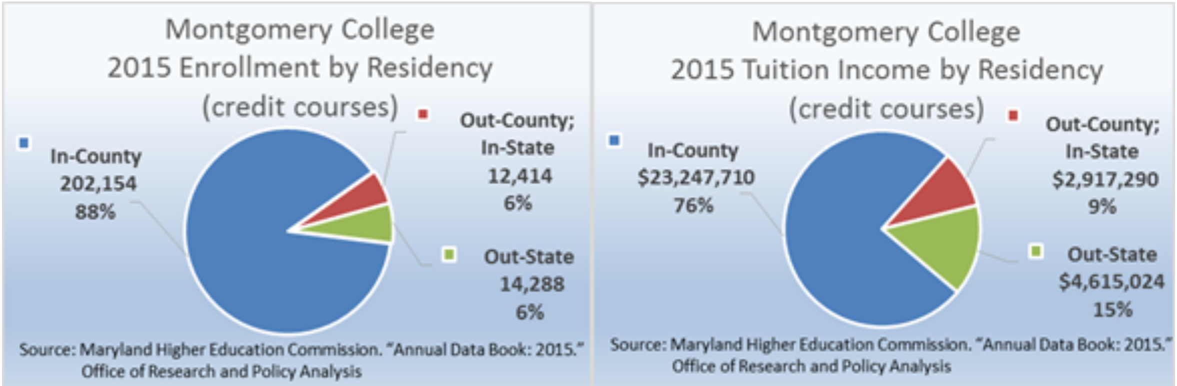
FIGURE 5: APPROXIMATE AVERAGE DISTRIBUTION OF OPERATING BUDGET INCOME SOURCES[37]




The majority of tuition income came from in-county resident students, even with per-credit rates that are half of the rates for out-of-county students. In 2015 alone, more than three quarters of total tuition income from credit courses came from resident students (see Figure 6). While per-credit tuition cost differences for students according to residency status are also average, the aggregate cost has remained above the national average for over a decade. These high costs appear to normalize when considering the state's concurrently high national average in median income (see Figure 3). Regardless, as fewer residents choose to attend community college, the population is less likely to support increased supplementary funding to the college. This sentiment is especially possible among the highest earners, whose children are more likely to forego community college in favor of four-year universities.

[37] Montgomery College Budget Office. Operating Budgets (n.d.). Retrieved from https://cms.montgomerycollege.edu/EDU/Department.aspx?id=17480.

FIGURE 6: SNAPSHOT OF 2015 CREDIT COURSE ENROLLMENT & TUITION INCOME[38]




At 42 percent above the national average in 2014, Maryland ranked the highest in national median household income, with Montgomery County maintaining the highest in the state.[39] When compared to state and national trends, Montgomery College tuition costs have risen concurrent to rising median household income, resulting in increasing relative costs for below median income families. If Montgomery College tuition rates adjust for county median household income, then increasing difference in family income from the median will result in increasing difference in relative tuition costs for families.

Increasingly anomalous differences in migration trends to Montgomery County versus Maryland and the nation may yield for future analysis. According to U.S. Census, Maryland ranked as the sixth densest state nationally in 2010.[40] Notably, Maryland attracted the fifth largest international migrant population in the period from 2010 to 2014, with total migration change of negative 1.3 percent domestic and 5.6 percent international (see Figure 7).[41] Further, a Maryland Department of Legislative Services county comparison reported that, from 2000 to 2007, Montgomery County experienced the largest increase in both total population growth and total minority population growth.[42]

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[38] Maryland Higher Education Commission. (n.d.). Annual Data Book: 2015. Office of Research and Policy Analysis. Retrieved October 2015 from http://www.mhec.state.md.us/publications/research/.

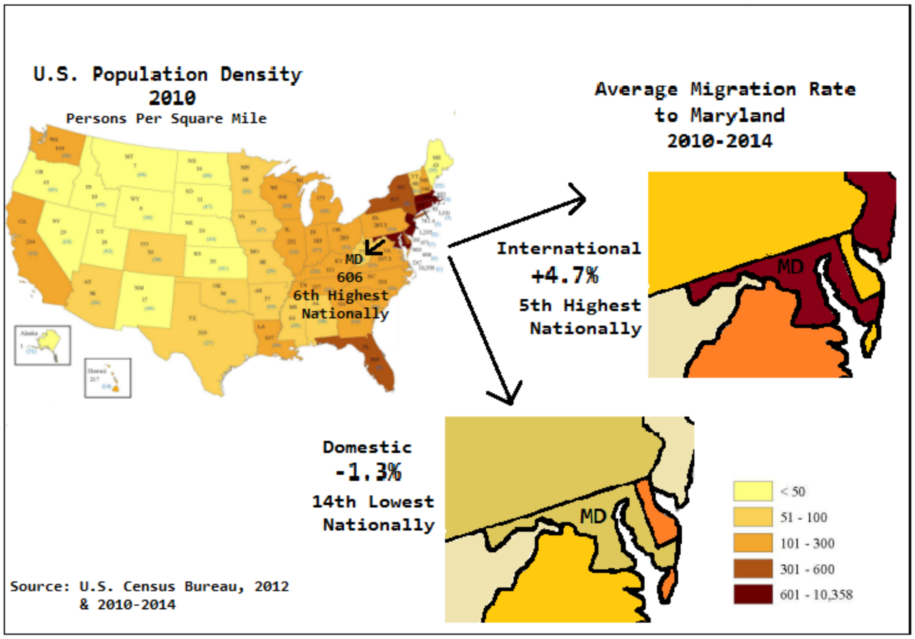
[39] Current Population Survey Annual Social and Economic Supplement (CPS ASEC). (2015). Retrieved from https://www.census.gov/hhes/www/poverty/publications/pubs-cps.html

[40] U.S. Census Bureau. (n.d.). *Quick Facts: U.S.; MD; Montgomery County, MD [Data File]*. Retrieved from http://www.census.gov/quickfacts/table/PST045214/00,24,24031.

[41] (1) Maryland State Data Center, Department of Planning. *Map 3 International Migration Rates for States, April 1, 2010 to July 1, 2014 [Data File]*. Retrieved from http://planning.maryland.gov/msdc/Pop_estimate/Estimate_14/popest_md14.shtml.
(2) Maryland State Data Center, Department of Planning. *Map 5 Domestic Migration Rates for States, April 1, 2010 to July 1, 2014 [Data File]*. Retrieved from http://planning.maryland.gov/msdc/Pop_estimate/Estimate_14/popest_md14.shtml.

[42] Maryland Department of Legislative Services, Office of Policy Analysis. (September 2008). *Maryland 2020: A State in Transition*. Retrieved November 2015 from http://dls.state.md.us/Content.aspx?page=57.

FIGURE 7: MARYLAND DOMESTIC & INTERNATIONAL MIGRATION TRENDS, NATIONAL RELATIVE[43]




## OVERVIEW OF CURRENT & PROPOSED PROGRAMS AT THE FEDERAL AND STATE LEVEL

### *U.S. Senate Bill 1716 & U.S. House Bill 2962: America's College Promise Act of 2015*

In his 2015 State of the Union address, President Obama proposed America's College Promise, which was recently introduced to Congress as the America's College Promise Act of 2015. This bill, which differs slightly from the President's proposal, would make two years of community college free for all responsible students, through a state partnership grant program. This grant program would be designed to incentivize states to waive tuition and fees at community, technical, and tribal colleges for students attending an eligible community college for the first time.[44] If enacted, Senators Tammy Baldwin and Cory Booker estimate that 9 million community college students could benefit from the legislation.[45] Table 1 displays the proposed student eligibility criteria for the America's College Promise Act.

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[43] (1) Maryland State Data Center, Department of Planning. *Map 3 International Migration Rates for States, April 1, 2010 to July 1, 2014 [Data File]*. Retrieved from http://planning.maryland.gov/msdc/Pop_estimate/Estimate_14/popest_md14.shtml.
(2) Maryland State Data Center, Department of Planning. *Map 5 Domestic Migration Rates for States, April 1, 2010 to July 1, 2014 [Data File]*. Retrieved from http://planning.maryland.gov/msdc/Pop_estimate/Estimate_14/popest_md14.shtml.

[44] America's College Promise Act of 2015. S. 1716 (2015). Retrieved from https://www.congress.gov/bill/114th-congress/senate-bill/1716.

[45] Sens. Baldwin, Booker and Rep. Scott introduce America's College Promise Act to make higher education more accessible and affordable. (2015). Press Release. Retrieved from http://www.baldwin.senate.gov/press-releases/baldwin-americas-college-promise-act-to-make-higher-education-more-accessible-and-affordable-.

TABLE 1: AMERICA'S COLLEGE PROMISE ACT OF 2015

| America's College Promise Act of 2015 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bill | Eligibility Criteria | | | | | | | Program Funding |
| | Student Status | Part-Time/Full-Time | Academic Progress | State Residency | Program | Last-Dollar Program/ FAFSA Completion | Other | |
| **U.S. Senate Bill 1716 & U.S. House Bill 2962** | First-time students | At least part-time | N/A for first-time eligibility; Must maintain satisfactory academic progress once enrolled | ✔ | Must enroll in an eligible state/program | ✗ | N/A | Appropriations of $1.365 billion for fiscal year 2016 and a total of $79.735 billion for 10 years; 75% federal government/25% states (federal match of $3 for every $1 invested by the state) |

Given that community colleges educate more African-Americans and Hispanics than any other higher education segment,[46] the America's College Promise Act proposes a second grant program focused on student pathways from community colleges to Minority Serving Institutions (MSI). This grant program would fund eligible community college students to transfer their two-year degree to an eligible four-year MSI – ultimately, obtaining their bachelor's degree. The legislation for this pathways grant program is estimated to cost $55 million for fiscal year 2016 and a total of $10 billion for ten years.[47]

While the America's College Promise Act has garnered much attention, the authors of this report believe that its prospect of passing in the current Congress is unlikely. As such, eleven state legislatures and governors, including Maryland, have introduced proposals for free or reduced cost community college programs.

### *The State of Maryland House Bills: 648, 673, & 696*

On February 29, 2015, Maryland introduced three-house bills that would reduce the financial burden of community college for state residents. The first bill, House Bill 673, the Community Colleges – Tuition Waiver for Full-Time Students – Full State Reimbursement, would exempt tuition costs for eligible students and would require the state to reimburse community colleges for any foregone tuition revenue associated with the legislation.[48] In addition to Maryland House Bill 673, state legislatures also introduced House Bill 648 and 696 in 2015. Bill 648, the Community Colleges – Tuition Waiver for Full-Time Students – Partial State Reimbursement, would also exempt tuition costs for eligible students. However, if passed, it would require the state to reimburse community colleges for only 50 percent of the foregone tuition revenue associated with the legislation.[49] Finally, Bill 696, the Maryland Education Opportunity Act of 2015, would provide a 50 percent discount to eligible adult students returning to higher education.[50] Similar to Bill 673, Bill 696 would reimburse community colleges for any foregone tuition revenue.[51] Table 2 compares the student eligibility criteria and funding mechanisms, as outlined in the proposed Bills.

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[46] Mitchell, T. (2015). America's college promise: A ticket to the middle class. The Official Blog of the U.S. Department of Education. Retrieved from http://www.ed.gov/blog/2015/01/americas-college-promise-a-ticket-to-the-middle-class/.

[47] America's College Promise Act of 2015. S. 1716 (2015). Retrieved from https://www.congress.gov/bill/114th-congress/senate-bill/1716.

[48] Community Colleges – Tuition Waiver for Full-Time Students – Full State Reimbursement. Maryland H.B. 673. (2015). Retrieved from http://mgaleg.maryland.gov/2015RS/bills/hb/hb0673f.pdf.

[49] Ibid.

[50] Maryland Education Opportunity Act of 2015. Maryland H.B. 696. (2015). Retrieved from http://mgaleg.maryland.gov/2015RS/bills/hb/hb0696f.pdf.

[51] Ibid.

TABLE 2: THE STATE OF MARYLAND HOUSE BILLS: 648, 673, & 696

| **Maryland Proposals for a Last Dollar Program with Mandatory FAFSA Completion to Be Supported by the Education Trust Fund** | | |
|---|---|---|
| **Bill** | **Eligibility Criteria for Full-Time, In-State Residents** *Must enroll in an a vocational certificate program or an Associate's degree program at a community college in MD* | |
| | **Student Status** | **Academic Qualification** |
| **HB 673: Community Colleges – Tuition Waiver** (Full State Reimbursement) | Must enroll within 2 years after graduating from a MD high school or after completing a GED | N/A for first-time eligibility; Must maintain 2.0/4.0 GPA once enrolled |
| **HB 648: Community Colleges – Tuition Waiver** (Partial State Reimbursement) | Must enroll within 2 years after graduating from a MD high school or after completing a GED | N/A for first-time eligibility; Must maintain 2.0/4.0 GPA once enrolled |
| **HB 696: Maryland Education Opportunity Act of 2015** (Full State Reimbursement) | Must be unemployed/ seeking employment for at least 6 months and do not have a high school diploma or GED | N/A |

The prospects of Maryland Bills 648, 673, or 696 passing in the state are unlikely. State legislators propose that funding come from the state's Education Trust Fund (ETF), which is predominantly funded by Maryland's lottery and casino gaming.[52] The state allocates funding from the ETF to counties to use for local expenditures, such as public kindergarten through twelfth grade (K-12) education. However, it is unknown how much of those funds are allocated to Montgomery County. The state's casinos have contributed more than $1 billion in profit to the ETF.[53] Currently, 20 percent of proceeds from Maryland casino games go to the ETF.[54] However, that percentage will be reduced to 15 percent in 2016, when the MGM National Harbor casino opens.[55] Historically, Maryland's ETF received more than 20 percent from casino revenue, but the percentage has decreased in recent years, allowing casinos to keep up to 80 percent of their revenue.[56]

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[52] Community Colleges – Tuition Waiver for Full-Time Students – Full State Reimbursement. Maryland H.B. 673. (2015). Retrieved from http://mgaleg.maryland.gov/2015RS/bills/hb/hb0673f.pdf

[53] Maryland Gaming FAQs (n.d.). Retrieved from http://gaming.mdlottery.com/faq/.

[54] Ibid.

[55] Ibid.

[56] Brockett, M. (2014). Despite campaign promises, casinos, not schools are big winners from gaming profits. Maryland Reporter. Retrieved from http://marylandreporter.com/2014/08/05/despite-campaign-promises-casinos-not-schools-are-big-winners-from-gaming-profits/.

## *How the Maryland Proposals Compare To States That Have Passed Legislation*

Available in Appendix A are detailed exhibits of five states that have passed legislation to provide free or reduced community college to residents in Delaware, Minnesota, New Jersey, Oregon, and Tennessee. Similarities between these state programs and the Maryland proposals include that they are all last dollar scholarship programs. Last dollar scholarships are meant to be used to close the gap between any financial aid or scholarships awarded to a student and the remaining cost of tuition. In addition, several proposals are designed to provide support to local residents who maintain a certain GPA, and a majority of the programs have time lapse requirements (i.e. students need to apply to the scholarship/waiver program within a certain time frame of graduating from high school or receiving a GED). Several of the programs also have time limits for how long the scholarship is available (e.g. completing the intended program within five semesters or two and a half years from enrolling in the program). Table 3 displays the student eligibility criteria, as outlined in each state program.

TABLE 3: HOW DO THE MARYLAND PROPOSALS COMPARE TO STATES THAT HAVE PASSED LEGISLATION

| Current State Last Dollar Programs with Mandatory FAFSA Completion | | | | | | |
|---|---|---|---|---|---|---|
| **State** | **Eligibility Criteria For In-State Residents** | | | | | **Program Funding** |
| | **Student Status** | **Part-Time / Full-Time** | **Academic Qualification** | **Program** | **Other** | |
| **Delaware** | Must enroll no later than Fall semester after graduating from a DE high school (public or private) | Full-time | Must have graduated high school with a minimum of a 2.5/4.0 GPA | Applies to the DE Technical & Community College system | Students shall not have been convicted of any felony | Nearly $5 million in annual funding from the state |
| **Minnesota** | Must enroll 2 years after graduating from a MN high school or after completing a GED | Full-time | N/A for first-time eligibility; Must maintain 2.5/4.0 GPA once enrolled | Must enroll in a 2-year program within the MN State Colleges & Universities system | (1) Recipients or dependent students reporting parental gross income must have an adjusted gross income of less than $90,000; (2) Targets students interested in high-demand, occupational fields; (3) Must participate in a mentoring program | $8.5 million pilot program funded by the state |
| **New Jersey** | Focuses on graduating high school students | Full-time | Recipient must graduate high school in the top 15% of his/her class | Must enroll in one of the state's 19 community colleges | Students who score 540 or better on the critical reading and 530 or better on the math portions of the SAT are considered college-ready. Students who do not take the SAT will have to take a college placement test selected by the NJ Council of County Colleges when they receive their conditional eligibility letter from the NJ Higher Education Student Assistance Authority | $7 million commitment from the state |
| **Oregon** | Must apply within 6 months of completing high school or a GED program | At least part-time | Recipient must graduate high school with a 2.5/4.0 GPA | Must enroll in one of the state community colleges | N/A | $10 million in annually from the state |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Tennessee (1)** | Students who graduate from an eligible high school, homeschool, or earn a GED (prior to 19th birthday) | Full-time | N/A for first-time eligibility; Must maintain 2.0/4.0 GPA once enrolled | Must enroll in one of the state's 13 community colleges, 27 colleges of applied technology, or another eligible program offering associates degrees | Recipients must (1) participate in a high school mentoring program that continues into college; and (2) perform 8 hours of community service prior to each term the award is received | TN created an endowment fund with original support coming from $300 million of lottery reserve funds and $47 million in one-time state general fund dollars; continues to draw from state lottery funds |
| **Tennessee (2)** | Targets adults who have earned at least 30 hours of college credit toward an associate's degree in applied sciences and who have not been enrolled in college for at least 24 months | At least part-time | N/A for first-time eligibility; Must maintain 2.0/4.0 GPA once enrolled | Must enroll in one of the state's 13 community colleges, 27 colleges of applied technology, or another eligible program offering associates degrees | Applicants must have an adjusted gross income less than $36,000 | $5 million commitment from the state |

One major difference between the Maryland proposals and the five state programs that are currently being implemented is the Maryland legislation proposes that the state reimburse, in-full or in-part, community colleges for any foregone tuition revenue associated with the legislation. Because the state could require a community college to waive tuition without supplying the funds to pay for it, including such specific language in Maryland legislation avoids this kind of unfunded mandate in the state.

In addition to these state programs, ten other states, in addition to Maryland, have proposed legislation in 2015 to provide free or reduced cost community college to residents. These states include Arizona, Indiana, Massachusetts, Mississippi, Missouri, New York, North Carolina, North Dakota, Oklahoma, and Texas. While many support these programs, it is important to note that some do not think that government involvement will make a difference.[57] According to the Federal Reserve Bank of New York, 34 percent of borrowers with less than $5,000 in loans went into default within two years of graduating, missing at least one payment, compared to 18 percent of borrowers with $100,000 or more. Students with six-figure loan debts may be in graduate school and earn higher salaries than those less than $5,000 in loans who may only hold a bachelor's or associate's degree.[58] David Baime, from the American Association of Community Colleges, says that, "the less you borrow, the likelier you are to default and that is very much a community college phenomenon."[59]

[57] Woodruff, M. (2015, September 24). Why making community college free won't solve the student debt crisis. Retrieved from http://finance.yahoo.com/news/community-college-problems-162559087.html
[58] Ibid.
[59] Ibid.

## LOCAL SCHOLARSHIP AND PROMISE PROGRAMS

TABLE 4: COMPARATIVE CASE STUDIES: LOCAL PROGRAMS ANALYZED

| Comparative Case Studies: Local Programs Analyzed | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Promise Program** | **Location** | **Type of Program** | **Funding Mechanism** | **Academic Qualifications** | **Residency Requirements** | **Other Eligibility Requirements** | **Extent of Scholarship** |
| Georgia HOPE Program | Georgia | Last Dollar | Georgia Lottery | Varies based on grant or scholarship applying for. Some require a minimum high school GPA, others ignore GPA. | Must reside in Georgia for 12 consecutive months prior to enrolling. | Some of the grants or scholarships require students to maintain a minimum GPA. Must attend within 7 years of high school graduation. | 90-100% of tuition is covered depending on the scholarship or grant, books and fees are not covered. |
| Cuesta Promise | San Luis Obispo County, CA | Last Dollar | Private: One large donation, plus school's endowment. | None | Must have graduated from a county high school (or be homeschooled or receive GED in county). | Must attend in the year following graduation. | Covers first year's tuition, and other fees including ID cards, the student center fee, and other course material fees. |
| New Haven Promise | New Haven, CT | Last Dollar | Private: Four local, private institutions fund different aspects of the program. | Minimum high school GPA of 3.0. Smaller scholarships are available for applicants with GPAs between 2.5-2.99 | Sliding residency requirement. Will not cover students who entered school district after tenth grade. | Must within two years of high school graduation. Requires high school community service hours and high school attendance requirement. Minimum GPA of 2.0 once enrolled. | Sliding requirement based on length of stay in New Have public schools. Students who attend K-12 receive 100% covered. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Galesburg Promise | Galesburg, IL | Last Dollar | Tax revenue: 2% increase in hotel tax. | None | Sliding residency requirement. Will not cover students who entered school district after ninth grade. | Must attend in the academic semester following high school graduation. Must take at least 9 credits a semester, attend 67% of sessions, and maintain a 2.0 GPA. | Sliding requirement based on length of stay in public school district: Maximum 16 credits a semester, 64 credits over a student's career. |
| George Washington Early College Program | Washington, DC | Dual Enrollment | Private | Competitive application process. Minimum of 3.0 GPA and PSAT requirement. | Must attend School Without Walls (public school on GW's campus). | None | Attend and receive credit for GW courses tuition free. |
| Alice Lloyd College | Pippa Passes, KT | Work-study | College Funded | 2.25 high school GPA, 17 ACT score. | Serves residents of 108 Appalachian counties. | Students must work a minimum of 10 hours per week and 160 hours per semester at an on-campus or off-campus job. | Full tuition, renewable for ten academic semesters. |

Localities from New Haven, CT to Long Beach, CA have implemented free or reduced cost community college programs through philanthropic donations and other means. Appendices B-D of this report includes exhibits, which highlight successful local programs that may be applicable in Montgomery County, Maryland.

Many local programs utilize a "promise program". This means that, should the student meet the requirements of the program, the funds will be there for them to utilize for postsecondary education. While similar to a scholarship, promise programs are not entirely merit based and are usually exclusive to the state or locality they are found in. Promise programs aim to give as many student's access to postsecondary education as possible that meet the minimum requirements. Promise programs have shown to be funded through several different strategies, which are outlined below and in Appendix B.

Many promise programs work as "last dollar" scholarships. As a reminder, last dollar scholarships close the gap between financial aid or scholarships already awarded to a student and the remaining cost of tuition. There are many ways to implement a last dollar scholarship program. Table 4 provides a summary of and comparisons of promise programs across the country. While some programs have academic eligibility requirements, other programs do not. Furthermore, some programs have requirements that students maintain a certain GPA while receiving a scholarship, while other programs do not.

Besides academic requirements, last dollar scholarship programs differ on other eligibility restrictions. While all of the programs researched in this report have a type of residency requirement, the programs differ on what that requirement is. For example, the New Haven Promise determines the percentage of scholarship it will pay out to a student based on a sliding residency scale, while the Georgia HOPE program has a single residency requirement that matches the residency requirement to receive in-state tuition. These programs differ on the extent of the scholarship as well. The Cuesta Promise, for example, only covers a student's first year of community college. The Galesburg Promise, on other hand, will pay a maximum of sixteen credits a semester, and cover up to sixty-four credits over a student's academic career. Some programs require students to be full-time, while other programs require students to be at least part-time.

Finally, these programs differ most distinctly based on their funding mechanism. The different funding mechanisms this report analyzes include programs funded on lottery revenue, private/endowment funded programs, and programs funded through tax revenue such as property, hotel and sin taxes. With these differences from program to program, it is clear that Montgomery County could narrowly tailor a last dollar scholarship program based on its own needs. A detailed description of how these funding mechanisms work for different localities can be found in Appendix B. Recommendations regarding which funding mechanism might work best in Montgomery County, and other concerns regarding last dollar scholarship programs, are discussed in the recommendations section.

## *Dual Enrollment: Attending Community College While Enrolled in High School*

Dual enrollment is a way for high school students to get a head start on their postsecondary education by attending college courses while still in high school. It should be noted that Montgomery College has a dual enrollment program in place as do many other states and localities. Like last dollar scholarship programs, these programs differ in terms of academic requirements. For example, some programs require a certain PSAT score to be eligible, while other programs, including Montgomery College's, do not. The more restrictions placed on a dual enrollment programs, including academic restrictions like GPA requirements, the less accessible these programs are for a broader population. Furthermore, other programs, like the George Washington University Early College Program (further discussed in Appendix C) award high school students an associate's degree at their high school graduation. Not only does this kind of program make a high school graduate much more competitive in the job market immediately after graduating high school, but it also opens doors for them to transfer credits to a four year institution. Therefore, the strength and accessibility of a dual enrollment program depend on its eligibility requirements, and dual enrollment programs that are substantive enough that they award high school students with associate's degrees are worth noting.

### *Work-Study: Tuition Support in Exchange for Employment at the College*

Work-study programs provide students with a scholarship in exchange for working at the college. The Alice Lloyd College, highlighted in Appendix D, provides students with free tuition in exchange for participation in the work-study program. Other work-study programs researched have different percentages in the amount of tuition that could be covered. Furthermore, work-study programs differ on the amount of hours per work and hours per semester that they require participants to work. It is important that the work performed is meaningful enough to cover the scholarship; however, if the work requirement is too high, this could interfere with a student's academic achievement. Finally, the colleges researched highlighted how working during college may be considered part of a student's education and may help advance their career following graduation.

## ECONOMIC PROJECTIONS

A last dollar scholarship program for students wishing to attend Montgomery College could have a significant impact on students with gaps between their financial aid and tuition costs. Montgomery County's population is growing extensively, meaning that the demand for postsecondary education will increase. In addition, the sources of funding for this last dollar scholarship program must be sustainable in the long term. The funding sources covered in this report include the use of lottery funds, tax increases, as well as the use of endowments to fund these scholarships. In addition, a Revenue-Expenditure Analysis was conducted based on a combination of funding sources to estimate what a last dollar scholarship program in Montgomery County entails and how many students would benefit from the program. To account for uncertainty, Monte Carlo simulations were conducted to obtain estimates mimicking real life net present value fluctuations. The calculations associated with this analysis are available in the supplemental materials accompanying this report, Appendix G.

### *Lottery Funds*

Lottery revenue is one way to fund a last dollar scholarship. While a portion of state lottery funds are directed toward Maryland's ETF, it is unknown how much of those funds are allocated to the counties. Residents in Montgomery County have accounted for an increasing share of lottery sales in Maryland. According to the Maryland Lottery and Gaming Control Agency, from 2010 to 2014, Montgomery County went from comprising 9.74 percent of total lottery sales to 10.28 percent.[60] Based on Montgomery County's share of state lottery sales, lottery funding in the county is estimated to bring in up to $8.7 million that could be invested into the last dollar scholarship program.

### *Tax Increases*

Raising taxes is another way for Montgomery County to provide its residents with last dollar scholarships. One type of tax explored for this analysis is the hotel tax, currently at 7 percent, and how much revenue the tax could bring to the county after a 2 percent increase. Between 2010 and 2015, Montgomery County's hotel tax brought in an average of $18 million to the county.[61] [62] With a 2 percent increase, a 9 percent hotel tax is estimated to bring up to $5 million in additional revenue to the county. Another tax explored is the property tax and how much a rate increase from .736 percent per $100 of assessed value to .836 percent per $100 could bring to the county. Between 2010 and 2015, the county collected an average of $1.4 billion from property taxes.[63] [64] If the property tax increased to .836 percent per $100, Montgomery County is estimated to receive an additional $196 million in revenue. Given the vast sum the county already collects, such a small increase can generate substantial revenue without alarming homeowners too much.

### *Endowment*

The Montgomery College Foundation currently provides over $1.25 million in scholarships to up to nine-hundred students per year.[65] The foundation is funded by numerous individual, corporate, and foundation donors funding scholarships targeted toward a variety of populations. In 2014, the Montgomery College Foundation raised $4 million in gifts and pledges.[66] According to the Montgomery College Foundation, an endowment of $45,000 generates enough interest after one year to pay for a student's tuition and fees for one semester, while an endowment of $90,000 generates enough interest after one year to pay for a student's

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[60] Maryland Lottery and Gaming Control Agency (2014).Comprehensive annual financial report for the years ended June 30, 2014 and 2013. Retrieved from http://cdn.mdlottery.com/CAFR/CAFR%20-%202014.pdf.

[61] Montgomery County Department of Finance (2014). Comprehensive annual financial report, fiscal year 2014. Retrieved from http://www.montgomerycountymd.gov/finance/resources/files/data/financial/cafr/FY2014_CAFR_web.pdf.

[62] Maryland Department of Legislative Services, Office of Policy Analysis (2015). County revenue outlook, fiscal 2015. Retrieved from http://dls.state.md.us/data/polanasubare/polanasubare_intmatnpubadm/polanasubare_intmatnpubadm_annrep/County-Revenue-Outlook-Fiscal-2015.pdf.

[63] Montgomery County Department of Finance (2014). Comprehensive annual financial report, fiscal year 2014. Retrieved from http://www.montgomerycountymd.gov/finance/resources/files/data/financial/cafr/FY2014_CAFR_web.pdf.

[64] Maryland Department of Legislative Services, Office of Policy Analysis (2015). County revenue outlook, fiscal 2015. Retrieved from http://dls.state.md.us/data/polanasubare/polanasubare_intmatnpubadm/polanasubare_intmatnpubadm_annrep/County-Revenue-Outlook-Fiscal-2015.pdf.

[65] Montgomery College Foundation (n.d.). Frequently-asked questions (FAQs). Retrieved from http://cms.montgomerycollege.edu/EDU/Altsub1.aspx?id=33674.

[66] Montgomery College Foundation (2015). Foundation focus, vol. 9, no. 1. Retrieved from http://cms.montgomerycollege.edu/WorkArea/DownloadAsset.aspx?id=83686.

tuition and fees for one academic year.[67]

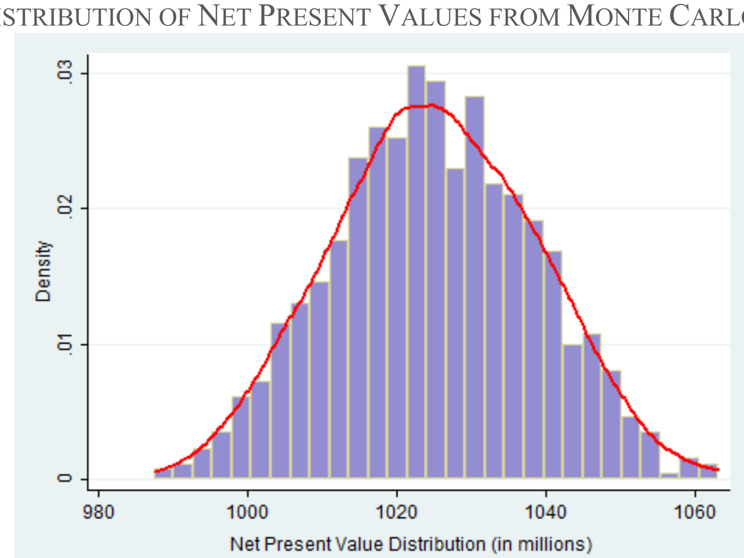
## *Revenue-Expenditure Analysis*

Based on the selected students impacted and the revenues sources utilized, a last dollar scholarship program in Montgomery County is estimated to have a net benefit between $178 million and $207 million. Over the course of five years, the total five year net benefit of a last dollar scholarship program is estimated to be valued between $770 million and $895 million. The range of benefits were estimated based on the benefits of the Montgomery County Foundation's existing endowment, an estimated county share of state lottery revenue, and the estimated additional tax revenue generated from hotel and property taxes. The range of costs were estimated based on the percentage of students receiving any financial aid, the average population of Montgomery County Public Schools' (MCPS) high school students and the percentage of MCPS high school graduates who go on to Montgomery College. The calculations suggest that at the proposed scholarship levels, the last dollar scholarship program could benefit an average of 1,800 MCPS graduates per year who start at Montgomery College. Among enrolled students, it is estimated that a last dollar scholarship could benefit around 11,000 students annually.

## *Sensitivity Analysis*

To account for uncertainty, a sensitivity analysis was also conducted using Monte Carlo simulations to obtain a more realistic sense of the benefits a last dollar scholarship program would have. After performing 1,000 simulations, this study obtained a range of net present values associated with the program ranging between $987 million and $1.1 billion, averaging at around $1 billion with a standard deviation of $14 million. Such a low standard deviation implies how closely the Monte Carlo estimates reflect any unforeseen circumstances that could occur in real time. The range of net present values can be seen in a histogram in Figure 8.

FIGURE 8: DISTRIBUTION OF NET PRESENT VALUES FROM MONTE CARLO SIMULATION




67 Montgomery College Foundation (n.d.). Frequently-asked questions (FAQs). Retrieved from http://cms.montgomerycollege.edu/EDU/Altsub1.aspx?id=33674.

## Potential Proposals for Montgomery County

Below is a list of potential policy solutions for lowering the cost of attendance at Montgomery College for county residents. These recommendations are based upon criteria of efficiency, effectiveness, equity, robustness/improvability, and political feasibility. These components ask the following:

1. *Efficiency:* How does the recommendation perform at increasing community college access at the lowest cost for the county and college?
2. *Effectiveness:* How does the recommendation perform at increasing access regardless of cost?
3. *Equity:* How does the recommendation perform at targeting vulnerable populations, such as low-income or minority populations?
4. *Robustness/improvability:* Is the funding mechanism flexible (can it be adjusted based on demand), and is the funding mechanism reliable (will it fund the program long term)?
5. *Political feasibility:* Is the recommendation legal, and will it have public support?

The criteria are also prioritized in the same order as the above listed, placing efficiency, effectiveness, and equity as the most important factors, followed by robustness/improvability, and political feasibility as least important. These recommendations are also presented in Appendix E.

### *Promise Program: Lottery Revenue*

Table 5: Lottery Revenue Assessment

| Criteria | Impact Category | Assessment |
|---|---|---|
| Efficiency | Increase access at lowest cost | Increase access at no direct cost to the county nor college. (+) |
| Effectiveness | Increase access regardless of cost | Programs examined have seen access increase. (+) |
| Equity | Target vulnerable populations | Programs examined saw applications increase. (+) |
| Robustness/Improvability | Flexibility of funding mechanism | Savings accumulate in the ETF. (+) |
| | Reliability of funding mechanism | Annual input from lottery & gaming may change from year to year causing the endowment to fail. (-) |
| Political Feasibility | Legality | The county currently uses their ETF allocation to fund public K-12 education. The county would have to make up the K-12 funding loss if they used their ETF allocation to fund community college. (-) |
| | Public Support | This would come at no direct cost to voters; voters would likely support if funding from the ETF was increased. However, if the county allocation from the ETF was not increased voters would not support a decrease in funds for K-12 public education. (+/-) |

Lottery revenue has long been used to fund K-12 public education across the country. Today, some states and localities, including Tennessee and Georgia, are also using lottery revenue as a way to secure promise program funding for last dollar scholarships. As previously discussed, Tennessee, which serves as a model for promise programs, started their program from lottery funds and a onetime private donation and created an endowment. Maryland already has a similar endowment funded by state lottery and gaming revenue called the ETF. The ETF currently supports public pre-K-12 education, higher education constructions, and capital improvements including community colleges. However, it does not fund individual scholarships for residents to attend higher education. As previously discussed, the Montgomery County Foundation provides these types of scholarships. If all remained constant, this study projects that lottery funding in the county could bring in about $8.7 million that could be invested into the last dollar scholarship program.

While lottery funding seems like an attractive policy, the legality of implementing it would be difficult in Montgomery County. The portion of lottery funds from the state that the county currently receives is already allocated to pre-K-12 public education. If the county did allocate a portion of their current funding from the ETF to fund community college scholarships, they would have to make up the funding loss for the pre-K-12 education. Another limitation is the reliability of the funding mechanism. While the ETF endowment will grow over time, the annual input from lottery and gaming funds may change. For example, the input of lottery revenue into the ETF may change or individuals may not play the lottery or visit the casinos as much in any given year, which may cause limitations in the total amount of funds that Montgomery County receives from the state from year to year.

In order for Montgomery County to implement a free community college program based on lottery revenue, the state would need to allocate additional funds from the ETF to the county, which is unlikely. However, if this was possible, a program funded by lottery and gaming revenue would likely be politically accepted and publicly supported given that the funding for the program would not come in the form of a tax. In addition, if implemented, the funding mechanism has the potential to be efficient, effective, and equitable. A promise program funded by lottery and gaming revenue may achieve the goal of increasing community college access at the lowest cost, as it has in Tennessee (i.e. not costing the county any additional funding). Furthermore, a program funded by lottery funds would have the potential for high impact of increasing access to Montgomery College for all, including the country's most vulnerable students as it does for the county's public education system. While this funding mechanism may work in some states and localities, this study does not see this as an option for Montgomery County given the legality issues and potential for an unsustainable funding source.

## *Promise Program: Private Funding/Endowment*

TABLE 6: PRIVATE FUNDING/ENDOWMENT ASSESSMENT

| Criteria | Impact Category | Assessment |
|---|---|---|
| Efficiency | Increase access at lowest cost | Increases access at no cost to the county, but could require some of College's endowment. (+/-) |
| Effectiveness | Increase access regardless of cost | Local programs examined have seen access increase. (+) |
| Equity | Target vulnerable populations | Programs examined saw applications increase. (+) |
| Robustness/ Improvability | Flexibility of funding mechanism | Endowment savings accumulate. (+) |
| | Reliability of funding mechanism | Private donation could run out, endowment could fall. (-) |
| Political Feasibility | Legality | Although legal, it could prove difficult to find a private donor. (-) |
| | Public Support | Comes at no cost to voters, voters will likely support. (+) |

In terms of efficiency, seeking out private funding and establishing a strong endowment is extremely cost effective, as it would come at almost no cost to Montgomery County nor Montgomery College. Two of the programs explored in depth here are the Cuesta Promise and the New Haven Promise (see Appendix B). In a structure similar to the Cuesta Promise, where one large donation is utilized as seed money for kick-starting the program and the school's endowment is used as sustained support, the only cost to the college is ensuring that a college's endowment remains strong enough to support the program in future years. In a structure similar to New Haven Promise, the funding mechanism is cost effective to all parties. As discussed in detail in Appendix B, the New Haven Promise divides funding responsibility across four private entities. This means that no one organization is solely responsible for covering the cost of the program; thus, one organization is not especially burdened by the program. Furthermore, this means that the college does not need to concern itself as much with ensuring future private donations are strong, like in the Cuesta Promise, because if one organization fails to meet its commitment one-year, other organizations committed to the program may fill in the gap. Thus, we believe that securing private funding and maintaining strong endowments would be efficient both for Montgomery College and Montgomery County.

When viewed in terms of effectiveness and equity, this study reports that private funding and endowment funding mechanisms are also strong. In terms of effectiveness—ensuring that access is increased to the College—we find that the Cuesta Promise was able to increase Cuesta

College's enrollment in the program's first year by more than 100 students.[68] The New Haven Promise Program saw a similar increase, increasing their applications by about 38 percent, from 352 applicants in 2012 to 486 applicants in 2013.[69] Therefore, the private funding mechanism proves effective. The mechanism also fares well in terms of equity. Looking specifically at minority applicants, the New Haven Promise found a 44 percent increase in African American applicants and a 21 percent increase in Hispanic applicants. The increase was especially large for African American males, increasing applicants by 84 percent.[70] Given that New Haven, Connecticut has a larger percentage of African Americans than Montgomery County, 35.4 percent of the population to Montgomery County's 17.2 percent, and a larger percentage of Hispanic residents, 27.4 percent to 17 percent, New Haven is not completely comparable to Montgomery County, although one might still expect Montgomery College to experience an increase of minority applicants.[71] [72] Across the board, New Haven saw an increase in the percent of "qualified" applicants for the program from every high school in New Haven, meaning these gains are representative across all backgrounds.[73] Therefore, we believe that a private funding mechanism can both increase access to Montgomery College generally, but also at vulnerable populations, including minority students and students with a low-income background.

Private funding could do well in terms of robustness and improvability, but one could imagine a scenario where it does not do well. In terms of flexibility of the funding mechanism, any money that is not used one year could be saved for later years; therefore, we do not view flexibility as a problem. However, the reliability of private funding raises some flags. For example, the New Haven Program spreads its risk across four different private entities, meaning that if one entity fails to provide its obligation one year, there are three other organizations funding other aspects of the program. Yet, the Cuesta Promise relies on a seed donation and future endowments. If the seed donation runs out, and if future endowments are lacking, then the program would suffer. However, in 2014, Cuesta Promise expanded their program from only covering one semester to covering a full year of college.[74] This suggests that they might have a stronger endowment, yet the concern is still worth raising.

Although the program could be legally implemented and politically popular, it could prove difficult for Montgomery County and Montgomery College to identify private funders. The Community Foundation for the National Capital Region (The Community Foundation in New Haven is one of New Haven Promise's private funders) already supports programs that assist with college readiness, and assist vulnerable populations attend college, so their resources could be strained as a private funder.[75] However, if a seed donation could be identified,

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[68]Milbourne, L. (2014, October 1). Full-Year Free with Cuesta College Promise. Retrieved from http://www.cuesta.edu/student/documents/cuesta-promise/2014Promise_Full_Year_news.pdf

[69] Promise Statistics. (2013). Retrieved, from http://newhavenpromise.org/about/stats/

[70] Ibid.

[71] New Haven County QuickFacts from the US Census Bureau. (2015, October 14). Retrieved from http://quickfacts.census.gov/qfd/states/09/09009.html

[72]Montgomery County QuickFacts from the US Census Bureau. (2015, October 14). Retrieved from http://quickfacts.census.gov/qfd/states/24/24031.html

[73]Promise Summary. (2013). Retrieved from http://newhavenpromise.org/about/stats/promise-summary/

[74] Bell, J. (2014, October 1). Cuesta Promise scholarship extended to full year for local high school grads. Retrieved from http://kcbx.org/post/cuesta-promise-scholarship-extended-full-year-local-high-school-grads

[75] Sharing Montgomery Grantees. (2015). Retrieved from http://thecommunityfoundation.org/our-communities/montgomery-county/sharing-montgomery-grantees/

Montgomery College describes that the college "ranks among the top five community colleges in the country relative to philanthropic giving and is listed among the prestigious ranks of colleges and universities across the country relative to total endowment size."[76] Therefore, although it could be difficult to identify a private donor, the College could have the resources to sustain the program through its endowment. Furthermore, in terms of political acceptability, voters would most likely support a private or endowment driven funding mechanism because the county stands to gain and it comes at no cost to the voter.

## *Tax Revenue*

TABLE 7: TAX REVENUE ASSESSMENT

| Criteria | Impact Category | Assessment |
|---|---|---|
| Efficiency | Increase access at lowest cost | Potential cost to the county associated with a tax (-) |
| Effectiveness | Increase access regardless of cost | Local programs examined have seen access increase. (+) |
| Equity | Target vulnerable populations | Programs examined saw applications increase. (+) |
| Robustness/ Improvability | Flexibility of funding mechanism | Steady income dependent on the tax chosen (+) |
| | Reliability of funding mechanism | Steady income dependent on the tax chosen, county has the ability to modify taxable amount should funds not be sufficient (+) |
| Political Feasibility | Legality | Aside from utilizing already taxed income that is deposited into the ETF, any legislative tax increase would have to be in line with state as well as county rules. This does not make it undoable but adds an extra layer of work to the political feasibility (-) |
| | Public Support | Any tax increase directly on county residents will likely be met with opposition. There is the potential to utilize an excise tax so that costs are put on non county residents in addition to residents but it is unknown if the County Council would be able to designate the funds for a specific use such as for promise program funds (+/-) |

Tax revenue is one of the most traditional means for funding a last dollar promise program. While it has its strengths in effectiveness and robustness, it also has drawbacks in imposing a new or increased tax on Montgomery County residents.

With regards to efficiency, tax revenue would be able to vastly increase the ability to access community college for more students but comes at an economic cost to Montgomery County residents. Despite the economic cost, there are benefits to the county that raising the number of students attending Montgomery College affords such as creating a highly educated

[76] About the Foundation. (2015). Retrieved from http://cms.montgomerycollege.edu/EDU/Department2.aspx?id=26889

workforce and incentivizing individuals to live in Montgomery County. Our economic analysis also shows that a last dollar scholarship would benefit around 11,000 students annually in Montgomery County. While these are not as visible as the economic woes a tax levies, they still factor into the benefit cost of the program. In looking at other programs that utilize tax revenue to fund their promise programs, most are used in tandem with a separate revenue source or endowment such as in the Galesburg Promise discussed in the literature review or in the Michigan Promise Zones which utilize local funding and a portion of the State Education Tax. There is no evidence of a promise program that is solely funded through tax revenue which does weigh into an efficiency evaluation of this revenue source.

In looking at effectiveness and equity, utilizing tax revenue would be highly desirable to fund a promise program. While the Galesburg Promise is only in its first year, over 80 students were able to utilize its funds to help them attend community college.[77] It is unknown if these students would have attended should the funding not been available to them. In the first year of the Baldwin Promise, part of the Michigan Promise Zones, "14 students of the graduating class of 23 enrolled in college. The previous year, eight had enrolled out of a graduating class of the same size."[78] If funding is available, it is more likely that students will utilize it. This speaks to the equity of the programs as well. While there are residency and academic requirements, there are no income requirements in these cases. Should Montgomery County want a program that is equitable to all students, income requirements should not be put in place.

Tax revenue would offer favorable robustness and improvability. Depending on the tax utilized, economic forecasting can estimate the dollars brought in and what level of a tax would be needed to create sufficient funds. While tax funds have the potential to fluctuate, they still have more economic stability than a lottery or endowment. As discussed in the economic projections section, if the property tax was increased to .836 percent per $100 from the current .736 per $100, Montgomery County could receive an additional $196 million in revenue. This is also something the Council would have the authority to increase or decrease dependent on the needs of the fund through potential legislation every year. Tax revenue, although affected by economic cycles, affords a steady stream of income every year, so there is not as high of a fear of the funds of the program running out as could be the case with an endowment.

Political acceptability is likely where tax revenue has the most drawbacks. Imposing a new tax on residents is likely to be met with contentiousness and opposition. There are options that could be favorable such as a hotel tax or sin tax which levies the tax not directly on the Montgomery County residents. Instead, these taxes would allow for nonresidents to claim some of the burden as well. Sin taxes are usually seen in a favorable light as they are impacting those that choose to partake in whatever activity is being taxed. They can also have potential public health benefits when looking at cigarettes or alcohol excise taxes. A potential issue with utilizing a tax for funding though is the possibility of sole ownership of a specific tax to be appropriated towards funding a promise program. According to Essie McGuire, Senior Legislative Analyst at Montgomery County Council, no county tax revenue is currently earmarked for one program. Instead, everything is deposited into one fund that is used to fund all of the County's programs. While the Council would not be barred from designating specific tax funds to be appropriated to

[77] David, J. (2015, January 22). Galesburg Promise offers free tuition at Carl Sandburg College. Retrieved from http://wqad.com/2015/01/22/galesburg-promise-offers-free-tuition-at-carl-sandburg-college/

[78] Semuels, A. (2015, August 18). The Town That Decided to Send All Its Kids to College. Retrieved from http://www.theatlantic.com/business/archive/2015/08/baldwin-michigan-promise/401399/

a single source, such as for promise program funds, it might be difficult to make the case since it is not something that is done at this point.

### *Last Dollar Scholarships & Economic Disincentive*

Before evaluating work-study and dual enrollment programs, it is important to note a concern that is relevant to the three last dollar scholarship programs highlighted above. While last dollar scholarship programs require students to demonstrate that they have applied for federal student aid, many do not stipulate that students show that they have also sought out private aid (in the form of private scholarships). Therefore, a concern is present where a last dollar scholarship could disincentivize students from seeking out these sources of private funding, because students know that the last dollar scholarship will step in to fill in whatever gap exists after federal aid is applied for. Therefore, it is worth exploring potential ways to incentivize students to seek out private donations. The authors of this report recommend ways to do so in the final recommendation.

### *Work-Study: Tuition Support in Exchange for Employment at the College*

TABLE 8: WORK-STUDY ASSESSMENT

| Criteria | Impact Category | Assessment |
|---|---|---|
| Efficiency | Increase access at lowest cost | Workability of agreements increases college enrollment & completion(+) |
| Effectiveness | Increase access regardless of cost | Option diversity increases applications & enrollment(+) |
| Equity | Target vulnerable populations | Mix of demographic & market based option variability increases application of vulnerable populations(+) |
| Robustness/ Improvability | Flexibility of funding mechanism | Expansion of existing program requires minimal cost to county, & may be subsidized by private organizations or volunteer working groups(+) |
| | Reliability of funding mechanism | Value & economic based sponsor funding levels potentially require county incentivizing to enter into & maintain student contracts(+/-) |
| Political Feasibility | Legality | In-county existing program establishes legality for expansion of current structure & similar out-of-county programs may provide legal framework for any alteration of scope(+) |
| | Public Support | Potential high public support given robust inclusivity of sponsor & student participation requirements, clear economic benefits in education outcomes & poverty rates, no direct voter cost. & real possibility of national recognition(+) |

A county work-study program will potentially yield long-term economic benefits substantially higher than initial and ongoing investment, if the program remains flexible to accommodate shifts in economic demand. As a note, when discussing the implementation of a work-study program, the authors of this report are operating under the assumption that beneficiaries will stay in the county, but this may not be true in practice.

A work-study program would be efficient and effective, because successful partnerships between students and sponsors would involve mutually beneficial opportunities in various public and private employment markets, thus increasing college access and completion at no cost to the county. Furthermore, a work-study program could be equitable, as vulnerable populations could be targeted under such a program. In work-study programs, students are incentivized by tuition assistance and work experience to attain education and skills. Sponsors are offered opportunities to fill operational gaps with highly motivated, educated employees. Dollar for dollar, a work-study program's potential for success may result in a policy investment yielding significant economic returns for the county.

In terms of robustness and improvability, Montgomery College already has a work-study program. Montgomery College and Montgomery County could expand this program by building upon the program that is currently in place. Montgomery County could gauge the funding of such a program by performing an analysis of various economic trends that will help determine the most effective work-study arrangements to implement both today and tomorrow. The authors of this report believe an expansion of work-study programs is politically feasible, as the program is already in place (thus legal), and voters are likely to support a work-based, public-private partnership.

Work-study program existence and scope is needs based, commonly existing to fill economic gaps between resource deprived sectors of the employment market and the available qualified workforce. Incentivizing students to align areas of study in deprived sectors is a huge bonus for both parties. Arrangements vary and depend on both employer and student requirements. For instance, a contract directly with the college for work on-campus might be considered a light commitment for a student, providing minimum tuition contribution. Conversely, a contract with a Military ROTC unit calls for a heavy student commitment. However, a student in greater need of funding may accept ROTC terms, with the payoff of full tuition sponsorship, paid part time employment during school, and the promise of a robust career after school completion.[79] Additionally, many colleges and private vendors provide platforms for connecting sponsors and student with an array of agreement options at various commitment levels.

The success of colleges to match sponsors and students is dependent on continuous market analysis of needs. Factors indicating program needs could include trends and projections in student enrollment, public and private job markets, as well as population demographics and changes. Economic concerns of the county government could also be included to foster development of creative policy solutions using student resources. State and national data review is encouraged to broaden perspective. As an example, one factor for possible consideration in a work-study program would be the county's economic needs accrued from a recent migration influx of international and non-English speaking populations. These new residents tend to be low-income and have been straining county resources, particularly in K-12 ESOL. A successful work-study approach to this need might focus on optimization of intercultural resources available among this group, such as with opportunities for foreign language instruction aids in K-12 classrooms and at the college, and cultural translation aids at various county government offices.

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[79] Military.com. (n.d.). *ROTC Overview*. Retrieved November 2015 from http://www.military.com/rotc.

## *Expanded Dual Enrollment*

TABLE 9: EXPANDED DUAL ENROLLMENT ASSESSMENT

| Criteria | Impact Category | Assessment |
|---|---|---|
| Efficiency | Increase access at lowest cost | Would either put the burden on the student, or require county and college funding. (+/-) |
| Effectiveness | Increase access regardless of cost | Could increase access for high school students. (+) |
| Equity | Target vulnerable populations | Removing financial and academic barriers would increase equity. (+) |
| Robustness/ Improvability | Flexibility of funding mechanism | Already in place to be improved upon, funding could be flexible--some student, some college. (+) |
| | Reliability of funding mechanism | Up to the student or the county/college to fund. (+/-) |
| Political Feasibility | Legality | Already in place, so this is legal. (+) |
| | Public Support | Public likely to support an existing program. (+) |

In terms of efficiency, that is, cost-effectiveness for Montgomery County, an expanded dual enrollment program may be expensive. Using the GW partnership highlighted in Appendix D as an example, public school students attend and receive tuition credits free. However, the program is competitive (accessibility to the program is not the goal), and, GW is a private university and therefore likely has more resources than a community college. Under the current Montgomery College Dual Enrollment program, students are responsible for paying tuition and fees associated with the college courses they are registering for, although twenty percent of students have their tuition waived.[80] If Montgomery College looked towards expanding dual enrollment, one of the ways that they might do so is by lowering tuition for high school students, perhaps through scholarships. This would come at a cost to both the College and the County. Dual enrollment could also be expanded by removing academic barriers. As it stands, Montgomery College has a number of GPA requirements and college-readiness requirements for its participants. Per the program's requirements, applicants to the program "have an articulated plan for high school and college attendance during their junior and/or senior year" could discourage potential applicants from vulnerable populations from applying in the first place. Removing these academic barriers would come at no cost to the county.

Ignoring costs, expanded dual enrollment could be effective. If dual enrollment were expanded by lowering costs to high school students, and removing academic barriers for high

[80] Douglas-Gabriel, Danielle (2015, October 30). College funding heads to high school, as feds aim to fund dual-enrollment. Retrieved from https://www.washingtonpost.com/local/education/college-funding-heads-to-high-school-as-feds-aim-to-fund-dual-enrollment/2015/10/30/10b36b26-7dc3-11e5-b575-d8dcfedb4ea1_story.html

school students, more high school students would be incentivized to attend. Thus, accessibility to the dual enrollment program would be increased. Expanded dual enrollment would perform better in terms of equity than the current dual enrollment system. Vulnerable populations, including low-income populations and minority populations, could see the mentioned academic requirements as a barrier to entry. These requirements could discourage potential applicants from vulnerable populations from applying in the first place. Therefore, if expanded dual enrollment includes removing these kinds of barriers, this type of program would fare well in terms of equity.

This kind of program does well in terms of robustness/improvability because it is already in place and can already be improved upon. It would likely do well in terms of political feasibility because it is not a new program, thus it is legal. Expanded dual enrollment would likely do well in terms of public support because it is simply an existing program being expanded upon, rather than an entirely new program being implemented.

## Final Recommendation: A Combination of Strategies

The authors of this study propose Montgomery County and Montgomery College pursue a combination of the strategies highlighted in this report. First, a last dollar scholarship should be pursued. Despite concerns mentioned earlier in this report that the most vulnerable populations may already be eligible for a full grant, the publicity generated by a newly implemented last dollar scholarship program would raise awareness of such grants and encourage students from vulnerable populations to complete the FAFSA. Additionally, students who may not be excessively needy to currently qualify for a full grant would qualify under this last dollar scholarship program.

Recognizing that a last dollar scholarship program could disincentivize students from applying to private scholarships or other funding sources, Montgomery County could require students demonstrate they have applied to private scholarships before being granted a last dollar scholarship. Alternatively, Montgomery County could place a cap on last dollar scholarships, to encourage students to seek out private funding. Or, Montgomery County could provide the last dollar scholarship as a matching grant to funds raised by the student, thereby also encouraging students to maximize private funding.

Based on the above analysis, a last dollar scholarship should be funded through new tax revenue, as well as endowment. Although there is a political cost and a county cost to implementing a new tax, the effectiveness and equity gains outweigh these costs. Utilizing Montgomery College's endowment, and potentially finding a private donor, or a group of donors, performs well across the examined criteria.

Second, we propose expanding Montgomery College's dual enrollment program. Expanding dual enrollment could take a number of forms. There are financial barriers to dual enrollment currently, as high school students are expected to pay the tuition and fees associated with the college courses. Reducing these financial barriers through a scholarship program is one way to expand dual enrollment. There are also academic barriers to dual enrollment, as Montgomery College expects students to meet a certain GPA requirement and display a level of college readiness. Reducing these academic barriers would expand dual enrollment by making the program more accessible to students who do not meet these academic requirements, such as students from vulnerable populations.

Third, we recommend expanding work-study programs. We found that work-study programs are efficient, effective, and equitable. Work-study programs are needs-based, so the most vulnerable populations would be the most impacted beneficiaries. And, examined programs saw that there is a benefit to students who develop strong work habits through out-of-classroom employment.

Finally, we recommend that Montgomery College and Montgomery County not only consider lowering the cost of community college, but also focus their attention and resources towards student retention. The costs associated with higher education are just one barrier to college completion, especially for students from vulnerable populations. Ensuring students are successful once they enter college is also a key element. One way to do so is through mentoring programs. Montgomery College, Montgomery County Public Schools, and the Universities at Shady Grove have partnered to implement a program called "Achieving Collegiate Excellence and Success" (ACES). ACES targets students at the high school and college level from low-income and underrepresented backgrounds, first generation students, among other targeted populations to ensure degree completion.[81] [82] Similarly, Montgomery County has implemented "Boys to Men Mentoring Program" (BTM), described as "a mentoring program specifically aimed at the retention of African American/Black Male students at Montgomery College."[83] We recommend that the County, College, and other partners continue to fund these programs, and ensure that they have the resources needed to succeed. Based on the successes of these programs, Montgomery College and Montgomery County should expand similar mentoring opportunities to other vulnerable sectors of the student body.

By pursuing these recommendations, the authors of this report believe that access to community college at Montgomery College will increase, especially among vulnerable populations. By supporting mentoring programs, the authors of this report further believe that college completion among vulnerable populations will rise.

TABLE 10: FINAL RECOMMENDATION

| Final Recommendations: A Combination of Strategies | |
|---|---|
| 1. | Last dollar scholarship program, funded by new tax revenue and endowment. |
| 2. | Expand dual enrollment program, remove financial and academic barriers. |
| 3. | Expand work-study program, targeting most vulnerable populations. |
| 4. | Continue funding and expanding retention programs, cost is not the only barrier to college completion. |

[81] How to Apply. (2015). Retrieved from http://cms.montgomerycollege.edu/EDU/Department.aspx?id=54909

[82] ACES. (2015). Retrieved from http://cms.montgomerycollege.edu/aces/

[83] Boys to Men Mentoring Program. (2015). Retrieved from http://cms.montgomerycollege.edu/btm/

# APPENDICES

## Appendix A: State Programs

### *Delaware*[84] [85] [86]

For the past 10 years, Delaware Technical and Community College, the state's only community college system, has provided free tuition through a last-dollar scholarship program, Delaware SEED Scholarships through the state's Title 14, Chapter 34 code. As such, students must complete all financial aid applications, such as the FAFSA, in order to be eligible for a SEED scholarship. The program serves local students, including undocumented students, who attended and graduated from a Delaware public or private high school with a minimum of a 2.5 GPA. In addition, students must enroll as a full-time student no later than the fall semester after graduating high school. Finally, students shall not have been convicted of any felony in order to be considered for the scholarship.

Through nearly $5 million in annual funding from the state, roughly 7,400 have benefited from the program. In 2010, the state created an additional scholarship program to help cover tuition at Delaware State University. This scholarship programs has helped the state create a pathway for community college students to obtain a bachelor's degree.

### *Minnesota*[87] [88]

Minnesota Senate Bill 5 created the College Occupational Scholarship Pilot Program as a last-dollar scholarship program that covers tuition and fees for recent graduates from a Minnesota high school or adult education program. All program participants must be Minnesota residents. In addition, recipients or dependent students reporting parental gross income must have an adjusted gross income of less than $90,000 and enroll within 2 years of completing high school (or a GED program). All program participants must be Minnesota residents. The College Occupational Scholarship Pilot Program, unlike other programs across the country, specifically targets students seeking a degree in a high-demand, occupational field. These program areas include, agriculture, food, and natural resources; business management and administration; human services; engineering, manufacturing and technology; arts, communications, and information systems; and health science technology. Finally, participants must maintain a 2.5 GPA throughout the program and participate in a mentoring program.

The state expects to save students as much as $5,300. 1,300 students will benefit from the $8.5 million pilot. The pilot will operate for two years beginning with the 2016-2017 academic year.

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[84] White House (2015). America's college promise: A progress report on free community college. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/progressreportoncommunitycollege.pdf

[85] State of Delaware - Search and Services/Information. (n.d.). Retrieved from http://delcode.delaware.gov/title14/c034/sc14/index.shtml

[86] SEED. (2015). Retrieved from https://www.dtcc.edu/admissions-financial-aid/financial-aid-scholarships/types-aid/seed

[87] White House (2015). America's college promise: A progress report on free community college. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/progressreportoncommunitycollege.pdf

[88] SF 5 6th Engrossment - 89th Legislature. (2015, March 27). Retrieved from https://www.revisor.mn.gov/bills/text.php?number=SF0005&session=ls89&version=latest&session_number=0&session_year=2015

## *New Jersey*[89 90]

The New Jersey STARS Scholarship provides 5 semesters of tuition at one of the state's 19 community colleges for New Jersey residents in the top 15 percent of their high school classes. The program is a last-dollar scholarship program. Students must enroll full-time (a minimum of 12 credits) and earn a 3.0 or better GPA during their freshman year to maintain the scholarship into their sophomore year. Since the program began in 2004, approximately 2,500 new students have enrolled each year through a $7 million commitment from the state. A follow-on program, New Jersey STARS II, provides additional tuition assistance for students who earn a cumulative GPA of 3.25 in the New Jersey STARS program, who continue on to a four-year college in the state.

## *Oregon*[91 92]

The Oregon Promise, Senate Bill 81, provides $10 million annually for last-dollar tuition waivers to as many as 6,000 Oregon residents. Applicants must be an Oregon resident for at least 12 months prior to enrolling in community college and apply within 6 months of completing high school or a GED program. Program applicants must have graduated high school with at least a 2.5 GPA. Each recipient will receive a minimum of $1,000 in grant funds. The program participants may enroll part- or full-time and pay a $50 fee per term.

## *Tennessee*[93 94]

The Tennessee College Promise, House Bill 2491, has served as a model for many promise programs across the country and draws from state lottery funds to cover tuition and fees at Tennessee community and technical colleges for students with a minimum 2.0 GPA. The program, which targets high school students, has both a mentoring and community service component built into the program and requires applicants to complete the FAFSA. It is a last dollar grant program. Tennessee created an endowment fund with original support coming from $300 million of lottery reserve funds and $47 million in one-time state general fund dollars.

In 2015, the state passed Senate Bill 605, creating the Community College Reconnect Grant program. This last dollar program targets adults who have earned at least 30 hours of college credit toward an associate's degree in applied sciences. Applicants must have an adjusted gross income less than $36,000 and not have been enrolled in college for at least 24 months. The Reconnect program participants must enroll in at least 9 course credits per semester and maintain a 2.0 GPA. The program is being implemented for the 2016-2017 academic year with $5 million of state funds.

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[89] White House (2015). America's college promise: A progress report on free community college. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/progressreportoncommunitycollege.pdf

[90] NJSTARS.NET. (n.d.). Retrieved from http://www.njstars.net/

[91] Senate Bill 81. (2015). Retrieved from https://olis.leg.state.or.us/liz/2015R1/Downloads/MeasureDocument/SB81/Enrolled

[92] SB 81. (2015). Retrieved from https://olis.leg.state.or.us/liz/2015R1/Measures/Overview/SB81

[93] FREE COMMUNITY COLLEGE: STATE ACTION. (2015, September 10). Retrieved from http://www.ncsl.org/research/education/free-community-college.aspx

[94] Tennessee General Assembly Legislation. (2015). Retrieved from http://wapp.capitol.tn.gov/apps/BillInfo/Default.aspx?BillNumber=SB0605&GA=109

# APPENDIX B: LOCAL SCHOLARSHIP AND PROMISE PROGRAMS

## *Lottery Funded*

Lottery fund revenue is an attractive way to fund a last dollar scholarship endowment. This type of revenue source has long been utilized for K-12 funding by states and localities, so it is natural for states to look to lottery funds as a way to secure promise program funding.

### GEORGIA HOPE PROGRAM

The Georgia Helping Outstanding Pupils Educationally (HOPE) Program was one of the first promise programs to be created in the United States. Founded in 1993 by Governor Zell Miller, the Georgia HOPE Program allows for financial assistance in degree, diploma, and certificate programs at eligible public and private colleges and universities and public technical colleges in Georgia. The program is entirely funded by the Georgia Lottery. Since its inception, HOPE has awarded over $6.4 billion to more than 1.5 million students attending Georgia's colleges, universities, and technical colleges.[95]

In 2010-2011, the HOPE Program changed its eligibility requirements, increasing the academic requirements needed for the HOPE and Zell Miller Scholarships. There are four types of awards under the HOPE Program. According to the Georgia Student Finance Commission, the HOPE Scholarship program is for students that have demonstrated academic achievement and are seeking a college degree while the HOPE Grant program is for students seeking a technical certificate or diploma, regardless of the student's high school grade point average or graduation date. The Zell Miller Scholarship program is for students who have demonstrated academic achievement and are seeking a college degree but also graduate from an eligible high school with a 3.70 GPA and a minimum score on the SAT/ACT. The Zell Miller Grant program is for students seeking a technical certificate or diploma, regardless of the student's high school grade point average or graduation date but must maintain a minimum 3.5 cumulative postsecondary GPA. [96] The HOPE Scholarship covers 90 percent of tuition while the Zell Miller Scholarship covers 100 percent. Books and mandatory fees are not included under the program.

## *Private Funding/Endowment*

Another way that localities have funded reduced cost community college is through leveraging private funding.

### THE CUESTA PROMISE

San Luis Obispo County began providing one year of free community college ("The Cuesta Promise") to all graduates of San Luis Obispo County high schools for the year following their graduation. Students who received their GED and students who were homeschooled are eligible. Besides these eligibility stipulations, there are no other restrictions. Students need to follow a six-step application process, which includes submitting an application, completing a FAFSA, and completing orientation, to register for classes completely fee-free.[97]

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[95] Georgia's HOPE Program. (2009). Retrieved from https://secure.gacollege411.org/Financial_Aid_Planning/HOPE_Program/_default.aspx

[96] Ibid.

[97] The Cuesta Promise. (2014, October 8). Retrieved from http://www.cuesta.edu/student/documents/cuesta-promise/CuestaPromise_10-23.pdf

The Cuesta Promise was made possible following an $8 million donation from the Charles and Leeta Dovica Family Trust. The Dovica's were longtime residents of San Luis Obispo County, who, because they knew the importance of higher education, left a significant portion of their estate to the community college, asking that the money be used to fund student scholarships.[98] The Dovica's gift was directed to the Cuesta College Foundation, which has been in place since 1973, with the goal of providing scholarships to students. The gift can be viewed as seed money, and the Cuesta College Foundation's primary goal is to ensure that there is sustained funding for future classes.

The Cuesta Promise covers enrollment fees, health fees, as well as other student fees including ID cards, the student center fee, and other course material fees, although it does not include books.[99] The largest fee is the enrollment fee, at $46 per unit. A full time student would be enrolled for twenty-six units during their free first year, totaling $1196 for the student's first academic year. However, a Cuesta Promise recipient can be enrolled as either full time or part time.

### New Haven Promise

The city of New Haven, Connecticut has been providing scholarships to its students since 2010, called the New Haven Promise.[100] Eligible students include residents of New Haven who have attended New Haven public schools or approved charter schools. Eligible students can attend any 2-4 public college in Connecticut. Recipients must have a positive disciplinary record, they must complete a certain amount of community service hours, they must meet a certain attendance record during high school, and they must meet a GPA requirement. Once students are in college, they must maintain at least a 2.0 GPA to continue receiving their scholarship. New Haven Promise also consists of a "partnership" arm, which supports programming in elementary schools, middle schools, and high schools, to encourage students to attend college. The partnership supports programming outside of school, in the community.[101]

Rather than being funded by a single charitable donation, like the Cuesta Promise, New Haven Promise is funded by private, local organizations. These organizations include Yale University, whose campus is located in New Haven, the Community Foundation for Greater New Haven, Yale-New Haven Hospital, and Wells Fargo. Yale funds the actual promise scholarship, the Community Foundation for Greater New Haven covers administrative costs, while Yale-New Haven Hospital and Wells Fargo funds the Promise's partnerships with local high schools.[102]

New Haven Promise is not a full tuition scholarship, like the Cuesta Promise is. Rather, the scholarship is a sliding scale, based upon the length of a student's residency in New Haven. A student who has attended New Haven public schools, or approved charter schools, kindergarten through twelfth grade will receive a full tuition scholarship. Conversely, students

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[98] http://www.sanluisobispo.com/2013/10/11/2729102_dovica-endowment-cuesta-college.html?rh=1

[99] Cost of Attendance. (2015). Retrieved from http://www.cuesta.edu/student/aboutmoney/cost_of_attendance.html

[100] Bailey, M. (2010, November 9). Public School Kids Get A College "Promise" | New Haven Independent. Retrieved from http://www.newhavenindependent.org/index.php/archives/entry/city_yale_make_a_promise_to_public_school_kids/

[101] About New Haven Promise. (2013). Retrieved from http://newhavenpromise.org/about/

[102] Board & Sponsors. (2013). Retrieved from http://newhavenpromise.org/about/board-and-sponsors/

who attend New Haven public schools tenth grade and onward are ineligible for a scholarship. A student who entered New Haven school at the start of high school (ninth grade) would receive a 65 percent tuition scholarship.[103]

## *Tax Revenue*

A third way that states have allocated funds for implementing free and reduced cost community college is through utilizing tax revenue.

### Galesburg Promise at Carl Sandburg College

The city of Galesburg, Illinois implemented a hybrid tax revenue, private funding, last dollar scholarship program called "The Galesburg Promise", which began in Fall 2014 at Carl Sandburg College. However, the primary funding mechanism for the promise program came in the form of a 2 percent increase in the hotel-motel tax, so it is classified here as such. Private donors provided seed money for the program, including the Galesburg Community Foundation, and the Galesburg Business and Technology Center.[104]

The Galesburg Promise offers to pay a maximum of sixteen credits a semester, and sixty-four credits over a student's college career, in the form of a last-dollar scholarship. This means that a student must first exhaust federal opportunities for financial aid, state opportunities for financial aid, as well as other scholarship opportunities. Only after these other opportunities have been applied will the Galesburg Promise be applied to cover the remaining cost of tuition. However, the Galesburg Promise does not guarantee to cover 100 percent of a student's remaining cost of tuition. It does so in the form of a sliding scale residency requirement, similar to the New Haven Promise. Students who have attended Galesburg District schools for thirteen grades (K-12) will have 100 percent of their remaining tuition covered. On the low end of the spectrum, students who attended district schools for three grades will have 50 percent of their remaining tuition covered. Any students who attended Galesburg District schools for fewer than three years are not eligible for the program.[105]

Students are eligible to apply for the scholarship the academic semester following their high school graduation, or the following year. Students must meet a 2.0 GPA and pass 67 percent of their courses to continue receiving their scholarship. Furthermore, students must show up for classes the first four days of the semester, or else they are dropped from the Galesburg Promise. The Galesburg Promise does not distinguish between part-time and full-time students. However, it stipulates that a student must take a minimum of nine credits a semester. It will cover a student through a maximum of 64 credits, or three years, whichever comes first.[106]

Despite the increased attention through the Galesburg Promise program, Carl Sandburg College continues to face threats at the state level. In June of this year, it was reported that the college expects to lose $500,000 in state funding over the course of the next year, a funding level that is 94 percent less than the college's 2008 funding level. Carl Sandburg College's president Dr. Lori Sundberg was quoted saying, "We serve 64 percent of the public higher education, but

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[103] About New Haven Promise. (2013). Retrieved from http://newhavenpromise.org/about/

[104] Galesburg Promise Offers Sandburg Scholarships to District 205 Graduates. (2014, February 6). Retrieved from http://sandburg.edu/content/galesburg-promise-offers-sandburg-scholarships-district-205-graduates

[105] Galesburg Promise. (2015). Retrieved from http://sandburg.edu/financial-aid/galesburg-promise

[106] Ibid.

we only get 14 percent of the funding."[107] That same month, an independent family foundation located in the same county as Galesburg, the G.L. Vitale Family Foundation, stepped in to fund Galesburg Promise scholarships for four students at the college.[108] These recent events illustrate the challenges that promise programs face. Despite having a steady funding mechanism through the increased hotel tax, Galesburg Promise still accepts private donations, and is still affected by state-level budget changes.

## APPENDIX C: DUAL ENROLLMENT

### *George Washington Early College Program*

In 2009, The George Washington University (GW) started a dual enrollment program with the District of Columbia Public Schools. Through a partnership with GW and DC's School Without Walls, a select number of students from School Without Walls apply to a competitive program in their sophomore year that allows them to attend GW and School Without Walls congruently, tuition free. GW President Steven Knapp says "GW's Early College Program is one way to increase the affordability and availability of postsecondary education for students of the District of Columbia,"[109] At their high school graduation students receive an Associate of Arts degree and a high school diploma. Students are encouraged to apply to GW or other universities and transfer their college credits. The program requirements include a minimum GPA of 3.0 and a PSAT score of at least 150.

## APPENDIX D: WORK-STUDY

### *Alice Lloyd College*

Alice Lloyd College, found in Pippa Passes, Kentucky, offers a tuition-free education to applicants from 108 counties in the Appalachian region. All students participate in the college's Student Work Program. The program requires every full-time student to work a minimum of 10 hours per week and 160 hours per semester at an on-campus or off-campus job.[110] Students work in all areas of the campus from the campus dining facility, to the library, to administrative assistants, to dorm janitors. The college believes that the work is a part of the student's education and it enhances their studies and future career opportunities.

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[107] David, J. (2015, June 30). Illinois budget stalemate slows Galesburg programs. Retrieved from http://wqad.com/2015/06/30/illinois-budget-stalemate-slows-galesburg-programs/

[108] G.L. Vitale Family Foundation awards $120K to groups. (2015, June 23). Retrieved from http://www.galesburg.com/article/20150623/NEWS/150629904

[109] Sherrad, M. (2009, April 4). College Comes Early for School Without Walls Juniors. Retrieved, from https://mediarelations.gwu.edu/college-comes-early-school-without-walls-juniors

[110] Student Work Program. (2012). Retrieved from http://www.alc.edu/admissions/financial-aid/student-work-program/

## APPENDIX E: RECOMMENDATIONS OUTCOME MATRIX

| Criteria | Impact Category | Potential Proposals for Montgomery County | | | | |
|---|---|---|---|---|---|---|
| | | Last Dollar Scholarships | | | Work-study | Expanded Dual Enrollment |
| | | Lottery | Private/Endowment | Tax Revenue | | |
| **Efficiency** | **Increase access at lowest cost** | Increases access at no cost to the county nor college. (+) | Increases access at no cost to the county, would require some of college's endowment. (+/-) | Potential cost to the county associated with a tax (-) | Workability of agreements increases college enrollment & completion (+) | Would either put the burden on the student, or require county and college funding. (+/-) |
| **Effectiveness** | **Increase access regardless of cost** | Programs examined have seen access increase. (+) | Local programs examined have seen access increase. (+) | Local programs examined have seen access increase. (+) | Option diversity increases applications & enrollment (+) | Could increase access for high school students. (+) |
| **Equity** | **Target vulnerable populations** | Programs examined saw applications increase. (+) | Programs examined saw applications increase. (+) | Programs examined saw applications increase. (+) | Mix of demographic & market based option variability increases application of vulnerable populations (+) | Removing financial and academic barriers would increase equity. (+) |
| **Robustness/ Improvability** | **Flexibility of funding mechanism** | Savings would accumulate in the ETF. (+) | Endowment savings accumulate. (+) | Steady income dependent on the tax chosen (+) | Expansion of existing program requires minimal cost to county, & may be subsidized by private organizations or volunteer working groups (+) | Already in place to be improved upon, funding could be flexible-- some student, some college. (+) |
| | **Reliability of funding mechanism** | Annual input from lottery & gaming may change from year to year causing the endowment to fail. (-) | Private donation could run out, endowment could fall. (-) | Steady income dependent on the tax chosen, county has the ability to modify taxable amount should funds not be sufficient (+) | Value & economic based sponsor funding levels potentially require county incentivizing to enter into & maintain student contracts (+/-) | Up to the student or the county/college to fund. (+/-) |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Political Feasibility** | **Legality** | The county currently uses their ETF allocation to fund public K-12 education. The county would have to make up the K-12 funding loss if they used their ETF allocation to fund community college. (-) | Although legal, it could prove difficult to find a private donor. (-) | Aside from utilizing already taxed income that is deposited into the ETF, any legislative tax increase would have to be in line with state as well as county rules. This does not make it undoable but adds an extra layer of work to the political feasibility (-) | In-county existing program establishes legality for expansion of current structure & similar out-of-county programs may provide legal framework for any alteration of scope (+) | Already in place, so this is legal. (+) |
| | **Public Support** | This would come at no direct cost to voters; voters would likely support if funding from the ETF was increased. However, if the county allocation from the ETF was not increased voters would not support a decrease in funds for K-12 public education. (+/-) | Comes at no cost to voters, voters will likely support. (+) | Any tax increase directly on county residents will likely be met with opposition. There is the potential to utilize an excise tax so that costs are put on non-county residents in addition to residents but it is unknown if the County Council would be able to designate the funds for a specific use such as for promise program funds (+/-) | Potential high public support given robust inclusivity of sponsor & student participation requirements, clear economic benefits in education outcomes & poverty rates, no direct voter cost. & real possibility of national recognition (+) | Public likely to support an existing program. (+) |

# APPENDIX F:  DEMOGRAPHIC DATA ANALYSIS

Found in supplemental materials

# APPENDIX G: ECONOMIC DATA ANALYSIS

Found in supplemental materials

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