

2014-
2015

Enviromental Scanning Report



Hagerstown
Community
College

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INTRODUCTION

An environmental scan is the process of examining external trends, issues, and events in order to determine their impact upon an institution. Environmental scanning focuses on the identification of emerging issues, situations, and potential pitfalls that may affect the college's future.

Environmental scanning by the Planning and Institutional Effectiveness Division enables the College to look at emerging, up-to-date demographic trends in the service region, state and nation, global trends, economic/business data, social trends, and enrollment potential by student type/populations, course or program potential (credit and noncredit). Information from environmental scanning activities helps establish a link between strategic planning and projected trends, resulting in data-based decisions to improve and update programs and services. When administrators, faculty, and staff are informed of changes, they are better able to prepare for the changes by determining future strategic institutional directions.

This report has been divided into six broad categories: Demographics, Economy, Education, Workforce and Economic Development, Technology, Public Policy and Accountability. These trends, facts, findings, and implications could or will affect Hagerstown Community College. No one can predict the future, but by understanding and examining the trends, issues, and events that impact the life of the community college, we can begin to create a plan that looks to the possibilities for HCC's future and opportunities.

DEMOGRAPHICS

United States - National

According to the US Bureau of the Census, the resident population of the United States, on August 6, 2013 is 316,392,999. At such a fast growth rate, the US population will likely hit 400 million in 2039, four years earlier than previously projected, according to new population projections from the U.S. Census Bureau. (The population estimates are most likely undercounted with the number of illegal immigrants living in the US.)

According to the US Census Bureau, the following components affect our population:

- one birth every 8 seconds
 - one death every 12 seconds
 - one international migrant every 44 seconds
 - net gain of one person every 13 seconds
-
- Today, only 74% of women are active in the U.S. workforce, little changed in the last 25 years, and trailing far behind many other developed countries. As of last year, America ranked 27th out of 37 developed countries for women's labor force participation, according to the Organization of Economic Cooperation and Development.
 - Trulia recently released a survey showing that 44% of jobless 18 to 34 year-olds live with their parents, while nearly a quarter of those *with jobs* have yet to leave the nest.

Sixty-six percent of households in 2012 were family households, down from 81 percent in 1970.

Between 1970 and 2012, the share of households that were married couples with children under 18 halved from 40 percent to 20 percent.

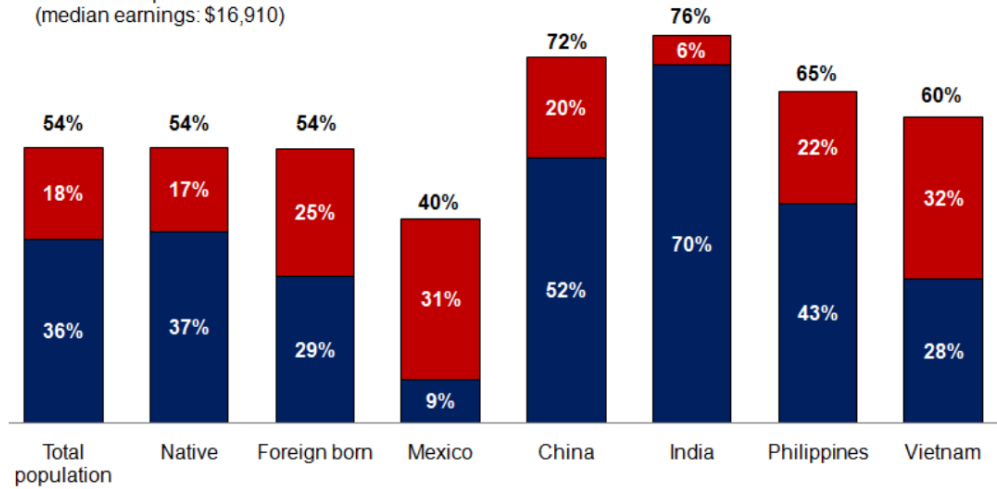
The proportion of one-person households increased by 10 percentage points between 1970 and 2012, from 17 percent to 27 percent.

Between 1970 and 2012, the average number of people per household declined from 3.1 to 2.6.

Occupation by Nativity Status and Country of Birth: 2010

(Civilian employed population 16 years and over)

- Management, business, science, and arts occupations
(median earnings: \$51,209)
- Service occupations
(median earnings: \$16,910)



Source: U.S. Census Bureau, American Community Survey, 2010.

United States
Census
Bureau

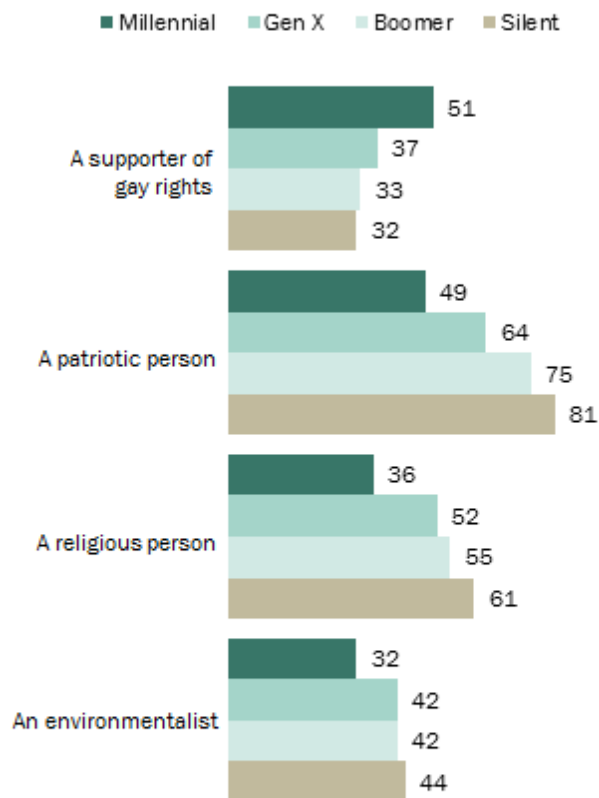
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Today's Generations

	Born	Age (in 2012)
GI Generation	1901 – 1924	88 – 111
Silent Generation	1925 – 1946	66 – 87
Baby Boom Generation	1946 – 1964	48 – 65
Generation X	1965 – 1979	33 – 47
Millennial Generation	1980 – 1999	13 – 32
Generation Z	2000 –	12 and under

How the Generations See Themselves

% saying ... describes them very well



Note: Percentages reflect those who rated each description 8-10 on a scale of 1-10 where "10" is a perfect description and "1" is totally wrong.

Source: Pew Research survey, Feb. 14-23, 2014

PEW RESEARCH CENTER

- Every day 15 million kids nationwide leave school with no place to go, putting them at risk of being unsupervised, unguided and unsafe during these critical after-school hours. Furthermore, during the summer, an alarming 43 million kids in America lack access to expanded learning opportunities, increasing their risk of learning loss and falling behind before the next school year begins.

America's youth are in crisis. Consider these alarming facts about the state of our country: the U.S. ranks 22nd in high school completion among 28 countries; three out of 10 kids are obese or overweight; and one in five youth lives in poverty. The consequences of these staggering statistics are felt not just by our next generation but also across our nation.

Age Groups

The nation as a whole grew older as the oldest baby boomers became seniors. The nation's 65-and-older population surged to 44.7 million in 2013, up 3.6 percent from 2012. By comparison, the population younger than 65 grew by only 0.3 percent.

The 85-and-older population grew by about 3 percent between 2012 and 2013 to 6 million. The number of people age 100 and over reached 67,000 in 2013.

The total number of children under age 5 was just under 20 million in 2013 or 6.3 percent of the population. The number of children age 5 to 13 was just over 37 million in 2013 (11.7 percent of the population).

The number of high school-age children (age 14 to 17) was 16.6 million or 5.3 percent of the population in 2013.

In 2013, there were about 198 million working-age adults (age 18 to 64), representing 62.6 percent of the total population.

In 2013, the median age of the minority population -- i.e., all people who were not in the non-Hispanic single-race white group -- was 30.5 years. The non-Hispanic white alone population was older, with a median age of 42.9 years in 2013.

In an AARP study, 9 out of 10 adults (ages 50 and over) said they wanted to actively seek out learning opportunities to keep current, grow personally, and enjoy the simple pleasure of mastering something new. Research continues to highlight the importance of lifelong learning as a prescription for a longer, healthier life – keeping minds active and people socially engaged.

Millennials

9 Statistics that Prove Millennials Think Differently About College

84% use a computer in the classroom

78% believe that it's easier to learn in a tradition classroom than online

57% believe internships are most important when developing their business skills

53% believe that online colleges are reputable

50% say they don't need a physical classroom

43% say that online education will provide them with courses of the same or higher quality than traditional colleges

39% view the future of education as being more virtual

19% said that they'll be using social media to engage in the classroom

12% believe college courses are most important when developing their business skills

Source - Edtech Magazine

- Projections show 20-something workers will make up 36% of the American workforce by 2014, and 75% of the global workplace by 2025. Half of companies surveyed reported that the average salary for a millennial is between \$30,000 and \$50,000, while 15% of the companies revealed that the average salary for a millennial is at least \$50,000.
- The millennial generation tends to measure job tenure in months, not years, changing employers as often as they change toothbrushes. The high turnover rate is expensive for companies — employers estimate that it costs them \$15,000 to \$25,000 to replace every 20-something who leaves the company.

Baby Boomers and Retirees

- There are 78 million Baby Boomers in the U.S. born between 1946 and 1964. They are the healthiest, wealthiest, most educated, and prosperous generation. The U.S. changed from a manufacturing economy to a knowledge economy because of the boomer's love of higher education.
- The five states with the largest number of baby boomers:
 - California
 - Texas
 - New York
 - Florida
 - Pennsylvania

- The average income of Boomers is \$71,300 with a net worth of \$236,000. The top 20 percent of Boomers have a median net worth of \$766,000. Boomers control 70% of the total net worth in the U.S. Boomers will spend an average of \$7 billion online this year.
- 41% of Boomers will move upon retirement. 1 in 7 Boomers are providing care to a parent or other family member. In 2005 boomers spent \$35 billion on their grandchildren. Adults 55 + account for one-third of all trips in the U.S. In 2015, people 50+ will represent 45% of the United States population.
- 25.8 million baby boomers formally volunteered in 2005.
- By 2030, all “Baby Boomers” will be at least 65 and the elderly will grow faster than any other age group.
- The Census Bureau forecasts that the 65 and over population will rise from 38.7 million in 2008 to 88.5 million by 2050 and that the 85 and over population will swell from 5.4 million to 19 million.
- 2.7 million grandparents are responsible for most of the basic needs of one or more grandchildren who lived with them in 2009. 1.6 million of these grandparents were still in the labor force.
- Three-quarters of U.S. adult workers believe they will continue working past retirement age, with 40% saying they will do so because they want to, and 35% because they will have to
- In Maryland, 58.0 percent of adults aged 25 years and older with at least a high school education report their health is very good or excellent compared to only 27.2 percent with less than a high school education, resulting in a gap of 30.8 percent.
- 43% of online traffic is generated by Boomers. 82% of adults aged 50+ using the internet research health and wellness online. Among internet users 50+ who are members of online communities, 58% log in to their online community daily or several times a day.

Minority Population

Non-Hispanic, single-race whites remained the nation's largest group with a population of 197.8 million. The total of all other groups was 118.3 million, or 37.4 percent of the population. Non-Hispanic single-race whites made up 52.4 percent of the population under 18.

Asians were the fastest-growing group from 2012 to 2013, though that distinction has alternated between Asians and Hispanics over the years. The Asian population increased by almost 2.9 percent to 19.4 million, an increase of about 554,000 people. Hispanics remained the second largest group overall, growing by 2.1 percent (or more than 1.1 million) to slightly more than 54 million. Hispanics were 17.1 percent of the total population in 2013, up about 0.2 percentage points from 2012. The primary driver of Asian population growth in 2013 was international migration, accounting for 61 percent of the total Asian population change in the last year. Hispanic population growth, on the other hand, was fueled primarily by natural increase (births minus deaths), which accounted for about 78 percent of the total Hispanic population change.

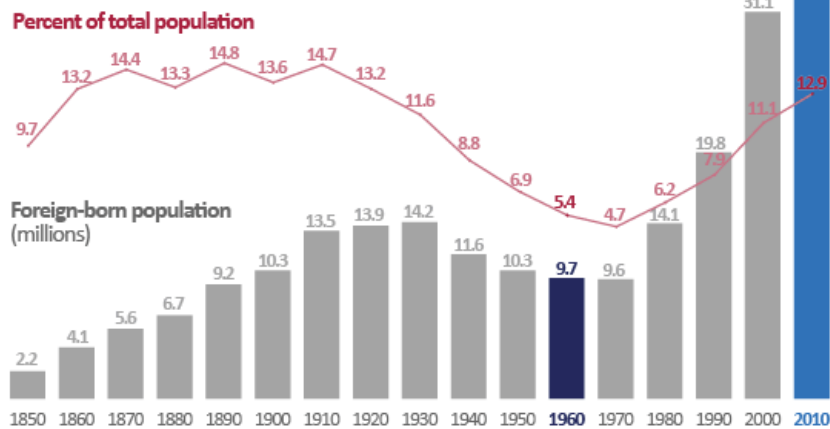
Following Asians in rate of growth were Native Hawaiians and Other Pacific Islanders (increasing 2.3 percent to just over 1.4 million), American Indians and Alaska Natives (increasing 1.5 percent to slightly more than 6.4 million) and blacks or African-Americans (increasing 1.2 percent to 45 million).

The non-Hispanic white alone population was the only group to have natural decrease (more deaths than births) from 2012 to 2013. However, due to migration, its population rose 0.1 percent from 2012 to 2013, reaching 197.8 million. Because of its slow rate of growth relative to other groups, its share of the total population declined from 63.0 percent to 62.6 percent over the period.

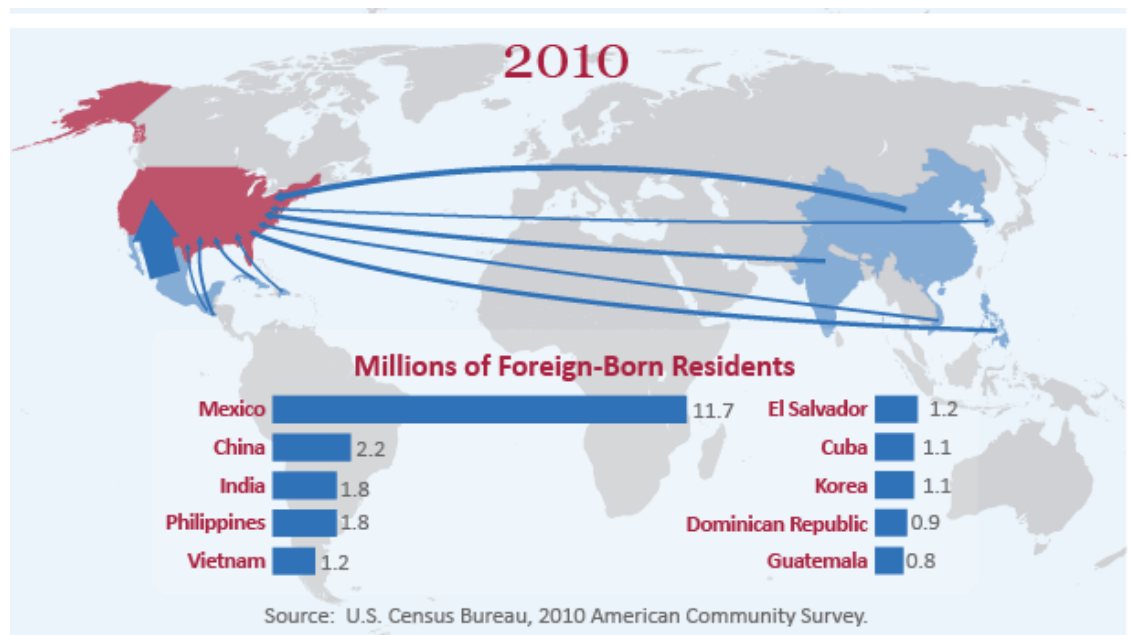
The new census estimates, a snapshot of the U.S. population as of July 2012, comes a year after the Census Bureau reported that whites had fallen to a minority among babies. Fueled by immigration and high rates of birth, particularly among Hispanics, racial and ethnic minorities are now growing more rapidly in numbers than whites.

Long-term trends

Foreign-Born Population and as Percent of Total Population



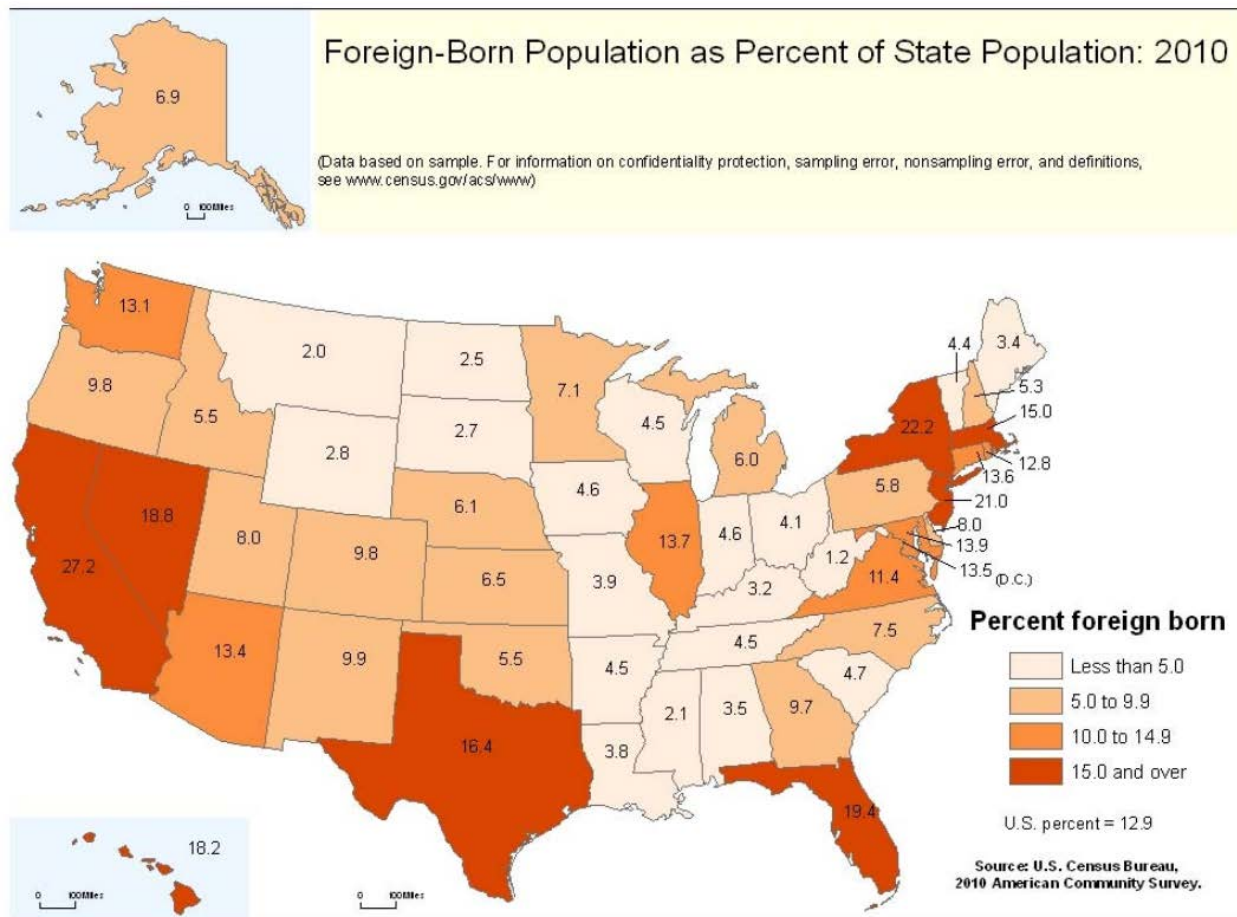
Source: U.S. Census Bureau, 1850–2000 Decennial Census; 2010 American Community Survey.



- In 2012, 44 percent of the foreign-born population age 5 and older who arrived in the United States in 2000 or later reported high English-language speaking ability, according to a U.S. Census Bureau report released today. This means they either reported speaking only English at home or reported speaking it "very well" whether or not they did so at home.

About 13 percent did not speak English at all. By comparison, 63 percent of immigrants who arrived prior to 1980 had high English-speaking ability in 2012, while only 6 percent did not speak English at all.

Almost three-fourths (73 percent) of the foreign-born age 25 and over with a bachelor's degree or higher had high English-speaking ability, speaking only English at home or speaking another language at home and speaking English "very well." The same was true for only 19 percent who had less than a high school education.



State of Maryland

Every 10 years, the U.S. Census Bureau conducts the federal census (U.S. Constitution, Article I, sec. 2). According to the federal 2010 census, Maryland has a population of 5,773,552. As of the 2010 census, Montgomery County was the most populated county in Maryland, with 971,777 residents, followed by Prince George's County (863,420), and Baltimore County (805,029). Kent County was the least populated, with 20,197 residents.

Between 2000 and 2010, Maryland's population gained 477,066 persons, an increase of 9%. Southern Maryland grew the fastest with an increase of 21% for the region overall, led by St. Mary's County at 22%.

In 2000, Maryland ranked 19th in the nation in population. With 529.1 persons per square land mile in 1999, it ranked 6th in population density among states (including the District of Columbia).

From 1990 to 2000, Maryland population grew by 10.8%, a gain of 515,733 persons. Calvert County led all other counties in that period with a 45.1% increase in population.

Maryland Adult Education Facts – 2013

- Over 450,000 adults in MD are without a high school diploma
- Maryland remains a top destination for foreign born individuals
- 16% of Marylanders speak a language other than English at home
- 6.3% of the population of MD speaks English less than “very well”
- Estimated number of adults in Maryland needing Adult Education and Literacy Services = 750,000-810,000.
- On August 12th, the Department of Human Resources (DHR) gathered state officials, members of Maryland's business and faith organizations, food providers and more to discuss the needs of children placed in Maryland seeking refuge from Central America. So far in 2014, over 30,000 Central American children have arrived in the United States. More than 2,200 of these children have been placed in Maryland with relatives. They are coming to Maryland from violence-ridden communities in Central America and are seeking safety in the United States. Most of these children are living with or have experienced some amount of trauma during their journey across the border into the United States.

Baby Boomers in MD:

- 52.8% are female
- 60.4% are still employed
- Richest Baby Boomers are in MD with a \$94,000 median income

Washington County, MD

- Washington County ranks first in Maryland for the largest total migration increase according to the U.S. Census Bureau 2007 Statistics. The population of the county is 147,430 and is projected to grow to 169,300 by 2020, according to the Maryland Department of Planning.
- With 149,588 people, Washington County is the 10th most populated county in the state of Maryland out of 23 counties.
- In 2012, Meritus Health conducted surveys, focus groups and interviews with Washington County residents to identify imperative community health needs. Mirroring many counties in the nation, Washington County residents cite obesity, high cholesterol, heart disease, stroke and diabetes as their most serious chronic disease problems. Other findings include:
 - 72.6 percent of Washington County residents are overweight or obese versus the 63.5 percent.
 - Almost half of 55-64 year olds and almost two-thirds of those ages 65 and older have been told they have high blood pressure and half have been told to reduce their cholesterol.
 - Washington County has a higher rate of diabetes mortality than the state average.
 - 30 percent of all respondents indicated that they have had no physical activity in the past 30 days.
 - Smoking rates were higher in Washington County compared to the state and nation.
 - Washington County Behavioral Health Emergency Department visits were 17 percent higher than the state average.
 - Maryland's average teen birth rate was 24.7 percent in 2011. Washington County's rate is 35 percent higher than the state average.
- With affordable housing and a high quality of life, the metropolitan and suburban areas are expanding into the western counties in Maryland, creating significant "in-migration" to Washington County.

- In 2012, the median household income of Washington County residents was \$53,167. Washington County households made slightly more than Wicomico County households (\$51,451) and Garrett County households (\$44,223). However, 14.2% of Washington County residents live in poverty.
- The median age for Washington County residents is 40.3 years young.
- For the fourth straight year, Maryland's public education system received two "#1 in the nation" rankings and Washington County Public Schools consistently rank among the top public school systems in Maryland. Our public schools historically are ranked among the top in the state in areas including attendance and graduation rates. In addition, there are 37 private schools located in the county.
- Hagerstown and Washington County, Maryland, offer a rare combination of business advantages:
 - A major crossroads location that is convenient to the entire East Coast
At the intersection of I-81 and I-70
 - A ready workforce of over 400,000
With strengths in manufacturing and technology
 - One of the top-ranked education systems in the nation
4 high schools named by U.S. News & World Report as America's Best
 - An affordable cost of doing business—and living
Close to the Washington, D.C./Baltimore regions, but with much lower costs
 - Plenty of facilities and land slated for development
Over 1.8 million s.f. of available industrial/commercial space

Career opportunities, plentiful shopping, and a state-of-the-art health system with a brand-new hospital attract people from 3 states (Maryland, West Virginia, and Pennsylvania) to Washington County. Our location has become a choice location for manufacturers, financial services, and distribution companies.

Of Over 3,500 Businesses...

- 25% in trade, transportation and utilities
- 14% in education and health services
- 12% in manufacturing
- 10% in financial activities

Government, business, and community organizations partner to help diversify the local economy. As a result, aero-defense, engineering, and advanced technology sectors are becoming a larger part of our industrial mix.

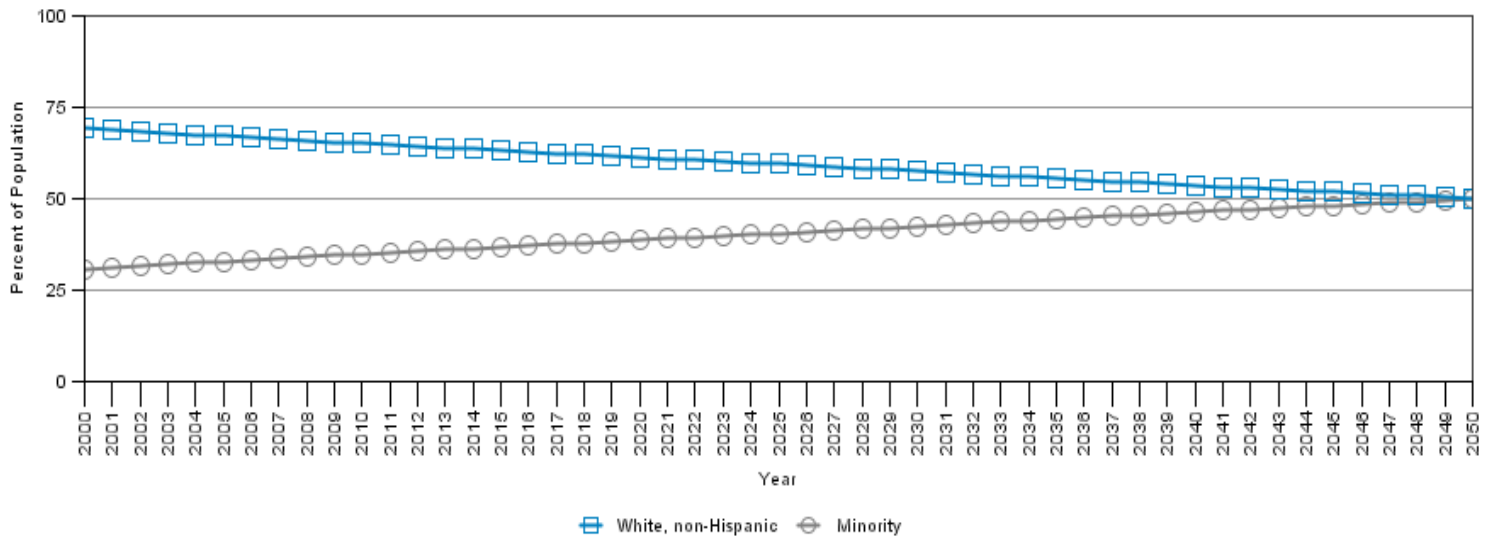
Wash Co Dept of Business Development

- Washington County is growing more diverse, as is HCC's student population. The US Census Bureau's 2013 Population Estimates report the following for Washington County:

Washington County Population Estimates by Race 2013	
Race	% of Total
White	84.8
Black or African American	10.7%
Asian	1.6%
American Indian and Alaska Native	0.3%
Native Hawaiian and Other Pacific Islander	0.1%

- A history of HCC's unduplicated credit enrollment by race/ethnicity indicates that non-white enrollment grew from 567 students in FY 05 to 844 in FY 09 for an increase of 567 students or 48.8%. African American students grew by 161 students while Hispanic students grew by 72 over that period.
- According to the U.S. Census Bureau, 11.9% of Washington County residents live in poverty, compared to 9.4% Maryland as a whole.
- The age range of HCC students age 17 and under has shown the most significant increase in headcount due to the ESSENCE program. From FY 05 through FY 09, there was an increase of almost 60% for that group. Overall, traditional age students (age 25 and younger) account for 55% of College enrollment.

Population Projection by Ethnicity



Source: U.S. Census

Washington County Age Distribution American Community Survey, 2012			
Age Range	Percent Of Total Population	Males	Females
Under 5 years	5.9%	6.1%	5.7%
5 to 9 years	6.0%	6.8%	6.0%
10 to 14 years	6.1%	5.9%	6.3%
15 to 19 years	6.0%	6.3%	5.6%
20 to 24 years	6.0%	6.3%	5.7%
25 to 29 years	6.9%	7.4%	6.3%
30 to 34 years	6.9%	7.6%	6.1%
35 to 39 years	5.2%	5.5%	4.9%
40 to 44 years	8.0%	8.0%	7.9%
45 to 49 years	7.7%	7.7%	7.7%
50 to 54 years	7.7%	7.5%	7.8%
55 to 59 years	6.1%	6.3%	5.9%
60 to 64 years	6.3%	5.9%	6.7%
65 to 69 years	4.4%	4.1%	4.7%
70 to 74 years	3.3%	3.0%	3.7%
75 to 79 years	2.8%	2.3%	3.3%
80 to 84 years	2.4%	1.8%	3.1%
85 years +	1.8%	1.3%	2.4%
TOTAL POPULATION	149,180	76,154	73,026

ECONOMY

HCC's Economic Impact in the Community

In 2013, Hagerstown Community College participated in an economic impact study through Economic Modeling Specialists, Intl. (EMSI), a leading provider of socioeconomic impact and strategic planning tools to community and technical colleges. Below are highlights from the final impact report:

Education Will Pay for a Lifetime

- Students enjoy an attractive 18.5 rate of return on their HCC educational investment, and recover all costs (including wages given up while attending classes) in only 7.7 years.
- The average HCC student's lifetime earnings will increase \$4.50 for every dollar invested in their HCC education.
- The typical Associate Degree graduate from HCC earns \$39,800 per year, 35% more than someone with a high school diploma or GED.
- The average income at the career midpoint of someone with an associate's degree in Washington County is \$39,800. 35% more than a student with a high school diploma...
- Over the course of a working lifetime associate's degree graduates in Washington County earn \$322,400 more than someone with a high school diploma (undiscounted).
- By 2022 it is anticipated that there will be about 30,400 new and replacement jobs available in Washington County.

HCC Leverages Taxpayer Dollars

- State and local taxpayers earn 9.0% rate of return on their investment in Hagerstown Community College.
- As many as 78% of HCC students remain in the State and contribute to economic growth.
- Students enjoy higher earnings after receiving education from HCC, thereby expanding the tax base and reducing the tax burden on state and local taxpayers.
- HCC yields a return on government investment. State and local government allocated around \$17.4 million in support of HCC in FY 2011-12. For every \$1.00 of this support, taxpayers see a cumulative return of \$2.20 over the course of students' working careers (in the form of higher tax receipts and avoided social costs.)

HCC Stimulates Economic Growth

- HCC skills translate to higher earnings for students and increased output of businesses. The added income attributable to the accumulation of HCC credits in the workforce amounts to \$134.6 million each year.

- Altogether, the average annual added income due to the activities of HCC and its former students equals \$156.5 million. This is approximately equal to 3.0% of the total of Washington County economy.

HCC Raises Consumer Spending

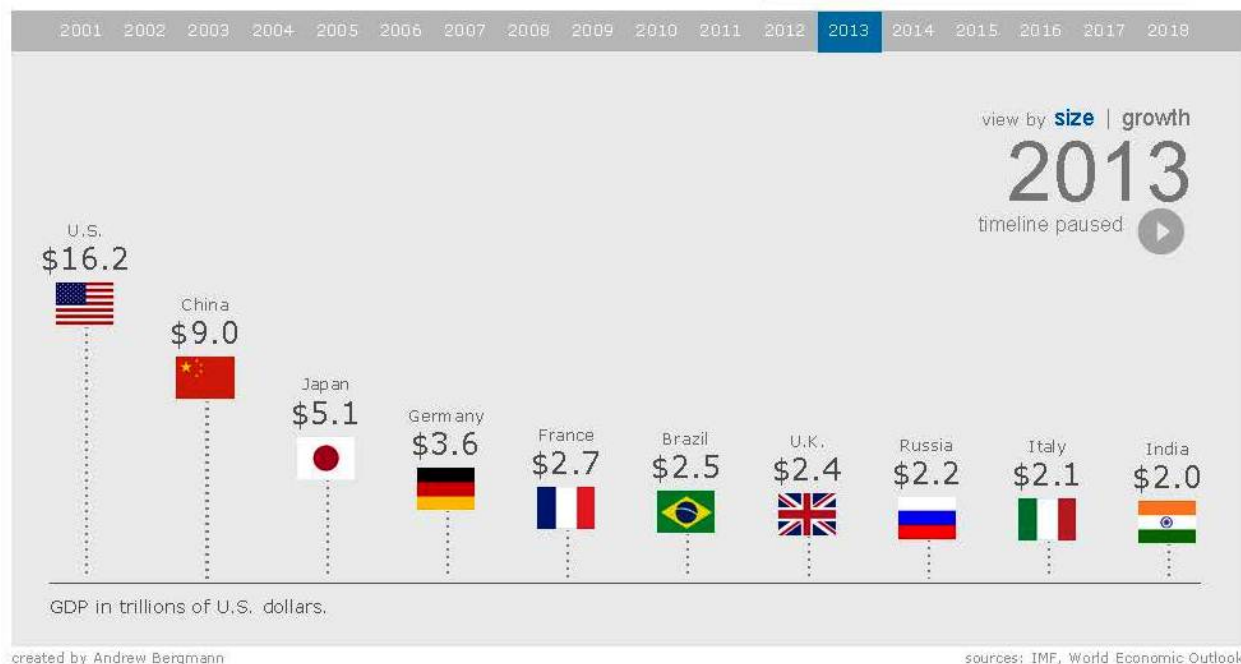
- The Washington County economy annually receives roughly \$21.9 million in income due to HCC operations.
- Many of HCC's employees (65%) live in Washington County. Faculty and staff earnings become part of the county's overall income, while their spending for groceries, apparel, and other household expenditures help support local businesses. In addition, HCC is also a purchaser of supplies and services within Washington County.

HCC Reduces Social Costs

- Education is statistically correlated with improved lifestyle behaviors, including reduced incidences of absenteeism, alcohol abuse, and smoking, lower probability of committing crime, and fewer welfare and unemployment claims.
- It is estimated that HCC's 2011-2012 student population generates social savings equal to \$899,000 a year.

Contact the Planning and Institutional Effectiveness Office to view the full report.

World's Largest Economies



United States – National

Foreclosures peaked at more than 2.2 million in December 2010 before steadily decreasing to a five-year low of 1.3 million in May 2012, down 29 percent from the peak.

Homeownership, at 65%, is at its lowest level since 1995, according to a recent report from the Census Bureau. New household formation, which measures the growth of homes occupied by either owners or renters, has plunged to an annual average of about 550,000 between 2007 and 2011. That's far fewer than the annual average of 1.35 million during the previous five years.

While the U.S. economy has improved since the Great Recession ended five years ago, part-time and "contract" workers are filling many of the new jobs. Contract workers made up less than half of one percent of all U.S. employment in the 1980s but now account for 2.3%. Economists predict contract workers will play a larger role in the years ahead.

More than a third of adults say they have not started saving for retirement yet, according to a national poll accompanying Bankrate's monthly Financial Security Index.

To raise a child born in 2013 to the age of 18, it will cost a middle-income couple just over \$245,000, according to newly released estimates from the U.S. Department of Agriculture. That's up \$4,260, or almost 2%, from the year before.

Gas prices are significantly higher and likely to go higher still, which could make this the most expensive summer at the pump in five years. The average price is now \$3.67, and Tom Kloza, chief oil analyst for GasBuddy.com, predicts there's at least a 50% chance gas could top the \$3.79 a gallon high for the year reached in February.

Credit card usage among college students declined to 35 percent 2012, down from 40 percent in 2011 and 42 percent the year before, according to a 2012 survey by Sallie Mae, with the sharpest drops among sophomores and juniors. Of those with a card, the average balance was \$755. Thirty-three percent reported carrying no balance on their credit card.



No. 10: Maryland

- 2014 Cost of Living rank: No. 41 (10th most expensive)
- 2014 Cost of Living score: 10 (out of 50)
- 2013 Cost of Living rank: No. 42 (9th most expensive)
- Avg. home price (Bethesda-Gaithersburg-Frederick Metro): \$583,838
- Half gallon of milk: \$2.57
- Pound of ground beef: \$3.46
- Monthly energy bill: \$210.11
- Doctor visit: \$84.89

Maryland has been known as the Free State since 1864, but the nickname couldn't be further from the average cost of living in the 10th most expensive state. Even potato chips and a 2-liter of Coke are going to cost you: \$4.13 and \$1.76, respectively. The national average for the same snack is more like \$3.62 and \$1.56.



No. 5: West Virginia

- 2014 Cost of Living rank: 5th cheapest
- 2014 Cost of Living score: 46 (out of 50)
- 2013 Cost of Living rank: 24th cheapest
- Average home price (Morgantown Metro): \$341,342
- Half gallon of milk: \$2.24
- T-bone steak: \$9.31
- Monthly energy bill: \$142.09
- Doctor visit: \$90.33

West Virginia is home to many beautiful places, but perhaps the most famous is the Greenbrier. The fancy resort in the small town of White Sulphur Springs is named for its hot spring waters that locals have touted as having healing qualities. In case you want to go the more traditional route for medical care, you'll find it quite affordable in the fifth cheapest state: an average of \$84.43 to see an optometrist, \$90.33 to see a doctor and \$72.04 to see a dentist. These are far less than the national averages of \$94.89, \$97.08, and \$84.88, respectively.

- According to the US Census Bureau's 2012 American Community Survey, Maryland ranked number one for Median Household Income.

Median Household Income for 2012		
Rank of US States	State	Percent
1	Maryland	\$71,122
8	Virginia	\$61,741
	United States	\$51,371
23	Pennsylvania	\$51,230
50	West Virginia	\$40,196

- Maryland ranked first for Median Family Income followed by New Jersey, New Hampshire and District of Columbia.

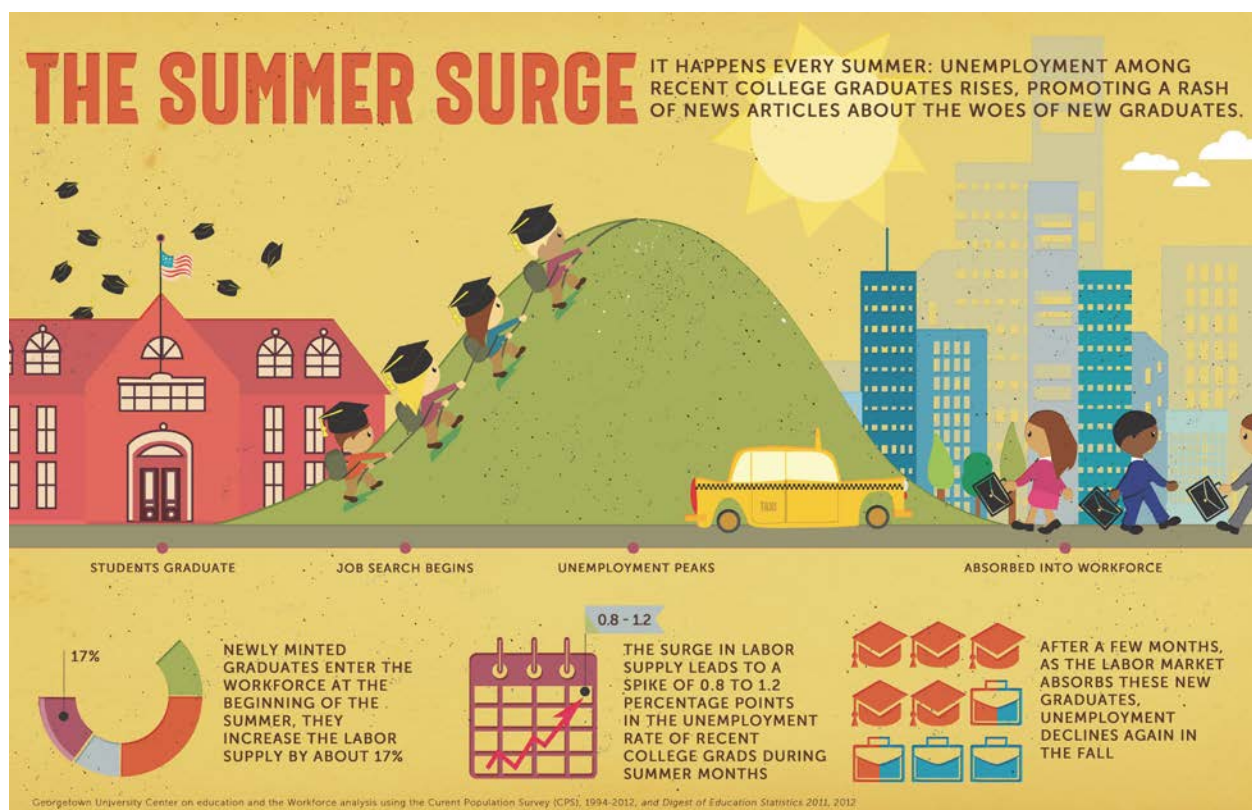
Median Family Income for 2012		
Rank of US States	State	Percent
1	Maryland	\$85,985
8	Virginia	\$74,485
23	Pennsylvania	\$65,109
	United States	\$62,527
49	West Virginia	\$51,320

- Over the past year, overall food prices rose nearly 5%, more than double the average of the previous ten years (2.5%). Experts forecast prices will rise even faster over the next five years at an annual rate of 7.5%. American households spend less than 6% of their income on food, which is actually less than any other country.
- When the financial crisis began in 2008, the U.S. national debt stood at \$9.2 trillion. Based on the White House's own figures, the national debt will reach \$20.0 trillion by the end of this decade—about 140% of our current GDP.

Government debt in advanced economies has climbed to its highest level since World War II. Gross debt levels in many nations, including Japan, Greece, Italy, Portugal, and Ireland, are all above 100%.

- In its first large-scale study of household finances, the U.S. central bank uncovered lingering effects of the sharpest economic downturn since the Great Depression, with 42 percent of respondents saying they had delayed major purchases and 18 percent saying they put off a major life decision, including buying a home or getting married, due to the crisis. Thirty-six percent said they now planned to retire later, according to the online survey.

- USA TODAY examined each state's gross domestic product to determine how the country's economic output has shifted within its borders. The data, recently released by the Bureau of Economic Analysis, reflect both population growth and income increases — in short, the economic weight of each state.



State of Maryland

- The index is a state-by-state analysis of how state economies are transforming from an industrial economic model based on “smokestack chasing.” In this model, economic development success is measured by the number of large company relocations rather than the creation and retention of high-value added, high-wage jobs. Maryland ranked fifth according to The 2014 State New Economy Index, behind Washington and California. Maryland’s high rankings are primarily due to high concentrations of knowledge workers, many employed with the federal government or related contractors in the suburbs of Washington, D.C. The ranking of Maryland and its neighbors follows.

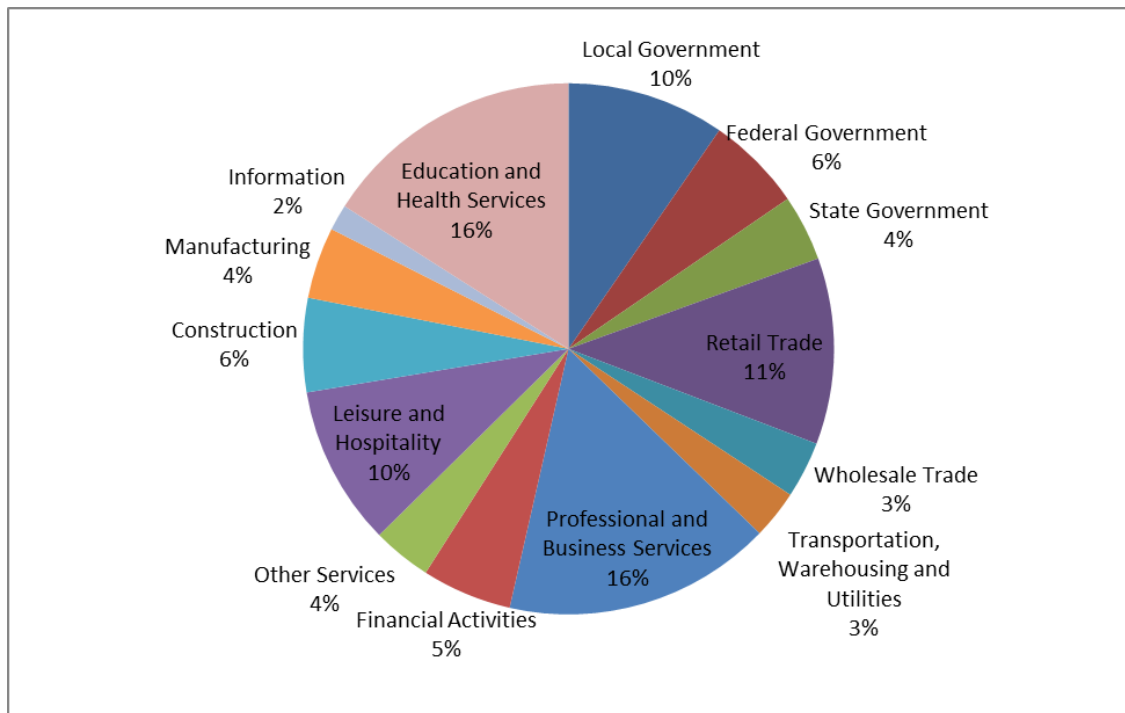
The 2012 State New Economy Index Overall Rank		
Rank of US States	State	Score
5	Maryland	81.5%
2	Delaware	85.1%
7	Virginia	80.9%
22	Pennsylvania	63.2%
	United States	62.6%
50	West Virginia	39.8%

Maryland’s 166,000 businesses employ over two million workers with an annual payroll of \$106 billion. More than 90 percent are small businesses (fewer than 100 employees) and they employ 36 percent of the state’s private sector workforce.

Information technology, telecommunications, and aerospace and defense are leading forces behind Maryland's economic growth. In the biotechnology area, Maryland is a noted leader and is at the center in the mapping of the human genome and commercial applications that result from its research.

Maryland is the center of the Boston-Atlanta Corridor on the Atlantic seaboard, and borders Washington, D.C., the nation’s capital. Among the 50 states, Maryland ranks 42nd in size and 19th in population. Its median household income is the highest among the states. Maryland’s gross state product in 2013 was \$342.4 billion. Maryland still retains its AAA bond rating, one of only ten states with the highly coveted rating from all three agencies.

The state’s diversified economy is rooted in high technology, biosciences and services, as well as advanced manufacturing and international trade. Professional and technical workers constitute 27.7 percent of the state’s work force—the second highest concentration among states. Maryland ranks fourth among the states in educational attainment—36.9 percent of Maryland’s population age 25 and above hold a bachelor’s degree or higher.



As per the latest data by the Census officials, state of Maryland is the richest state in United States of America in 2013. Covering a land area of 9,707 square miles, it is the 42nd largest state in USA in terms of land area and in terms of water area it ranks #18. It is home to Port of Baltimore which is one of the largest in the country. Its Howard County frequently finds a place in the richest counties of US and currently in the list it ranks #6. Poverty rate of Maryland is the lowest among all the states of America. Majority of its employed population is in private sector which accounts for 80% of these employed while the government sector (federal, State, county and municipal governments) employs remaining 20%. High-end occupations and good income and a vibrant income make Maryland the richest state in USA. Health care and educational sector employ significant proportion of population.



Washington County, MD

- Washington County, MD building permits average per year since 2001 is 683. In 2005, there was a high number of building permits with 1,846 and a low number of building permits in 2013 of 45. 100.00% of the building permits are for Single Family housing units in 2013.
- Anirban Basu, one of state's leading economists, that the economy is gathering momentum boosted by a booming stock market. But Maryland's recovery from the recession continues to be soft when compared to some other states, and Washington County's is softer than some other jurisdictions in the state.

Basu pointed out that the United States has seen job growth of 1.7 percent in the last year, while Maryland's was about 1 percent. In the same time period, Washington County lost about 300 jobs, with a decline in about 200 manufacturing jobs.

- Washington County ranks as the 17th most developed retail market (per person) in the nation by the National Research Bureau.
- Increased State and local funding is imperative if community colleges are to fulfill their missions as open door institutions of higher learning. The State and County contributions to the College's operating budget are in jeopardy as the economy weakens and tax revenues drop. To make up for any cuts in funding, the College will be forced to place the burden on students, who already bear approximately 45% of tuition costs.

Washington County Real Estate Data



First Quarter 2012— Washington County Foreclosures

- 87 notices of default issued to homeowners.
- 14 notices of sales of foreclosed homes and 16 purchases made by lenders.
- 2.8% of the total foreclosures for Maryland were in Washington County in that time period.
- 34.4% increase in foreclosures from the fourth quarter 2011; decline of 12.8% from the first quarter of 2011.

Saving for Down Payment in Washington County

- In 2010, a starter home in Washington County costs \$127,415 (85% of the 2010 median home price). The typical first time homebuyer had a median household income of \$29,418 (57% of annual county median income).
- At the average 5% rate of savings per household (\$1,471 per year), it would take a first time homebuyer :
 - 4.3 years to accumulate a 5% down payment of \$6,371
 - 8.7 years to accumulate a 10% down payment of \$12,742
 - 17.3 years to accumulate a 20% down payment of \$25,483

* Note: Average Price is the weighted average of sales prices in the county, calculated by weighting the price of homes by the number of homes sold. To calculate the weighted average Maryland price, we weight the average price for all 24 Maryland jurisdictions by the number of homes sold. The median price is the middle value of the prices of all homes sold in the period—the price at which half the sold homes are above and half are below in selling price.

** Note: 2012 includes first 11 months of preliminary data.

*** Note: FY 2012 property taxes collected and percent change from previous years are estimates.

Sources: Maryland Association of REALTORS®, Sage Policy Group, Maryland Department of Assessment and Taxation, Maryland Association of Counties, Maryland Hope Initiative U.S. Census Bureau. Information presented here are based on the most recent data available.

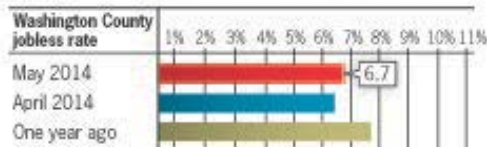
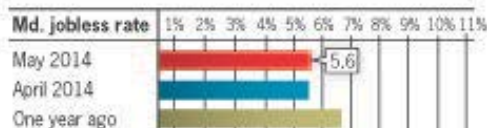
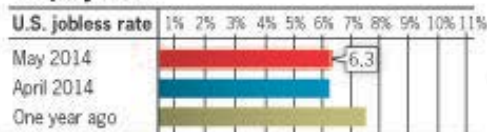


ECONOMIC PULSE

Economic Pulse is a snapshot of Washington County's economy. Using the latest sales, construction and employment data, it provides comparative Maryland and national figures. This chart runs in the Monday paper near the end of each month, as new data is released.

If there are local statistics not on the chart that you'd like to be included, email Arnold Platou at arnoldp@herald-mail.com or call 301-733-5131, ext. 2338.

Employment



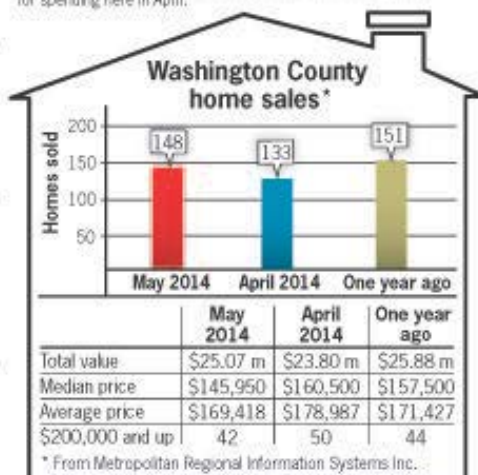
Sales

Washington County spending*

April 2014	March 2014	One year ago
\$141.18 m	\$139.19 m	\$137.41 m

m = million

* Based on Maryland sales tax collections announced in June for spending here in April.



Construction starts	May 2014	April 2014	One year ago
Washington County* homes and improvements**	\$4.29 m	\$4.84 m	\$3.73 m
Homes only***	12	18	13
Washington County* commercial	\$1.14 m	\$1.57 m	\$2.71 m
Number of projects	15	26	20
Hagerstown homes and improvements**	\$0.44 m	\$0.24 m	\$1.50 m
Homes only***	2	0	13
Hagerstown commercial	\$0.85 m	\$3.03 m	\$1.01 m
Number of projects	10	10	21

m = million

* Figures do not include construction in Hagerstown.

** All homes, additions, remodeling projects and mobile home replacements, plus pools, garages, storage and other such projects.

*** Houses, apartment units, mobile homes and other homes

Hotel, motel, and other lodging*

April 2014	March 2014	One year ago
\$2.67 m	\$2.37 m	\$2.51 m

m = million. *Based on Washington County lodging tax collections announced in June for hotel, motel, bed and breakfast rooms, and campground cabins rented here in April.

Auto sales	May 2014	April 2014	One year ago
Md. new cars sold	31,504	29,820	32,103
Average new-car price	\$29,551	\$30,226	\$28,199
Md. used cars sold	56,649	61,277	59,114
Average used-car price	\$9,422	\$9,234	\$9,284

- In 2012, Maryland was ranked first in the nation in "Entrepreneurship and Innovation" by the U.S. Department of Commerce for the second year in a row. Up from third in 2011, Maryland ranked second for concentration of businesses and jobs in science, technology, engineering, and mathematics.
- Four foreign trade zones (federally mandated, duty-free sites) are found in Maryland. They are located at the Collington Business Center near Bowie in Prince George's County (#63); near BWI Thurgood Marshall Airport in Anne Arundel County (#73); and Baltimore Harbor (#74); and seven sites in Washington County (#255). Maryland also has 28 State Enterprise Zones, and a Federal Empowerment Zone. All zones offer economic or tax incentives for businesses.

• Top largest employers in Washington County

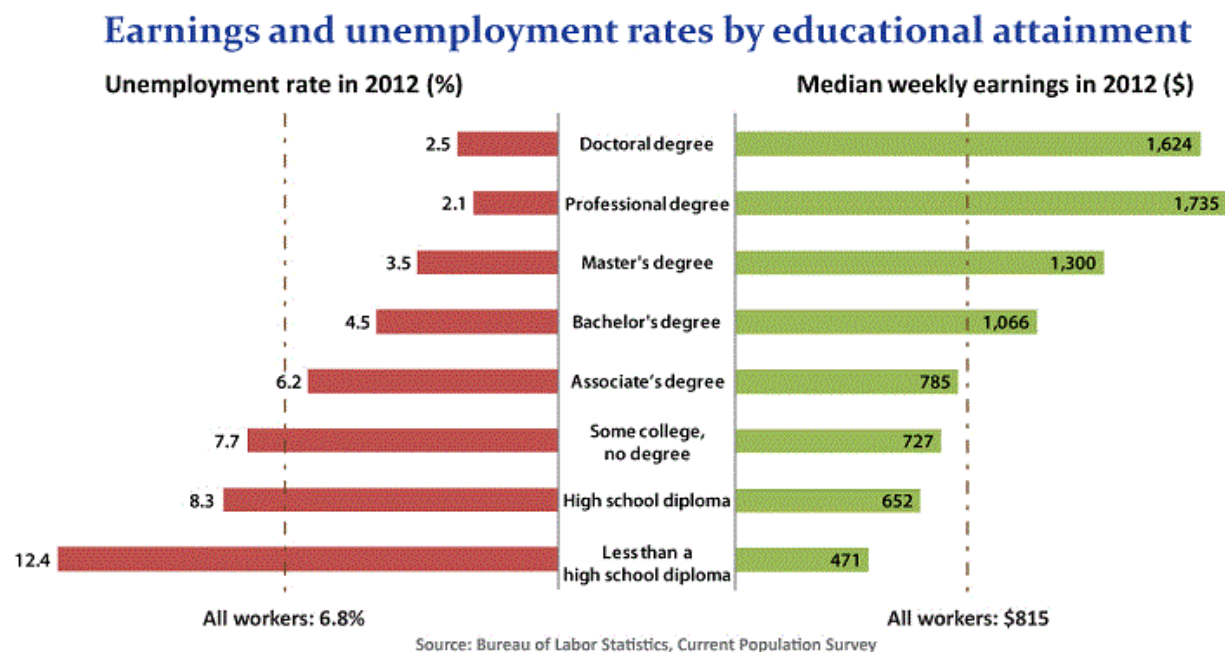
Maryland Workforce Exchange Website 2014

Employer Name	Partial Address	City	State	Zip Code	Estimated number of employees
<u>Citigroup Operations Ctr</u>	Citicorp Dr	Hagerstown	MD	21742	1,000-4,999
<u>Meritus Medical Ctr</u>	Medical Campus Rd	Hagerstown	MD	21742	1,000-4,999
<u>First Data</u>	Western Maryland Pkwy	Hagerstown	MD	21740	1,000-4,999
<u>JLG Financial Solutions Inc</u>	Fountain Head Plz	Hagerstown	MD	21742	1,000-4,999
<u>Volvo Powertrain North America</u>	Pennsylvania Ave	Hagerstown	MD	21742	1,000-4,999
<u>Antietam Health Svc Pharmacy</u>	Medical Campus Rd # 229	Hagerstown	MD	21742	500-999
<u>Sam's Club Distribution Ctr</u>	Industry Dr	Hagerstown	MD	21742	500-999
<u>Walmart Distribution Ctr</u>	Elliott Pl	Williamsport	MD	21795	500-999
<u>Maryland Ribbon Co</u>	Showalter Rd	Hagerstown	MD	21742	500-999
<u>Walmart Supercenter</u>	Garland Groh Blvd	Hagerstown	MD	21740	500-999
<u>MD Corr Training Ctr</u>	Roxbury Rd	Hagerstown	MD	21746	500-999
<u>DM Bowmen Trucking</u>	Governor Lane Blvd	Williamsport	MD	21795	500-999
<u>Staples</u>	Hopewell Rd	Hagerstown	MD	21740	500-999
<u>Correctional Institute</u>	Roxbury Rd	Hagerstown	MD	21746	500-999
<u>ARC</u>	Florida Ave	Hagerstown	MD	21740	500-999
<u>MD Correctional Institute</u>	Roxbury Rd	Hagerstown	MD	21746	500-999
<u>Roxbury Correctional Institute</u>	Roxbury Rd	Hagerstown	MD	21746	250-499
<u>Lehigh Phoenix</u>	Phoenix Rd	Hagerstown	MD	21742	250-499
<u>Weis Markets</u>	Eastern Blvd N	Hagerstown	MD	21740	250-499
<u>Berwick Offray</u>	Willow Cir	Hagerstown	MD	21740	250-499
<u>Certain Teed Corp</u>	Governor Lane Blvd	Williamsport	MD	21795	250-499
<u>Cinetic Landis Corp</u>	Halfway Blvd	Hagerstown	MD	21740	250-499
<u>Direct Mail Processors Inc</u>	Conrad Ct	Hagerstown	MD	21740	250-499
<u>Peak Engineered Wood</u>	Village Mill Dr	Maugansville	MD	21767	250-499
<u>Rayloc Co</u>	Rayloc Dr	Hancock	MD	21750	250-499

EDUCATION

United States – National

- Education pays in higher earnings and lower unemployment rates according to the Bureau of Labor Statistics' May 2012 data.



- The Nation's Report Card says America's high school seniors lack critical math and reading skills for an increasingly competitive global economy.

Only about one-quarter are performing proficiently or better in math and just 4 in 10 in reading. And they're not improving, the report says, reinforcing concerns that large numbers of today's students are unprepared for either college or the workplace.

Scores on the 2013 exam in both subjects were little changed from 2009, when the National Assessment of Educational Progress was last given to 12th-graders. The new results, released Wednesday, come from a representative sample of 92,000 public and private school students.

The report follows the just-released and seemingly more encouraging research that U.S. high school graduation rates in 2012 reached 80 percent, a record.

Five Two Year Degrees That Pay Off

1. Radiation Therapist

Median Annual
Salary -\$59,800

2. Ultrasound Technologist

Median Annual
Salary -\$53,500

3. Wind Turbine Technician

Median Annual
Salary -\$47,600

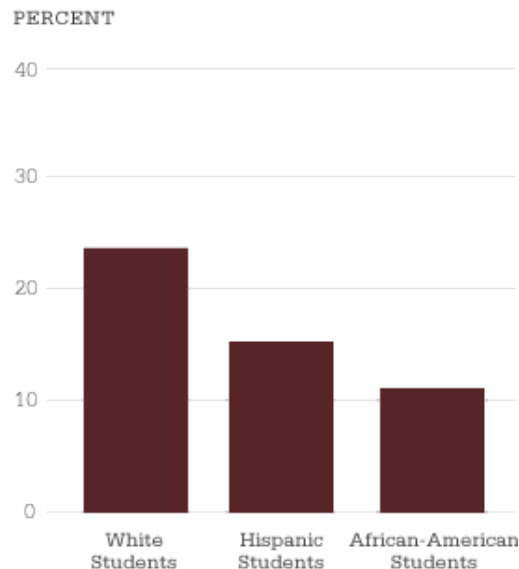
4. Railroad Conductor

Median Annual
Salary -\$45,000

5. HVAC Controls Technician

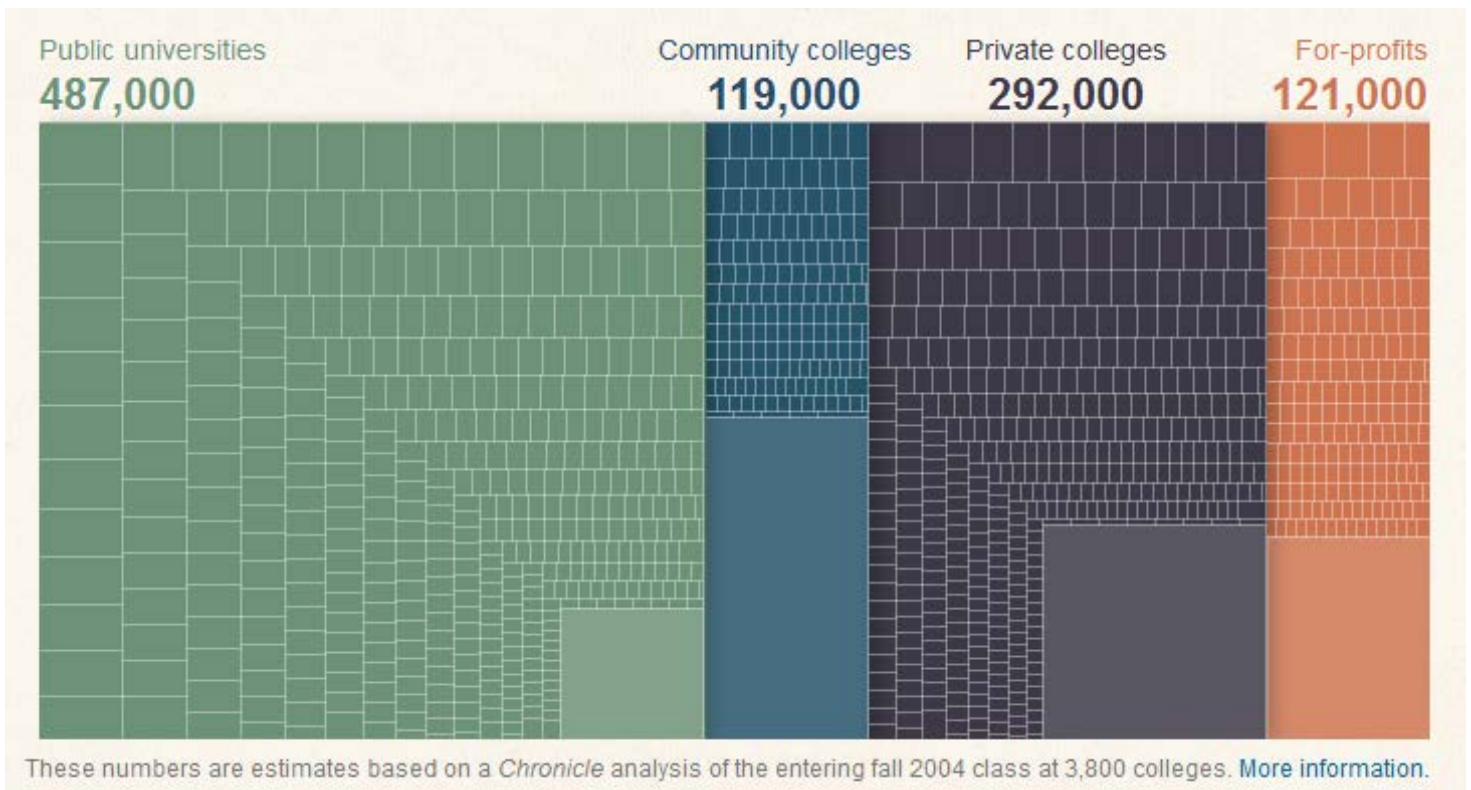
Median Annual
Salary -\$42,200

- “Complete College America” is building an Alliance of States ready to take bold actions to significantly increase the number of students successfully completing college and achieving degrees and credentials with value in the labor market and close attainment gaps for traditionally underrepresented populations. Maryland is one of 32 states in the alliance. Americans can take pride in the great progress made in ensuring access to college. More than 70% of our young people start some kind of advanced training within two years of receiving their high school diplomas. Yet for too many, the journey ends and they become college dropouts. Fewer than three out of ten students who start at a community college full-time graduate with an associate degree in three years. Just over half of students who start 4-year bachelor’s degree programs full time finish in six years. Once first in the world, America now ranks tenth in the percentage of young adults with a college degree. In the current recession, unemployment rates are twice as high for those with just a high school diploma (10.8%) compared to those with a bachelor’s degree or higher (4.9%).



23% of white students who enter public community colleges full-time complete an associate degree within three years. Rates for African-American & Hispanic students are even lower: 11% and 15% respectively. *U.S. Dept. of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2007.*

4.3 million freshmen started college in fall 2004



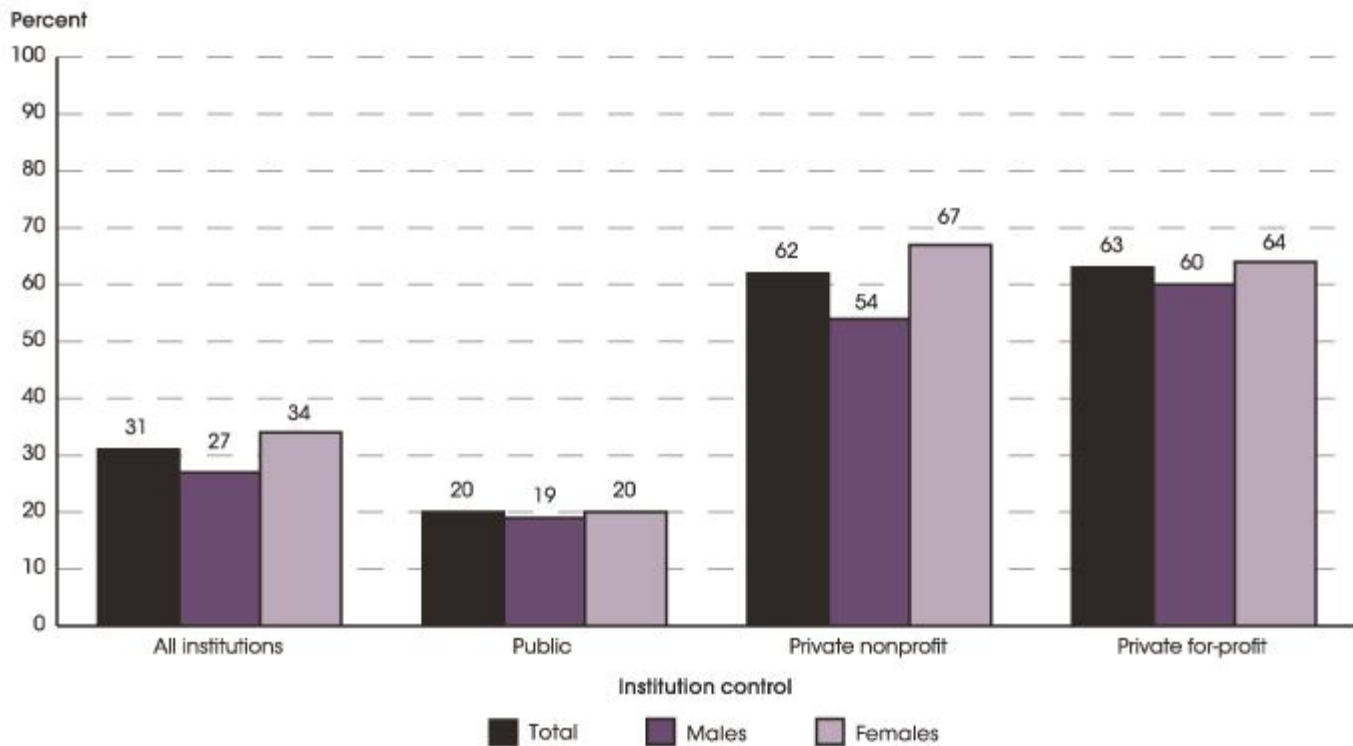
What colleges did they graduate from?

In the United States, the illiteracy rate has not changed in the past 10 years. According to the US Department of Education and the National Institute of Literacy, the following statistics outline the state of literacy in the United States.

- ◆ 32 million adults can not read in the United States equal to 14% of the population.
 - ◆ 21% of US adults read below the 5th grade level.
 - ◆ 19% of high school graduates can not read.
 - ◆ 85% of juveniles who interact with the juvenile court system are considered functionally illiterate.
-
- 70% of inmates in America's prisons can not read above the fourth grade level.

- Americans are increasingly uncomfortable with the current federal role in public education, according to a poll. Just 15 percent of respondents in a Gallup poll said the federal government – as opposed to state governments or local school boards – should have the greatest role in deciding what is taught in public schools. After a survey found support for Common Core shrinking, a second poll found an outright majority opposes the standards. Only 33 percent of U.S. adults who have heard of Common Core favor its use in the nation's classrooms, compared to 59 percent who are opposed, the Gallup poll found.
- Proficiency on the keyboard, according to the Common Core, adopted in most states, is more important than teaching legible handwriting, reports Maria Kinnikova for *The New York Times*. Psychologists and neuroscientists are not so sure. There is evidence of a connection between handwriting and a wide range of educational development processes. One example is that reading is learned more quickly when young students begin to write by hand, and they are better at generating ideas and information retention at this point.
- In August 2013, President Obama announced the “8 Keys to Veterans' Success on Campus,” eight concrete steps institutions of higher learning can take to help student veterans succeed on campus. At that time, 250 schools had committed to implementing the 8 Keys. Since then, the number of community colleges and universities pledging their support has more than doubled with partners all across the country including the University of Michigan, Solano Community College in California, the University of Florida, eighteen members of the City University of New York (CUNY) and Texas A&M University.
- Developed by more than 100 education experts in collaboration with the Administration and the Departments of Education and Veterans Affairs, the 8 Keys to Veterans' Success on Campus are specific actions that institutions of higher education can take to help veterans and service members transition into the classroom and thrive once they are there. Schools across the country are stepping up to ensure that the women and men who fought for our nation in uniform can succeed on campus, complete their college programs and obtain career-ready skills.
- More students from China are studying in the United States than are students from all non-Asian countries combined. China accounts for 29 percent of foreign students in the country. India ranks second, at 11 percent.

Figure 4. Percentage of students seeking a certificate or degree at 2-year degree-granting institutions who completed a credential within 150 percent of the normal time required to do so, by control of institution and sex: Starting cohort year 2009



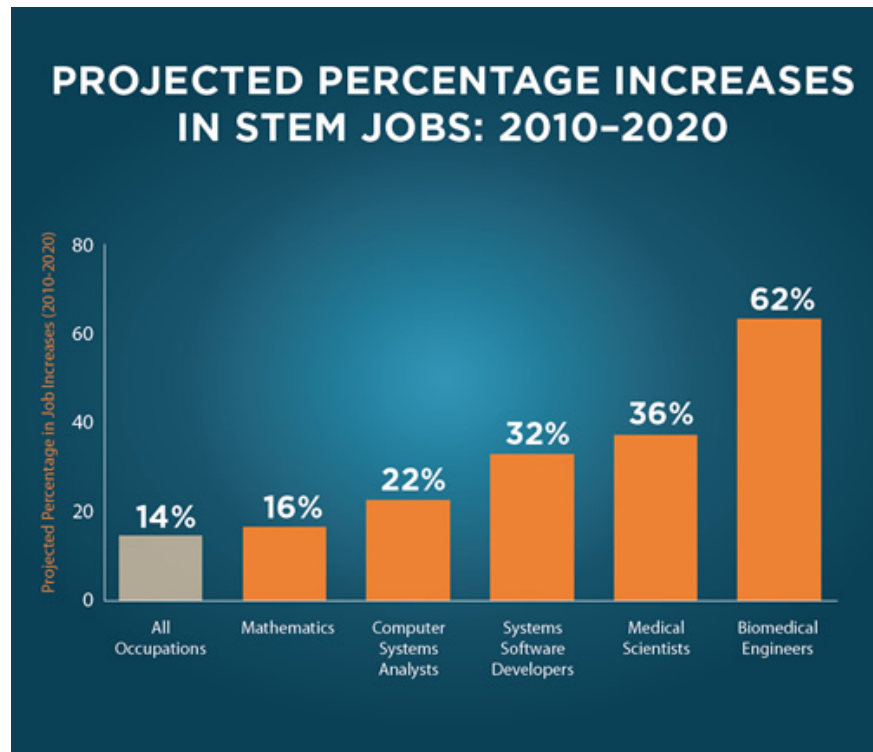
NOTE: Data are for 2-year degree-granting postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates refer to first-time, full-time students receiving associate's degrees or certificates from their initial institution of attendance only. An example of completing a credential within 150 percent of the normal time required to do so is taking 3 years for a 2-year degree. Students who transferred to another institution and graduated are not counted as completers at their initial institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Graduation Rates component. See *Digest of Education Statistics 2013*, [table 326.20](#).

At 2-year degree-granting institutions, 31 percent of first-time, full-time undergraduate students who began their pursuit of a certificate or associate's degree in fall 2009 attained it within 150 percent of the normal time required to do so. An example of completing a credential within 150 percent of the normal time required to do so is taking 3 years for a 2-year degree. This graduation rate was 20 percent at public 2-year institutions, 62 percent at private nonprofit 2-year institutions, and 63 percent at private for-profit 2-year institutions. At 2-year institutions overall, as well as at each type of 2-year institution, the completion rate was higher for females than for males. At private nonprofit 2-year institutions, for example, 67 percent of females versus 54 percent of males completed a certificate or associate's degree within 150 percent of the normal time required.

- So, what's the No. 1 field of interest for graduating seniors? RIDGID's survey results show 25 percent of students hope to work in a career with computers or the Internet. The next most popular fields of interest include business (16 percent); engineering (15 percent); healthcare, defined as doctors, nurses, assistants and technicians (15 percent); and the entertainment/arts field, defined as actor, musician, TV anchor, reporter and producer (15 percent).

- Only 16 percent of American high school seniors are proficient in mathematics and interested in a STEM career. Even among those who do go on to pursue a college major in the STEM fields, only about half choose to work in a related career. The United States is falling behind internationally, ranking 25th in mathematics and 17th in science among industrialized nations.



Top 12 Best Jobs for Community College Graduates

- Construction Manager
- Dental Hygienist
- RN/Radiation Therapist
- Vet Technician
- Environmental Science
- Civil Engineering Tech
- Funeral Director
- Paralegal and Legal Assistant
- Preschool Teacher
- Respiratory Therapist/Rad Tech
- Physical Therapy Assistant

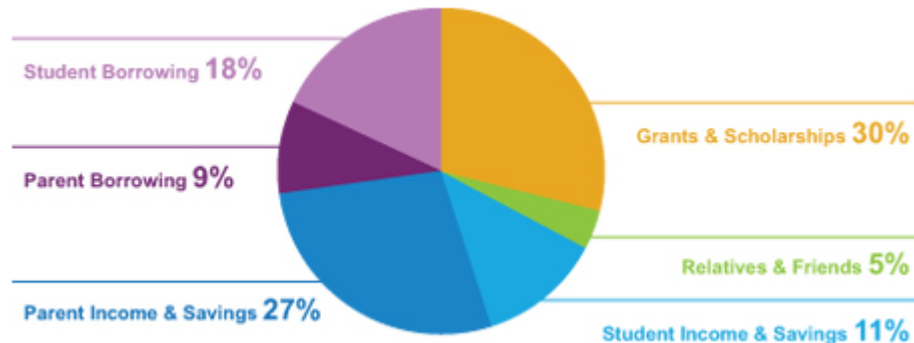
- As high school graduates of 2014 head to college this fall, the recent ACT report shows most are not prepared for the rigor of the coursework they will encounter. However, those who took challenging courses in high school face better odds of success.

The Iowa City, Iowa-based testing organization found that when students took the ACT-recommended core college preparatory curriculum (four years of English and three years each of math, science, and social studies), they were far more likely than those who took less than the core to meet ACT's college-readiness benchmarks in each of the four subject areas.

- 90% of the US population lives within 25 miles of a community college.
- College textbook prices have increased faster than tuition, health care costs and housing prices, all of which have risen faster than inflation. College textbook prices are 812 percent higher than they were a little more than three decades ago, the American Enterprise Institute, a think tank, reports. Textbook costs have well outpaced the 559 percent increase in tuition and fees over roughly the same period. The National Association of College Stores (NACS) says the average college student will spend \$655 on textbooks each year, but with a single textbook easily costing as much as \$300, that total can easily be much higher. In fact, the College Board puts the annual cost of books and materials at \$1,168. Students at for-profit colleges tend to spend even more

How America Pays for College 2013: A national study by Sallie Mae and Ipsos

Average percentage of total cost of attendance paid from each source



- President Barack Obama is expected to sign new student loan legislation this week, making market-based interest rates the law of the land for federal student loans and immediately lowering rates for borrowers (August 5, 2013).
- A new survey from GradStaff, a Minneapolis-based leader in outsourced college recruiting services for companies from 50 to 2,000 employees, reveals that college graduates aren't necessarily prepared to navigate the complex world of job hunting, with 64 percent surveyed revealing they are often unsure which job opportunities are a fit for their newly acquired skillset.
- Research shows many college students who take developmental education classes, usually required when they score low on placement exams, fail to graduate. Only 28% of two-year college students who took at least one developmental course earned a degree or certificate within 8.5 years, compared to 43% of non-remedial students, according to one study. The study concluded the gap in graduation rates reflected differences in learning skills carried over from high school, rather than the impact of remedial classes themselves.
- Over the next two years, AARP Foundation will invest more than \$2 million to expand the program and reach thousands more older workers. To date, Back to Work 50+ has provided more than 5,000 unemployed workers with information and resources to help them find meaningful jobs.

There are more than 3 million workers age 50-plus looking for full-time employment, according to AARP Foundation.

- A growing number of startups want to play the matchmaker role between community colleges and employers. One of them, WorkAmerica, makes an unusual offer as part of their pitch: students get a legally binding job offer before they enroll at one of the company's partner colleges.

WorkAmerica has begun placing students in trucking programs at community colleges. Gutman said more deals are in the works, and that the company plans to branch into other fields with a high churn of workers, such as employers of welders, medical assistants, and IT and HVAC technicians.

NUMBER AND TYPE OF COLLEGES

Public – 986
Independent – 115
Tribal – 31



1,132
Total number of community colleges

HEADCOUNT ENROLLMENT (FALL 2012)

Program Type	#	%	Attendance	#	%
Credit ²	7.7M	61%	Part-time ²	4.6M	60%
Noncredit ³	5.0M	39%	Full-time ²	3.1M	40%
Total	12.8M	100%			

Estimated change fall 2012 – fall 2013: -3.1%.⁴

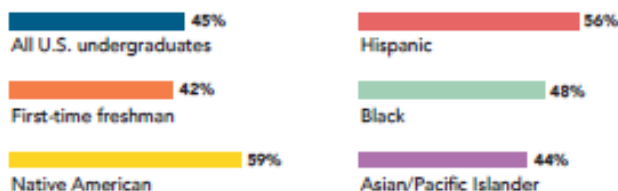
STUDENT DEMOGRAPHICS

Age ⁵	%	Gender ²	%	Ethnicity ²	%
Average	28	Women	57%	White	51%
Median	24	Men	43%	Hispanic	19%
≤21	30%			Black	14%
22-39	57%			Asian/Pacific Islander	6%
40+	14%			Native American	1%
				2 or more races	2%
				Other/Unknown	5%
				Nonresident Alien	1%

Other Student demographics⁵

First generation to attend college – 36%
Single parent – 17%
Non-U.S. citizens – 7%
Veterans – 4%
Students with disabilities – 12%

REPRESENTATION OF COMMUNITY COLLEGE STUDENTS AMONG UNDERGRADUATES (FALL 2012)²



EMPLOYMENT STATUS (2011–2012)⁵

Full-time student employed full time – 22%
Full-time students employed part time – 40%
Part-time students employed full time – 41%
Part-time students employed part time – 32%

STUDENT FINANCIAL AID (2011–2012)⁵

% of students applying % of students receiving

Any aid – 72%
Federal aid – 62%
Any aid – 58%
Federal grants – 38%
Federal loans – 19%
State aid – 12%
Institutional aid – 13%

% OF FEDERAL AID RECEIVED BY COMMUNITY COLLEGES (2012–2013)⁶

Pell Grants – 33%
Federal Work Study – 16%
Federal Supplemental Educational Opportunity Grants – 21%

AVERAGE ANNUAL TUITION AND FEES (2013–2014)⁷

Community colleges (public, in district) – \$3,260
4-year colleges (public, in state) – \$8,890

DEGREES AND CERTIFICATES AWARDED (2011–2012)⁸



770,797
Associate degrees



436,037
Certificates

Bachelor's degrees awarded by 48 public and 82 independent colleges.^{1A}

REVENUE SOURCE⁹

Source	Revenue	%
Federal	\$9,135,894,867	16.1%
State	\$15,972,223,577	28.1%
Local	\$9,807,927,497	17.3%
Tuition	\$16,749,438,987	29.5%
Other	\$5,104,713,349	9.0%
Total	\$56,770,198,278	100.0%

Sources

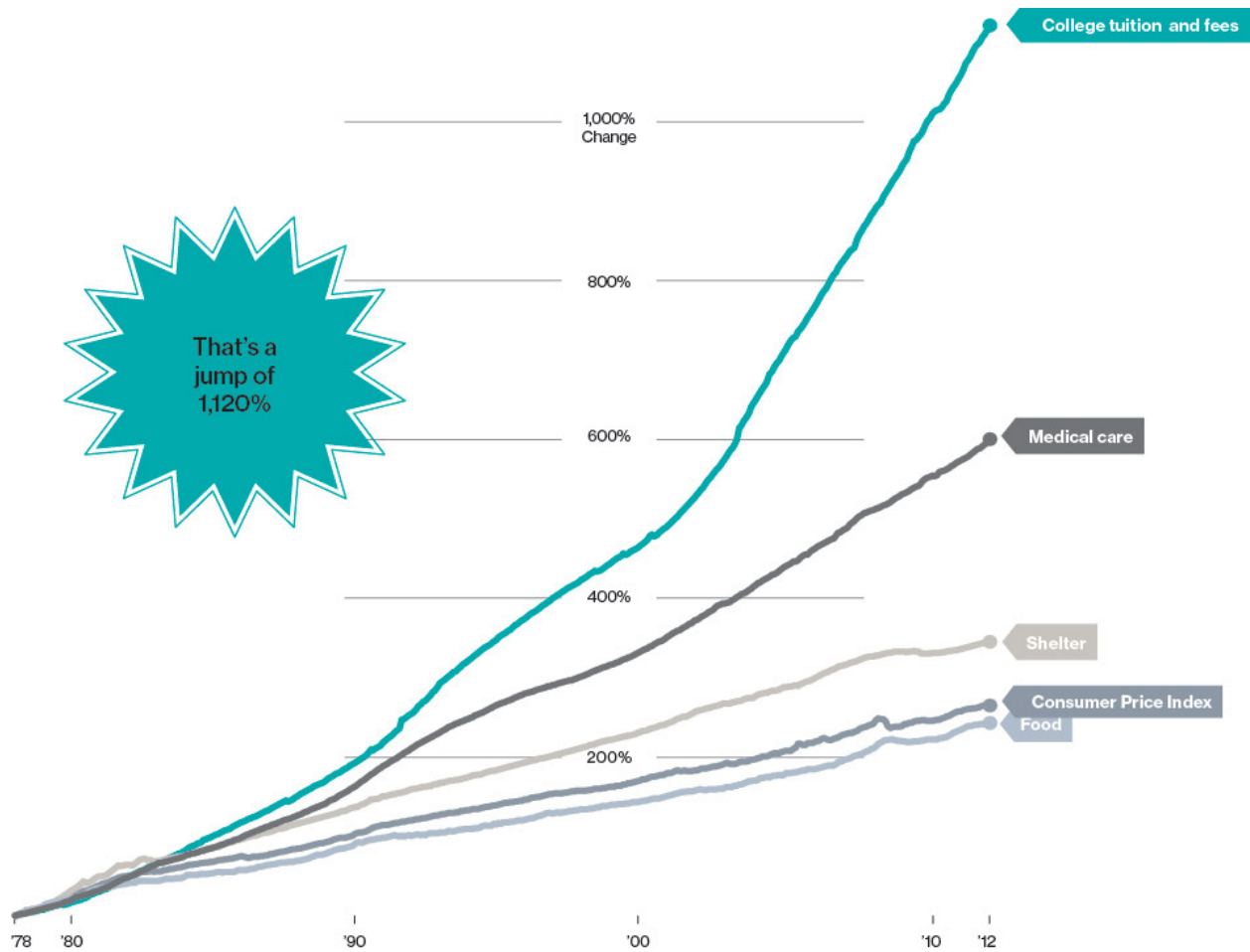
¹ AACC membership database, January 2014.
² NCES (2014). IPEDS Fall 2012 Enrollment Survey [AACC analysis].
³ AACC membership database, 2014 [AACC analysis].
⁴ National Student Clearinghouse. (2013). Term Enrollment Estimates Fall 2013.

⁵ NCES. (2014). 2011–12 National Postsecondary Student Aid Study (NPSAS:12) [AACC analysis].
⁶ College Board. (2013). Trends in Student Aid: 2013.
⁷ College Board. (2013). Trends in College Pricing: 2013.
⁸ NCES. (2014). IPEDS 2011 Completion Survey [AACC analysis].
⁹ NCES. (2014). IPEDS 2012 Finance Survey [AACC analysis].

April 2014

College Tuition's 1,120 Percent Increase

Schools are investing and building more than ever—and students are paying for it.



Data: Bloomberg; Labor Department

The Department of Education is going to make it easier for students to get a college loan, even if they or their parents have less than great credit histories, according to Andrew Taylor of *Associated Press*.

These changes will make getting a loan from the government's Direct Loan program less restrictive. Up until now, students with "adverse debt" were denied automatically, unless they had extenuating circumstances. Sometimes students in this situation are required to have loan counseling.

The new regulations allow up to \$2,085 debt or written-off debt and would shorten the debt securitization from five years to two. Under these standards about 370,000 students could now qualify for direct loans.

Students who attend community college are defaulting on their loans more often than those who attend a four-year school.

With 70% of students borrowing less than \$6,000, this may come as a surprise. However, low graduation rates may explain why so many cannot repay these small amounts.

Only 7% of young-adult families hold \$50,000 or more in debt related to education. In contrast, 58% of the same households have less than \$10,000 in this type of debt. These are the graduates who have a difficult time finding a job and paying back their loans.

College Loan Payment Responsibility

While a majority of families who borrowed to pay for college view paying college costs as a joint effort between parent and student, there is a notable difference between overall responsibility and repayment of any loans accrued.

In families where the student borrowed a federal or private education loan, fewer than one-third say parents will contribute to loan payments; a strong majority (71%) say the student will be solely responsible for repaying the loans. In families where the parent borrowed a federal or private education loan, the student is again expected to take responsibility. Only 12 percent say the parent will be solely responsible for the payments. The vast majority expect students to make some payments on parent loans with 24 percent saying the student will be fully responsible for those payments.

SallieMae.com

Online Course Demographics

October 31, 2010

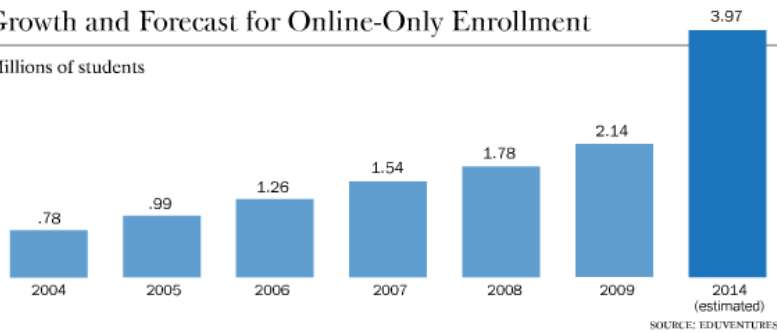
Online Learning: By the Numbers

GROWTH AND TYPE OF ONLINE ENROLLMENT

All figures are estimates.

Growth and Forecast for Online-Only Enrollment

Millions of students



Enrollments of Online-Only Students Pursuing Bachelor's Degrees, by Field, 2009

These 10 fields accounted for 81 percent of all online enrollment.

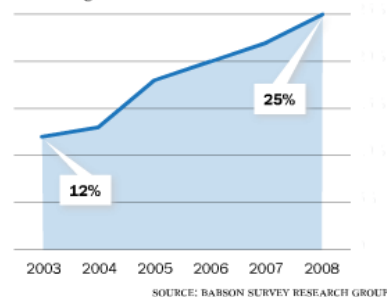
Percentage of all enrollment that is online only, by field

Criminal justice.....	27%
Computer and information technology.....	19%
Health care.....	16%
Business.....	14%
Nursing.....	13%
Public administration.....	12%
Liberal arts.....	9%
Communication.....	8%
Education.....	6%
Psychology.....	6%

SOURCE: EDVENTURES

Growth in Enrollments of Students Taking at Least One Online Course

Percentage of all enrolled students



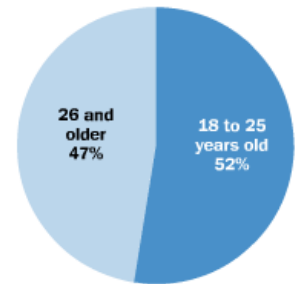
Source – Chronical of Higher Education

SELECTED DEMOGRAPHICS

These figures describe students at 226 two-year institutions in 2008-9. Figures are rounded and may not add to 100 percent.

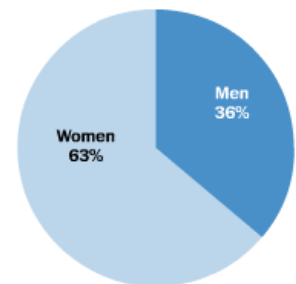
Age of Students

In online courses

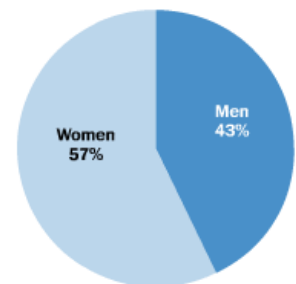


Gender

In online courses



In all courses



Striking Statistics About Distance Learning in Higher Education

64% completion rate for online classes at community colleges, compared to 76% for traditional face-to-face courses

150% increase in the # of students selecting distance-learning courses as a part of the regular college curriculum between 1198-2008

18% of undergraduate students are predicted to receive 80% or more of their education through online courses by 2013

25% of students enrolled in at least one online course at the associate's degree level, compared to 17% at the bachelor's degree level

71% of leaders of for-profit colleges and universities report that their institutions offer classes online, and more than half (54%) say these classes offer the same value as classes taken in person.

61% of the presidents of four-year liberal arts colleges report that their institutions offer classes that are taught exclusively online, compared to 79% of presidents of research universities and 82% of those at community colleges.

15% of college students who have taken a class online have earned a degree entirely online

39% of all adults who have taken a class online say the format's educational value is equal to that of a course taken in a classroom.

65% of students have taken online classes

71% of students believe that virtual learning proves increased flexibility to take classes

72% of university IT staff believe that virtual learning is essential to a 21st century classroom, compared to 63% of administrators

59% of college IT managers surveyed say their institution offers online learning

48% of faculty member believe that virtual learning is essential to a 21st century classroom, compared to 53% of students

51% of college presidents say online course provide equal value to classroom experiences

29% of the publics says online courses offer an equal value compared with courses taken in the classroom

77% of college presidents report that their institution offer online courses.

23% of college graduates report that they have taken a class online

50% of college presidents predict that 10 years from now most of their student will take classes online

90% of online institutions based at community colleges use student evaluations

64% of online institutions based at community college use some type of administrative review

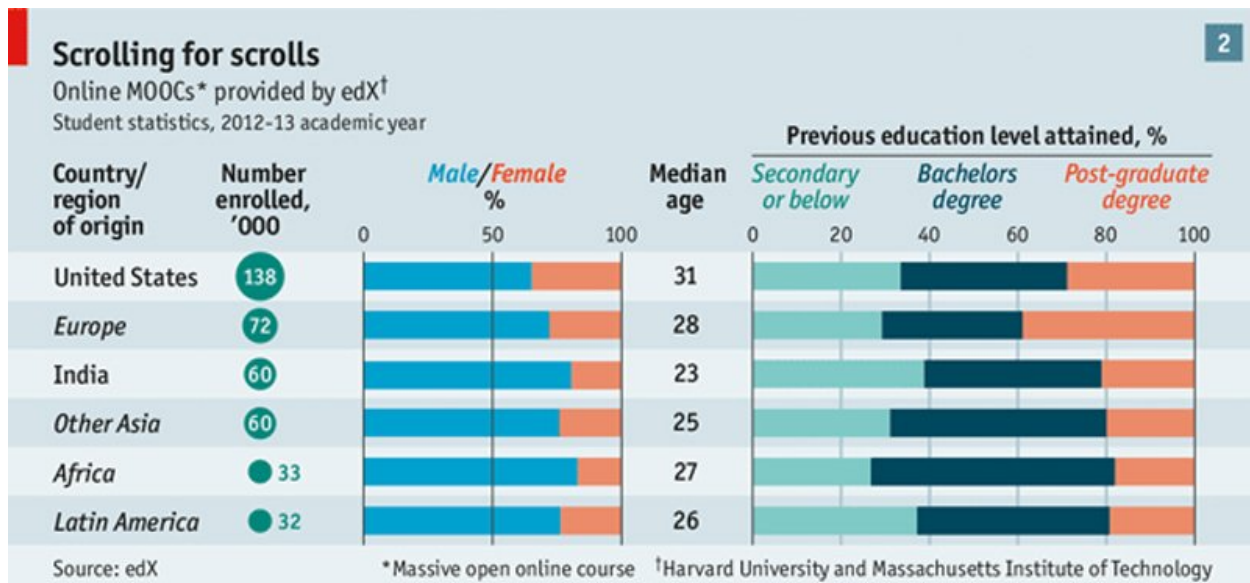
<i>75% of community colleges develop their own content for online courses</i>
<i>18% of community colleges use publisher content for online courses</i>
<i>5% of community colleges use contract or license materials from content providers</i>
<i>40% of community colleges own and maintain their own servers for their online classes</i>
<i>36% of community colleges outsourced their server needs to a third party, such as a learning management system provider, publisher or IT provider.</i>
<i>70% of community colleges currently offer an online student orientation for distance education classes</i>
<i>54% of community colleges currently offered online plagiarism evaluations for distance education classes</i>
<i>90% of community colleges offered a dedicated website for their distance education program and students</i>
<i>85% of community colleges offer online admission</i>
<i>91% of community colleges currently offer online registration for their classes.</i>
<i>15% of community colleges offer blended/hybrid courses</i>
<i>3% of community colleges offer interactive video</i>
<i>53% of community colleges continue to increase the number of blended/hybrid courses each term</i>
<i>3% of community colleges do not offer blended/hybrid courses</i>
<i>40% of community colleges have deactivated their interactive video (IAV) course or have never offered IAV courses.</i>
<i>60% of faculty members at community colleges believe that faculty participation in training programs for distance education is mandatory.</i>
<i>28% of community colleges limit the number of online class sections a full-time faculty member can teach each term.</i>
<i>52% of students at community colleges who take online courses are traditional students.</i>
<i>63% of students at community college who take online courses are female and 36% are male</i>
<i>27% of distance learners are employed full-time.</i>
<i>Source - EDTech Magazine (2012)</i>

- Experts predict the following three trends will have a significant role in shaping higher education in 2013:
 - More Online Programs – Many colleges have increased their online learning opportunities and will continue to bolster these courses and degree programs.
 - More Emphasis on ‘Self-Directed’ Learning – With a large number of adult learners over age 25, there are already an increasing number of self-paced and competency-based programs that will become more common with traditional college students as well.
 - Shift in Faculty Hiring Process – As schools continue to experience decreased endowments and tight budgets, fewer faculty members will be hired on a full time basis.

A number of education trends made their mark in 2013, from massive open online courses to evaluating colleges based on their graduation rates. The underlying forces that drove change this year aren't likely to change anytime soon: declining public funding, changing demographics, advancing technology, and a tough job market.

Here are five trends we'll be watching next year, with special attention to how they affect minority and at-risk students.

- Earning college credit for what you know
- Career and technical education
- Student loan outrage
- Data privacy concerns
- Teacher effectiveness



Between 1993 and 2009, the student body—as defined by the distribution, not the number, of students—on community college campuses shifted. For instance, students under the age of 18 are increasingly enrolling in community colleges. While the student body is becoming increasingly younger, the characteristics of younger students are not homogenous across all sectors of higher education. Community college students have a greater proportion of students with various risk factors when compared to all of higher education.

These colleges also provide access to nearly half of all minority undergraduate students and more than 40% of undergraduate students living in poverty.

- According to the annual report published by the College Board, fewer than half the members of the 2013 high school class who took the SATs had the academic skills necessary to succeed in college. More troubling still, this percentage has not varied much over the past five years, breaking the trend of small but notable gains in the decade before.
- Social networks are still growing more popular, now educational institutions are developing their own networks centered on the student experience. According to David F. Carr of Information Week, universities are increasingly creating their own enterprise social networking websites to recruit, engage and retain students.

Social networks offer the possibility of more effective and cheaper tools for universities to interact with students. Facebook, the world's most famous and widely used social network, allows users to create business pages. After Facebook pages proved useful to the private sector, educational institutes realized that building customized social networks could also be useful to manage and engage students.

Homeschooling

- The National Center for Education Statistics reports an increase in home schooled students. In spring 2007, the number of homeschooled students was 1.5 million, an increase 36% since 2003. Today, this number is approaching 2 million and is underestimated because there is no requirement for parents to report their children's progress. 77% of these students were white and 89% were from two-parent households. The reasons parents gave for homeschooling was:
 - 36% of students have parents who desire to provide moral or religious instruction.
 - 21% are concerned about school environment such as safety, drugs and peer pressure.
 - 17% said they were dissatisfied with the academic instruction available at public schools.
 - 14% indicated other reasons such as family time, finances, travel and distance.
 - 7% were interested in nontraditional education method.
 - 6% noted child's health problems or special needs.
- In February 2008, a California state appeals court ruled that unless parents have recognized teaching credentials, they must send their children to school. If upheld, the court decision could influence laws across the country. Currently, only six states have strict regulations for home-schooling (including curriculum approval, show test scores, and home visits.) Nationwide, approximately up to 2 million children are taught at home and the number is increasing 7% to 12% a year.
- Homeschooled students are making a smooth transition to higher education, thanks to a marked increase of available resources and a friendlier public perception. Data shows that more homeschooled students than ever are going into college life with better skills and preparation, and in many cases better than their non-home-schooled peers

- For-profit educational institutions continue to increase in size and number competing with established public community colleges. Colleges like Phoenix University offer flexibility for the working student. For-profit technical schools like ITT, guarantee job placement. Community colleges must quickly distinguish themselves so that their offerings or mode of delivery are unique in the marketplace. The community college as a low cost option for higher education does not have the same attraction for students that it did even five years ago.

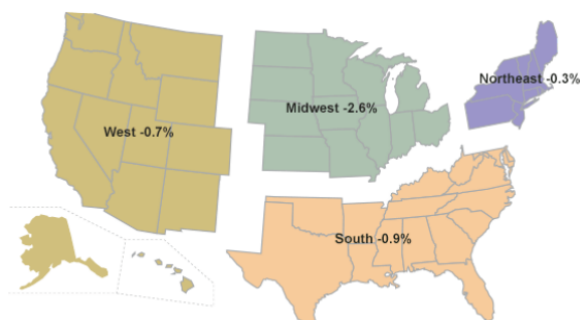
States That Drew the Most Out-of-State Freshmen, 2012

Pennsylvania drew more freshmen from New Jersey alone (almost 9,000) than most single states drew from all others combined. While many states drew the highest number of students from neighboring states, California contributed many students to distant states like New York and Illinois.

	State	Number of out-of-state freshmen	Top 3 sending states
1.	Pennsylvania	27,936	New Jersey, New York, Maryland
2.	New York	27,830	New Jersey, California, Massachusetts
3.	Massachusetts	20,914	New York, Connecticut, New Jersey
4.	Virginia	14,804	Maryland, New Jersey, Pennsylvania
5.	Ohio	14,476	Pennsylvania, Illinois, Michigan
6.	North Carolina	11,976	Virginia, Maryland, New Jersey
7.	Indiana	11,648	Illinois, Ohio, Michigan
8.	California	10,601	Washington, Texas, Oregon
9.	Illinois	9,676	California, Michigan, Missouri
10.	Wisconsin	9,597	Illinois, Minnesota, Michigan
Note: The data cover only domestic enrollments from the 50 states and the District of Columbia. The colleges represented are those designated doctorate-granting, master's, or baccalaureate institutions by the Carnegie Foundation for the Advancement of Teaching in 2010. Private for-profit institutions are not included, as many rely on distance learning, which skews migration data. Figures are from the most-recent year when institutions were required to report residency data to the Education Department.			
Source: <i>Chronicle</i> analysis of U.S. Department of Education data			

Annual Decline in College Enrollment by Region, Fall 2012 to Fall 2013

Enrollment declined 1.5 percent over all from the fall of 2012 to the fall of 2013, with the Midwest the hardest hit. Every region experienced a drop, with the Northeast the least affected. It was the second year in a row that total enrollment fell, with the 1.5-percent drop for all regions in 2013 following a 1.8-percent decline in 2012.



Number of enrolled students in all regions



Note: Enrollment is for degree-granting institutions eligible for federal student financial aid. Students who are enrolled simultaneously at two different institutions are double-counted.

Source: National Student Clearinghouse Research Center

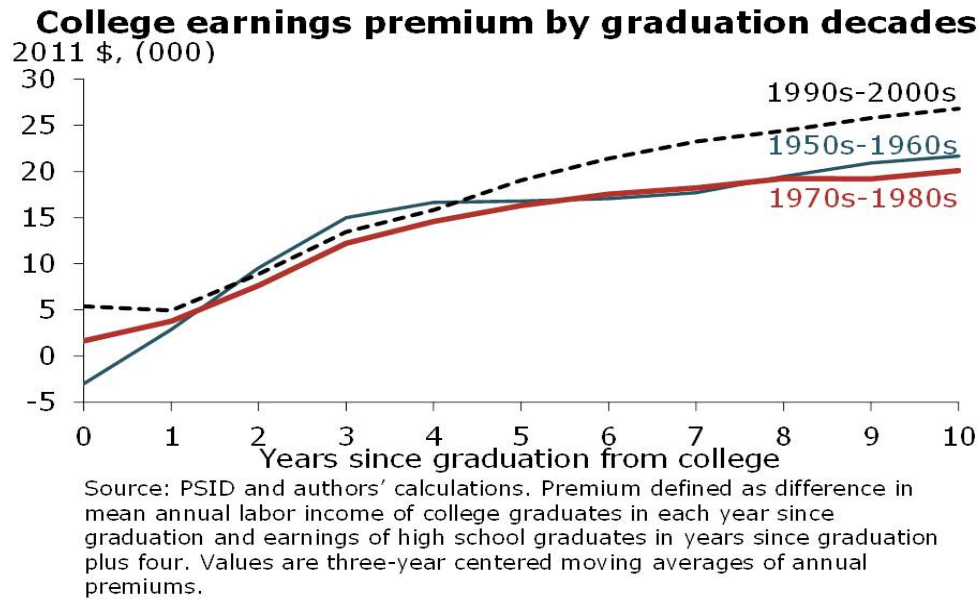
- The National Student Clearinghouse Research Center put out a Snapshot Report on persistence and retention, which shows what's happening to first-time college students after their first year. While persistence (students who return to the same college for their second year) has dropped a bit, retention (students who return anywhere for their second year) has stayed steady. About one in nine students who start in the fall transfer.
- The average college graduate banks \$800,000 more over the course of his or her lifetime than the average high school degree-holder (this figure accounts for the cost).

% Increase in Associate Degree Attainment by Race*

- Hispanic—383%
- Asian/Pacific Islander—230%
 - Black—204%
- American Indian/Alaska Native—182%
 - White—52%

*Based on community college data from 1989-1990 through 2009-2010

This chart tracks the earnings premium of having a college degree, illustrating that “there is little evidence that the value of a college degree has declined over time, and it has even risen somewhat for graduates five to ten years out of school.”



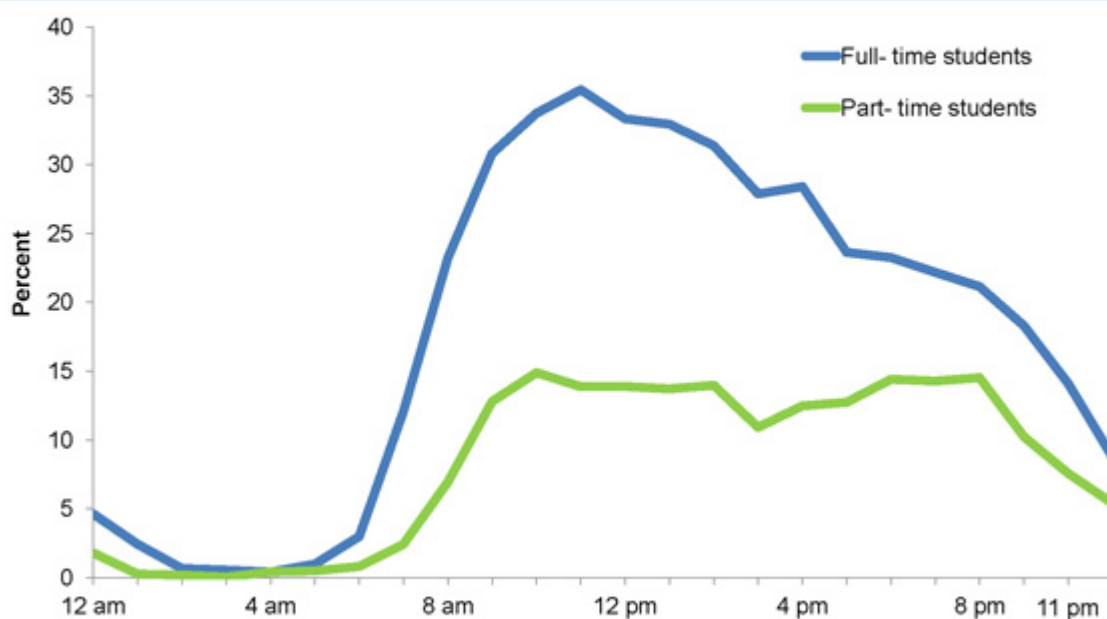
CareerBuilder.com lists the following emerging careers that are making a mark and poised for growth in the coming years

Home Stager
Health Informatics Technician
Simulation Developer
Green Jobs
Emergency Management
Career Counselor
Patient Advocate

According to degreedriven.com, the six fastest-growing degree programs in response to the world's newest challenges are:

Health Infomatics
Homeland security
Information Assurance and Cyber Security
Nanotechnology
Public Health
Environment Studies and Environmental Science
Patient Advocate

Percent of university and college students who did educational activities, by hour of day on weekdays



NOTE: Data include individuals, ages 15 to 49, who were enrolled at a university or college. Data include non-holiday weekdays and are averages for 2008-12.

SOURCE: Bureau of Labor Statistics, American Time Use Survey

- For 2-year institutions, the percentage of students receiving any financial aid increased from 67 percent in 2006–07 to 79 percent in 2011–12, and the largest percentage increase in students receiving aid was at public institutions, from 61 to 76 percent. The percentage of students receiving aid at 2-year private nonprofit institutions increased from 83 to 94 percent between 2006–07 and 2011–12; the percentage receiving aid at 2-year private for-profit institutions was higher in 2011–12 (91 percent) than in 2006–07 (89 percent).
- Of the 3.2 million high school completers in 2012, some 2.1 million, or 66 percent, enrolled in college the following fall. This rate, known as the *immediate college enrollment rate*, is defined as the annual percentage of high school completers (including GED recipients) who enroll in 2- or 4-year colleges in the fall immediately after completing high school. Between 1990 and 2012, the immediate college enrollment rate increased from 60 to 66 percent. However, the rate did not change measurably between 2011 and 2012.

- The Department of Labor (DOL), in partnership with the Department of Commerce, will establish a new Center for Workforce and Industry Partnerships, which will champion regional partnerships. DOL will also be creating a business engagement metric for all WIOA-funded programs, and adult education programs will need to address how they will teach “employability skills.” The document also notes that WIOA-funded job training programs will be required to display outcomes in a standard “scorecard” format, and that DOL does not plan to offer waivers to WIOA’s requirements in this area, as it had often done in the past. The scorecard requirements are embedded in WIOA itself.
- A number of pilot programs were announced, including Department of Education experimental sites to explore student aid eligibility for competency-based and shorter term training programs, and prior learning assessment, which were originally put forward last year as part of the president’s college affordability proposals. The administration’s ongoing focus on getting the long-term unemployed back to work and expanding apprenticeship programs will also be addressed in today’s release.
- The President will sign the Workforce Innovation and Opportunity Act (WIOA) into law, marking the end of the legislative phase of an 11-year Workforce Investment Act reauthorization process.

The plan establishes a checklist of elements that federal agencies will seek to encourage or require of the education and job training programs that they administer. The checklist includes items such as engaging employers, measuring results, and ensuring that various programs are better connected. The administration notes that this checklist played a role in \$950 million in grants to be awarded this year (including round 4 of the TAACCCT grants) and \$1.4 billion in grants to be awarded by various agencies in 2015. The checklist will also be incorporated into economic development and manufacturing extension programs, as well as shared with governors.

- The immediate college enrollment rate of high school completers at 2-year colleges increased from 20 percent in 1990 to 29 percent in 2012. The rate fluctuated between 20 and 25 percent in the 1990s and then increased from 21 percent in 2000 to 29 percent in 2012. The immediate college enrollment rate at 4-year colleges in 2012 (37 percent) did not differ significantly from the corresponding rate in 1990 (40 percent), but the rate in 2012 (37 percent) was lower than the rates in 2011 and 2000 (42 percent each). In each year between 1990 and 2012, the immediate college enrollment rate at 4-year colleges was higher than that at 2-year colleges. For example, in 2012 the immediate college enrollment rate at 4-year colleges was 37 percent, compared with 29 percent at 2-year colleges.

- On June 25, the House Ways and Means Committee approved the Student and Family Tax Simplification Act (H.R. 3393), a bill that would consolidate several existing higher education tax credits and deductions into an improved American Opportunity Tax Credit. AACC was strongly supportive of the bill as introduced, as it better aims the benefits of higher education tax credits to low-income students attending lower-cost institutions.
- According to the National Center for Higher Education Management, two year college graduates earned an average of \$41,251 while high school graduates earned an average of only \$30,938.

A major reason for the relatively high growth rates and income levels for community college jobs is the specialized nature of many of the degrees. Community college students often study in disciplines where they develop skills that are readily applied to the marketplace.

The vast majority of the highest paying associate's degrees and those with the highest projected growth rates fall into 3 categories: healthcare, engineering and other areas of technology. All of these segments are experiencing an above-average expansion in employment opportunities due to economic trends.

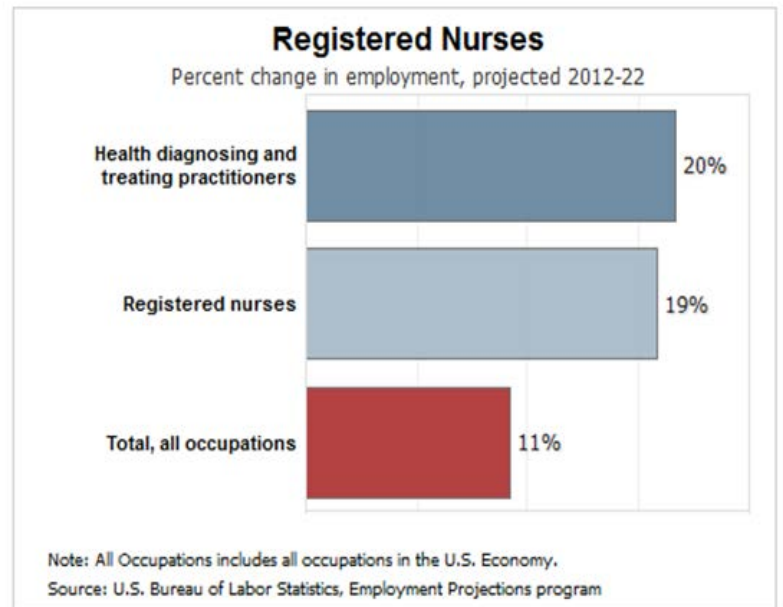
- 14 % - Percentage of college students 35 and older in October 2012. They made up 32 percent of those attending school part time
- 41% - Percentage of 18- to 24-year-olds enrolled in college in 2012.
- 52% -Percentage of students enrolled in college who worked less than full time, year-round in 2011; 20 percent worked full time, year-round.
- \$8.6 billion - The estimated amount of money spent at family clothing stores in August 2013. Sales at bookstores in August 2013 were estimated at \$1.6 billion, For back-to-school shopping, choices of retail establishments abound: In 2012, there were 25,421 family clothing stores, 6,945 children and infants clothing stores, 25,455 shoe stores 7,443 office supply and stationery stores, 20,893 sporting goods stores, 7,244 book stores and 8,196 department stores.

Source: U.S. Census Bureau Monthly Retail Trade and Food Services.

Nursing and Health Care

Employment of registered nurses is projected to grow 19 percent from 2012 to 2022, faster than the average for all occupations. Growth will occur for a number of reasons.

Demand for healthcare services will increase because of the aging population, since older people typically have more medical problems than younger people. Nurses also will be needed to educate and to care for patients with various chronic conditions, such as arthritis, dementia, diabetes, and obesity. In addition, the number of individuals who have access to healthcare services will increase, as a result of federal health insurance reform. More nurses will be needed to care for these patients.



- Nursing students comprise more than half of all health professions students.
- Generally, licensed graduates of any of the three types of education programs (bachelor's, associate's, or diploma) qualify for entry-level positions as a staff nurse. However, some employers may require a bachelor's degree.

Many registered nurses with an ADN or diploma choose to go back to school to earn a bachelor's degree through an RN-to-BSN program. There are also master's degree programs in nursing, combined bachelor's and master's programs, and programs for those who wish to enter the nursing profession but hold a bachelor's degree in another field. Some employers offer tuition reimbursement.

Certified nurse specialists (CNSs) must earn a master's degree in nursing. CNSs who conduct research typically need a doctoral degree.

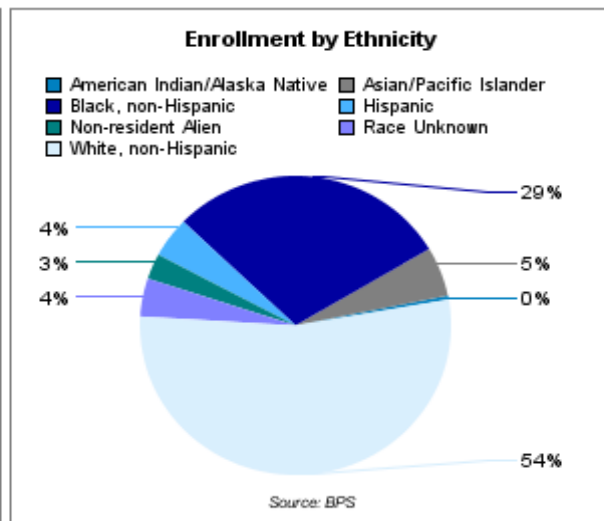
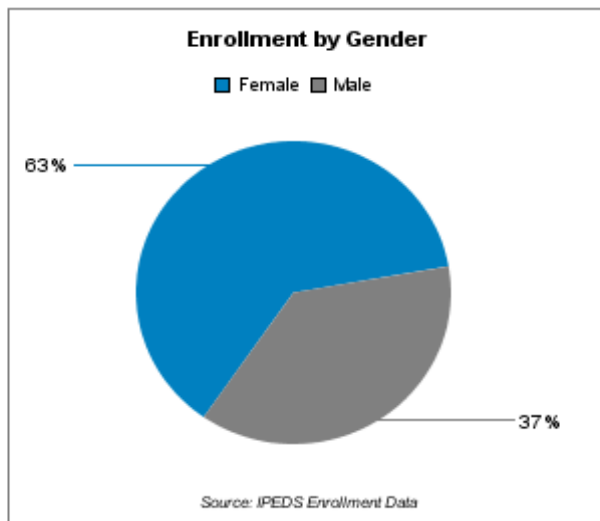
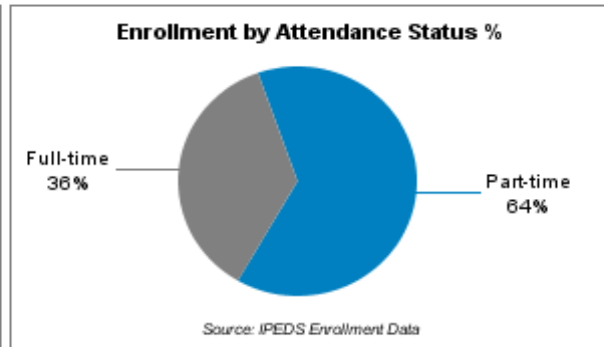
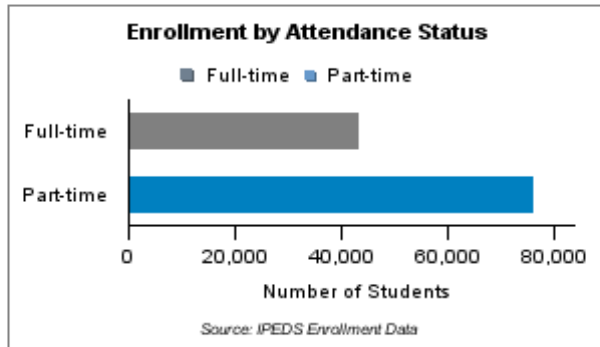
- The primary pathway to professional nursing, as compared to technical-level practice, is the four-year Bachelor of Science degree in nursing (BSN). Registered nurses are prepared either through a four-year baccalaureate program; a three-year associate degree in nursing program; or a three-year hospital diploma program. Graduates of all three programs take the same state licensing exam, the NCLEX-RN. (The number of diploma programs has declined steadily -- to less than 10 percent of all basic RN education programs -- as nursing education has shifted from hospital-operated instruction into the college and university system.)

State of Maryland and Washington County

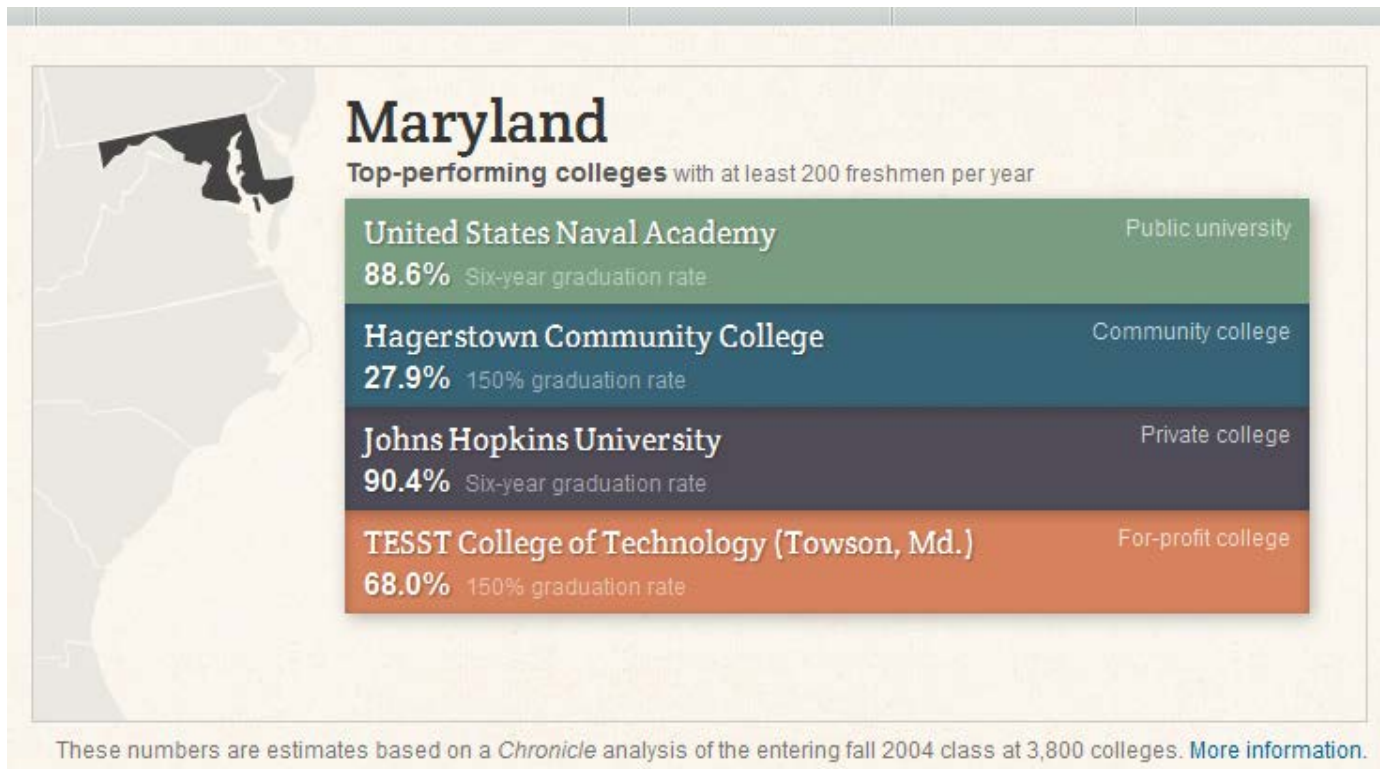
Community College Enrollment

Enrollment Data: Full-time vs. Part-time, Male vs. Female, and Ethnicity

Select State: MD ▼



Total headcount enrollment at Maryland public colleges and universities is projected to be 16% higher (48,680 students) in 2023. Totals enrollments are expected to increase by 20% (28,314 students) at the community college and by 13% (20,366 students) at the public four-year campuses by 2023.



Maryland Average Annual Tuition and Fees for 2012-2013 (College Savings Plans of Maryland)	
Community colleges (public)	\$3,950
4-year colleges (public)	\$8,645

Maryland Average Annual Tuition and Fees Projected for 2013-2014 (College Savings Plans of Maryland)	
Community colleges (public)	\$4,132
4-year colleges (public)	\$8,900

Education Week, the premier education journal, ranked Maryland eight in nation in its annual “Quality Counts 2014” survey. Maryland scored a B (85.9), ahead of Virginia and Pennsylvania. Maryland’s neighboring states received the following grade, score, and rank: Pennsylvania B, 82.6, Ranked 13; Virginia B, 84.8, Ranked 9; and West Virginia C-, 71.6, Ranked 45. The nation as a whole received a 77.3 (C+).

QUALITY COUNTS 2014 GRADING SUMMARY

	Maryland		How did the average state score?
	grade	rank	
Chance for success (2014)	B	8	C+
K-12 achievement (2014)	B	2	C-
School finance analysis (2014)	B	8	C
Transitions and alignment (2013)	A	2	B-
Standards, assessments, and accountability (2012)	B+	24	B
The teaching profession (2012)	B	3	C

GRADE

A (rank=2)

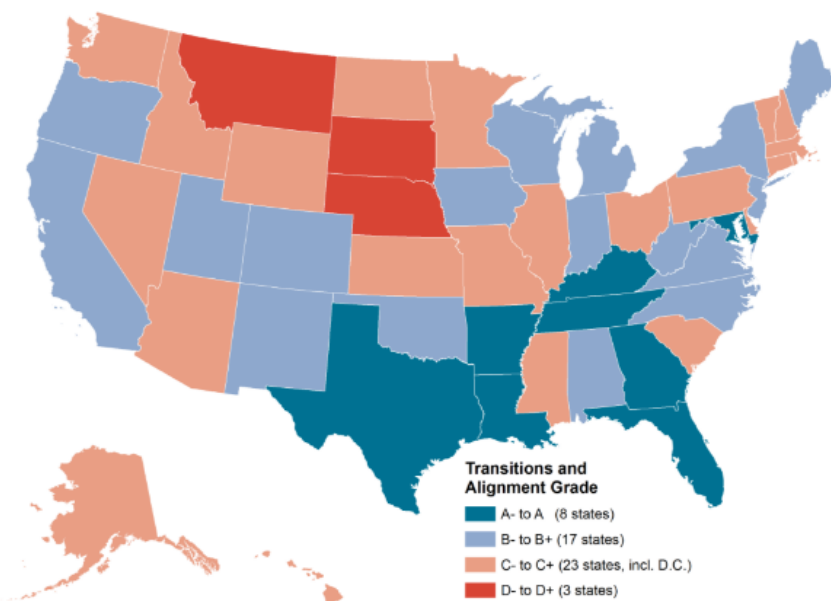
B-

A National Perspective

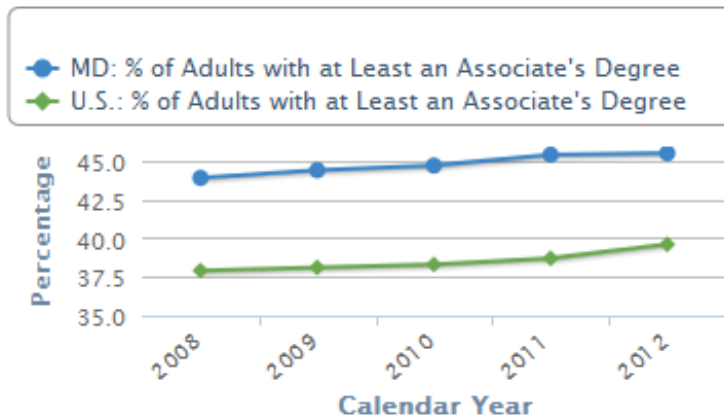
The Education Week Research Center examined state efforts to connect the K-12 education system with early learning, higher education, and the world of work. Fourteen key transitions and alignment policies were included in *Quality Counts 2013*.

By the 2012-13 school year, most states had enacted at least nine of the 14 tracked policies; 19 states had 10 or more policies in place. Georgia became the first state to earn a perfect score, having implemented all 14 policies. At the other end of the spectrum, Nebraska and South Dakota had just four such policies in place, and Montana only three.

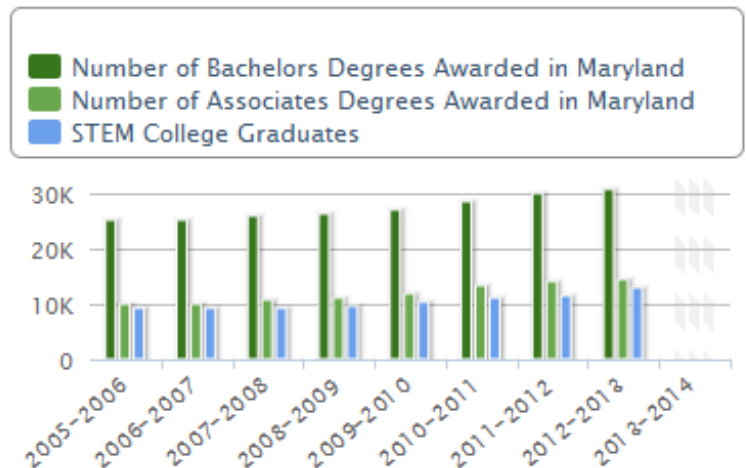
SOURCE: Education Week Research Center, 2013



Percentage of Adults with at Least an Associate's Degree



Degrees Awarded in Maryland



Overall Progress



15.3% Increase in Annual Skills Training Completions since FY2009

PROGRESSING ►

Total Annual Skills Training Completions

FY 2013

42,099
Completions

FY 2009

36,513
Completions

15.3% INCREASE ▲

Credit-Based Enrollments at Community Colleges

FY 2013

145,085
Enrollments

FY 2009

128,093
Enrollments

13.3% INCREASE ▲

Associate's Degrees Awarded by Community Colleges

FY 2013

14,269
Degrees

FY 2009







10,371
Degrees

37.6% INCREASE ▲

This site was last updated on July 23, 2014.

Education Statistics

(All Programs, Maryland)

Degree Type	Enrollment	Graduates
All Degrees	388,615	88,759
 Graduate Degree	66,854	22,439
 Bachelor Degree	144,430	30,385
 Associate Degree	118,403	14,470
 None-Degree	18,655	0
 Higher Ed. Certificate	11,289	6,037
 Occupational Training	28,984	15,428

Source: Maryland Higher Education Commission, 2012



Top Programs By Enrollment

(All Programs, All Degrees, Maryland)

Liberal Arts and Sciences, General Studies and Humanities, Other	44,131 (11.1%)
Multi-/Interdisciplinary Studies, Other	33,666 (8.5%)
Business Administration and Management, General	25,820 (6.5%)
Registered Nursing/Registered Nurse	19,522 (4.9%)
Liberal Arts and Sciences/Liberal Studies	15,891 (4.0%)
Business/Commerce, General	12,598 (3.2%)
Psychology, General	8,351 (2.1%)
Computer and Information Sciences, General	8,112 (2.0%)
Biology/Biological Sciences, General	7,824 (2.0%)
Information Science/Studies	7,413 (1.9%)
Computer and Information Systems Security/Information Assurance	5,085 (1.3%)
Nursing Assistant/Aide and Patient Care Assistant/Aide	4,898 (1.2%)

Source: Maryland Higher Education Commission, 2012



Top Programs By Graduates

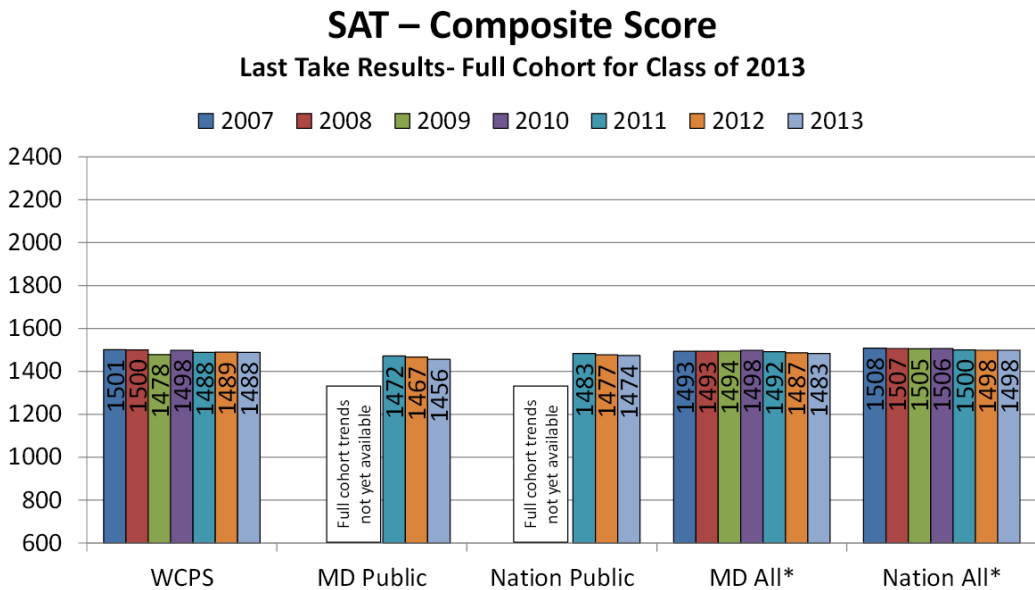
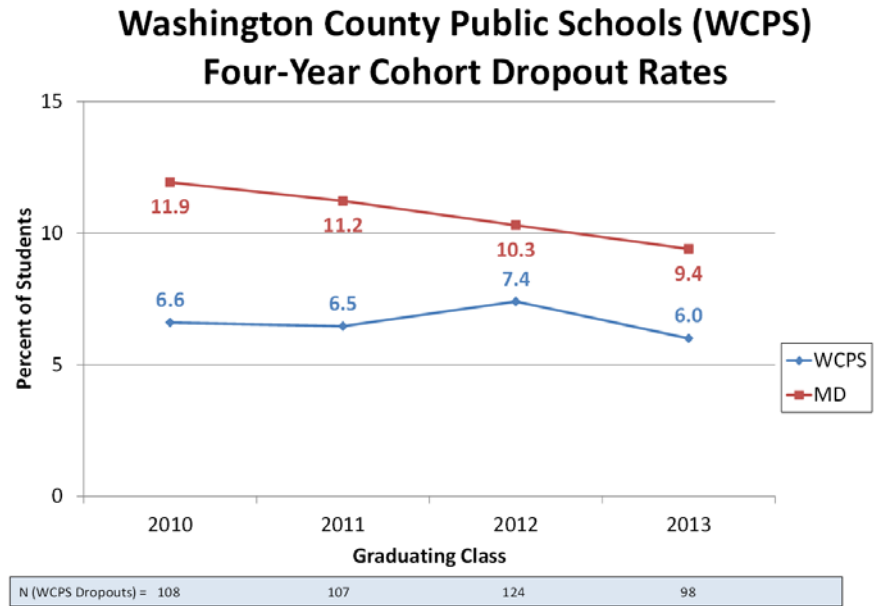
(All Programs, All Degrees, Maryland)

Business Administration and Management, General	6,572 (7.4%)
Liberal Arts and Sciences, General Studies and Humanities, Other	5,135 (5.8%)
Nursing Assistant/Aide and Patient Care Assistant/Aide	4,288 (4.8%)
Registered Nursing/Registered Nurse	3,352 (3.8%)
Business/Commerce, General	2,537 (2.9%)
Psychology, General	2,193 (2.5%)
Liberal Arts and Sciences/Liberal Studies	2,091 (2.4%)
Information Science/Studies	1,907 (2.1%)
Medical/Clinical Assistant	1,545 (1.7%)
Biology/Biological Sciences, General	1,481 (1.7%)
Truck and Bus Driver/Commercial Vehicle Operator and Instructor	1,207 (1.4%)
Education, General	1,187 (1.3%)

Source: Maryland Higher Education Commission, 2012



Projected High School Graduates									
State	2003	2004	2005	2006	2007	2008	2009	2010	2011
Maryland	51,600	52,040	53,150	54,220	55,520	57,360	56,030	55,700	54,010
Pennsylvania	116,710	119,450	118,840	120,640	121,440	123,160	122,060	119,130	115,830
West Virginia	17,700	17,390	17,020	16,710	16,990	17,160	17,200	16,740	16,220
Virginia	70,200	69,000	69,480	70,440	73,860	76,370	76,440	76,250	74,840



*Includes public, religiously affiliated, and independent.
Source: College Board District Profile Report

OTA 9.26.13

- For the eighth year in a row, Maryland ranks first in the percentage of public high school seniors who scored at the mastery level on Advanced Placement (AP) exams, with 29.6% earning a score of 3 or higher in 2013. Maryland ranks second among the states in the percentage of graduates taking AP tests during high school at 47.4%, up from 25.7% in 2003. Further, Maryland ranks third among the states in the percentage of Black/African American graduates having success on the tests, comprising 11.7% of students receiving a grade of 3 or better during their high school career.
- According to a U.S. News and World Report ranking of U.S. public high schools, Maryland places fifth in the percentage of schools awarded a gold or silver medal based on performance on state proficiency tests and how well schools prepare students for college-level work.
- Maryland was the first state in the nation to set specific STEM education standards telling teachers not just what STEM is, but how to teach the subjects. The O'Malley-Brown Administration set a goal of increasing STEM college graduates by 40 percent by 2015. Through 2013, we are nearly there with a 37.1 percent increase so far.
- Maryland entered the 2103-14 school year with the #1 ranked public school system in the country for the fifth year in a row.
- Washington County Public Schools will implement a shared safety program, working closely with students, parents and staff to help better educate students and parents about online safety. WCPS will also consult with both groups about how school leaders can improve the school climate in light of issues regularly surfacing in social media conversations.

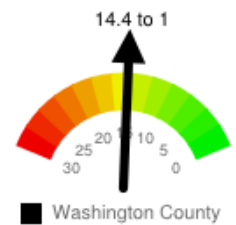
In addition, WCPS has contracted with Social Sentinel, Inc., an education safety and security company that will assist the district in monitoring publicly available social media streams for threats of harm against students, staff or school sites in general.

According to data compiled by the Maryland State Department of Education, WCPS ranks 11th in student enrollment among the 24 public school systems in Maryland. In fiscal year 2012, WCPS had a total full-time regular and special education pupil population of 22,240 at its 46 schools. WCPS' operating and capital expenditures totaled \$303 million during that year.

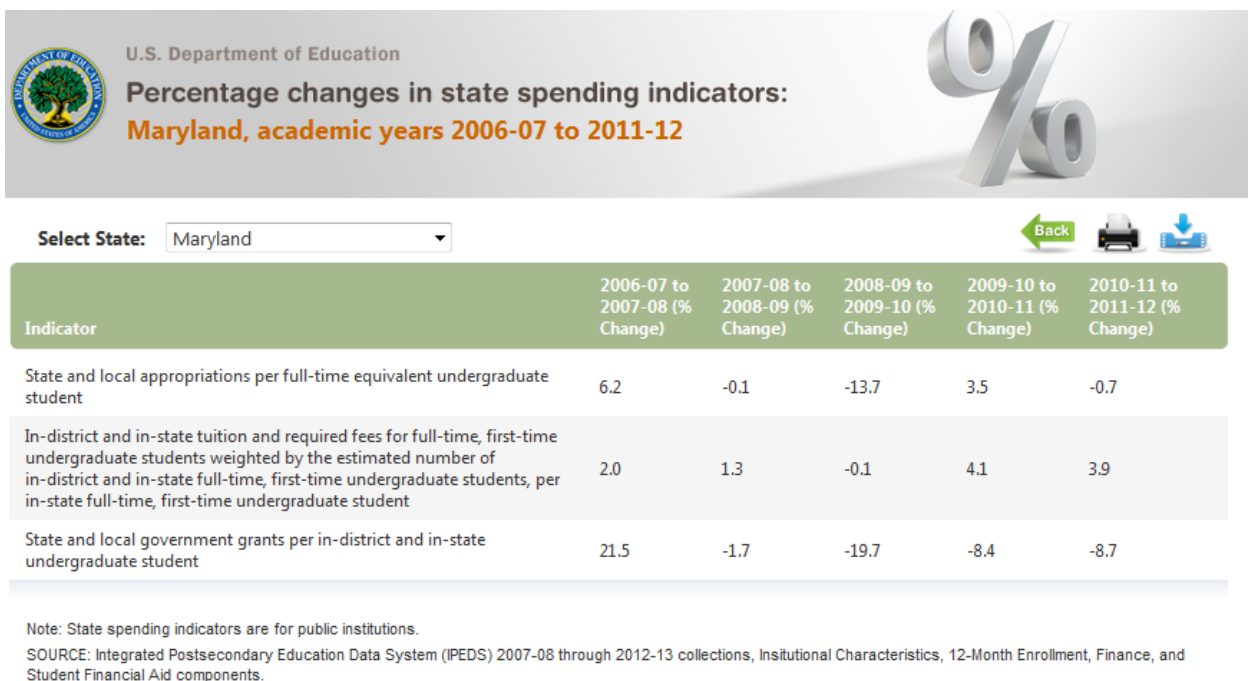
Washington County Public School Statistics / Demographics

Number of schools	46	Total Number of Students	21,902
• Elementary schools	27	American Indian/Alaska Native	87
• Middle schools	7	Asian	454
• High schools	10	Hispanic	905
• Other	2	Black	3,157
Number of school districts	1	White	16,905
Full-time teachers	1,517	Hawaiian Native/Pacific Islander	0
Average Student / Teacher ratio	14.44	2 or more races	0

Student Teacher Ratio



- There are 27 private school in Washington County serving 2,880 students
- Minority enrollment is 14% of the student body which is less then the MD State average of 31%
- 67% are religiously affiliated
- The student: teacher ratio is 10:1



Nationally, 10% of School revenue came from the federal government, and roughly the same came from state sources and local sources. In the nation's highest spending states, local sources were more likely to account for high portions of expenditures, with little coming from the federal government.

Educational attainment rates among adults were also higher in the states that spent more per student. Students in these states were much more likely to complete high school and go on to complete college. More than 30% of adults in the majority of the top spending states had at least a bachelor's degree, compared to the U.S rate of 29.1%.

Maryland ranked 10th

Spending per pupil: \$13,608

Total education spending: \$13.7 billion (13th highest)

Pct. with high school diploma: 89.1% (23rd highest)

Median household income: \$71,122 (the highest)

Maryland spent \$13,608 per pupil in fiscal year 2012, 10th highest nationwide. School administration costs accounted for nearly \$1,000 per pupil, more than in all but two other states. The state benefits from having a wealthy tax base. Maryland's median household income of \$71,122 in 2012 was the highest of any state and nearly \$20,000 more than the national median income of \$51,371 that year. While large school budgets do not guarantee that students will have high scores on national tests, Maryland children excelled in most subjects. For example, Maryland primary school students led the nation in reading proficiency in 2013.

- The public education system, which includes Washington County Public Schools, Hagerstown Community College, and the University System of Maryland at Hagerstown, are positioned to work in partnership with each other and other community interests to serve bioscience development within the county. Issues for education include: participating in a community education campaign; finding ways to increase the math and science interests and skills of local students; working to provide financial assistance to for higher education; and developing clear pathways among educational levels.

UNDERGRADUATE TUITION			
	2013-14	2014-15	% change
Hagerstown Community College (per credit hour)			
In-county	\$107	\$110	2.8%
Out-of-county	\$168	\$172	2.4%
Out-of-state	\$220	\$226	2.7%
Kaplan University - Hagerstown* (per credit hour)			
Nursing	N/A	\$315	—
Other programs	\$371	\$371	—
Penn State Mont Alto (per year)			
Freshmen/Sophomores			
In-state	\$12,568	\$12,718	1.2%
Out-of-state	\$19,174	\$19,404	1.2%
Juniors/Seniors			
Business, EMS, Science, IST and Engineering			
In-state	\$14,396	\$14,396	—
Out-of-state	\$21,154	\$21,154	—
Other programs			
In-state	\$13,604	\$13,768	1.2%
Out-of-state	\$20,300	\$20,544	1.2%
Shepherd University (per semester)			
In-state	\$2,177	\$2,329	7%
Out-of-state	\$6,493	\$6,883	6%
Shippensburg University (per semester)			
In-state	\$3,311	\$3,410	3%
Out-of-state	\$7,450	\$7,673	3%
University of Charleston - Martinsburg (per credit hour)			
Seat classes	\$320	\$320	—
University System of Maryland at Hagerstown			
Coppin State University (per year)			
In-state	\$3,970	\$4,089	3%
Out-of-state	\$8,904	\$9,350	5%
Frostburg State University (per year)			
In-state	\$5,630	\$5,800	3%
Out-of-state	\$16,278	\$17,092	5%
Out-of-state, contiguous counties	\$12,166	\$12,774	5%
Salisbury University (per year)			
In-state	\$5,912	\$6,268	6%
Out-of-state	\$14,258	\$14,614	2.5%
Towson University (per year)			
In-state	\$5,830	\$6,004	3%
Out-of-state	\$17,508	\$17,682	1%
University of Maryland University College (per year)			
In-state	\$6,192	\$6,384	3.1%
Out-of-state	\$11,976	\$11,976	—
Wilson College (per year)			
New students	\$28,745	\$23,745	-17.4%
Returning students	\$28,745	\$28,745	—

* Kaplan University - Hagerstown sets tuition for the calendar year rather than the traditional school year.
 NOTE: Some of the tuition figures include other mandatory fees. This list does not include tuition for online courses, which might differ.
 Sources: Websites and officials from the represented institutions.

The national trend has been for tuition to increase, though the 2.9 percent increase for in-state tuition and fees at public four-year colleges and universities for the 2013-2014 school year was the smallest percentage increase in more than 30 years, according to the College Board's 2013 Trends in College Pricing report. The College Board has not yet issued its report for this year.

Based on a basic comparison of tuition for the equivalent of a full-time student attending year-round, Hagerstown Community College is the least-expensive option.

- HCC's closest competition, in terms of location, is Kaplan University - Hagerstown. As shown on the chart below, HCC is a better buy! Kaplan offers several of the same programs: Business Administration, Medical Receptionist/Transcriptionist, Medical Secretary/Assistant, Accounting, Phlebotomist, Criminal Justice, and Information Technology.

Hagerstown Community College				Kaplan University (Hagerstown Campus)				
Degrees Offered								
Associates and Certificates				Bachelors, Associates and Certificates				
Enrollment								
Total enrollment:		4,905		Total enrollment:		893		
Percent of Enrollment	By gender				by gender			
	Men		38%		Men:		21%	
	Women		62%		Women:		79%	
	By race/ethnicity				by race/ethnicity			
	Black non-Hispanic		10%		Black non-Hispanic:		16%	
	American Indian or Alaskan Native:		0%		American Indian or Alaskan Native:		2%	
	Asian or Pacific Islander:		2%		Asian or Pacific Islander:		1%	
	Hispanic:		4%		Hispanic:		4%	
	White non-Hispanic:		78%		White non-Hispanic:		76%	
	Race-ethnicity unknown:		2%		Race-ethnicity unknown:		1%	
	(Enrollment data Fall 2013)				(Enrollment data Fall 2013)			
Financial	Academic year prices for full-time, first-time undergraduate students							
		2012-2013	2013-2014		2012-2013	2013-2014		
	Tuition & fees				Tuition & fees		\$14,895	\$13,411
	In-district		\$2,958	\$2,986				
	In-state		\$4,398	\$4,450				
	Out-of-state		\$5,646	\$5,698				
	Books and supplies		\$1,400	\$1,850	Books and supplies		Not available	Not available
	Off-campus				Off-campus			
	Room and board		\$9,900	\$10,126	Room and board		\$4,928	\$4,984
	Other expenses		\$2,118	\$2,400	Other expenses		\$5,560	\$5,408
	Off-campus with family				Off-campus with family			
Other expenses		\$2,118	\$2,400	Other expenses		\$3,880	\$3,720	
Source: IPEDS College data 2013								

WORKFORCE AND ECONOMIC DEVELOPMENT

United States – National

- Colleges should develop closer partnerships with business partners and employers to be more market and workforce driven.
- An executive summary prepared for Georgetown University's Center on Education and the Workforce notes that women represent 23% of the workers in science, technology, engineering and mathematics (STEM) professions. But women make up 48% of workers in all occupations across the board.
- The head of the National Association of Manufacturers testified to Congress about the deep need for change to manufacturing jobs. Jay Timmons estimates that as many as 600,000 skilled labor positions are unfilled around the nation.
- U.S. News & World Report writes that a study completed by HSBC and the Cicero Group found that more than a third of working Americans would like to semi-retire before retiring completely.

Of those who responded to the survey, 19 percent between 55 and 64 said they consider themselves to be semi-retired, while another 32 percent hope to transition into semi-retirement before completely retiring. It's a trend that is growing among the younger generations, too. In fact, 43 percent of 25- to 34-year-olds and 41 percent of people between 35 and 44 hope to one day semi-retire. Interestingly enough, workers between 45 and 54 aren't as inclined to consider semi-retirement, with only 27 percent planning to, according to *U.S. News & World Report*.

- Crowdsourcing can be a great opportunity for baby boomers looking to continue working in the disciplines they've worked in for the last several decades (for instance, finance, tech support, sales) but part-time, from home and maintaining work-life balance. These types of opportunities allow baby boomers to be entrepreneurs, solopreneurs or independent contractors.

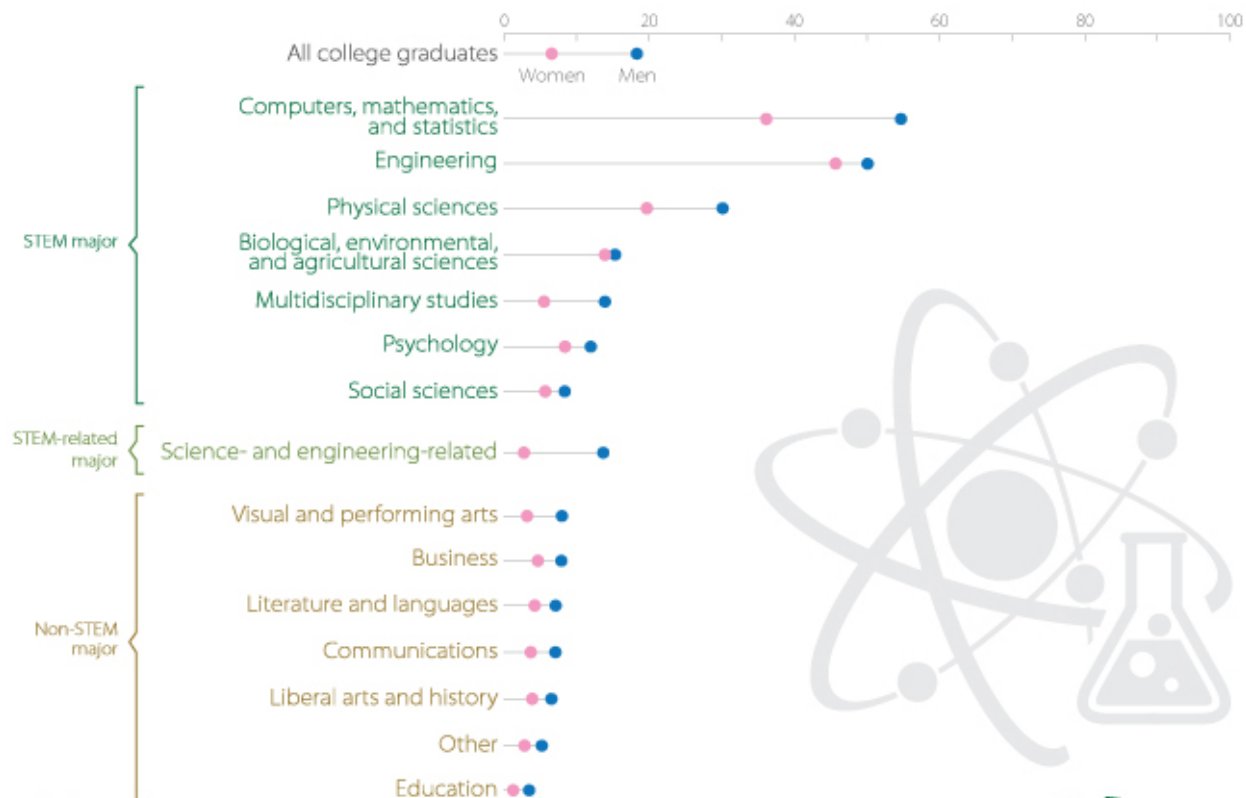
- A 2013 study by the software company Intuit estimates that 40 percent of the U.S. workforce (more than 60 million people) will be employed as contractors or temporary workers by the year 2020. Many people, especially those in creative or technology occupations, will work as contractors by choice. They value the flexibility and the higher pay they can command compared to work as full-time employees.
- In 2013, 7.2 million employees in the public sector belonged to a union, compared with 7.3 million workers in the private sector. The union membership rate for public-sector workers (35.3 percent) was substantially higher than the rate for private-sector workers (6.7 percent). Within the public sector, the union membership rate was highest for local government (40.8 percent), which includes employees in heavily unionized occupations, such as teachers, police officers, and firefighters. In the private sector, industries with high unionization rates included utilities (25.6 percent), transportation and warehousing (19.6 percent), telecommunications (14.4 percent), and construction (14.1 percent). Low unionization rates occurred in agriculture and related industries (1.0 percent), finance (1.0 percent), and in food services and drinking places (1.3 percent). Among occupational groups, the highest unionization rates in 2013 were in education, training, and library occupations and protective service occupations (35.3 percent each). Farming, fishing, and forestry occupations (2.1 percent) and sales and related occupations (2.9 percent) had the lowest unionization rates.
- The job market for blue collar professionals is experiencing a decline due to outsourcing and a movement towards service-based economy. However, several of these professions maintain a strong presences in today's workforce. The pay for these jobs is comparable to many white collar jobs. According to the 2006-2007 Bureau of Labor Statistics' Occupational Outlook Handbook, the following jobs are still very much in demand and pay more than \$43,318 annually:
 - Construction and Building Inspectors
 - Plumbers, Pipefitters and Steamfitters
 - Structural iron and Steel Workers
 - Electricians
 - Elevator Installers
 - Police Officers
 - Subway/Streetcar Operators
 - Commercial and Industrial Equipment Repairers
 - Aircraft and Avionics mechanics
 - Plastic Machine Setters

From the aerospace sector to Silicon Valley, engineering has a retention problem: Close to 40 percent of women with engineering degrees either leave the profession or never enter the field.

Conventional wisdom says that women in engineering face obstacles such as the glass ceiling, a lack of self-confidence and a lack of mentors. But psychologists who delved deeper into the issue with a new study found that the biggest pushbacks female engineers receive come from the environments they work in.

Men and Women Working in STEM

Percent of college graduates, by major, who now work in science, technology, engineering or math occupations



United States™
Census
Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Source: U.S. Census Bureau,
2012 American Community Survey

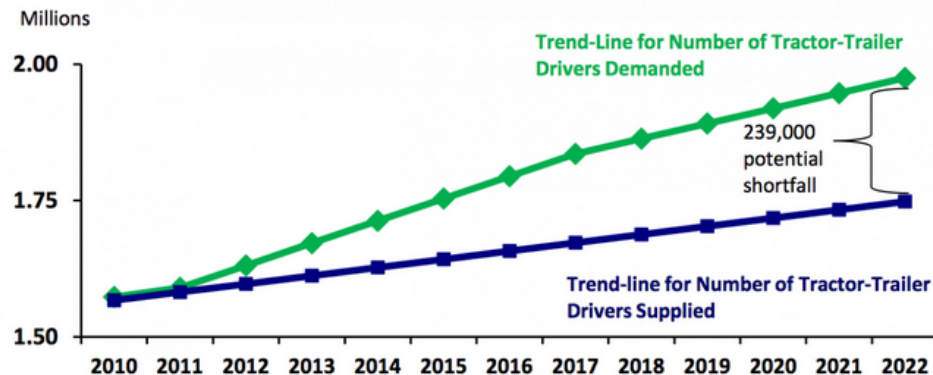
According to new statistics from the 2012 American Community Survey, engineering and computer, math and statistics majors had the largest share of graduates going into a STEM field with about half employed in a STEM occupation. Science majors had fewer of their graduates employed in STEM. About 26 percent of physical science majors; 15 percent of biological, environmental and agricultural sciences majors; 10 percent of psychology majors; and 7 percent of social science majors were employed in STEM.

Approximately 14 percent of engineers were women, where they were most underrepresented of all the STEM fields. Representation of women was higher among mathematicians and statisticians (45 percent), life scientists (47 percent) and social scientists (63 percent). The rates of mathematicians and statisticians, and life scientists are not statistically different from each other.

- At 9.1 million, the college major with the most graduates was business, while multidisciplinary studies was the major with the smallest number of graduates at 275,000.
- Engineering was the major with the highest earnings (\$92,900), while the major with the lowest earnings was visual and performing arts (\$50,700).
- In 2012, 3.6 percent of all college graduates between the ages of 25 and 64 were unemployed. A larger percentage of men than women were unemployed: 3.7 percent and 3.5 percent, respectively.
- Non-STEM management occupations employed the most male college graduates (3.8 million), while education occupations employed the most female college graduates (4.3 million).
- States with the largest percentage of STEM workers: Maryland (18.8 percent), Washington (18.3 percent) and Virginia (16.5 percent). The rates of workers in Maryland and Washington are not statistically different from each other.

America is facing a shortage of truck drivers, and that problem is expected to get worse. The current shortage is estimated to be at 30,000, and a new regulation will help drive that higher. A mandate requiring commercial vehicles to have an electronic logging device is likely to go into effect in early 2015. This will make it harder for drivers to fudge the numbers and work more than the legally mandated limit on hours. Right now 75% of the industry does not have these logging devices. Analysts expect 100% compliance within a year or two of the rule going into effect.

The American Trucking Associations expects the estimated U.S. shortage of 30,000 to surge to 239,000 by 2022.



According to the U.S. Bureau of Labor Statistics, by 2014 the U.S. will need 29 percent more HVACR and 21 percent more plumbing technicians, a total of more than 100,000 skilled workers in the job pool. Among the 500,000 plumbers in the United States alone, the demand is expected to grow 10 percent by 2016, however, due to an aging generation of skilled professionals, more than a third of all plumbers – or approximately 167,000 workers – will be exiting the workforce.

There is another side to the U.S. unemployment problem: Believe it or not, there are *three million* jobs going unfilled. Employers can't seem to find the right match for more than 200,000 manufacturing jobs alone. The transportation, utilities and trades sectors have almost half a million jobs open, waiting for the right applicant. These positions are for vocational or skilled workers, who are in short supply.

- A new analysis from CareerBuilder and EMSI indicates that, when it comes to post-recession job recovery, baby boomers are leading the charge against millennials.

While the number of jobs held by baby boomers (individuals aged 55-64) grew 9 percent from 2007 to 2013, jobs held by millennials (individuals aged 25-34) have increased a mere .3 percent. In terms of numbers, that translates to a gain of 1.9 million jobs versus 110,000 jobs, respectively. Baby boomers now also hold a larger percentage of jobs in STEM and other occupations than before the recession, outpacing millennials.

- As millions of boomers are driven by both the desire to remain productive and the need to make ends meet over longer life spans, this is good news for a society facing significant labor shortages in critical areas. Although, there are many obstacles: the cost of additional education and certification in a new field, securing and affording new health insurance, and the trepidation of many employers hiring older Americans. Policymakers must eradicate the barriers and disincentives that penalize individuals for continuing to contribute. This means changes in Social Security, pension rules, and health coverage.
- The U.S. Office of Technology Assessment defines bioscience as "any modern technology that uses living organisms (or parts of organisms) to produce or modify products, to improve plants or animals, or to develop microorganisms for specific uses." The bioscience field, one of the most rapidly changing areas of science, offers a wide variety of high skill, high wage employment options, including laboratory technicians, research associates, manufacturing and production technicians, as well as senior scientists. Positions can relate to medical and pharmaceutical research, microbiology, forensics, and product development, and are typically better paid than jobs in manufacturing. For example, former textile workers now working as research technicians in North Carolina have increased their earning capacity after community college biotechnology training.
- CareerBuilder's midyear survey finds that employers will continue to place an emphasis on roles that involve new technologies. Over the next six months, 16 percent of employers plan to hire for jobs tied to mobile technology, as consumers rely more heavily on their devices for both professional and personal use. Another 15 percent of employers plan to recruit for cloud technology-related jobs, as more companies adopt cloud computing as a way to replace computer products with Web-based services, streamlining the way they do business. Also, technology is being used to help businesses manage and interpret big data, and so 12 percent of employers plan to hire for jobs tied to this area.

- While hiring is increasing across industries, certain sectors are playing a larger role in economic growth. One such area is technology. According to IT analyst firm Foote Partners, IT employment in the first half of 2013 is averaging 13,500 new jobs per month. Another area that employers predict they'll staff up for in the back half of the year is cybersecurity, with 9 percent planning to hire for this role. As cyber attacks grow in number and attackers become more sophisticated, demand for cybersecurity-trained professionals will continue to increase.
- As the latest jobs report from the Bureau of Labor Statistics signaled, there continue to be signs of sustained economic recovery. The U.S. added 195,000 jobs in June, higher than economists' expectations, and April and May numbers were revised upward by 70,000 jobs. The rise in consumer confidence -- which reached a five-year high in June -- along with a stronger housing market and increased auto sales, have also helped build up the economy in recent months.

Coming out of the recession, employers have been trending toward a more flexible workforce, one that allows them to scale up and down quickly as staffing needs arise. This has led to temporary and contract jobs becoming a larger part of the general hiring mix.

10 Hardest Working Countries

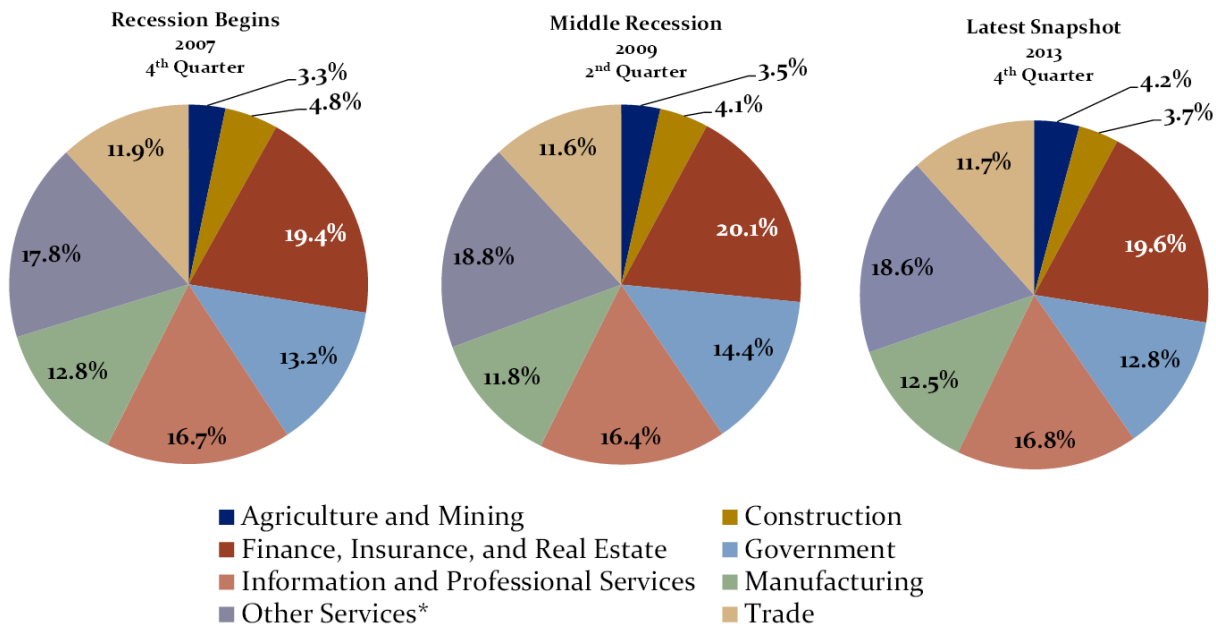
Country	Avg. Annual Hours	Avg. Annual Wages
Mexico	2,317	\$9,885
Chile	2,102	\$15,820
Korea	2,092	\$35,406
Estonia	2,021	\$17,323
Russian Federation	2,012	\$15,286
Poland	1,893	\$20,069
USA	1,798	\$54,450
Hungary	1,797	\$19,437
Japan	1,765	\$35,143
Slovak Republic	1,749	\$19,068

Source – CNN Money

How Did the Recession and Recovery Change the Size of U.S. Industries?



Value Added by Industry Group as a Percentage of GDP

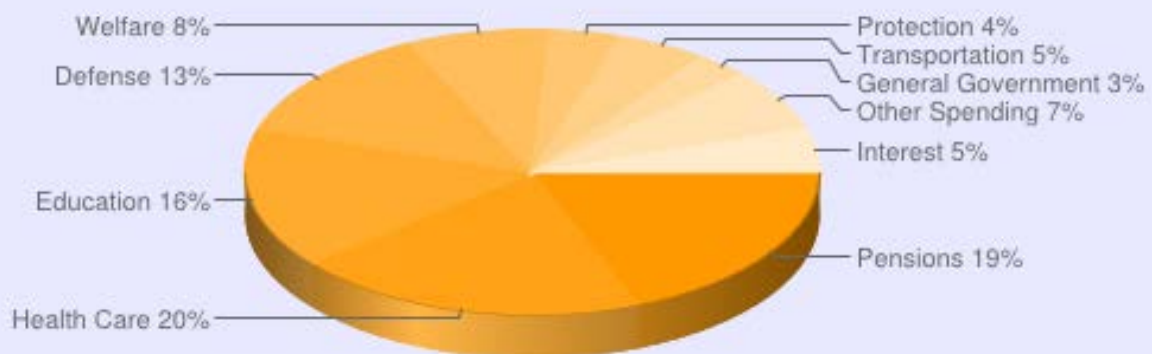


*Other Services includes Utilities, Transportation, Education, Health Care, Arts, Accommodation, Food Services, and Other Services Industry Groups

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11

Total Spending for United States - FY 2014



“The 50 Best Careers of 2014” was published on January 23, 2014 by US News and World Report, which includes job growth through 2022, stress level, typical education requirements (although they vary), and the national median salary for 2012.

US NEWS & WORLD REPORTS 50 BEST CAREERS FOR 2014				
	Outlook - % of Job Growth 2012 – 2022	Stress Level	Education & Prep	National Median Pay 2012
Technology				
Software Developer	22.8%	Average	BS	\$90,060
Civil Engineer	19.7%	Average	BS	\$79,340
Web Developer	20%	Below Avg.	BS	\$62,500
Information Security Analyst	36.5%	Above Avg.	BS or MS	\$86,170
Computer Systems Analyst	24.5%	Average	BS or MS	\$79,680
Civil Engineer	19.7%	Average	BS or MS	\$79,340
IT Manager	15.3%	High	BS or MS	\$120,950
Database Administrator	15.1%	Above Avg.	BS or MS	\$77,080
Mechanical Engineer	4.5%	Average	BS or MS	\$80,580
Computer Programmer	8.3%	Above Avg.	AA or BS	\$74,280
Healthcare				
Dentist	16%	Average	Doctorate	\$145,240
Nurse Practitioner	33.7%	Above Avg.	MS	\$89,960
Pharmacist	14.5%	Above Avg.	Pharm. D	\$116,670
Occupational Therapist Assistant	42.6%	Above Avg.	AA	\$53,240
Occupational Therapist	29%	Average	MS	\$75,400
Dental Hygienist	33.3%	Average	AA	\$70,210
Physician	18%	High	Doctorate	Varies
Physical Therapist	36%	Above Avg.	MS	\$79,860
Physical Therapist Assistant	41%	Average	AA	\$52,160
Phlebotomist	27%	Above Avg.	Certificate	\$29,730
Registered Nurse	22%	Above Avg.	AA or BS	\$65,470
Physician Assistant	38.4%	Above Avg.	MS	\$90,930
Veterinarian	12%	Above Avg.	DVM	\$84,460
Social Services				
School Psychologist	11.3%	Above Avg.	MS	\$67,650
Maintenance & Repair	9.4%	Above Avg.	AA	\$35,210
Speech Language Pathologist	26,000 new openings	Above Avg.	MS	\$69,870
High School Teacher	5.5%	Average	BS	\$55,050

Nail Technician	15.6%	Average	State Approved Program/license	\$19,220
Middle School Teacher	12.4%	Average	BS	\$53,430
Lawyer	9.8%	High	Juris Doctorate Degree	\$113,530
Elementary School Teacher	12.3%	Above Avg.	BS	\$53,400
Exterminator	19.7%	Above Avg.	High School & license	\$30,060
Child & Family Social Worker	51.1%	High	BS or MS	\$41,530
Business				
Market Research Analyst	31.6%	Above Avg.	BS	\$60,300
Operations Research Analyst	27%	Average	BS or MS	\$72,100
Accountant	13.1%	Average	BS	\$63,550
Financial Advisor	27%	Above Avg.	BS	\$67,520
Business Operations Manager	12.4%	Above Avg.	BS or MS	\$95,440
Meeting Planner	33.2%	Above Avg.	BS	\$45,810
Financial Manager	8.9%	High	BS or MS	\$109,740
Marketing Manager	12.7%	Above Avg.	BS	\$119,480
Bookkeeping/Audit Clerk	11.4%	Low	Certification	\$35,170
Creative and Service				
Public Relations Specialist	12%	Above Avg.	BS	\$54,170
Art Director	7.4%	High	BS	\$80,880
Architect	17.3%	Above Avg.	Professional Degree in Arch.	\$73,090
Construction				
Construction Manager	79,000 new jobs	High	On job experience up to BS	\$82,790
Cost Estimator	26%	Above Avg.	On job experience up to BS	\$58,860
Glazier	17.2%	Above Avg.	On job training and Apprenticeship	\$37,610
Plumber	21.3%	Above Avg.	On job training and Apprenticeship	\$49,140
Structural Iron/Steel Worker	21.8%	High	On job training and Apprenticeship	\$46,140

- PayScale.com released the following “Most Profitable College.” With high tuition and a struggling job market, many college students are concerned about translating their undergraduate education into a successful career.

2010 – 2011 College Salary Report		
Best Undergrad College Degrees By Salary	Starting Median Pay	Mid-Career Median Pay
Petroleum Engineering	\$93,000	\$157,000
Aerospace Engineering	\$59,400	\$108,000
Chemical Engineering	\$64,800	\$108,000
Electrical Engineering	\$60,800	\$104,000
Nuclear Engineering	\$63,900	\$104,000
Applied Mathematics	\$56,400	\$101,000
Biomedical Engineering	\$54,800	\$101,000
Physics	\$50,700	\$99,600
Computer Engineering	\$61,200	\$99,500
Economics	\$48,800	\$97,800
Computer Science	\$56,200	\$97,700
Industrial Engineering	\$58,200	\$97,600
Mechanical Engineering	\$58,300	\$97,400
Building Construction	\$52,900	\$94,500
Materials Science & Engineering	\$59,400	\$93,600
Civil Engineering	\$53,500	\$93,400
Statistics	\$50,000	\$92,900
Finance	\$47,500	\$91,500
Software Engineering	\$56,700	\$91,300
Management Information Systems	\$50,900	\$90,300

Source: All salary data is from PayScale.com. The salaries listed are median, annual salaries for full-time workers. March 17, 2011

- Career Builder released the following “10 Best Jobs Requiring Two-Year Degrees.”

Career	Median Annual Wage	Current Employment	Projected 2016 Employment Increase
Computer Specialist	\$71,510	136,000	15%
Dental Hygienist	\$64,740	167,000	30%
Fashion Designer	62,810	20,000	5%
Registered Nurse	60,010	2.5 million	23%
Environmental Engineering Technician	\$40,560	21,000	25%
Radiologic Technologist and Technician	\$50,260	196,000	15%
Industrial Engineering Technician	\$47,490	75,000	10%
Paralegal and Legal Assistant	\$44,490	238,000	22%
Occupational Therapist Assistant	\$45,050	25,000	25%
Computer Support Specialist	\$42,400	552,000	13%
<i>Salary and Employment Data based on Bureau of Labor Statistics January 5, 2009</i>			

- According to the seventh annual talent shortage survey from staffing firm ManpowerGroup, 49% of employers in all industries are experiencing difficulty filling open positions within their organizations, despite the fact that millions of people are still desperate for jobs and unemployment remains stuck at more than 8%.

10 Hardest Jobs to Fill in America	
1	Skilled Trades
2	Engineers
3	IT Staff
4	Sales Representatives
5	Accounting and Finance Staff
6	Drivers
7	Mechanics
8	Nurses
9	Machinists/Machine Operators
10	Teachers

Source: Forbes May 29, 2012

TABLE 1: FASTEST GROWING OCCUPATIONS: 2013-2017

DESCRIPTION	2013 JOBS	2017 JOBS	CHANGE	% CHANGE	MED. HOURLY EARNINGS
Personal Care Aides	1,334,313	1,608,211	273,898	21%	\$9.77
Home Health Aides	950,273	1,150,340	200,067	21%	\$9.97
Market Research Analysts & Marketing Specialists	438,851	499,740	60,889	14%	\$29.10
Medical Secretaries	537,064	613,450	76,386	14%	\$15.17
Emerg. Med. Techs & Paramedics	238,658	268,892	30,234	13%	\$15.28
Software Developers, Systems Software	420,109	468,400	48,291	11%	\$47.64
Software Developers, Applications	626,262	688,020	61,758	10%	\$43.34
Medical Assistants	582,734	642,843	60,109	10%	\$14.35
Registered Nurses	2,727,171	2,983,874	256,703	9%	\$32.04
Network & Computer Systems Administrators	371,652	406,477	34,825	9%	\$35.14
Pharmacy Technicians	364,818	396,793	31,975	9%	\$14.29
Landscaping & Groundskeeping Workers	1,227,107	1,338,551	111,444	9%	\$11.07
Social and Human Service Assistants	376,214	410,625	34,411	9%	\$14.02
Computer Systems Analysts	524,040	564,502	40,462	8%	\$37.98
Management Analysts	727,928	788,085	60,157	8%	\$35.80
Cooks, Restaurant	1,052,514	1,131,878	79,364	8%	\$10.63
Insurance Sales Agents	695,384	747,949	52,565	8%	\$23.20
Nursing Assistants	1,487,171	1,604,571	117,400	8%	\$12.01
Licensed Practical & Vocational Nurses	754,387	817,707	63,320	8%	\$20.33
Food Prep. & Serving, Incl. Fast Food	3,088,847	3,326,039	237,192	8%	\$8.75
Receptionists & Information Clerks	1,050,120	1,135,155	85,035	8%	\$12.64

*Occupations with at least 8% growth and 30,000 jobs added

State of Maryland

- The minimum wage in Maryland is currently \$7.25 per hour for most workers. Recent legislation will increase the minimum wage in the following increments:
 - January 1, 2015 - \$8.00
 - July 1, 2015 - \$8.25
 - July 1, 2016 - \$8.75
 - July 1, 2017 - \$9.25
 - July 1, 2018 - \$10.10

- In 2013, the Maryland civilian labor force totaled 3,127,700 workers, with almost 90 percent living within the central Maryland region. The Maryland work force is highly industrious—nearly 70 percent of the state's population 16 years and older is in the labor force. During the current decade, Maryland's labor force is projected to increase by over 200,000, with participation remaining high. The state boasts a large number of female workers, as well as workers in the experienced 25 to 44 year age group.

- Maryland is home to a highly skilled civilian labor force of over three million workers, and filling this labor pipeline is a network of 57 accredited two-and four-year colleges and universities currently serving over 357,000 students around the state. The second highest concentration of professional and technical workers among the states, and the highest proportion of doctoral scientists and engineers in the nation can be found in Maryland. Though the workforce is highly skilled, wages in the state remain competitive, offering employers an exceptional value.

<i>Current Unemployment Rates for States and Historical Highs/Lows</i>					
<i>Seasonally Adjusted</i>					
	July 2014	Historical High		Historical Low	
<i>State</i>	<i>Rate</i>	<i>Date</i>	<i>Rate</i>	<i>Date</i>	<i>Rate</i>
<i>Maryland</i>	6.1	Nov. 1982	8.4	Feb. 2008	3.3
<i>Pennsylvania</i>	5.7	Mar. 1983	12.9	Mar. 2000	4
<i>West Virginia</i>	6.3	Mar. 1983	18.1	Mar. 2008	3.9
<i>Virginia</i>	5.4	Jan. 1983	7.8	Dec. 2000	2.2

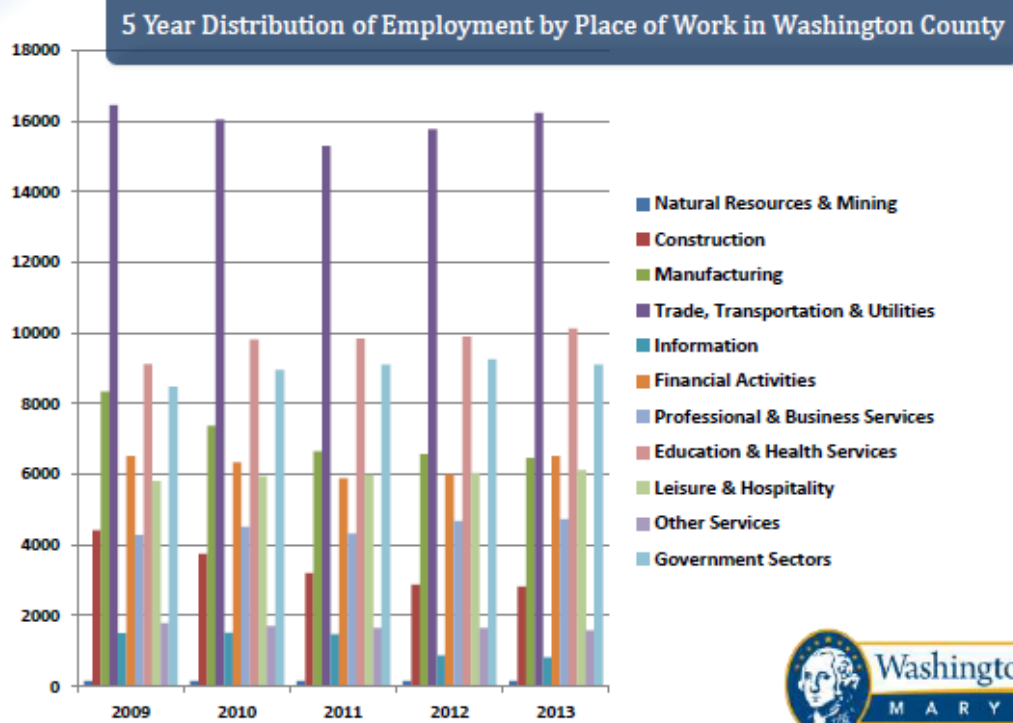
- Maryland's private nonprofit organizations the second largest industry in the state in terms of employment behind only retail trade. More specifically, Maryland nonprofits employ nearly six and a half times as many workers as the real estate industry, more than six times as many workers as the information industry and about three and a half times as many workers as the transportation industry. Nearly three times as many workers as the finance and insurance industry and more than two and a half times as many workers as state government. About two and a half times as many workers as the manufacturing industry and nearly twice as many workers as the construction industry.
- Over 435,000 veterans call Maryland home according to the US Department of Veterans Affairs. In 2013, 5.9 percent of these veterans were unemployed. The O'Malley-Brown Administration, led by veteran Lt. Governor Brown, set a goal to achieve full employment for Maryland veterans by 2015.
- Maryland is one of only ten states with a "triple triple" general obligation bond rating from the three major bond rating houses—Maryland has the longest running Triple-A rating with a "stable" outlook from Standard & Poor's, dating back to 1961.

- According to a study on business taxes by Ernst & Young, Maryland businesses pay the second lowest share of state and local taxes, with business taxes accounting for 30.5% of total taxes collected in the state, compared with 45.2% for the national average. Further, Maryland ranks ninth nationally in state and local business taxes as a share of private sector GSP. Maryland has a total effective business tax rate of 4.0% on economic activity compared with 4.8% for the U.S. as a whole.
- In the 2014 Enterprising States study which looks at how states are creating an environment in which the private sector can thrive, Maryland ranks first in “Technology and Entrepreneurship,” and third in the human capital “Talent Pipeline.”
- In the 2013 Business Facilities Ranking Report, Maryland ranks first overall among the states in education climate, fifth in per capita income and eighth in installed solar power capacity. In the logistics category, the Port of Baltimore ranks third among U.S. ports, and the Baltimore Foreign Trade Zone #74 ranks third among top FTZs in merchandise received.
- Maryland is a thriving location for space exploration, satellite technology and research, design and manufacturing of UAVs and robotics. The industry includes Department of Defense related activities such as biodefense, cybersecurity, avionics, informatics and ordnance and weapons testing. Under the Base Realignment and Closure (BRAC) process, Maryland added thousands of jobs, primarily at Aberdeen Proving Ground, Fort Meade, and the Naval National Medical Center at Bethesda. Maryland's 8,520 aerospace and defense businesses annually generate \$35.45 billion in economic activity and secure \$7.33 billion in federal contracts.
- Maryland's 11,440 information technology businesses are annually awarded \$9.92 billion in federal contracts and generate \$37.79 billion in economic activity, making it one of the nation's leaders and a major economic engine for the state

America's Career Info Net was the source of the following occupational data.

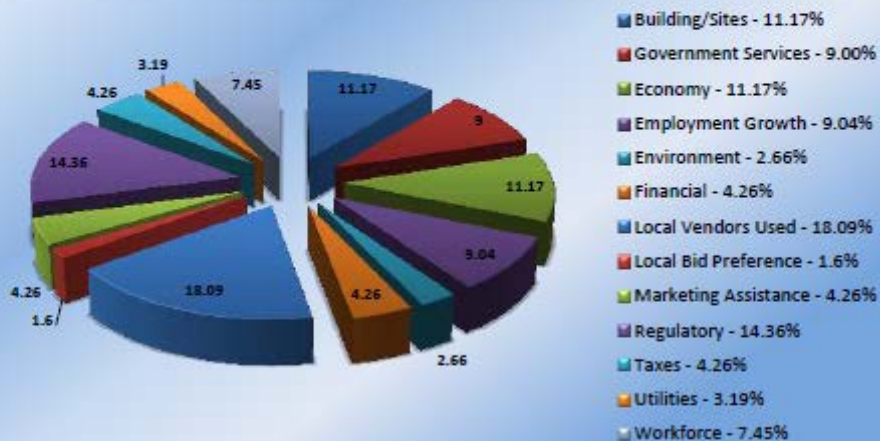
Top Highest-Paying Occupations by Median Hourly Wages in 2012 Requiring an Associates' Degree or Post-Secondary Training For the State of Maryland			
#	Occupation	Median wages, 2009	
		Hourly	Annual
1	Nurse Anesthetists	\$71.09	\$147,900
2	General and Operations Managers	\$53.74	\$111,800
3	Air Traffic Controllers	\$48.72	\$101,300
4	Nurse Midwives	\$46.93	\$97,600
5	Nurse Practitioners	\$43.40	\$90,300
6	Construction Managers	\$42.19	\$87,800
7	Dental Hygienists	\$38.91	\$80,900
8	Nuclear Medicine Technologists	\$37.46	\$77,900
9	Magnetic Resonance Imaging Technologists	\$36.76	\$76,500
10	Diagnostic Medical Sonographers	\$34.91	\$72,600
11	Registered Nurses	\$33.80	\$70,300
12	Electrical and Electronic Engineering Technicians	\$32.77	\$68,200
13	Engineering Technicians, Except Drafters, All Other	\$31.89	\$66,300
14	Radiation Therapists	\$31.86	\$66,300
15	Aerospace Engineering and Operations Technicians	\$31.70	\$65,900
16	Radiologic Technologists	\$31.41	\$65,300
17	Morticians, Undertakers, and Funeral Directors	\$31.37	\$65,200
18	Respiratory Therapy Technicians	\$30.60	\$63,600
19	Respiratory Therapists	\$30.19	\$62,800
20	Electrical and Electronics Drafters	\$29.89	\$62,200
21	Funeral Service Managers	\$29.39	\$61,100
22	Industrial Engineering Technicians	\$28.73	\$59,800
23	Occupational Therapy Assistants	\$28.54	\$59,400
24	Mechanical Engineering Technicians	\$27.89	\$58,800
25	Precision Instrument and Equipment Repairers, All Others	\$27.72	\$57,700

Employer Outlook



Business Outreach and Retention

Washington County Business Outreach Program Trending Chart



- Compared to the Washington/Baltimore metro region, the cost of doing business in Washington County is 18% lower and the cost of living is 23% lower. With a pro-business climate and lower operating costs, manufacturers greatly benefit from the County's manufacturing-friendly tax environment.
- A diversified regional workforce of 400,000 (skilled and manufacturing-oriented) includes over 12% of the employment base in advanced manufacturing. Customized workforce and training development programs are also offered through the Western Maryland Consortium, higher learning institutions, and Washington County Public Schools Academy of Manufacturing & Engineering
- Hagerstown has an established defense presence and is an ideal place to conduct defense related work because it is outside of Washington, DC's highly-controlled air traffic area, but still within an hour's drive of the Pentagon. Existing infrastructure such as the extended airport runway, aviation workforce, telecommunications, and local shipping powerhouses nearby, help businesses easily succeed at HGR.

- Washington County and Hagerstown are historical aviation centers. The Hagerstown Regional Airport (HGR) has been a hub of the aviation business since before World War II, so consequently there is an available workforce with a strong background and training in aircraft maintenance and modifications.
- Southern Business & Development *magazine*, ranks Hagerstown-Washington County as one of 20 areas in the Southern United States that feature a robust defense industry. This is attributed to the strong aero defense presence and growth at HGR.



The table below shows the total number of commuters from Washington County to County/Parishes in Maryland in 2010.

To sort on any column, click a column title.

Rank	Commuters Working In	Total Commuters	Action
1	Washington County, MD	31,977	Profile
2	Frederick County, MD	8,860	Profile
3	Montgomery County, MD	5,429	Profile
4	Baltimore County, MD	2,597	Profile
5	Prince George's County, MD	1,655	Profile
6	Anne Arundel County, MD	1,438	Profile
7	Howard County, MD	1,199	Profile
8	Baltimore, City of, MD	1,115	Profile
9	Carroll County, MD	702	Profile
10	Allegany County, MD	679	Profile

Rows: 1 – 10 of 24

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Source: U.S. Census Bureau

Biotechnology

Located an hour from Washington, DC's biotech corridor and less than 30 minutes from well-known national biodefense resource Fort Detrick in Frederick, Maryland, Washington County is an affordable place to do business with close proximity to local metropolitan areas.

About 25% of Fort Detrick's employees live in Washington County, MD and the activities and related agencies at Fort Detrick generate more than \$1.7 billion in economic activity in the region.

Hagerstown-Washington County is a transportation hub for the regional economy with easy access to major Atlantic coast cities and the Midwest. With three interstates, a regional airport, two major rail providers, and a location less than 90 minutes from the Port of Baltimore, our transportation infrastructure is unmatched.

- Historically, Hagerstown's nickname of the "Hub City" came from the large number of railroads that served the city. Today that nickname applies as the intersection of Interstates 81 and 70, which makes Washington County a critical transportation hub. Business growth along the interstate corridors has created more employment opportunities in the Western Maryland. In addition, this interstate system established Washington County as a home for commuters to the Baltimore and Washington DC employment areas.
- Believe it or not: Every workday, nearly 1,500 Montgomery County, Md., residents get up and go to work — in Washington County.

So do more than 7,000 people from Franklin County, Pa., and about 4,000 each from Berkeley County, W.Va., and Frederick County, Md. A total of 37,441 "outsiders" — 17 percent more than a decade ago — were coming to jobs in Washington County every workday in 2011, according to the latest data from the Center for Economic Studies at the U.S. Census Bureau.

In contrast, the total of 30,778 Washington County residents leaving the county each workday for jobs elsewhere is up barely 1 percent in the same period, the data shows.

The growth in workers coming in, together with the more than 29,000 local residents who work here, is a welcome sign to companies looking for new business sites, a local economic development leader said.

- Compared to the Washington/Baltimore metro region, the cost of doing business in Washington County is 18% lower and the cost of living is 23% lower. With a pro-business climate and lower operating costs, manufacturers greatly benefit from the County's manufacturing-friendly tax environment.
- A diversified regional workforce of 400,000 (skilled and manufacturing-oriented) includes over 12% of the employment base in advanced manufacturing. Customized workforce and training development programs are also offered through the Western Maryland Consortium, higher learning institutions, and Washington County Public Schools Academy of Manufacturing & Engineering.
- Washington County's available, relatively low-cost land, as well as its comparative lower property taxes and operating costs, make the area potentially attractive for start-up and expanding companies. The county's proximity to the Baltimore-Washington metropolitan area makes it an attractive site for a variety of businesses and its transportation network incorporates air, rail, and interstate connections.
- Likely future career growth areas in the local workforce include healthcare; education; law enforcement; biotechnology; advanced technology including systems and management; financial services; defense industries; government; security; gerontology; and hospitality/tourism/culinary arts. The clinical and allied health fields are the single most promising sources of jobs locally, where demand for nurses and a broad range of other medical support workers will be substantial, especially as the population ages.
- The College's role in the County's and State's economic development continues to expand. HCC's clinical and allied health programs, along with other certificate/degree programs including teacher education, business, technology-related development, and workforce development, will expand to help meet State and local work force needs.
- While the number of dairy farms in Washington County is the largest in Maryland (as is the land area of the County), the number of jobs is small.
- The historic development of Washington County has led to a unique blending of the past with the present. A challenge for the County is the preservation and balance of its historic rural character with the need to grow in order to effectively compete in the new global economy.

Washington County Business by Industry, 2011		
Industry Description	Total Establishment s	Percent of Total
Retail Trade	610	
Construction	363	
Other Services (except Public Administration)	385	
Health Care and Social Assistance	435	
Accommodation and Food Services	288	
Professional, Scientific, and Technical Services	237	
Finance and Insurance	206	
Administrative and Support and Waste Management and Remediation Services	166	
Wholesale Trade	153	
Transportation and Warehousing	160	
Manufacturing	126	
Real Estate and Rental and Leasing	131	
Arts, Entertainment, and Recreation	51	
Information	56	
Educational Services	31	
Management of Companies and Enterprises	20	
Utilities	5	
Mining	23	
Unclassified	4	
Forestry, Fishing, Hunting, and Agriculture Support	1	
TOTAL	3451	
<i>Source: US Census Bureau "2011 County Business Patterns."</i>		

- Along with the Biotechnology curriculum, additional investment in the future of bioscience in Washington County is represented by the construction of a 4,000 square-foot addition to the Technical Innovation Center (TIC), HCC's business incubator. The \$1.3 million addition, jointly funded by a state and local partnership composed of the Maryland Department of Business and Economic Development (DBED), the Maryland Technology Development Corporation (TEDCO), and the Washington County Board of County Commissioners, contains eleven private wet laboratories and one common laboratory. The wet lab addition opened in February 2008.

- A large percentage of the local workforce is devoted to health care and services; financial services; education; state and local government; and transportation and warehousing.

TOP EMPLOYERS IN WASHINGTON COUNTY, MD - 2012		
Rank	Employer	Employment
1	Washington County Public Schools	2,965
2	Meritus Health, Inc.	2,860
3	State of Maryland	2,304
4	Citi	2,500
5	State of Maryland	2,304
6	First Data	2,214
7	Volvo Powertrain	1,391
8	Washington County Government	1,134
9	Hagerstown Community College	813
10	The Bowman Group, LLP	753
11	FedEx Ground	648
12	Staples Distribution Center	567
13	Merkle Response Services, Inc.	520
14	City of Hagerstown	461
15	Lehigh Phoenix/Sierra Nevada Corporation	417
<i>SOURCE: Hagerstown-Washington County Economic Development Commission, based on year-end data provided by employers.</i>		

Top 10 Occupations by Advertised Jobs as of July 7, 2014		
Rank	Occupation	Number of Job Openings
1	Heavy and Tractor-Trailer Truck Drivers	284
2	Retail Salespersons	131
3	Physical Therapists	125
4	First-Line Supervisors of Retail Sales Workers	117
5	Occupational Therapists	89
6	Customer Service Representatives	77
7	First-Line Supervisors of Food Preparation and Serving Workers	63
8	Combined Food Preparation and Serving Workers, Including Fast Food	47
9	Nurse Practitioners	46
10	Registered Nurses	44

About 27.8% of this list was openings that required heavy or tractor-trailer truck driving skills and a commercial drivers' license

Source: Maryland Workforce Exchange VOS Online Jobs data

Regional Workforce Draw - April 2014						
State/County	Population*	Labor Force	Employed	UE	UE Rate	No. of Commuters into W. County**
State of Maryland	5,884,563	3,110,695	2,938,947	171,748	5.5%	
United States	313,914,640	155,421,000	145,669,000	9,753,000	6.3%	
Maryland						
Washington County	149,180	68,474	64,107	4,367	6.4%	23,448***
Allegany County	74,012	35,507	33,286	2,221	6.3%	588
Frederick County	239,582	126,587	120,920	5,667	4.5%	1,968
Pennsylvania						
Franklin County	151,275	78,900	75,800	3,900	4.9%	9,284
Fulton County	14,772	7,400	7,000	500	6.5%	1,142
West Virginia						
Berkeley County	107,098	47,120	44,250	2,880	6.1%	5,290
Jefferson County	54,504	25,090	23,990	1,100	4.4%	442
Morgan County	17,471	7,180	6,740	440	6.1%	882
Total Regional Workforce	807,894	396,258	376,093	21,075	5.7%	19,596

Employment and unemployment data are not seasonally adjusted

* U.S. Census Bureau; State and County QuickFacts 2012 Estimates

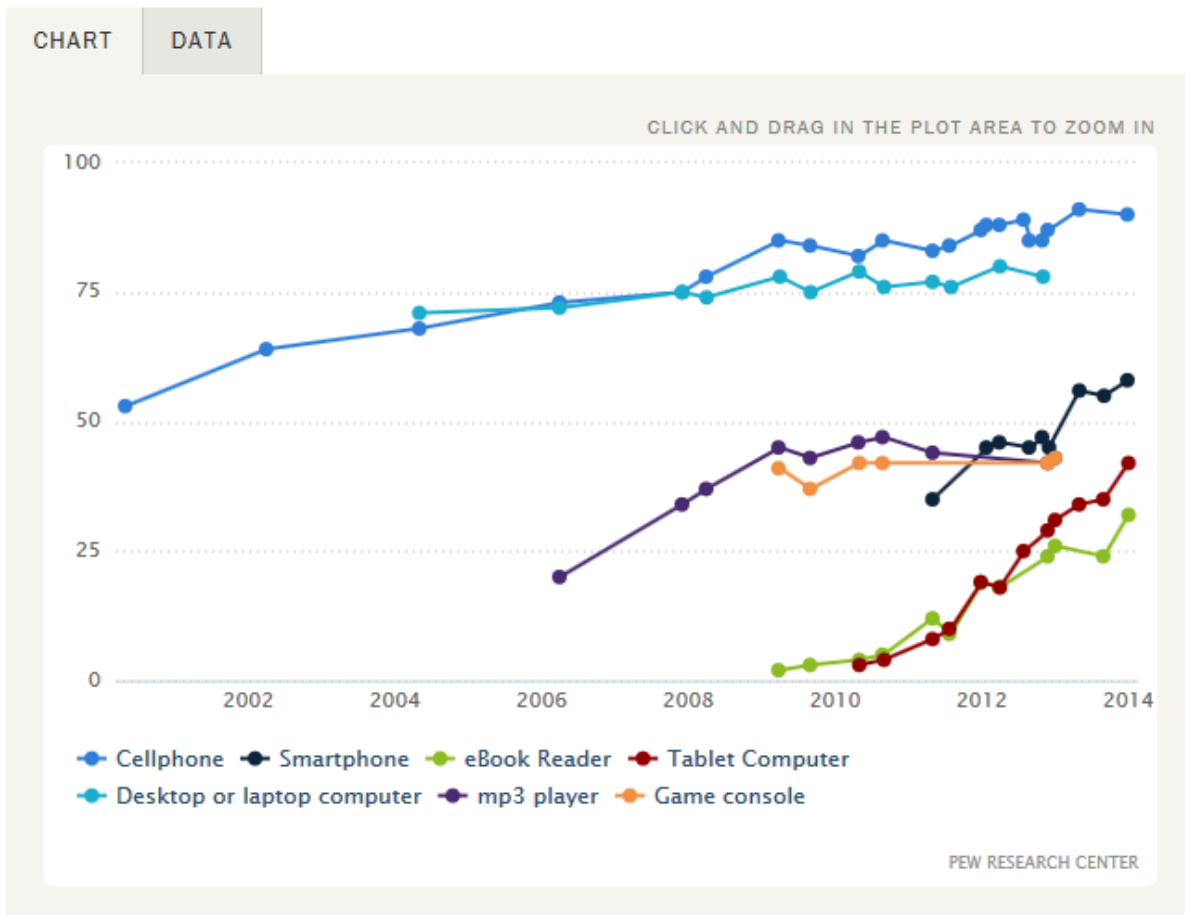
** U.S. Census Bureau ACS Data 2010 - Journey-to-Work Commutation

*** Residents commuting out of county; U.S. Census Bureau ACS 2010 - Journey-to-Work Commutation

TECHNOLOGY

As of January 2014:

- 90% of American adults have a cell phone
- 58% of American adults have a smartphone
- 32% of American adults own an e-reader
- 42% of American adults own a tablet computer



- Tablets are now driving more traffic web traffic than smartphones. This means that tablet users are more engaged and active on their devices. According to Adobe, "Internet users view 70% more pages per visit when browsing on a tablet vs. a smartphone." That's an impressive number and a strong indicator that colleges should be preparing tablet-friendly experiences for their websites and course materials. Tablets handle desktop websites better than smartphones and don't always require apps to offer students and faculty advanced functionality.

Mostly thanks to a massive solar farm placed on state prison lands south of Hagerstown, Washington County currently leads all Maryland counties in solar-energy production capacity with 33.8 megawatts, according to officials with the Maryland Energy Administration, or MEA.

MEA officials said the county's solar capacity represents about 18 percent of the state's total 184-megawatt capacity as of Aug. 4. Larger solar projects also have been undertaken by businesses and government, including Maryland's public-private partnership with First Solar Inc. that resulted in a 29-megawatt solar farm on state prison lands off Md. 65 in 2012. The power produced there is sold by First Solar back to Potomac Edison's electrical grid.

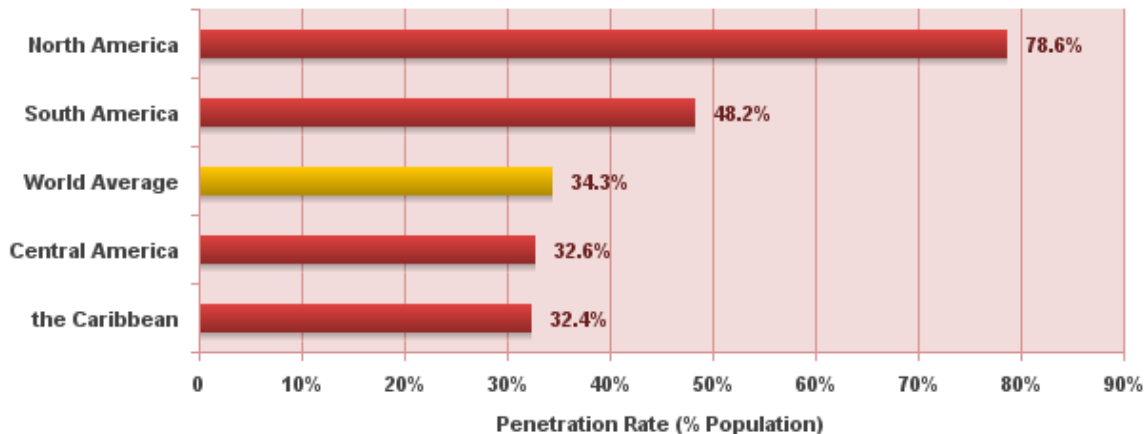
Staples and Walmart are among larger local businesses that have added solar panels to their facilities. On the government level, Washington County and the Town of Boonsboro have agreements in place for solar-farm projects in the near future.

The rise in solar technology has prompted a corresponding increase in the industry that sells, installs and maintains solar arrays.



- By July 2010, Facebook will officially log its 500 millionth active citizen. More than one in four people who use the Internet have a Facebook account. Facebook did not invent social networking but the company has fine-tuned it into a science. Facebook represents a tremendous cultural shift, particularly since 28% of the site's users are older than 34, Facebook's fastest-growing demographic. Facebook keeps finding itself in the cross-hairs of intense debates about privacy. To quell the latest concerns of users and elected officials in the US and abroad, Facebook is getting ready to unveil enhanced privacy controls. Facebook houses the world's largest photo collection of 48 billion unique images!
- HCC was designated as a National Center of Academic Excellence in Information Assurance Two-Year Education (CAE-2Y) by the NSA and is one of only six two-year schools to receive this honor. This distinction enables students to transfer seamlessly from HCC to a four-year college in order to complete their degree. HCC's designation as a CAE-2Y couldn't have occurred at a better time because the Department of Defense, one of the largest employers of cyber security specialists, now requires incoming workers to have both a bachelor's degree, as well as the necessary certification training needed to meet the rapidly changing demands of the information assurance field.
- The world is seeing an accelerating pace of technological change, an increasingly multidisciplinary nature of technology, and continued globalization. Technology is an integral part of our lives, the economy, and education. All education sectors are increasingly dependent upon technological development support systems for teaching and learning including distance learning, E-learning, distributed learning, hybrid applications, access to information on-line, local integrated systems, and migration to fused media.

Internet Penetration Rate in the Americas June 30, 2012



Source: Internet World Stats - www.internetworldstats.com/stats2.htm
528,701,158 Internet users in the Americas for June 30, 2012.
Copyright © 2012, Miniwatts Marketing Group

- Cloud based computing is an important component that is driving the higher education market. In today's present competitive world, cloud based education has developed into an increasingly attractive alternative for educators to offer innovative learning platforms and services continuously. Educational institutions are implementing the model of cloud computing within the campuses so that it is easier to share, accumulate and collaborate the data from any location, and at any time.
- Students are engaging with a number of different applications on their smartphones and tablets. More than 6 in 10 claim to regularly use games (73%), music (67%), entertainment (64%) and social networking (64%) apps, with a majority also putting photo and video (53%) apps to use. Interestingly, productivity apps are on the low end of the totem pole, with less than 1 in 5 saying they regularly use them.

- MarketsandMarkets forecasts the global Higher Education Market to grow from \$43.06 billion in 2013 to \$65.83 billion in 2019. In terms of regions, North America is expected to be the largest market in terms of market size, while Europe and Asia-Pacific (APAC) are expected to experience an increase in market traction, during the forecast period.
- Colleges have started to jump on the mobile craze, and schools such as Ohio State University and Massachusetts Institute of Technology have launched apps that allow students to check grades, manage their university accounts and track campus bus lines.

Apps created by colleges often go beyond just schedules and grades, says Chester Goad, director of disability services for Tennessee Technological University.

"Many colleges and universities upload tips and tricks for navigating campus, best places to eat, college traditions and more," he says, adding that these apps often include emergency alerts to help keep students safe on campus.

- Using those apps takes time, and college students are spending more of it with their devices. On average, they report spending 0.8 hours with a tablet, up from half-an-hour last year. And they're spending 3.6 hours a day with their cell phones and smartphones (presumably more on smartphones), up from 3.3 hours last year. By contrast, they're spending less time with computers, TVs, handheld gaming devices, and e-readers.
- Most relevant for college admins, the 2013 E-Expectations Report, conducted by Noel-Levitz, OmniUpdate, CollegeWeekLive, and NRCCUA, examined how social media and mobile devices are affecting students' search for the right college. About 2,000 students participated in the survey and the results were enlightening:

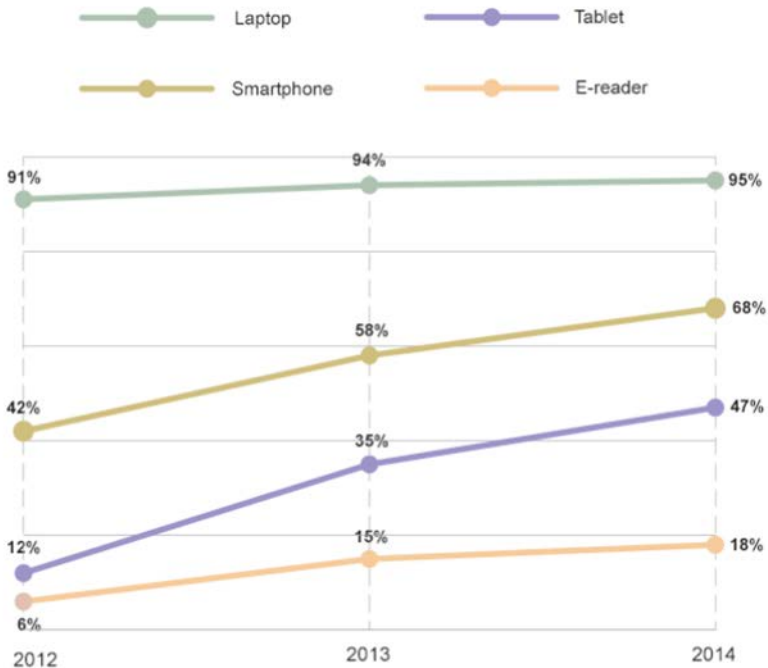
67 percent of the respondents said they still use Facebook, but that's a drop of 12 percentage points from last year

The survey also found that while virtually all of the students said they think information on a university's website is reliable, only about half of them said they trust information delivered through a university's social media

August 18, 2014

Growth in Student Use of Devices for Academic Work, 2012-14

Use of e-readers for college studies tripled in the past two years but remained under 20 percent. Use of tablets almost quadrupled; the devices were being used by almost half of students.



Note: Survey data for 2014 were collected from February to April 2014 from 75,305 students at 213 institutional sites. The findings for 2014 were developed from a representative sample of 10,000 students from 186 colleges in the United States. Data for 2012 and 2013 were developed from similar representative samples of about 10,000 students. Those samples were drawn from 106,875 students who responded to a survey from February to April 2012 and 113,035 students who responded to a survey from February to April 2013.

Source: Educause Center for Analysis and Research

5 Must-Have Tech Skills for College Students

- Typing ability
- Online etiquette skills
- Software suite basics
- Online research skills
- Privacy and security awareness

- Students expect the availability of wireless networks and immediate connectivity/ access to the Internet for e-mail and class assignments and projects. Students connected to the Internet are finding they can go anywhere in the world to learn. This gives them increasing choices about who provides their education and what mode of delivery best fits their busy lifestyle. Because of this trend community colleges have the opportunity to serve more students than those just in their service areas.

- So students are moving to quick services that are visually appealing and easy to use. Services like Snapchat were designed for mobile use and have grown at an impressive rate. According to CNET, in November 2013, the site was processing 400 million snaps per day while Facebook users were uploading approximately 350 million photos per day.
- Technological advances make it possible for people to live longer. As the overall population increases, community college enrollment is expected to grow. Technological innovations in the workplaces are expected to continue to fuel community college enrollment by people seeking training and skills upgrades. Distance learning technologies may increase community colleges' capacity without massive new building projects. Through distance learning, the Internet and other means, colleges can compete on a greater scale overcoming limitations in size, location, and costs.
- Rapid advances in information systems, technology and its applications are having a profound impact on teaching and learning, necessitating that colleges invest in technology and integrate it into curriculum and instructional practices.
- The rapid integration of evolving and emerging technologies influence how people live, learn and work. Hence, the public in general and students in particular, are putting an increased importance on the use of technology in education and training. Thus, there is a need for an interdisciplinary teaching approach that combines information technology, science and engineering.
- Technology in the biosciences will have a dramatic impact and influence during the next decade. The revolution of information availability and utility, and the use of multidisciplinary technology open the opportunity for technological breakthroughs and advancements.

10 technology trends to watch in 2014



1. Space Tourism
2. Wearable Tech
3. Internet of Things
4. Robots on the Rise
5. Machines in the Sky
6. Bigger, Smarter TV's
7. 3D printed everything
8. Multi-Screened World
9. The Fight for Privacy
10. Smart Phone Market Continues to Grow

- More than 10 years after unmanned aerial vehicles – known typically as drones – began making an impact on the battlefields of Iraq and Afghanistan, they're beginning to make their mark on college classrooms. According to the Government Technology Magazine, some schools are introducing majors that focus on drone technology to their science, technology, engineering and mathematics staples.

- In Maryland, an effort to improve STEM education began in 2009. A state task force recommended curriculum changes, internship opportunities and teacher professional development to help meet a goal of increasing the pool of STEM college graduates. Representatives from companies such as Lockheed Martin and Apple worked with educators on the task force. Meanwhile, a national effort was ongoing to redesign science education. Maryland and 26 states worked alongside the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve, as well as teachers from around the country. Two Maryland school board members, including the president, have been directly involved in the effort funded by the Carnegie Foundation.



As scientists look to find alternatives to traditional fossil fuels, a number of major projects, including Cape Wind (in Massachusetts' Nantucket Sound) and Deepwater Wind (near Block Island, Rhode Island), are vying to become the first offshore windfarm in the U.S.

Two companies, Cape Wind and Deepwater Wind, are competing to lead the way in offshore wind power in the U.S. Alongside power from volcanoes, waves, biomass and the sun, , wind power is set to become a significant alternative energy source in 2014.

Synthetic biology begins to grow

Marcus Fairs, the editor of dezeen.com, a highly influential online design magazine, says that in his view 2014's most significant emerging technologies will be in the field of synthetic biology.

"This emerging field started to hit the headlines at the end of last year and will be huge in 2014," Fairs say. "It involves the creation of new types of artificial life forms that perform useful functions. At the smallest scale it could mean man-made microbes that live inside your body and detect illness; at the largest scale it could mean synthetic creatures that are released into the wild to clean up pollution or attack parasitic species."

- Effective programming in distance learning and on-line education requires application of best practices in designing and delivering instruction. The expansion of on-line and distance learning and a commitment to the assessment of student learning outcomes are required of any community college wishing to remain competitive and effective. To do so requires sound faculty and staff development programs and the funding to maintain the curriculum and equipment necessary for quality programming.
- Electronic portfolios are becoming a common place repository for student work.
- The advancement in technology represents another challenge that has significantly impacted traditional methods of delivery. Many students come to campus expecting to find a far more sophisticated environment than the one that exists. The so called iPod generation is demanding eye-catching visuals, interactive instructional methods, and active engagement in learning.

- Many students, including non-traditional, are comfortable with the newest technological devices as they use camera phones, keep Blogs, use wireless devices effortlessly, use Instant Messaging (IM) constantly, and regularly use videoconferencing and Internet based telephony. Though many will not need training in the use of these tools, some will. Meeting the needs created by these varying degrees of expertise is a challenge.
- With the expansion of on-line learning opportunities for students, issues of faculty training and development, intellectual property rights, adequacy of technical infrastructure and evaluation of learning are becoming major pieces of the accountability concerns for this relatively new mode of student learning.
- Tuition costs at online institutions tend to be significantly higher than those of community colleges and many four-year institutions.
- Having the ability to do mass messaging is becoming more important on college campuses today. The potential use of such a messaging system is important for emergency messaging and campus-wide announcements.
- Technological security at the college is also an essential issue, which includes security of institutional databases, as well as the security of its students when online. Due to the large quantities of downloading and internet surfing worms and viruses are rampant on college campuses and can be quite expensive to be removed.
- Technological changes will pave the way for a greater demand for data transparency. Transparent data are those that can be accessed from one entry point, such as your personal web page, and are constantly available. Transparent data are critical for speeding up the pace of institutional planning. Decisions need to be data driven, with data easily found and manipulated for fast turn around. Data transparency is not limited to college administration. Students need transparency within their own data sets so they can increase their learning. Use of a student portal should allow individual students to see all of their own data and interact with data sets that will help them make decisions.
- With changing demographics nationally, as well as locally, students should be able to speak any language because of translation software. This will allow the classes to become more tailored for each student while simultaneously expanding enrollments internationally. While a lecture going on, students will be able to pull up information, on their individual screen, for a topic for which they are having trouble.

- According to the Microsoft Corporation, the following are technological changes that will be used in colleges across the country by 2020:
 - Simulation technologies and powerful sensor technologies provide scaleable models engage in learning by doing. Sensors in laboratories provide students feedback as they reconstruct and deconstruct various objects in real time, with real materials.
 - There are intelligent laboratory objects where technology is embedded in them. Students receive physical components that instruct the students on how to design, test, and connect them together. Instrumentation is also managed remotely. Internet based laboratories are the norm where students are able to run laboratory experiments wherever they find them.
 - All scientific disciplines require increasing amounts of computing sophistication. Thus, students will need to know how to program software. So, students must be taught to identify opportunities and customers, manage their requirements, provide effective documentation, and manage source code.
 - Voice technology eases communication as students will wear technology on their clothing.
- As reported by the National Intelligence Council, biotechnology, (the use of living organisms to make a product or run a process) is revolutionizing industry, modern medicine and agriculture, will show continued expansion improving the quality and length of human life. The ability to work and manipulate materials using technology at the “nano” level will allow industry in general to better design and produce chemical, fluidic, optical, mechanical and biological components. Not only are these technologies having impact on our lives, but they are heavily intertwined, making the technology revolution highly multidisciplinary and accelerating progress in each area. Fundamental changes in what and how we manufacture will produce unprecedented customization and fundamentally new products and capabilities.
- Nanotechnology is a type of manufacturing technology that will build objects from the atom up as well as be able to manipulate atoms within a current structure. It is technology that works with elements the size of a nanometer, and it will play a major role in the future of security, medicine, economic productivity, and environment. The National Science Foundation estimates that 2 million workers are expected to be needed to support the industries of nanotechnology worldwide within the next 15 years.
- With new technology also comes the issue of cost. Technology has the costs of employees that can install and maintain the new technology as well as the cost of the technology itself. Classrooms are seen as out of date if technology is not used. Therefore, the issue becomes how to balance an effective classroom at reasonable cost.

- Alternate sources of revenue can increase institutional giving by leveraging technology. As funds from the state continue to tighten, Institutional Advancement offices at community colleges look for new sources of funding. The institution's Benefactor system can be tapped for valuable data leading to improved targeting of Alumni for events and fund-raisers that will particularly interest them.

20 Social Media Statistics

1. One in every nine people on Earth is on Facebook (This number is calculated by dividing the planets 6.94 billion people by Facebook's 750 million users)
2. People spend 700 billion minutes per month on Facebook
3. Each Facebook user spends on average 15 hours and 33 minutes a month on the site
4. More than 250 million people access Facebook through their mobile devices
5. More than 2.5 million websites have integrated with Facebook
6. 30 billion pieces of content is shared on Facebook each month
7. 300,000 users helped translate Facebook into 70 languages
8. People on Facebook install 20 million "Apps" every day
9. YouTube has 490 million unique users who visit every month (as of February 2011)
10. YouTube generates 92 billion page views per month (These YouTube stats don't include videos viewed on phones and embedded in websites)
11. Users on YouTube spend a total of 2.9 billion hours per month (326,294 years)
12. Wikipedia hosts 17 million articles
13. Wikipedia authors total over 91,000 contributors
14. People upload 3,000 images to Flickr (the photo sharing social media site) every minute
15. Flickr hosts over 5 billion images
16. 190 million average Tweets per day occur on Twitter (May 2011)
17. Twitter is handling 1.6 billion queries per day
18. Twitter is adding nearly 500,000 users a day
19. Google+ has more than 25 million users
20. Google+ was the fastest social network to reach 10 million users at 16 days (Twitter took 780 days and Facebook 852 days)

jeffbullas.com 2011

PUBLIC POLICY AND ACCOUNTABILITY

- The public will continue to demand increased return on its investment in education. From an institutional point of view, this will require much better results when assessing institutional effectiveness. Not only will it mean educators must increase their ability to measure it, to assure the validity and reliability of the data being gathered and used, but also they must show evidence of continuous improvement in quality in order to remain competitive. As competition in the educational arena increases from for-profit educational providers, community colleges will need to continually improve to survive.
- Accrediting bodies, through their standards, expect institutional commitments to providing high quality education congruent with their institutional mission. Colleges are required to conduct ongoing institutional evaluation and improvement. Evaluation must focus on student achievement, student learning, and the effectiveness of processes, policies, and organization. Institutions are required to make improvements through an ongoing and systematic cycle of evaluation, integrated planning, implementation, and re-evaluation.
- Accountability challenges related to performance are requiring more comprehensive monitoring of student outcomes data related to special initiatives developed to improve student performance. Student learning outcomes are central to accreditation standards. Student learning outcomes are knowledge, skills, abilities, and attitudes that a student has attained at the end (or as a result) of his or her engagement in a particular set of collegiate experiences. Institutions are asked to demonstrate the effectiveness of its efforts to produce and support student learning by developing student learning outcomes at the course, program, and degree level. Student learning outcomes must be measured and assessed to determine how well learning is occurring so that changes to improve learning and teaching can be made. Colleges must show evidence of a conscious effort to create a culture of evidence.
- Accreditation standards emphasize the need for integration of the college's many planning activities, with an emphasis on the integration of planning and budgeting. As components of accountability mandates, educational entities need to demonstrate, through outcomes assessment and cost benefit studies, efficiencies in all areas, including academic programs, support services and administration. Additionally, colleges are required to demonstrate institutional integrity (i.e., concern with honesty, truthfulness, and the manner in which it represents itself) to all stakeholders, internal and external.

- Government will continue to be involved in education, establishing standards and demanding accountability. In all probability, the government will not be able to provide the strong or consistent financial support institutions require. Government support for educational institutions is subject to change and often accompanied by performance mandates and “other strings” attached.
- Faced with the “trickle down” effect of the national economy, the State of Maryland has decreased its funding to colleges and universities. Additionally, the State is cutting aid to counties, some of which, in turn, are cutting local support for community colleges. Diminished public resources will require community colleges to be more productive with the resources they have, pursue innovative partnerships with community entities, and be more innovative in fundraising.
- The current political climate calls for a better response from colleges and universities to address the critical shortage of teachers and nurses, as well as workforce development.
- Diversity awareness, support, and programming will become increasingly central to the community college’s mission.
- With a greater array of choices for the community, competition will present a challenge to make programs responsive, accessible, convenient, and current.
- Managing internal data has become imperative in this age of accountability. Getting the right data into a resource system(s) and then getting it back out has posed many challenges for community colleges. Data systems are particularly important when administering Federal grants.
- Total estimated federal spending for FY 2010 will be about \$3.6 trillion, a 22% increase over last year. Below is a partial list of categories that are financed by your tax dollars, according to the Office of Management and Budget.

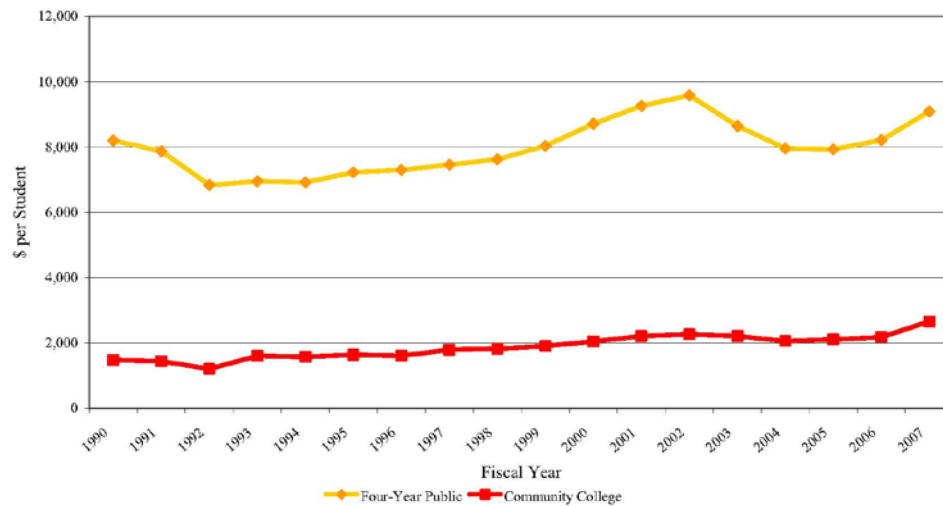
State and Local

- State funding per community college student is about 25% of four-year public institutions.
- State aid provides 35% of Maryland Community College fund in 1990 but only 25% in 2011.
- Most of Maryland Community Colleges money is spent on teaching and helping students.
- Community colleges offer a lower cost entry into higher education compared to four-year institutions. In Maryland, the average public four-year institution's tuition and fee rate was \$8,071 in fall 2012, compared to \$3,880 at the State's community colleges. However, the State's community college tuition and fee rates are higher than the national average
- In fiscal 2012, Maryland's community colleges awarded \$12.2 million in institutional aid. That amount is dwarfed by Pell Grants, a federal low-income student financial aid program that totaled \$169.0 million in that year. Federal funding for Pell Grants increased significantly in fiscal 2010 to help low-income individuals pursue a college education. Students can receive Pell grants valued at an amount up to \$5,400 annually for a maximum of twelve semesters at all institutions. For many recipients, this may cover their full cost of attendance at a community college
- The English for Speakers of Other Languages (ESOL) program provides funding for instructional costs and services for ESOL students. Funding is capped at \$800 per eligible FTES and \$6 million in total State aid for the program.
- The Statewide and Health Manpower Grant programs permit some students to attend out-of-county community colleges and pay in-county tuition rates. The grants reimburse colleges for out-of-county tuition waivers. If funding in a single year is not enough to cover the entire program, MHEC prorates funding based on the number of participating students.
- The first and largest source of State support is the Cade formula, calculated based on actual community college enrollments and a percentage (19.7% for fiscal 2014) of the proposed per student funding at selected public four-year institutions. Cade formula funding grows \$13.8 million. The second major part is comprised of the miscellaneous grant programs such as the Statewide and Health Manpower Grant programs, small college grants, and ESOL.

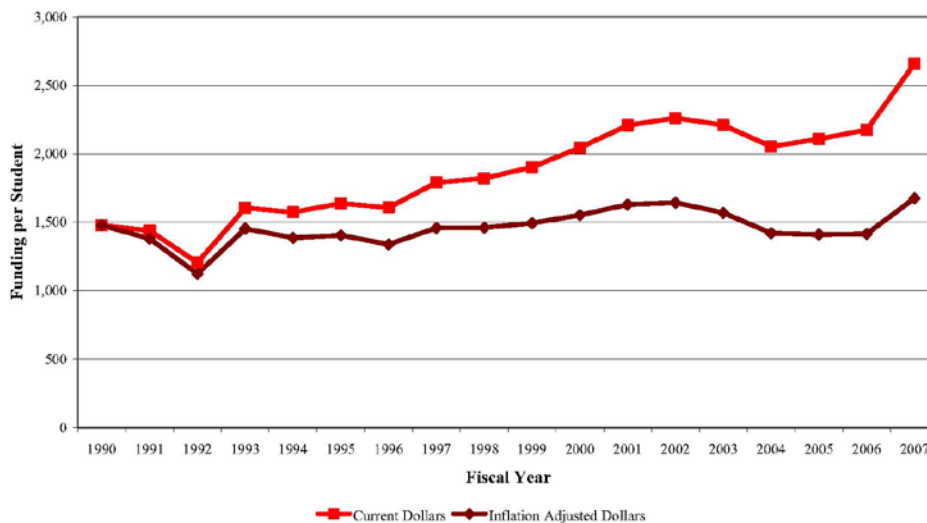
- A county government is required to maintain or increase the total dollar support for the local community college or risk losing an increase in State support, a concept known as maintenance of effort. In fiscal 2013, each college received an increase in State support
- State and local governments allocated approximately \$17.4 million in support of HCC in FY 2011-12.
- For every dollar of this support, taxpayers see a cumulative return of \$2.20 over the course of students' working careers.
- State and local governments see a rate of return of 9.0% on their support for HCC. This return compares very favorably with private sector rates of return on similar long-term investments.
- Altogether, the average annual added income due to the activities of HC and its former students equals \$156.5 million. This is approximately equal to 3.0% of the total Washington County economy.
- An estimated 78% of HCC students remain in Maryland and contribute to economic growth. Students who enter the workforce expand the tax base by generating higher earnings and reducing social costs.
- Given the low completion rates of community college students, policymakers and educators are regularly looking at ways to grow the number of degrees awarded to students. Only 18% of Maryland students entering a community college earn an associate's degree after four years. Many students transfer to four-year institutions before completing their degree, and although they may not continue on to complete a bachelor's degree, their work at the four-year institution may satisfy the community college's associate's degree requirements. To recognize the work done by these students, colleges are beginning to implement reverse transfer programs. After completing the necessary requirements for an associate's degree, the four-year institution sends a copy of the student's transcript back to the community college, usually at no charge to the student. The community college then evaluates the student's work and awards an associate's degree if all requirements are met.

The following analyses were published in Maryland Association of Community College's 2012 Trendbook.

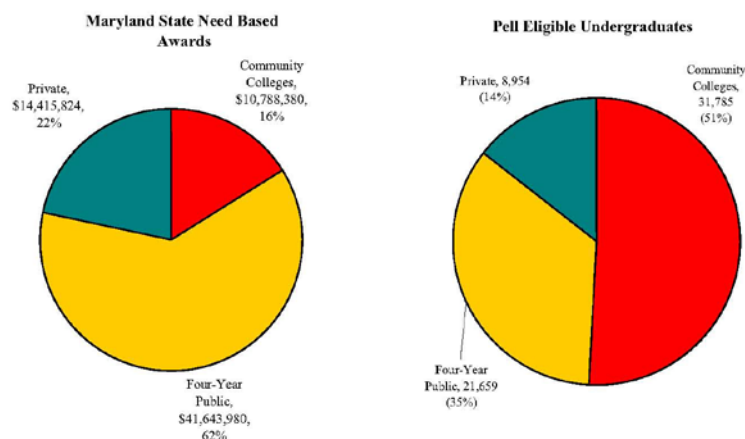
- Maryland State funding per community college student is about 25% of four-year public institutions.



- State Aid per community college student, adjusted for inflation, is nearly the same as in 1990.



- Maryland Community College students receive a small portion of State grants but represent the largest number of needy undergraduates.

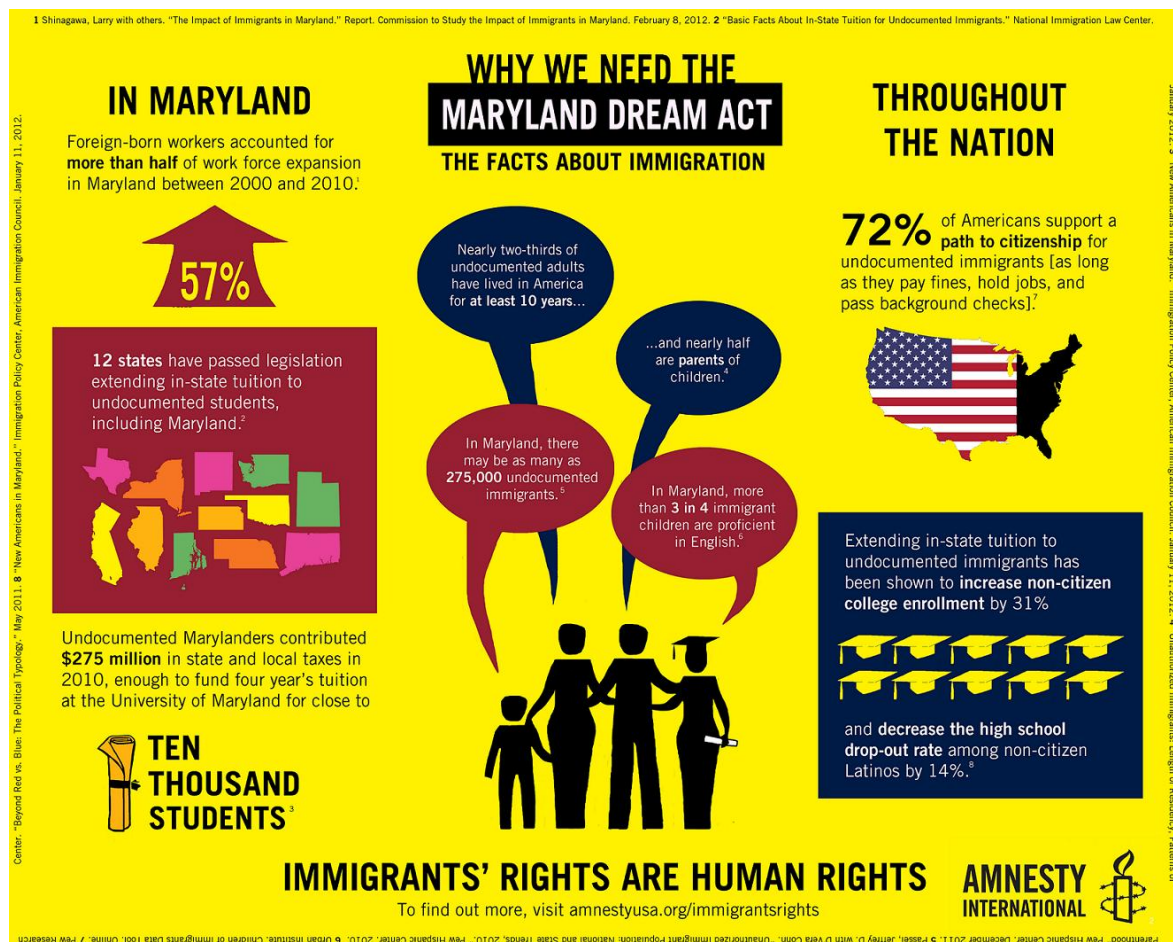


- Maryland Community Colleges average less than half of the capital funding (including local support) versus four-year public institutions.
- Post-secondary accountability in Maryland is monitored primarily through the Maryland Higher Education Commission, which uses as its primary model, the annual Maryland Performance Accountability Report.
- State and local level priorities in both the policy and fiscal arenas greatly influence direction setting for HCC. Several key issues are likely to impact local policy. These include issues related to: accountability; accreditation; budget; general enrollment growth, as it relates to facilities planning; local population growth related to environmental concerns; distance learning; and part-time faculty.
- A change in State funding for community colleges could put pressure on county governments, who share responsibility for funding these institutions. In the past, some counties have contributed more than 40% of their community college budgets.

- In the Budget Reconciliation and Financing Act of 2014 (**SB 172**), the standard formula is amended to limit the growth of community college funding in FY15. The proposal provides \$223 million to community colleges in FY15. While this is a 5% increase (\$10.7M more in direct aid) compared to FY14 funding, it is actually less of an increase than would have been dictated by the John A. Cade Funding Formula.

The Cade Formula is a set appropriation based on the number of enrolled students. If the Cade was applied this year, community colleges would have received a 7.2% increase in funding from 2014, or \$15.3M more than in FY14.

- The Maryland DREAM Act was enacted in 2011 (Chapter 191). The law authorizes certain individuals, including undocumented immigrants, to pay in-state tuition rates at Maryland public higher education institutions. Prior to passage of the law, in-state tuition rates and policies at most community colleges and public four-year institutions of higher education did not include individuals who were unable to establish permanent residency. As a result, these students were considered nonresidents for tuition purposes regardless of how long they had lived in Maryland.



SOURCES

- ◆ America's Career Info Net – Career One Stop (<http://acinet.org>)
- ◆ American Association of Community Colleges (<http://www.aacc.nche.edu>)
- ◆ AOL Money & Finance (www.money.aol.com)
- ◆ Baby Boomer Death Counter (www.boomerdeathcounter.com)
- ◆ Biotechnology Institute, www.biotechinstitute.org, www.fractal.org.
- ◆ Bureau of Labor Statistics – US Department of Labor (<http://www.bls.gov/>)
- ◆ CCbenefits: The Economic Contribution of Hagerstown Community College
- ◆ Centers for Disease Control and Prevention (<http://www.cdc.gov/>)
- ◆ CNN Money (money.cnn.com)
- ◆ Comcast (www.comcast.net)
- ◆ Community College Journal
- ◆ “Education, Economic Development, and 21st century jobs: The Case for Planned Growth of Biosciences in Washington County, August 2008” (Discussion paper prepared by Dr. Diane Weaver)
- ◆ FAIR: Federation for American Immigration Reform (www.fairus.org)
- ◆ “First COPT Tenant to Network at Fort Ritchie,” *Quad-State Business Journal*, September 2007.
- ◆ Fort Detrick Installation Expansion Notes. Fort Detrick Business Development Office, September 2007
- ◆ FoxNews.com
- ◆ Gas Buddy (www.gasbuddy.com)
- ◆ Hagerstown Community College's Official Enrollment Reports
- ◆ Hagerstown Economic Development Commission (www.hagerstownedc.org)
- ◆ Huffington Post
- ◆ InflationData.com (<http://inflationdata.com/>)
- ◆ Internet World Stats
- ◆ Inside Higher Ed
- ◆ Kauffman Foundation (www.kauffman.org)
- ◆ League for Innovations Conference, 2005
- ◆ Maryland Association of Community Colleges

- ◆ Maryland Higher Education Commission (MHEC)
- ◆ Maryland State Department of Education (www.msp.msde.state.md.us)
- ◆ Metropolitan Regional Information Systems, Inc.
- ◆ Microsoft Corporation
- ◆ MSNBC (www.msnbc.msn.com)
- ◆ National Center for Educational Statistics [NCES] (<http://www.nces.ed.gov> and <http://nces.ed.gov/ipeds/cool>)
- ◆ 2005 National Education Summit on High Schools (sponsored by the National Governors Association and Achieve.org)
- ◆ National Science Foundation
- ◆ NPR.org
- ◆ Parade magazine (www.parade.com)
- ◆ Pew Research Group (www.pewresearch.org)
- ◆ The Philanthropy (www.philanthropy.com)
- ◆ Planning for the 21st Century: A Guide for Community Colleges (2003) William A. Wojciechowski and Dedra Manes
- ◆ "Quad-State Business Journal
- ◆ Reuters (www.features.us.reuters.com)
- ◆ Senior Journal (<http://www.seniorjournal.com>)
- ◆ Technology Review
- ◆ "Technology, Talent and Capital: State Bioscience Initiatives 2008." The Battelle Memorial Institute, 2008
- ◆ The Boston Globe (www.boston.com)
- ◆ The Chronical for Higher Education
- ◆ The Gallup Poll (<http://galluppoll.com>)
- ◆ The Herald-Mail Newspaper (<http://www.herald-mail.com>)
- ◆ The Literacy of America's College Students, Justin D. Baer, Andrea L. Cook and Stéphane Baldi, American Institutes for Research (funded by the Pew Charitable Trusts), January 2006
- ◆ The National Center for Public Policy and Higher Education (www.highereducation.org)
- ◆ The New York Times (www.nytimes.com)
- ◆ Time magazine
- ◆ Washington Post (www.washingtonpost.com)

- ◆ U.S. Census Bureau (<http://www.census.gov/> and <http://factfinder.census.gov>)
- ◆ USA Today (<http://www.usatoday.com>)
- ◆ US News & World Report (<http://www.usnews.com>)
- ◆ Yahoo Education (www.education.yahoo.net)