Environmental Scan

Prepared for Yavapai College

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In the following report, Hanover Research presents a detailed analysis of economic, educational, demographic, and political trends to inform future decision making at Yavapai College. This data-centered report incorporates government statistics at the national, state, and local level to provide a broad overview of forces influencing community college education.

HANOVER RESEARCH

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EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

The public relies on community colleges, especially in challenging economic times, to provide affordable, relevant, and valuable higher education. However, the pressures on community colleges have increased in recent years. Economic recession, state funding cuts, and political initiatives all push community colleges to improve student outcomes despite declining resources. In this report, Hanover Research provides an overview of many of the current trends that influence community colleges and higher education in general, analyzing developments at the national, state, and local level.

A comprehensive evaluation of all recent developments related to higher education would exceed the scope of this project, so we have chosen to focus on four specific trends that are relevant to Yavapai College's mission to prepare graduates to compete in the global job market, ensure that students can continue to other higher education institutions, provide lifelong learning to the Yavapai community, and promote local economic development.[1] The report is divided as follows:

- **Section I: Economics** – this section summarizes trends in the employment market from recent community college graduates, highlighting high-growth occupations and industries.
- **Section II: Education** – this section provides an overview of trends in higher education, focusing on community college enrollment and emerging academic disciplines.
- **Section III: Demographics** – this section provides a detailed profile of the population at the national, state, and local level.
- **Section IV: Politics** – this section briefly examines governmental policies toward community colleges, concentrating on recent changes in state-level appropriations.

The key findings of this report are presented on the following two pages.

[1] "Yavapai College Mission and Vision." Yavapai College. http://www.yc.edu/v4content/office-of-the-president/mission-vision.htm?utm_campaign=&utm_source=&utm_medium=unknown

KEY FINDINGS

ECONOMICS

- **After steep increases during the recent economic recession, the national, state, and local unemployment rates have begun to decline**. The current unemployment rate in the Prescott Metropolitan Statistical Area (MSA) is 8.5 percent, slightly lower than the current state unemployment rate of 8.7 percent. The Prescott MSA unemployment rate is still notably higher than the national employment rate of 7.6 percent.

- **Health care is the fastest-growing industry at the national level, and many of the most in-demand associate-degree level occupations are in the health care industry**. Such positions include physical therapist assistants, diagnostic medical sonographers, occupational therapy assistants, dental hygienists, radiation therapists, and respiratory therapists. Health care jobs are also among the most lucrative associate-level occupations. For example, the four-highest paying associate-degree level jobs in the Prescott MSA, each with a median annual salary of over $60,000, are in the health care field.

EDUCATION

- **Community college enrollment in the United States and Arizona is increasing**. Average enrollment at Arizona community colleges outside of the Phoenix area, however, has decreased over the past three years. According to the National Center for Education Statistics, enrollment at Yavapai College has declined by an average of 2.2 percent annually since 2008, more than any other Arizona community college with more than 6,000 students.

- **Our analysis suggests that the many of the increasingly-popular associate degree programs are in healthcare fields such as nursing, pharmacy technician, medical records technology, respiratory technology, and cardiovascular technology**. However, institution reporting inconsistencies complicate the process of determining student demand for new degree program. The most commonly-pursued associate degrees are in liberal arts and related fields, followed by nursing, business, and medical assistance.

DEMOGRAPHICS

- **The Arizona population is projected to increase almost 2.5 times as quickly as the overall U.S. population in the next 25 years, and the Yavapai County population is expected to increase more than twice as quickly as the national population**. In Arizona and the United States as a whole, the population growth will result from natural population change and from migration from other countries and regions. In

Yavapai County, however, population growth will be entirely dependent on migration from other regions – the County's death rate is expected to exceed its birth rate by a wider margin each year for the next four decades.

- **The population of Yavapai County is also much older than the population of Arizona or the United States as a whole**. 55.7 percent of the Yavapai County population is older than 44, compared to 39.9 percent of the Arizona population and 40.9 percent of the U.S. population. The median age in Yavapai County and throughout the nation is expected to increase in the future, increasing demand for social and healthcare services that meet the needs of an aging population.

- **Eighty-nine percent of Yavapai County citizens identify themselves as "White."** That percentage is projected to decline over the next 25 years, but the Yavapai County population is still expected to be 84.4 percent White. The percentage of Hispanic citizens in Yavapai County is expected to increase from 14.9 percent in 2015 to 23.2 percent in 2040. The percentage of Hispanic citizens in Yavapai County is far below the state average, which is anticipated to increase from 31.5 percent to 40.8 percent over the same period.

POLITICS

- **Appropriations for community colleges across the country have declined in recent years, with the average community college appropriation amount decreasing by 15 percent in 2010 alone**. Despite these budget cuts, most community colleges have remained affordable through widespread cost-cutting measures unparalleled at other types of higher education institutions.

- **Appropriations for Arizona community colleges have decreased even more quickly than the national average, plummeting from $132.6 million in 2003 to $65.9 million in 2013**. The Arizona state legislature has budgeted for small funding increases, but funding is not expected to return to pre-recession levels in the near future.

- **Appropriations for community colleges in Yavapai County have decreased more significantly than in any Arizona county other than Maricopa County**. Between 2011 and 2012, the state budget for community colleges in Yavapai County decreased by 78.6 percent from $4,196,000 to $899,200.

SECTION I: ECONOMIC TRENDS

This section analyzes current economic trends at the national, state, and local level to evaluate the future employment prospects for recent Yavapai College graduates.

NATIONAL TRENDS

EMPLOYMENT CHANGE

National unemployment statistics and academic research suggest that employment opportunities throughout the economy will increase in the near future. The national unemployment rate has declined from its recent peak of 9.6 percent in 2010[2] to an average of 7.6 percent during 2013.[3] And according to the Georgetown Center on Education and the Workforce (CEW), the number of jobs in the U.S. economy will increase from 140 million to 165 million by 2020.[4]

The CEW predicts that this growing job market will be increasingly dependent on workers with postsecondary education. As of 2010, 59 percent of jobs required some postsecondary education; by 2020, CEW estimates that the percentage will increase to 65 percent. The role of two-year higher education institutions is expected to grow over the next decade, as well. The CEW predicts that the percentage of jobs requiring associate's degrees or some college without a degree will increase from 27 percent in 2010 to 30 percent in 2020.[5]

Figure 1.1: National Unemployment Rate, 2008-Present

2008	2009	2010	2011	2012	2013 (JAN-AUG)
5.8%	9.3%	9.6%	8.9%	8.1%	7.6%

Source: Bureau of Labor Statistics

The CEW also found that the skills acquired in college are becoming increasingly valuable in the modern economy. CEW identified communication, analysis, and leadership as the most important skills for workers to possess. Other abilities such as oral comprehension, oral expression, problem sensitivity, and deductive reasoning are also important in the growing economy.[6]

[2] "Labor Force Statistics from the Current Population Survey: Series ID LNU04000000." U.S. Bureau of Labor Statistics, September 25, 2013. http://data.bls.gov/timeseries/LNU04000000?years_option=all_years&periods_option=specific_periods&periods=Annual+Data

[3] "Labor Force Statistics from the Current Population Survey: Series ID LNS14000000." U.S. Bureau of Labor Statistics, September 25, 2013. http://data.bls.gov/timeseries/LNS14000000

[4] Carnevale, A., N. Smith, and J. Strohl. "Recovery: Job Growth and Education Requirements through 2020." Georgetown University Center on Education and the Workforce, June, 2013. pp.1-3. http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/Recovery2020.ES.Web.pdf

[5] Ibid., pp.1-3.

[6] Ibid., pp.7-9.

Associate's degrees will be particularly important in healthcare professional and technical occupations, where 29 percent of all jobs in 2020 will require an associate's degree (compared to 12 percent of all jobs throughout the economy requiring associate's degrees), according to CEW.[7]

Growing Industries

Throughout this report, we analyze statistics using the compound annual growth rate (CAGR), which provides a smoothed measurement of annual growth; in other words, CAGR disregards year-to-year fluctuations in the data and instead provides an indication of overall growth over a given period of time.

When applied to recent national employment projections from the U.S. Bureau of Labor Statistics (BLS), CAGR reveals that employment opportunities in health care services field are projected to increase more quickly than in any other industry between 2010 and 2020 (see Figure 1.2). The BLS also expects individual and family services opportunities to increase rapidly through the end of the decade.[8]

Figure 1.2: Fastest-Growing U.S. Industries, 2010-2020 Projections

Industry	Employment		Total Change, 2010-2020	CAGR
	2010	2020		
Home health care services	1,080,600	1,952,400	871,800	6.8%
Individual and family services	1,215,000	2,066,400	851,400	6.1%
Management, scientific, and technical consulting services	991,400	1,567,000	575,600	5.2%
Veneer, plywood, and engineered wood product manufacturing	64,700	94,900	30,200	4.3%
Computer systems design and related services	1,441,500	2,112,800	671,300	4.3%

Source: Bureau of Labor Statistics

High-Growth Occupations

The BLS provides employment projections for individual occupations in addition to its overall industry projections. The BLS also publishes the typical education required for each occupation that it evaluates, and for this section we focus primarily on occupations that require only an associate's degree.

The BLS estimates that opportunities for veterinary technicians and technologists will increase more than opportunities for any other associate's-degree level occupations between 2010 and 2020. Other high-growth occupations identified by the BLS include physical therapist assistant, diagnostic medical sonographer, occupational therapy assistant,

[7] Ibid., p.11.
[8] "Employment and output by industry." U.S. Bureau of Labor Statistics, February 1, 2012. http://www.bls.gov/emp/ep_table_207.htm

and dental hygienist (see Figure 1.3). The health care industry also accounts for many of the most lucrative associate's-degree level employment opportunities. Except for air traffic controllers, radiation therapists, nuclear medicine technologists, and dental hygienists earn more than any other occupation (see Figure 1.4).[9]

Figure 1.3: Fastest-Growing Non-Managerial Occupations Requiring Only an Associate's Degree, 2010-2020 U.S. Projections

Occupation	Employment		Change		Average Annual Openings*
	2010	2020	#	CAGR	
Veterinary Technologists and Technicians	80,200	121,900	41,700	4.28%	5,570
Physical Therapist Assistants	67,400	98,200	30,800	3.84%	4,120
Diagnostic Medical Sonographers	53,700	77,100	23,400	3.68%	3,170
Occupational Therapy Assistants	28,500	40,800	12,300	3.65%	1,680
Dental Hygienists	181,800	250,300	68,500	3.25%	10,490

* Due to growth and replacement
Source: Bureau of Labor Statistics

Figure 1.4: Highest-Paying U.S. Non-Managerial Occupations Requiring Only an Associate's Degree, 2010

Occupation	Median Annual Salary	2010 Employment
Air Traffic Controllers	$108,040	27,000
Radiation Therapists	$74,980	16,900
Nuclear Medicine Technologists	$68,560	21,900
Dental Hygienists	$68,250	181,800
Nuclear Technicians	$68,090	7,100
Registered Nurses	$64,690	2,737,400
Diagnostic Medical Sonographers	$64,380	53,700
Aerospace Engineering and Operations Technicians	$58,080	8,700
Engineering Technicians, Except Drafters, All Other	$58,020	70,600
Electrical and Electronics Engineering Technicians	$56,040	151,100

Source: Bureau of Labor Statistics

Health care occupations figure less prominently among the fastest-growing and most lucrative bachelor's degree occupations. The BLS predicts that the number of opportunities for biomedical engineers will increase more rapidly than for any other bachelor's-degree level occupation between 2010 and 2020. Other in-demand occupations include meeting, convention, and event planners, interpreters and translators, and market research analysts and marketing specialists (see Figure 1.5). And the engineering field dominates the list of

[9] "Long Term Occupational Projection Data." U.S. Bureau of Labor Statistics, February 1, 2012. http://www.bls.gov/emp/ep_table_102.htm

the most lucrative bachelor's-level occupations, accounting for eight of the ten highest-paying occupations (see Figure 1.6).[10] Because community colleges often serve as the first step toward a student's eventual completion of a bachelor's degree, associate's degree programs that easily transfer to high-demand four-year programs may attract promising students.

Figure 1.5: Fastest-Growing Non-Managerial Occupations Requiring Only a Bachelor's Degree, 2010-2020 U.S. Projections

Occupation	Employment		Change		Average Annual Openings*
	2010	2020	#	CAGR	
Biomedical Engineers	15,700	25,400	9,700	4.93%	1,310
Meeting, Convention, and Event Planners	71,600	102,900	31,300	3.69%	4,500
Interpreters and Translators	58,400	83,100	24,600	3.59%	4,030
Market Research Analysts and Marketing Specialists	282,700	399,300	116,600	3.51%	19,180
Geographers	1,600	2,200	600	3.24%	130

Source: Bureau of Labor Statistics

Figure 1.6: Highest-Paying Non-Managerial Occupations Requiring Only a Bachelor's Degree, National Level, 2010

Occupation	Median Annual Salary	2010 Employment
Petroleum Engineers	$114,080	30,200
Airline Pilots, Copilots, and Flight Engineers	$103,210	70,800
Nuclear Engineers	$99,920	19,100
Computer Hardware Engineers	$98,810	70,000
Aerospace Engineers	$97,480	81,000
Physical Scientists, All Other	$94,780	30,300
Software Developers, Systems Software	$94,180	392,300
Chemical Engineers	$90,300	30,200
Engineers, All Other	$90,270	156,500
Electronics Engineers, Except Computer	$90,170	140,000

Source: Bureau of Labor Statistics

[10] Ibid.

ARIZONA

EMPLOYMENT CHANGE

The Arizona Office of Employment and Population Statistics (OEPS) projects that the employment situation in Arizona will improve in the near future, albeit at a slower rate than it predicted in previous years. Federal policies such as budget sequestration and increases to the payroll tax may have contributed to the slower-than-expected employment growth.[11] Despite the dampening effects of some federal policies, a number of economic trends are supporting growth in the Arizona and national economy:

- Continued improvement in real Gross Domestic Product (GDP), real personal income at the state and national levels, employment, and retail sales.
- Continued employment gains in the private sector, increasing private domestic investment, gradual increase in the index of industrial production and rate of capacity utilization, high levels of corporate profit, a gradual resurgence in private residential construction permits.
- Continued gradual climb in household net worth, a continued decline in the fraction of disposable income used for household debt payments, and U.S. exports.
- Residential real estate markets in Arizona and Phoenix metropolitan area are showing an improvement as measured by various indicators. These include rising levels of building permits. Also, the home prices in Arizona have been rising.
- While revolving consumer credit levels have remained flat, an expansion of non-revolving consumer credit since 2011 has served as an impetus to expanding economic activity. Consumer sentiment and consumer spending have shown signs of improvement, but the rate of growth has been slowing down.[12]

The Arizona unemployment rate, although higher than the national average, has declined since 2010. The unemployment rate, however, appears to have stalled since 2012 (see Figure 1.7).[13]

Figure 1.7: Arizona Annual Unemployment Rate

2008	2009	2010	2011	2012	2013 (AUGUST)	
					SEASONALLY ADJUSTED	NOT SEASONALLY ADJUSTED
6.0%	9.8%	10.4%	9.4%	8.3%	8.3%	8.7%

Source: OEPS

[11] "Office of Employment & Population Statistics Employment Forecast." Arizona Office of Employment & Population Statistics, May 9, 2013. p.1. http://www.azstats.gov/pubs/labor/Forecast_05-09-13.pdf
[12] Bullet points taken verbatim from Ibid.
[13] "Local Area Unemployment Statistics (LAUS) Data," Arizona Office of Employment and Population Statistics, 2013. http://azstats.gov/laus-data-query-tool/

GROWING INDUSTRIES

The fastest-growing industries in Arizona, according to OEPS, are construction, educational and health services, and professional and business services. The OEPS projects that nonfarm employment in Arizona will grow at a rate of 2.2 percent annually through the end of the decade.[14]

Figure 1.8: Fastest-Growing Arizona Industries, 2010-2020 Projections

Industry	Employment		Change	
	2010	2020	#	CAGR
Construction	111,500	166,200	54,700	4.5%
Educational and Health Services	344,800	456,500	111,700	3.2%
Professional and Business Services	339,800	441,200	101,400	2.9%
Leisure and Hospitality	253,900	315,800	61,900	2.5%
Trade, Transportation, and Utilities	467,800	562,900	95,100	2.1%
Total Nonfarm Employment	*2,382,000*	*2,894,000*	*512,000*	*2.2%*

Source: OEPS

HIGH-GROWTH OCCUPATIONS

The fastest-growing associate's-degree level occupations at the state level resemble those at the national level. Diagnostic medical sonographers, dental hygienists, and veterinary technicians and technologists are all in high demand (see Figure 1.9). At the bachelor's-degree level, biomedical engineers, cost estimators, and meeting and convention planners are expected to see the greatest increase in employment opportunities (see Figure 1.10).[15]

Figure 1.9: Fastest-Growing Arizona Non-Managerial Occupations Requiring Only an Associate's Degree, 2010-2020 Projections

Occupation	Employment		Change		Average Annual Openings*
	2010	2020	#	CAGR	
Diagnostic Medical Sonographers	916	1,424	508	5.0%	65
Dental Hygienists	2,947	4,506	1,559	4.8%	215
Veterinary Technologists and Technicians	2,006	2,809	803	3.8%	115
Physical Therapist Assistants	867	1,213	346	3.8%	48
Radiation Therapists	629	875	246	3.7%	37

* Due to growth and replacement
Source: OEPS

[14] "2010-2020 Occupation Projections." Arizona Office of Employment and Population Statistics. Downloaded from http://www.azstats.gov/employment-forecasts.aspx
[15] Ibid.

Figure 1.10: Fastest-Growing Arizona Non-Managerial Occupations Requiring Only a Bachelor's Degree, 2010-2020 Projections

Occupation	Employment		Change		Average Annual Openings*
	2010	2020	#	CAGR	
Biomedical Engineers	298	525	227	6.5%	30
Cost Estimators	3,341	4,855	1,514	4.2%	215
Meeting and Convention Planners	1,370	1,949	579	4.0%	84
Personal Financial Advisors	3,989	5,652	1,663	3.9%	212
Market Research Analysts and Marketing Specialists	5,790	8,152	2,362	3.9%	390

Source: OEPS

Prescott Metropolitan Statistical Area

Employment Change

The unemployment rate in the Prescott Metropolitan Statistical Area (MSA) has exceeded the Arizona statewide unemployment rate for the past four years, although the current Prescott MSA unemployment rate is slightly lower than the statewide unemployment rate (See Figure 1.11).[16]

Figure 1.11: Prescott MSA Annual Unemployment Rate

2008	2009	2010	2011	2012	2013 (August, Not Seasonally Adjusted)*
6.0%	10.3%	10.9%	9.7%	8.6%	8.5%

* Seasonally adjusted data not available for Prescott MSA
Source: OEPS

Growing Industries

The fastest-growing industry in the Prescott MSA, according to OEPS, is the leisure and hospitality industry. The Manufacturing industry is also projected to experience strong growth through the end of the decade. The Prescott MSA as a whole, though, is not expected to experience as much employment growth as in other parts of the state. The Prescott CAGR for all nonfarm industries of 0.6 percent is significantly lower than the state average of 2.2 percent.[17]

[16] "Local Area Unemployment Statistics (LAUS) Data," Arizona Office of Employment and Population Statistics, 2013. http://azstats.gov/laus-data-query-tool/
[17] "Current Employment Statistics (CES) Data," Arizona Office of Employment and Population Statistics, 2013. http://azstats.gov/ces-data-query-tool/

Figure 1.12: Industries with Positive Employment Growth 2010-2012, Prescott MSA

Industry	Employment		Change	
	2010	2012	#	CAGR
Leisure and Hospitality	6,900	7,700	800	5.6%
Manufacturing	2,600	2,900	300	5.6%
Professional and Business Services	3,200	3,300	100	1.6%
Goods-Producing Industries	7,000	7,100	100	0.7%
Total Nonfarm Employment	*55,000*	*55,700*	*700*	*0.6%*

Source: OEPS

High-Earning Occupations

OEPS does not publish employment projections for specific occupations in the Prescott MSA. It does, however, publish the median salary and total employment for specific occupations. According to OEPS, the highest-paying non-managerial occupations that require only an associate degree are in the healthcare industry (see Figure 1.13). Each of the four highest-paying occupations, all in the healthcare field, provides a median wage between $28.93 and $37.09. Registered nurses are the most common associate-degree-only occupation in the Prescott Metropolitan Statistical Area (MSA), accounting for approximately 1,060 of the MSA's approximately 52,540 employees. At the bachelor's-degree level, sales representatives in the technical and scientific industries, materials engineers, and financial analysts earn the highest annual salaries (see Figure 1.14). As in other locations, engineers earn higher salaries than other occupations in general. [18]

Figure 1.13: Highest-Paying Non-Managerial Occupations Requiring Only an Associate's Degree, Prescott MSA, 2012

Occupation	Median Hourly Wage	Median Annual Salary	Rounded Employment
Diagnostic Medical Sonographers	$37.09	$77,151	30
Registered Nurses	$35.66	$74,182	1,060
Dental Hygienists	$34.34	$71,423	100
Physical Therapist Assistants	$28.93	$60,172	-
Architectural and Civil Drafters	$23.42	$48,705	30
Respiratory Therapists	$23.02	$47,891	50
Civil Engineering Technicians	$19.69	$40,961	50
Paralegals and Legal Assistants	$18.71	$38,910	100
Life, Physical, and Social Science Technicians, All Other	$18.09	$37,628	20
Radio, Cellular, and Tower Equipment Installers and Repairers	$17.92	$37,282	30

Note: OEPS employment totals for Physical Therapist Assistants were not available.
Source: OEPS

[18] "Prescott MSA---2012 Occupational Employment & Hourly Wage Estimates." Arizona Office of Employment and Population Statistics. Downloaded from http://www.azstats.gov/occupational-employment-statistics.aspx

Figure 1.14: Highest-Paying Non-Managerial Occupations Requiring Only a Bachelor's Degree, Prescott MSA, 2012

Occupation	Median Hourly Wage	Median Annual Salary	Rounded Employment
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	$47.32	$98,430	70
Materials Engineers	$40.20	$83,621	10
Financial Analysts	$39.99	$83,176	-
Electronics Engineers, Except Computer	$39.00	$81,123	10
Civil Engineers	$37.33	$77,648	80
Mechanical Engineers	$35.71	$74,276	20
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	$35.59	$74,025	10
Software Developers, Applications	$35.51	$73,861	40
Database Administrators	$35.19	$73,198	10
Tax Examiners and Collectors, and Revenue Agents	$34.31	$71,362	-

Source: OEPS

SECTION II: EDUCATION TRENDS

In this section, Hanover summarizes the current educational trends occurring at the national, state, and local levels, with a focus on community colleges. We describe enrollment trends and analyze degree completions data to identify emerging academic disciplines.

COMMUNITY COLLEGE ENROLLMENT

At the national level, community college enrollment is increasing. Enrollment data from the National Center for Education Statistics' (NCES) Integrated Postsecondary Education Data System (IPEDS) show that between Fall 2008 and Fall 2012, national community college enrollment increased by 1.9 percent annually. Enrollment growth at Arizona community colleges was slightly more rapid, increasing by an average of 2.0 percent each year between 2008 and 2012 (see Figures 2.1 and 2.2).[19]

Based on the IPEDS data, Yavapai College enrollment growth has not maintained pace with enrollment at the state and national level. IPEDS reports that Yavapai College enrollments decreased by 2.2 percent annually between 2008 and 2012. **The IPEDS data suggest that most of the Arizona community college enrollment growth has occurred in Phoenix and its immediate area**. The 12 Phoenix-area community colleges with more than 1,000 students[20] reported an overall annual enrollment increase of 3.7 percent between 2008 and 2012. In contrast, total enrollment for the eight other Arizona community colleges with more than 1,000 students declined by 2.7 percent annually over the same period.[21] Of those eight institutions, only Arizona Western College and Cochise College experienced any overall enrollment growth between 2008 and 2012.[22]

Figure 2.1: Community College Enrollment (Total Headcount), 2008-2012

LOCATION	2008	2009	2010	2011	2012 (EST.)	CAGR
United States	6,623,816	7,285,413	7,528,794	7,403,218	7,127,777	1.9%
Arizona	208,419	227,803	244,154	240,223	225,218	2.0%
Phoenix Area	129,860	144,223	155,138	153,170	150,347	3.7%
Non-Phoenix Area	76,018	79,439	81,192	79,530	68,258	-2.7%
Yavapai College	**9,033**	**8,276**	**8,410**	**7,837**	**8,250**	**-2.2%**

Source: NCES

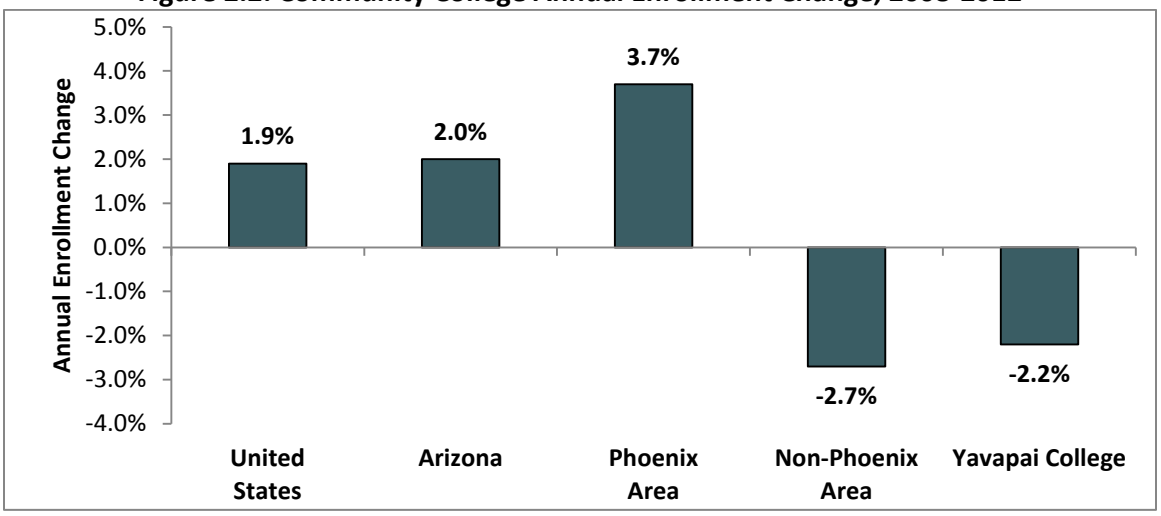
[19] "IPEDS Data Center." National Center for Education Statistics. http://nces.ed.gov/ipeds/datacenter/

[20] The 12 institutions are: Pima Medical Institute-Mesa, Universal Technical Institute of Arizona, Estrella Mountain Community College, Rio Salado College, Central Arizona College, Phoenix College, Scottsdale Community College, Mesa Community College, Paradise Valley Community College, GateWay Community College, South Mountain Community College, and Southwest Institute of Healing Arts

[21] The eight institutions are: Arizona Western College, Cochise College, Eastern Arizona College, Yavapai College, Pima Community College, Mohave Community College, Coconino Community College, and Northland Pioneer College

[22] "IPEDS Data Center," Op. cit.

Figure 2.2: Community College Annual Enrollment Change, 2008-2012



Source: NCES

DEGREE COMPLETIONS METHODOLOGY

Hanover typically evaluates demand for new degree programs by analyzing changes in the number of degrees completed in different academic disciplines. The NCES publishes degree completions data for all higher education institutions in IPEDS, providing a central source for information on a wide range of educational trends. The degree completions method, while indirect, allows us to approximate demand for a wide range of disciplines. We can infer that in disciplines where the number of degree completions is increasing, student demand for such programs is trending upward. The degree completions method of analysis is particularly effective when used to compare a small set of academic disciplines.[23]

This analysis method is less effective at predicting degree demand across *all* academic fields because of inconsistencies throughout the IPEDS database. Notably, IPEDS reorganized its classification of degree programs in 2010. Some degree programs were merged together – and others were divided – to create new classifications. This reorganization complicates the process of comparing pre- and post-2010 completions data. Dramatic changes in completions between the 2009-10 and 2010-11 academic years can often be attributed to these classification changes. To avoid data inconsistencies, we rely only on completions data from the 2010-11 and 2011-12 academic years to calculate growth rate. It is important to note that two years of data provides a very small sample, and it is difficult to project future program growth based on such a small sample. The completions data do, however, highlight fields of study with the potential for future growth.[24]

IPEDS does not publish degree completion data below the state level, so this report contains no degree completion analysis for Yavapai County or the Prescott MSA.

[23] Ibid.
[24] Ibid.

NATIONAL DEGREE COMPLETIONS

ASSOCIATE DEGREE

National completions at the associate-degree level indicate growing demand for degrees in technical fields, particularly in the healthcare industry. Completions in disciplines such as medical insurance specialist/medical biller, respiratory therapy technician/assistant, cardiovascular technology/technician, and pre-nursing studies have increased over the past five years (see Figure 2.3). Degree completions data also indicate growing demand for computer-related academic programs. Completions in computer support specialist and general computer programming programs have increased over the past year, although demand for computer support specialist programs is difficult to evaluate because of a dramatic increase in completions between the 2010-11 and 2011-12 academic years. While it is not impossible that student degree completions increased by 347.5 percent in a single year, it is more likely that changes in reporting at one or more institutions is responsible for the scale of the completions increase. Similar dramatic five-year increases in securities services administration completions are likewise dubious.[25]

The most popular national associate degree completions are more easily discernible and less subject to reporting inconsistencies than the fastest-growing degree programs. The most-commonly chosen fields of study among all associate degree programs, displayed in Figure 2.4, are general studies and related disciplines. Programs in liberal arts and sciences, general studies, and humanities account for four of the top 10 most common degree programs. Other popular degree programs include registered nursing, business administration and management, and medical/clinical assistant.[26]

Figure 2.3: Fastest-Growing Associate's Degree Fields of Study

FIELD OF STUDY	2010-11	2011-12	% GROWTH
Computer Support Specialist	282	1,262	347.5%
Medical Insurance Specialist/Medical Biller	2,440	4,319	77.0%
Respiratory Therapy Technician/Assistant	528	897	69.9%
Cardiovascular Technology/Technologist	702	1,130	61.0%
Recording Arts Technology/Technician	1,074	1,716	59.8%
Energy Management and Systems Technology/Technician	566	838	48.1%
Computer Programming/Programmer, General	1,895	2,694	42.2%
Pre-Nursing Studies	734	1,023	39.4%
Baking and Pastry Arts/Baker/Pastry Chef	2,357	3,271	38.8%
Securities Services Administration/Management	1,432	1,968	37.4%

*List only includes degree programs with at least two years of data and at least 500 reported completions in the 2011-2012 academic year.
Source: NCES

[25] Ibid.
[26] Ibid.

Figure 2.4: National Associate Degree Completions, by Discipline

Field of Study	Completions
Liberal Arts and Sciences/Liberal Studies	242,179
Registered Nursing/Registered Nurse	83,432
General Studies	66,934
Business Administration and Management, General	45,347
Medical/Clinical Assistant	25,185
Business/Commerce, General	17,335
Biological and Physical Sciences	15,793
Liberal Arts and Sciences, General Studies and Humanities	14,211
Humanities/Humanistic Studies	13,518
Culinary Arts, Chef Training	12,968

Source: NCES

Bachelor's Degree

Bachelor's degree completions are also strong indicators of student academic interest. Many students who pursue associate degrees will transfer to four-year institutions to complete a bachelor's degree, and popular disciplines at the bachelor's degree level are likely to be of interest to students at two-year institutions. Figure 2.5 displays the academic disciplines that experienced the largest completions increases in the 2011-12 academic year.[27]

The most popular bachelor's-level academic disciplines in the 2011-12 academic year, displayed in Figure 2.6, were business administration and management, psychology, and registered nursing/registered nurse.[28]

Figure 2.5: Fastest-Growing Bachelor's Degree Fields of Study, 2007-08 to 2011-12

Field of Study	2010-11	2011-12	% Growth (2010-11 to 2011-12)
Corrections and Criminal Justice, Other	1,148	1,814	58.0%
Behavioral Sciences	3,673	5,220	42.1%
Hospital and Health Care Facilities Administration/Management	2,366	3,310	39.9%
Multi-/Interdisciplinary Studies, General	1,595	2,157	35.2%
Communication, General	5,525	7,108	28.7%
Computer and Information Systems Security/Information Assurance	2,884	3,701	28.3%
Health/Health Care Administration/Management	5,645	7,033	24.6%
Education, Other	1,653	2,012	21.7%
Human Services, General	5,299	6,414	21.0%
Athletic Training/Trainer	2,844	3,416	20.1%

* List only includes degree programs with two years of data and at least 1,500 completions in the 2011-2012 academic year.
Source: NCES

[27] Ibid.
[28] Ibid.

Figure 2.6: National Bachelor's Degree Completions, 2011-12 Academic Year

Field of Study	Completions
Business Administration and Management, General	144,202
Psychology, General	108,555
Registered Nursing/Registered Nurse	92,388
Biology/Biological Sciences, General	66,247
English Language and Literature, General	46,488
Political Science and Government, General	43,572
Elementary Education and Teaching	39,749
History, General	37,807
Finance, General	34,921
Marketing/Marketing Management, General	33,910

Source: NCES

Arizona Degree Completions

Associate's Degree

The fastest-growing associate's degree fields of study in Arizona in the 2011-12 academic year were pharmacy technician/assistant, criminal justice/law enforcement administration, and automobile and automotive mechanics technology. Two additional health-related disciplines, health information and medical records technology as well as medical office assistant, have also experienced recent completions increases (see Figure 2.7).[29]

The most popular Arizona associate's degree disciplines, as measured by total completions, are office management and supervision, liberal arts and sciences, and behavioral sciences (see Figure 2.8).[30]

Figure 2.7: Fastest-Growing Associate's Degree Fields of Study, Arizona

Field of Study	2010-11	2011-12	% Growth
Pharmacy Technician/Assistant	292	790	170.5%
Criminal Justice/Law Enforcement Administration	100	268	168.0%
Automobile/Automotive Mechanics Technology/Technician	535	1,298	142.6%
Health Information/Medical Records Technology/Technician	1,034	2,398	131.9%
Hospitality Administration/Management, General	203	429	111.3%
Sport and Fitness Administration/Management	120	249	107.5%
Teacher Assistant/Aide	1,807	2,699	49.4%
Computer Systems Networking and Telecommunications	181	264	45.9%
Banking and Financial Support Services	229	313	36.7%
Medical Office Assistant/Specialist	2,958	3,991	34.9%

* List only includes degree programs with two years of data and at least 200 completions in 2011-2012 academic year.
Source: NCES

[29] Ibid.
[30] Ibid.

Figure 2.8: Arizona Associate's Degree Completions

Field of Study	Completions
Office Management and Supervision	9,826
Liberal Arts and Sciences/Liberal Studies	4,961
Behavioral Sciences	4,356
Medical Office Assistant/Specialist	3,991
Corrections and Criminal Justice, Other	3,865
Accounting Technology/Technician and Bookkeeping	2,773
General Studies	2,704
Teacher Assistant/Aide	2,699
Health Information/Medical Records Technology/Technician	2,398
Human Services, General	1,871

Source: NCES

Bachelor's Degree

Bachelor's degree completions in science technologies, secondary education and teaching, and business support service degrees increased substantially between the 2010-11 and 2011-12 academic years. Other high-growth academic fields include biochemistry, special education and teaching, and social work. No health care occupations appeared near the top of the list of degree programs with recent completions increases (see Figure 2.9).[31]

The most common bachelor's degree field of study in Arizona is registered nursing, followed by psychology, elementary education and teaching, and business administration and management (see Figure 2.10).[32]

Figure 2.9: Fastest-Growing Bachelor's Degree Fields of Study, Arizona

Field of Study	2010-11	2011-12	% Growth
Science Technologies/Technicians, Other	187	294	57.2%
Secondary Education and Teaching	223	340	52.5%
Business, Management, Marketing, and Related Support Services, Other	267	397	48.7%
Biochemistry	149	214	43.6%
Special Education and Teaching, General	446	640	43.5%
Social Work	164	219	33.5%
Hospitality Administration/Management, General	183	244	33.3%
Mechanical Engineering	233	294	26.2%
History, General	412	504	22.3%
Computer Science	172	210	22.1%

* List only includes degree programs with two years of data and at least 200 completions in 2011-2012 academic year.
Source: NCES

[31] Ibid.
[32] Ibid.

Figure 2.10: Arizona Bachelor's Degree Completions, 2011-12 Academic Year

Field of Study	Completions
Registered Nursing/Registered Nurse	2,781
Psychology, General	1,821
Elementary Education and Teaching	1,265
Business Administration and Management, General	1,188
Multi-/Interdisciplinary Studies, Other	891
Speech Communication and Rhetoric	873
Political Science and Government, General	792
Biology/Biological Sciences, General	759
Accounting	644
Special Education and Teaching, General	640

Source: NCES

SECTION III: DEMOGRAPHIC TRENDS

This section provides an overview of the demographic trends occurring at the national, state, and local level. The data in this section were taken from projections published by the U.S. Census Bureau and OEPS.

UNITED STATES

POPULATION

The U.S. Census Bureau projects that the U.S. population will grow over the next three decades, increasing from over 321.4 million to 380.0 million between 2015 and 2040 (see Figures 3.1a and 3.1b). **The national rate of population growth, however, is expected to decline steadily in the decades to come**. The Census Bureau estimates that the U.S. population will increase by 12,533,000 between 2015 and 2020, but it predicts that the U.S. population will only increase by 10,354,000 between 2035 and 2040 (see Figure 3.2a).[33]

In the near future, most of this population growth will result from net natural change. Net natural change measures the population change resulting from changes in the current population, ignoring the effects of migration to and from the country. Net natural change is calculated by subtracting the number of annual deaths from the number of annual births within the country. The Census Bureau projects, though, that by 2035, net migration to the United States will overtake net natural change as the primary source of the nation's population growth (see Figures 3.2a and 3.2b).[34]

Figure 3.1a: U.S. Total Population Projections, 2015-2040

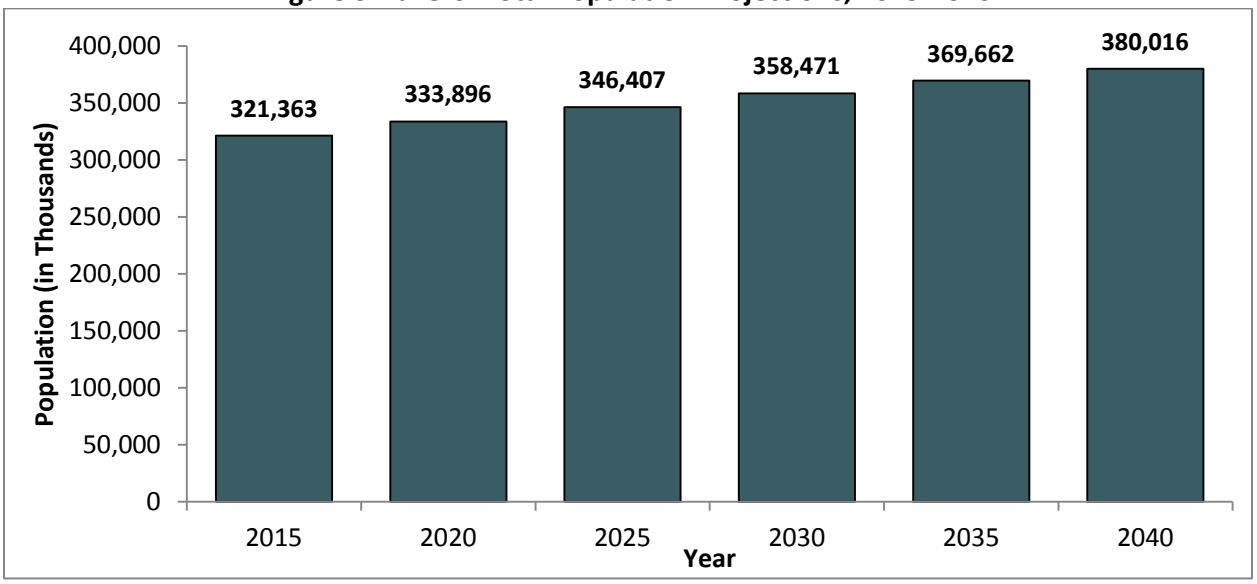
2015	2020	2025	2030	2035	2040	CAGR
321,363,000	333,896,000	346,407,000	358,471,000	369,662,000	380,016,000	0.67%

Source: U.S. Census Bureau

[33] "Table 1. Projections of the Population and Components of Change for the United States: 2015 to 2060." U.S. Census Bureau, December, 2012. Downloaded from http://www.census.gov/population/projections/data/national/2012/summarytables.html

[34] Ibid.

Figure 3.1b: U.S. Total Population Projections, 2015-2040



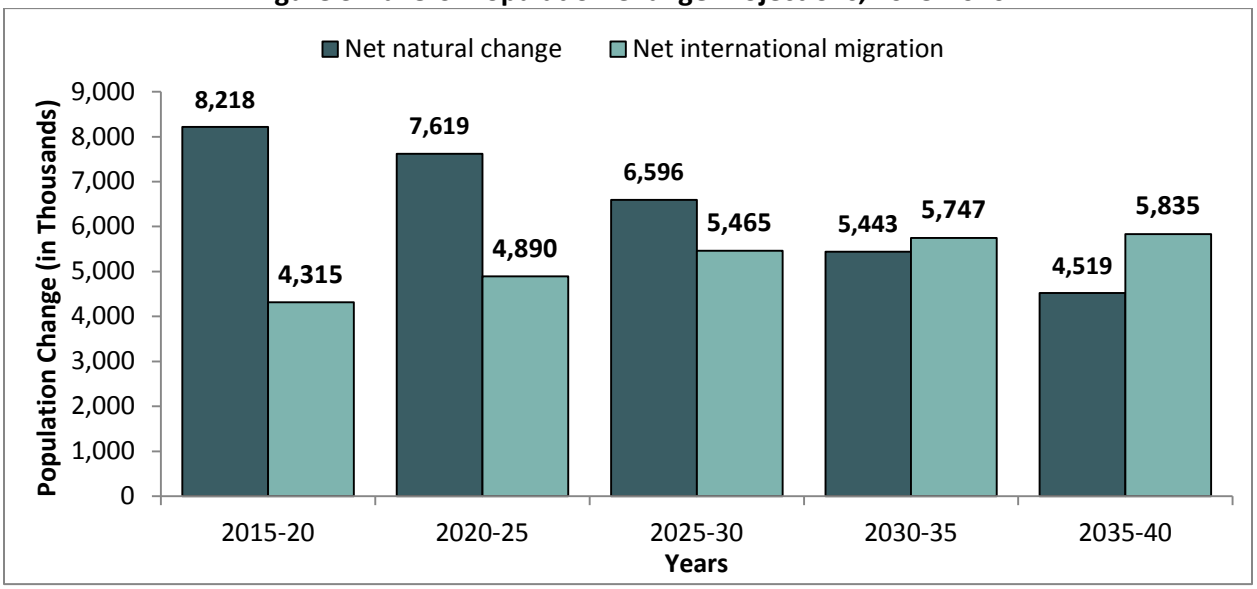
Source: U.S. Census Bureau

Figure 3.2a: U.S. Population Change Projections, 2015-2040

Metric	Years				
	2015-20	2020-25	2025-30	2030-35	2035-40
Net natural change	8,218,000	7,619,000	6,596,000	5,443,000	4,519,000
Net international migration	4,315,000	4,890,000	5,465,000	5,747,000	5,835,000
Total Net Change	**12,533,000**	**12,509,000**	**12,061,000**	**11,190,000**	**10,354,000**

Note: Natural change and international migration projections may not correspond exactly to overall population projections due to rounding.
Source: U.S. Census Bureau

Figure 3.2b: U.S. Population Change Projections, 2015-2040



Source: U.S. Census Bureau

SEX

The current U.S. population is split almost evenly between female and male citizens. Currently, approximately 50.7 percent of all U.S. citizens are female, and 49.3 percent are male. The Census Bureau predicts that over the next 25 years, male residents will account for a larger share of the population than at present, comprising 49.6 percent of all U.S. citizens by 2040.[35] The current U.S. male-to-female ratio of 0.97 is similar to the ratio in other North American and Western European countries, such as Canada (0.99), Mexico (0.96), The United Kingdom (0.99), and Germany (0.97).[36]

Figure 3.3: Projected Distribution of U.S. Population by Sex, 2015-2040

SEX	YEAR					
	2015	2020	2025	2030	2035	2040
Female	50.7%	50.6%	50.6%	50.5%	50.5%	50.4%
Male	49.3%	49.4%	49.4%	49.5%	49.5%	49.6%

Source: U.S. Census Bureau

RACE/ETHNICITY

The population of the United States is currently 77.4 percent white, 13.2 percent Black, 5.3 percent Asian, 1.3 percent American Indian or Alaska Native, and 0.2 percent Native Hawaiian or Pacific Islander. 2.6 percent of Americans identify as multiracial (see Figures 3.4a and 3.4b). In the next 25 years, the Census Bureau projects that the percentage of White citizens will decline, while the percentage of citizens from every other racial group will increase. The Asian and multiracial populations, in particular, are expected to account for a much larger percentage of the population by 2040.[37]

Figure 3.4a: Projected Distribution of U.S. Population by Race, 2015-2040

RACE	YEAR					
	2015	2020	2025	2030	2035	2040
White	77.4%	76.5%	75.6%	74.7%	73.7%	72.7%
Black	13.2%	13.4%	13.6%	13.7%	13.9%	14.1%
Asian	5.3%	5.7%	6.0%	6.4%	6.7%	7.1%
American Indian/Alaska Native	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%
Native Hawaiian/Pacific Islander	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
Two or more races	2.6%	2.9%	3.3%	3.6%	4.0%	4.4%

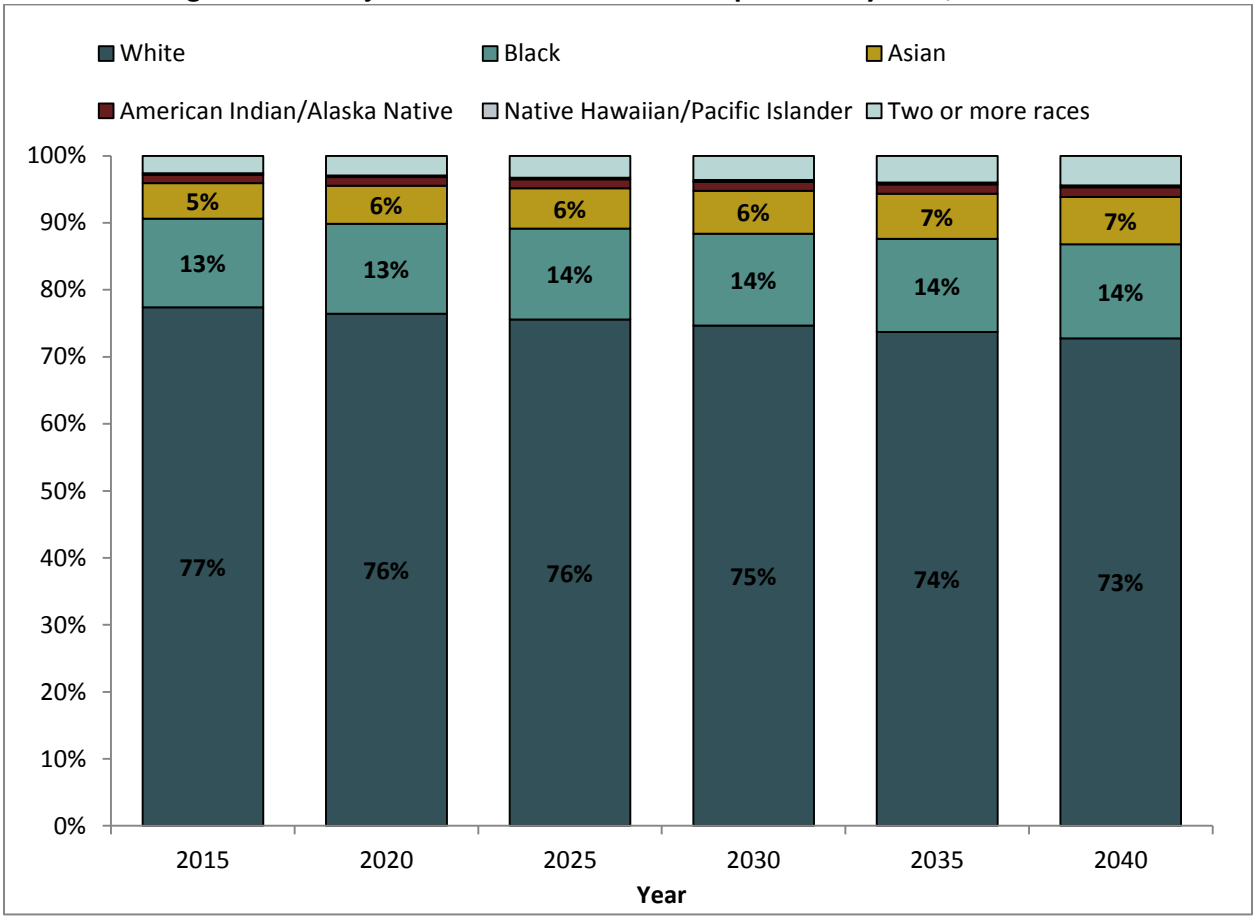
Source: U.S. Census Bureau

[35] "Table 2. Projections of the Population by Selected Age Groups and Sex for the United States: 2015 to 2060." U.S. Census Bureau, December, 2012. Downloaded from http://www.census.gov/population/projections/data/national/2012/summarytables.html

[36] "Field Listing:: Sex Ratio." CIA World Factbook. https://www.cia.gov/library/publications/the-world-factbook/fields/2018.html

[37] "Table 5. Percent Distribution of the Projected Population by Sex, Race, and Hispanic Origin for the United States: 2015 to 2060." U.S. Census Bureau, December, 2012. Downloaded from http://www.census.gov/population/projections/data/national/2012/summarytables.html

Figure 3.4b: Projected Distribution of U.S. Population by Race, 2015-2040



Source: U.S. Census Bureau

The population of citizens of Hispanic origin, 88 percent of which identifies as "White," is also expected to account for a much larger share of the U.S. population over the next 25 years.[38] The Census Bureau projects that the percentage of Hispanic citizens in the United States will increase from 17.8 percent in 2015 to 25.0 percent in 2040 (see Figures 3.5a and 3.5b). This increasing number of Hispanic citizens, most of which identify as White, suggests that the share of non-Hispanic Whites among the general population will decline substantially during the next decades.[39]

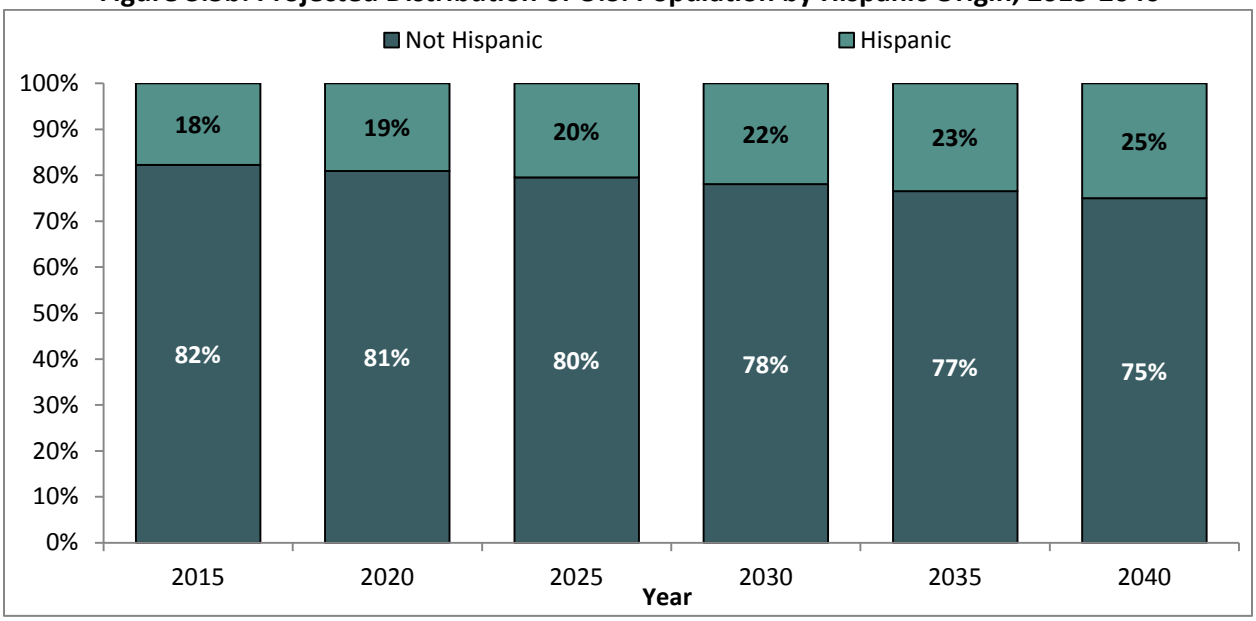
Figure 3.5a: Projected Distribution of U.S. Population by Hispanic Origin, 2015-2040

Origin	Year					
	2015	2020	2025	2030	2035	2040
Hispanic	17.8%	19.1%	20.5%	21.9%	23.4%	25.0%
Not Hispanic	82.2%	80.9%	79.5%	78.1%	76.6%	75.0%

Source: U.S. Census Bureau

[38] Ibid.
[39] "Table 6. Percent Distribution of the Projected Population by Race, and Hispanic Origin for the United States: 2015 to 2060." U.S. Census Bureau, December, 2012. Downloaded from http://www.census.gov/population/projections/data/national/2012/summarytables.html

Figure 3.5b: Projected Distribution of U.S. Population by Hispanic Origin, 2015-2040



Source: U.S. Census Bureau

AGE

The Census Bureau projects that the general population will age significantly over the next 25 years. Approximately 40.9 percent of U.S. citizens are currently over the age of 44. By 2040, the percentage of citizens over the age of 44 will increase to 44.3 percent (see Figures 3.6a and 3.6b). The number of citizens older than 64 in particular is expected to increase substantially. The Census Bureau predicts that the percentage of citizens older than 64 among the general population will increase from 14.8 percent to 21.0 percent between 2015 and 2014. This aging of the population has significant implications for future generations, as society, the economy, and the healthcare system all must adapt to meet the needs of an aging population.[40]

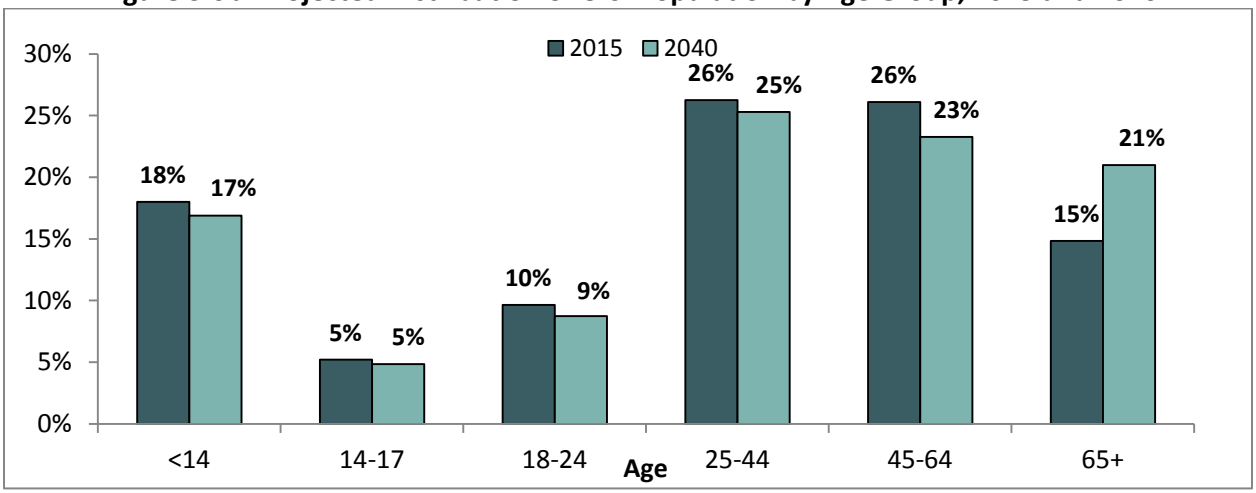
Figure 3.6a: Projected Distribution of U.S. Population by Age Group, 2015-2040

AGE	YEAR					
	2015	2020	2025	2030	2035	2040
<14	18.0%	17.8%	17.8%	17.5%	17.1%	16.9%
14-17	5.2%	5.0%	4.8%	5.0%	4.9%	4.9%
18-24	9.6%	9.0%	8.7%	8.5%	8.7%	8.7%
25-44	26.2%	26.5%	26.5%	26.2%	25.7%	25.3%
45-64	26.1%	24.9%	23.4%	22.6%	22.6%	23.3%
65+	14.8%	16.8%	18.8%	20.3%	20.9%	21.0%

Source: U.S. Census Bureau

[40] "Table 3. Percent Distribution of the Projected Population by Selected Age Groups and Sex for the United States: 2015 to 2060." U.S. Census Bureau, December, 2012. Downloaded from http://www.census.gov/population/projections/data/national/2012/summarytables.html

Figure 3.6b: Projected Distribution of U.S. Population by Age Group, 2015 and 2040

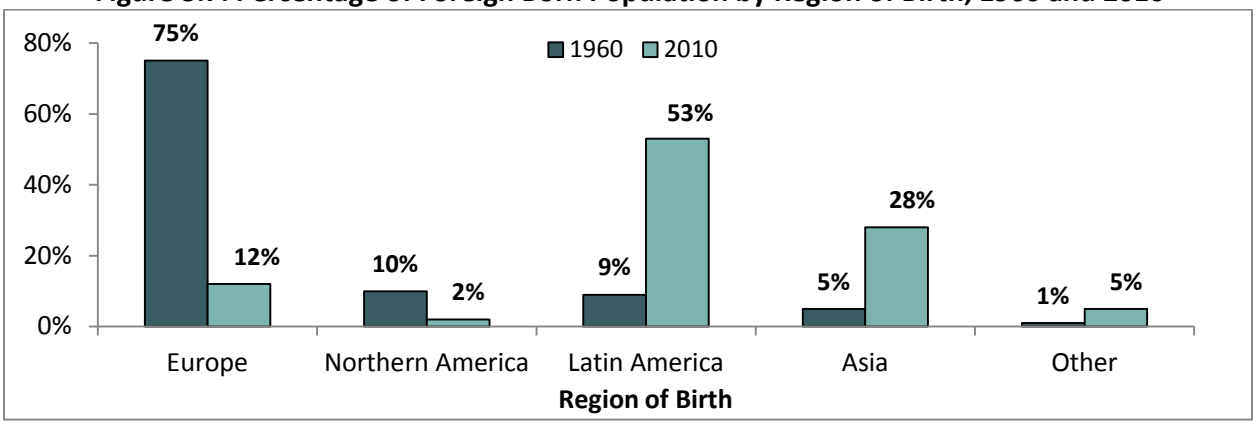


Source: U.S. Census Bureau

IMMIGRATION

The percentage of foreign-born residents among the U.S. population has increased steadily for more than 40 years. In 1970, 4.7 percent of the U.S. population was foreign-born. In 2010, 12.9 percent of the U.S. population was foreign-born. **These foreign-born residents are increasingly arriving from Latin American countries**. In 1960, 75 percent of all foreign-born residents were from Europe, and only 9 percent were from Latin America (see Figure 3.7). In contrast, 12 percent of the 2010 foreign-born population was from Europe, and 53 percent is from Latin America. The single largest source of foreign-born residents is Mexico, accounting for 11.7 million foreign-born residents in 2010. The proportion of Asian-born residents has also increased from 5 percent to 28 percent between 1960 and 2010, led by 2.2 million China-born residents, 1.8 India-born residents, and 1.8 Philippines-born residents.[41]

Figure 3.7: Percentage of Foreign Born Population by Region of Birth, 1960 and 2010



Source: U.S. Census Bureau

[41] "America's Foreign Born in the Last 50 Years." U.S. Census Bureau. http://www.census.gov/how/infographics/foreign_born.html

ARIZONA

POPULATION

OEPS projects that the population of Arizona will increase by 3.72 million between 2012 and 2040, growing at an average rate of 1.63 percent per year (see Figures 3.8a and 3.8b). **This projected annual growth rate is almost 2.5 times as rapid as the national growth rate**.[42] Most of this growth will be a result of net domestic and international migration. A team of researchers form Arizona State University (ASU), relying on OEPS data, project that the rate of net domestic migration (i.e., migration from other states), displayed in Figures 3.9a, 3.9b, and 3.9c, will increase until the middle of the 2020s, after which it will begin to decline. International net migration, on the other hand, is expected to increase steadily through 2050.[43]

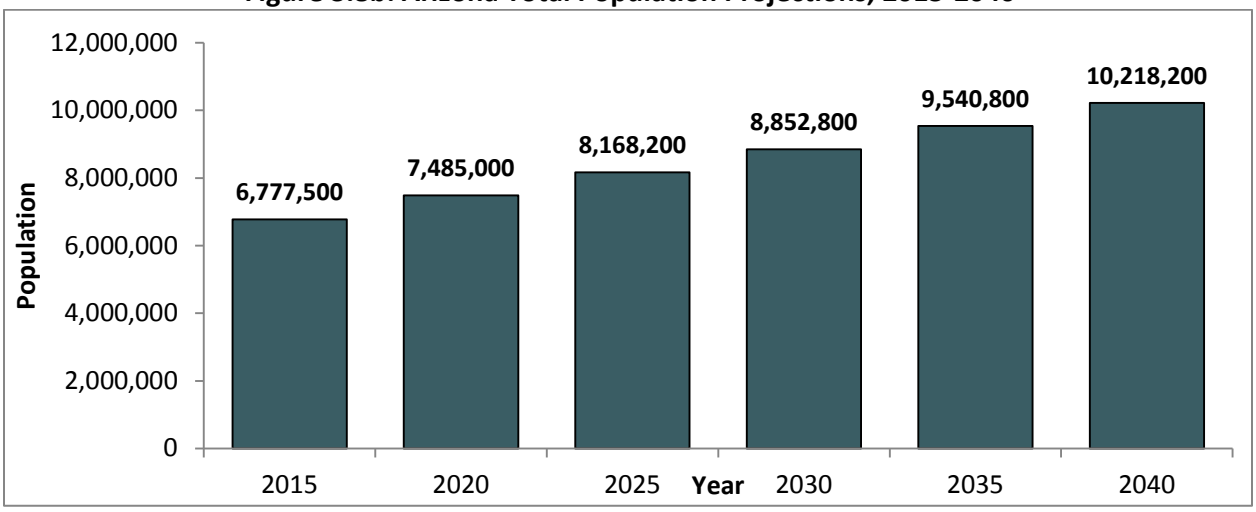
The ASU team also projects that the rate of net natural change will slowly decline over the next four decades. The Arizona birth rate declined steadily between 2007 and 2011 (due in part to poor economic conditions), but is expected to consistently rise in decades to come. However, the death rate is expected to increase more quickly than the birth rate, lowering the net natural change in years to come (see Figure 3.9a).[44]

Figure 3.8a: Arizona Total Population Projections, 2012-2040

2012	2015	2020	2025	2030	2035	2040	CAGR
6,498,600	6,777,500	7,485,000	8,168,200	8,852,800	9,540,800	10,218,200	1.63%

Source: OEPS

Figure 3.8b: Arizona Total Population Projections, 2015-2040



Source: OEPS

[42] "Arizona Population Projections: 2012 to 2050, Medium Series. Table 1: Total Population & Components of Population Change." Arizona Office of Employment and Population Statistics, December 7, 2012. Downloaded from http://www.workforce.az.gov/population-projections.aspx

[43] Rex, T. R. "New Population Projections for the United States, Arizona and Arizona Counties." Arizona State University, January, 2013. p.8. http://wpcarey.asu.edu/seid/ccpr/upload/Projections.pdf

[44] Ibid.

Figure 3.9a: Arizona Net Natural Population Change Projections, 2010-2050

Projection	Years			
	2010-20	2020-30	2030-40	2040-50
Births	946,000	1,148,000	1,280,000	1,424,000
Deaths	514,000	683,000	881,000	1,047,000
Net natural change	**432,000**	**465,000**	**399,000**	**377,000**

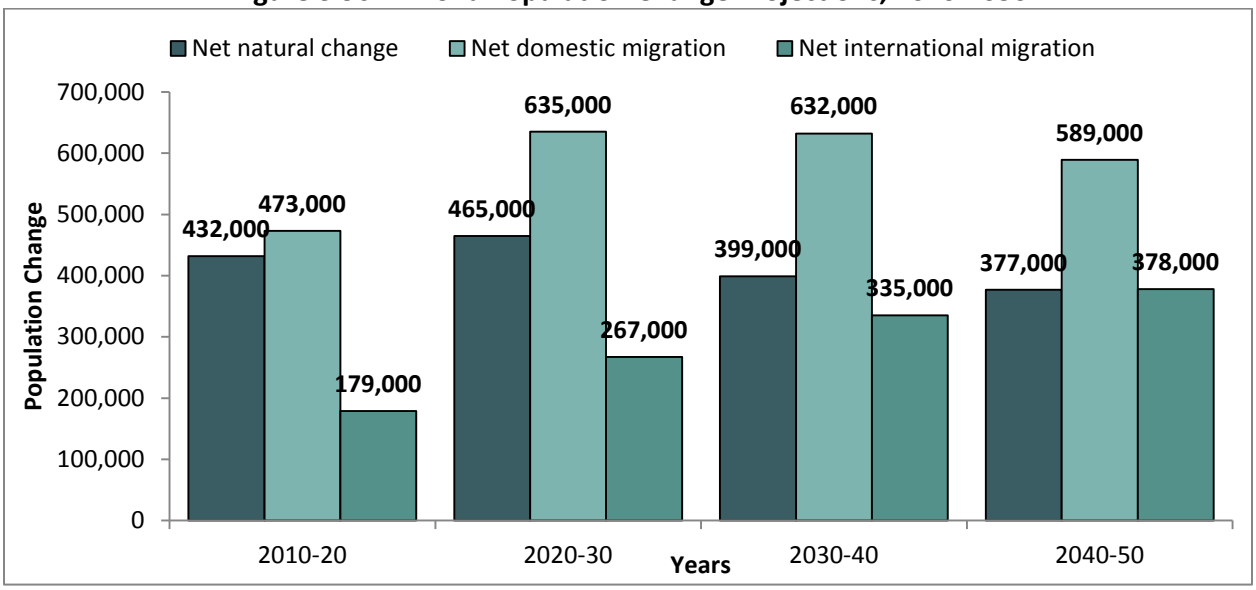
Source: Arizona State University

Figure 3.9b: Arizona Net Migration Population Change Projections, 2010-2050

Projection	Years			
	2010-20	2020-30	2030-40	2040-50
Net domestic migration	473,000	635,000	632,000	589,000
Net international migration	179,000	267,000	335,000	378,000
Total net migration	**651,000**	**902,000**	**967,000**	**967,000**

Source: Arizona State University

Figure 3.9c: Arizona Population Change Projections, 2010-2050



Source: Arizona State University

Sex

The Arizona population has a slightly higher male-to-female ratio than the United States as a whole, with men outnumbering women. OEPS projects that by 2040, however, female citizens will outnumber male citizens, and the male-to-female ratio will resemble the national ratio more closely.[45]

[45] "Arizona Population Projections: 2012 to 2050, Medium Series. Table 3: Population by Broad Age Group and Sex." Arizona Office of Employment and Population Statistics, December 7, 2012. Downloaded from http://www.workforce.az.gov/population-projections.aspx

Figure 3.10: Projected Distribution of Arizona Population by Sex, 2012-2040

Sex	Year						
	2012	2015	2020	2025	2030	2035	2040
Female	49.7%	49.8%	49.9%	49.9%	50.0%	50.1%	50.2%
Male	50.3%	50.2%	50.1%	50.1%	50.0%	49.9%	49.8%

Source: OEPS

Race/Ethnicity

According to OEPS data, Arizona has a smaller proportion of White citizens than the rest of the United States. OEPS projects that 71.8 percent of Arizona citizens will be White in 2015, while the Census Bureau estimates that the general U.S. Population will be 77.4 percent White. These statistics may be misleading, however, because the Arizona statistics contain an "Other" race category that is not provided in the U.S. Census statistics. 15.7 percent of Arizona citizens identified as an "Other" race in 2012. It is possible – but not certain – that a large number of Hispanic citizens who would be classified as "White" in the national census chose to identify themselves as "Other" in the Arizona surveys, decreasing the reported percentage of White citizens among the general population.[46]

OEPS projects that the percentage of White citizens among the population will decline from 72.5 percent in 2012 to 66.5 percent in 2040 (see Figures 3.11a and 3.11b). In contrast, OEPS predicts that the percentage of "Other" citizens will increase from 15.7 percent to 20.1 percent during the same time period. The Asian population in Arizona will also grow by 2040, increasing from 3.1 percent to 4.8 percent of the state's total population.[47]

Figure 3.11a: Projected Distribution of Arizona Population by Race, 2012-2040

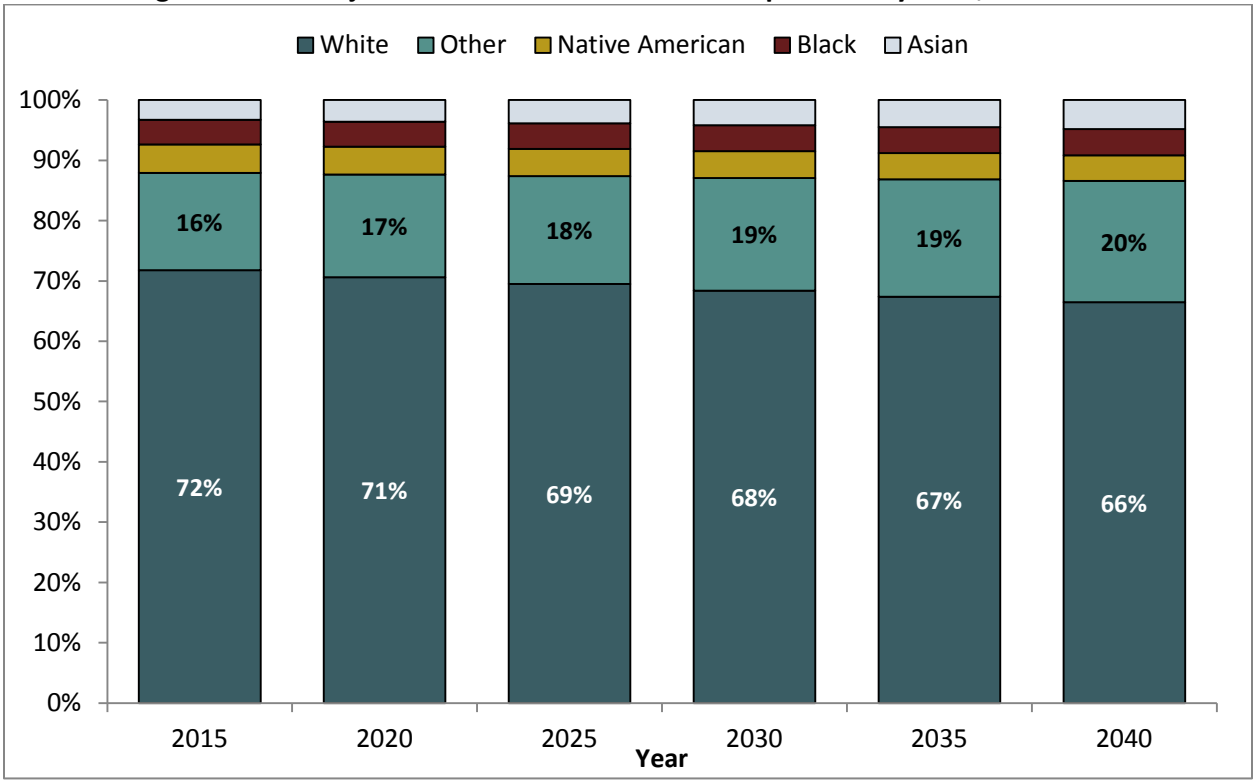
Race	Year						
	2012	2015	2020	2025	2030	2035	2040
White	72.5%	71.8%	70.6%	69.5%	68.4%	67.4%	66.5%
Black	4.1%	4.1%	4.2%	4.2%	4.3%	4.3%	4.3%
Asian	3.1%	3.3%	3.6%	3.9%	4.2%	4.5%	4.8%
Native American	4.7%	4.7%	4.6%	4.5%	4.4%	4.3%	4.3%
Other	15.7%	16.2%	17.0%	17.9%	18.7%	19.5%	20.1%

Source: OEPS

[46] "Arizona Population Projections: 2012 to 2050, Medium Series. Table 5: Population by Race/Hispanic Origin." Arizona Office of Employment and Population Statistics, December 7, 2012. Downloaded from http://www.workforce.az.gov/population-projections.aspx

[47] Ibid.

Figure 3.11b: Projected Distribution of Arizona Population by Race, 2015-2040



Source: OEPS

As in the nation as a whole, the percentage of Hispanic people among the general population in Arizona is expected to increase over the next three decades. Hispanic people currently account for 30.4 percent of the Arizona population – 12.6 percent more than the national average. OEPS projects that by 2040, the share of Hispanic people among the state's population will increase to 40.8 percent. Arizona state colleges and universities can expect to serve increasing numbers of Hispanic students for years to come.[48]

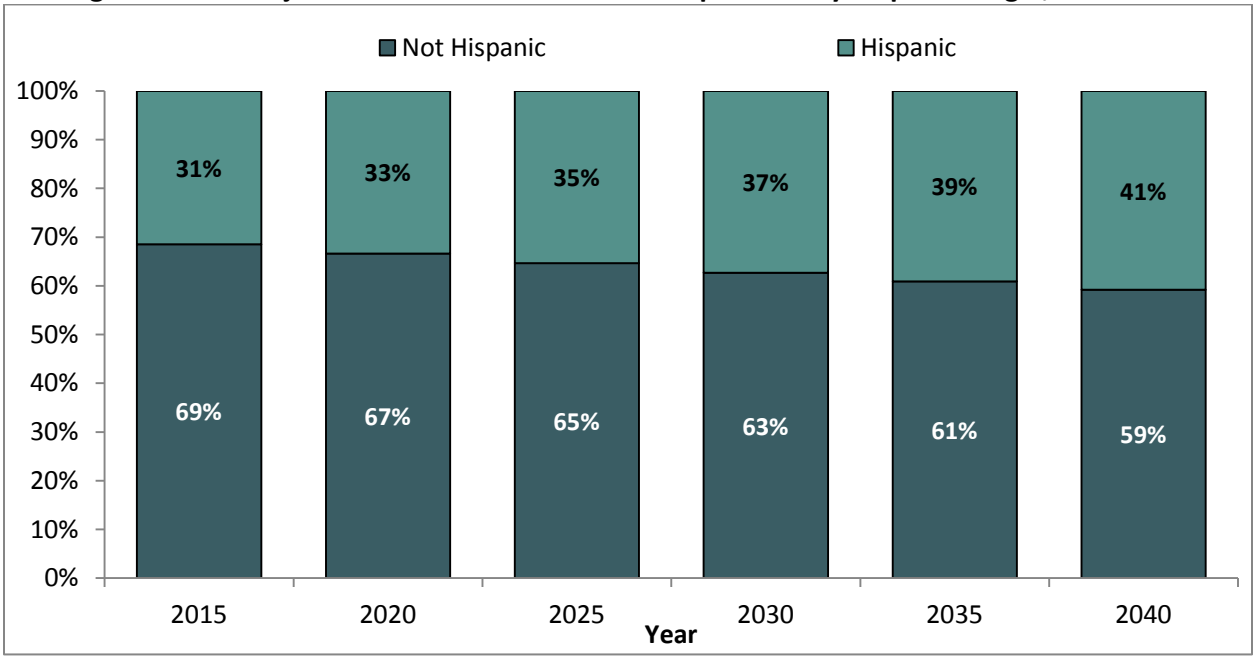
Figure 3.12a: Projected Distribution of Arizona Population by Hispanic Origin, 2012-2040

Origin	Year						
	2012	2015	2020	2025	2030	2035	2040
Hispanic	30.4%	31.5%	33.4%	35.4%	37.3%	39.1%	40.8%
Not Hispanic	69.6%	68.5%	66.6%	64.6%	62.7%	60.9%	59.2%

Source: OEPS

[48] Ibid.

Figure 3.12b: Projected Distribution of Arizona Population by Hispanic Origin, 2015-2040



Source: OEPS

AGE

As with the wider U.S. population, the overall Arizona population is projected to age over the next three decades. OEPS projects that the percentage of the Arizona population older than 44, displayed in Figures 3.13a and 3.13b, will increase from 39.9 percent to 42.3 percent between 2015 and 2040. OEPS projects that the percentage of Arizona citizens over the age of 64 will increase from 15.7 percent to 21.1 percent over the same time period.[49]

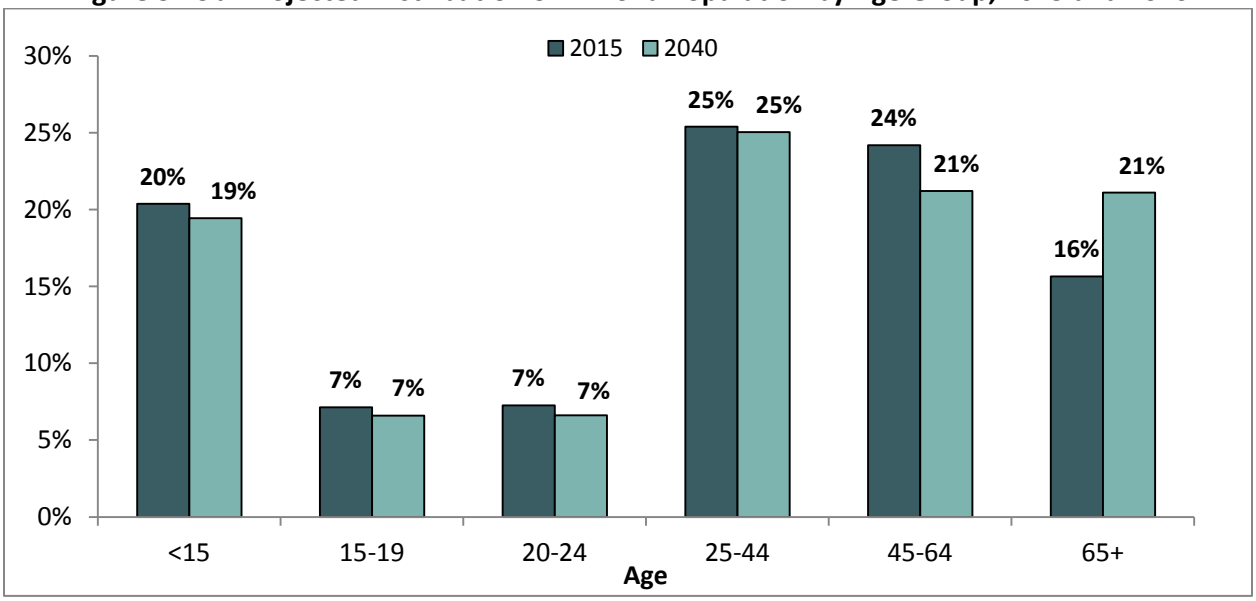
Figure 3.13a: Projected Distribution of Arizona Population by Age Group, 2012-2040

AGE	YEAR					
	2015	2020	2025	2030	2035	2040
<15	20.4%	19.7%	19.5%	19.8%	19.7%	19.5%
15-19	7.1%	7.0%	6.7%	6.2%	6.5%	6.6%
20-24	7.3%	7.2%	7.1%	6.8%	6.3%	6.6%
25-44	25.4%	25.0%	25.0%	25.1%	25.5%	25.0%
45-64	24.2%	23.7%	22.5%	21.6%	21.1%	21.2%
65+	15.7%	17.4%	19.2%	20.5%	20.9%	21.1%

Source: OEPS

[49] "Arizona Population Projections: 2012 to 2050, Medium Series. Table 2: Population by Age Group and Sex." Arizona Office of Employment and Population Statistics, December 7, 2012. Downloaded from http://www.workforce.az.gov/population-projections.aspx

Figure 3.13b: Projected Distribution of Arizona Population by Age Group, 2015 and 2040



Source: OEPS

IMMIGRATION

The U.S. Census Bureau estimated in 2012 that 875,927 Arizona residents, or 13.4 percent of the state's population, were foreign born. Residents from Latin America accounted for 65.1 percent of the foreign-born population, followed by residents of Asian origin (17.5 percent of foreign-born population).[50] The U.S. Census Bureau also estimates that 27.1 percent of Arizona residents speak a language other than English at home.[51]

YAVAPAI COUNTY

POPULATION

OEPS projects that the Yavapai County population will increase consistently over the next three decades, albeit at a somewhat slower pace (1.51 percent annually) than in the state as a whole.[52] Unlike other parts of Arizona and the nation as a whole, population growth in Yavapai County is expected to be entirely due to migration from other states and countries.

[50] "Selected Social Characteristics in the United States: 2012 American Community Survey S1-Year Estimates." U.S. Census Bureau, 2012. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_1YR_DP02&prodType=table

[51] "Selected Characteristics of the Native and Foreign-Born Populations: 2012 American Community Survey 1-Year Estimates." U.S. Census Bureau, 2012. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_1YR_S0501&prodType=table

[52] "Yavapai County Population Projections: 2012 to 2050, Medium Series." Arizona Office of Employment and Population Statistics. http://www.workforce.az.gov/population-projections.aspx

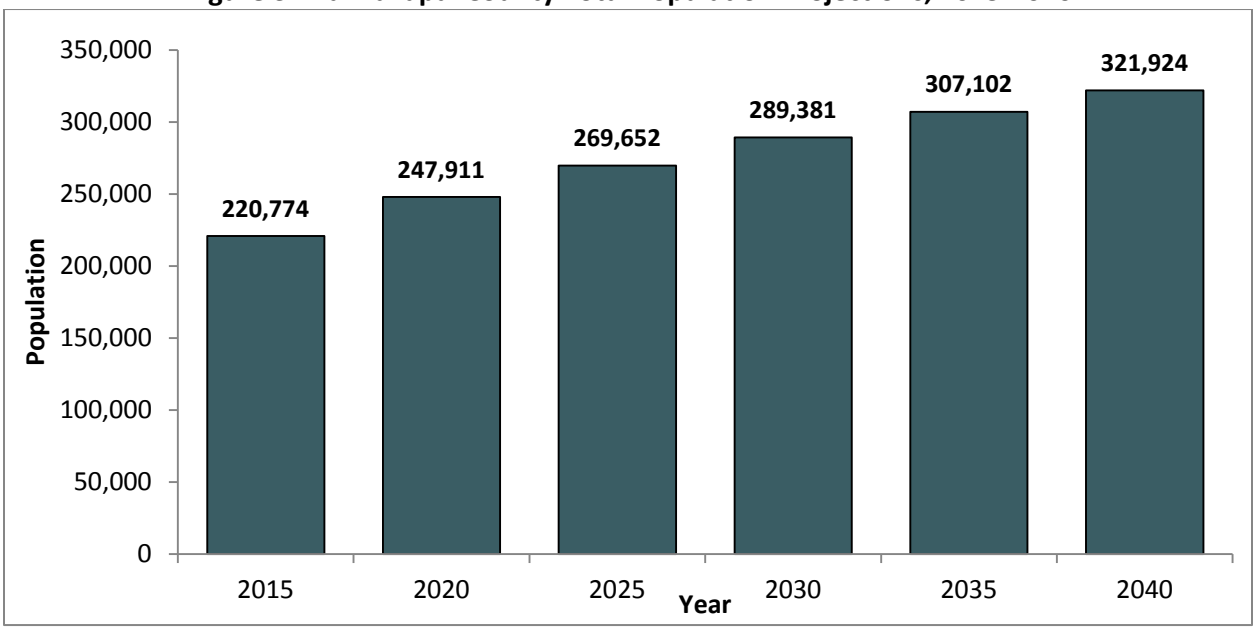
According to the ASU research team, the population in Yavapai County has grown substantially since the 1970s. The County population reached its peak in the 1990s, and all population growth since the 1980s has been due to net in-migration. The net migration is projected to grow steadily through the 2040s. Overall population growth, though, is hampered by a declining net natural change rate. The research team links the County's negative net natural change rate to the high median age in the county, one result of an influx of retirees to the Yavapai County. This net natural decrease is expected to become more dramatic during the next four decades, slowing the effects of population growth from net migration (see Figures 3.15a and 3.15b).[53]

Figure 3.14a: Yavapai County Total Population Projections, 2012-2040

2012	2015	2020	2025	2030	2035	2040	CAGR
211,582	220,774	247,911	269,652	289,381	307,102	321,924	1.51%

Source: OEPS

Figure 3.14a: Yavapai County Total Population Projections, 2015-2040



Source: OEPS

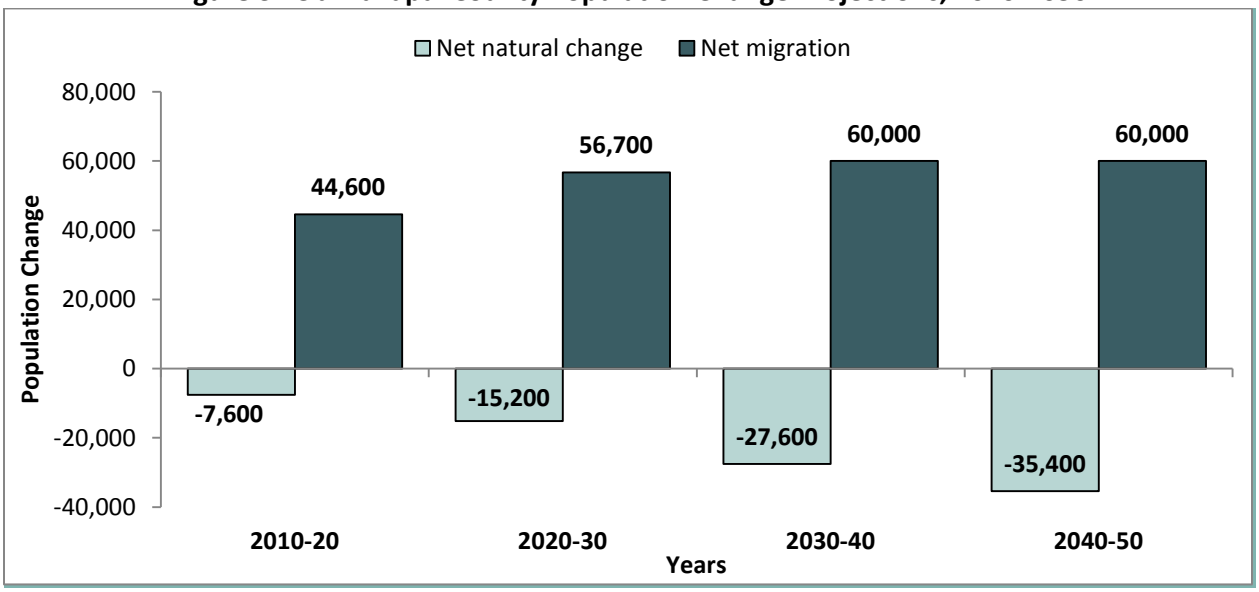
Figure 3.15a: Yavapai County Population Change Projections, 2010-2050

Projection	Years			
	2010-20	2020-30	2030-40	2040-50
Net natural change	-7,600	-15,200	-27,600	-35,400
Net migration	44,600	56,700	60,000	60,000
Total population change	37,000	41,500	32,500	24,600

Note: Net natural change and net migration may not sum to equal total population change because of rounding.
Source: Arizona State University

[53] Rex, Op. cit., p.17.

Figure 3.15b: Yavapai County Population Change Projections, 2010-2050



Source: Arizona State University

Sex

The male-to-female ratio in Yavapai is higher than in the U.S. as a whole or in other parts of Arizona, with men accounting for 51 percent of the population. Unlike other parts of the state, this ratio is expected to remain steady through the next three decades, ultimately rising to 51.1 percent in 2040.[54]

Figure 3.16: Projected Distribution of Yavapai County Population by Sex, 2012-2040

Sex	Year						
	2012	2015	2020	2025	2030	2035	2040
Female	49.0%	49.0%	49.0%	49.0%	49.0%	49.0%	48.9%
Male	51.0%	51.0%	51.0%	51.0%	51.0%	51.0%	51.1%

Source: OEPS

Race/Ethnicity

The White population in Yavapai County accounts for a much larger percentage of the total County population than in Arizona as a whole. In 2012, 89.0 percent of Yavapai County citizens identified as White; just 72.5 percent of Arizona citizens identified as White in the same year. OEPS projects that the same trend toward racial diversity that is expected throughout the nation will occur in Yavapai County. Despite this trend, Yavapai County's

[54] "Yavapai County Population Projections: 2012 to 2050, Medium Series. Table 3: Population by Broad Age Group and Sex." Arizona Office of Employment and Population Statistics. http://www.workforce.az.gov/population-projections.aspx

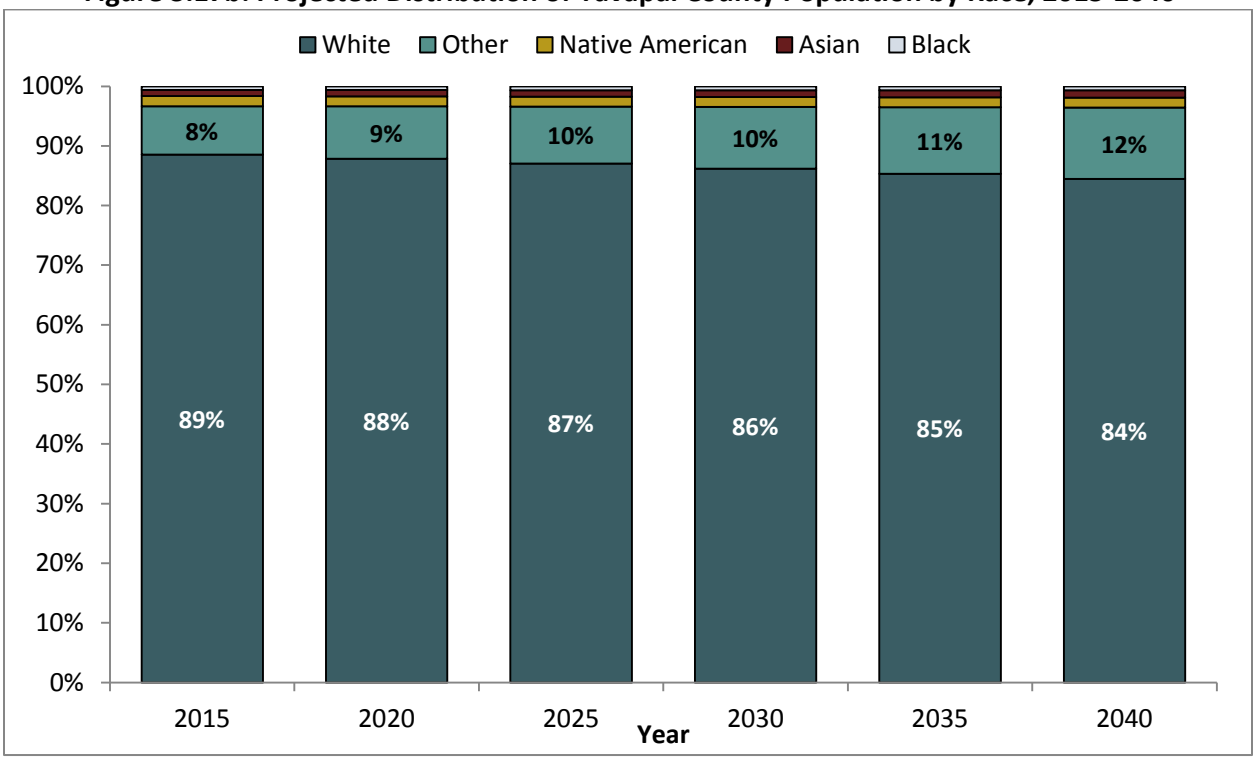
population will remain overwhelmingly White – the percentage of White people among the general population will only shrink to 84.4 percent by 2040 (see Figures 3.17a and 3.17b).[55]

Figure 3.17a: Projected Distribution of Yavapai County Population by Race, 2012-2040

Race	Year						
	2012	2015	2020	2025	2030	2035	2040
White	89.0%	88.6%	87.8%	87.0%	86.2%	85.3%	84.4%
Black	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%
Asian	1.0%	1.0%	1.1%	1.1%	1.1%	1.2%	1.2%
Native American	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Other	7.7%	8.1%	8.8%	9.6%	10.4%	11.2%	12.0%

Source: OEPS

Figure 3.17b: Projected Distribution of Yavapai County Population by Race, 2015-2040



Source: OEPS

OEPS also projects that the Yavapai County Hispanic will grow in years to come, increasing from 14.1 percent of the Yavapai County population in 2012 to 23.2 percent of the population in 2040. This percentage, however, will remain slightly below the national average (25.0 percent in 2040) and far below the Arizona state average (40.8 percent in 2040).[56]

[55] "Yavapai County Population Projections: 2012 to 2050, Medium Series. Table 5: Population by Race/Hispanic Origin." Arizona Office of Employment and Population Statistics. http://www.workforce.az.gov/population-projections.aspx

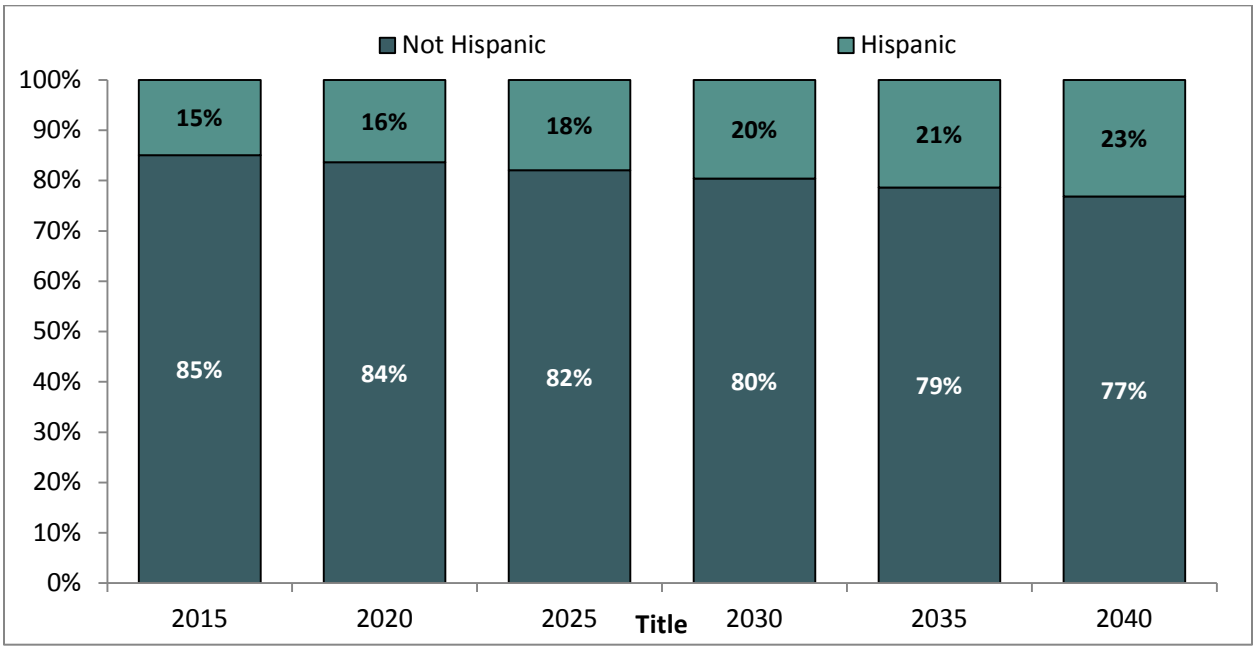
[56] Ibid.

Figure 3.18a: Projected Distribution of Yavapai County Population by Hispanic Origin, 2012-2040

Origin	Year						
	2012	2015	2020	2025	2030	2035	2040
Hispanic	14.1%	14.9%	16.4%	17.9%	19.6%	21.4%	23.2%
Not Hispanic	85.9%	85.1%	83.6%	82.1%	80.4%	78.6%	76.8%

Source: OEPS

Figure 3.18b: Projected Distribution of Yavapai County Population by Hispanic Origin, 2015-2040



Source: OEPS

Age

The population in Yavapai County is much older than the population in the state or nation as a whole. 55.7 percent of the population is older than 44, and 25.4 percent of the population is older than 64 (see Figure 3.19a and 3.19b). Each of these statistics is expected to increase over the next three decades, as well. OEPS projects that in 2040, 59.4 percent of the population will be older than 44, and 38.7 percent will be older than 64. These statistics suggest that the effects of an aging population occurring in other parts of the country will be magnified in Yavapai County, forcing the region's institutions to develop a healthcare system and other services that will provide support to an older population.[57]

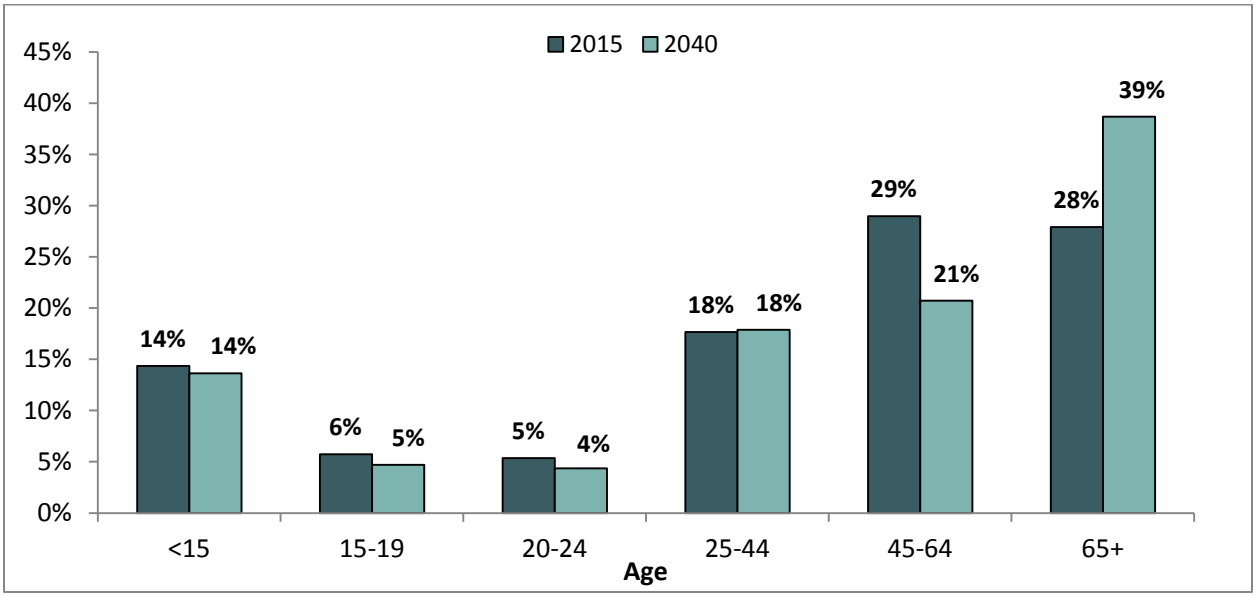
[57] "Yavapai County Population Projections: 2012 to 2050, Medium Series. Table 2: Population by Age Group and Sex." Arizona Office of Employment and Population Statistics. http://www.workforce.az.gov/population-projections.aspx

Figure 3.19a: Projected Distribution of Yavapai County Population by Age Group, 2012-2040

	2012	2015	2020	2025	2030	2035	2040
<15	15.2%	14.4%	13.3%	12.9%	13.5%	13.7%	13.6%
15-19	5.8%	5.7%	5.1%	4.8%	4.1%	4.5%	4.7%
20-24	5.2%	5.4%	5.3%	4.8%	4.6%	4.0%	4.4%
25-44	18.2%	17.7%	17.5%	17.9%	18.3%	18.6%	17.9%
45-64	30.3%	29.0%	26.6%	23.4%	20.9%	20.2%	20.7%
65+	25.4%	27.9%	32.2%	36.1%	38.6%	39.1%	38.7%

Source: OEPS

Figure 3.19b: Projected Distribution of Yavapai County Population by Age Group, 2015 and 2040



Source: OEPS

SECTION IV: POLITICAL TRENDS

This section summarizes the political trends affecting community colleges. We pay particular attention to state appropriations policies. Government funding has decreased for community colleges across the country. As public institutions, community colleges rely on state appropriations as a major source of revenue. The recent economic recession and related financial challenges have led the federal government and state governments to reduce budgets in all departments. Cuts in appropriations to community colleges, in particular, have been severe.

STATE FUNDING

For the past decade, state appropriations for higher education in general have declined in Arizona. Between 2003 and 2013, state funding for universities decreased by 5.3 percent. The cuts to community college appropriations were even more dramatic. **Over the same time period, appropriations for community colleges decreased from $132.6 million to $65.9 million – a drop of 50.3 percent**. In comparison, none of the other nine largest state budgets[58] decreased by more than 19 percent over the same period. While the Arizona state legislature predicts that some funding for community colleges will be restored – the legislature has budgeted for $71.9 in appropriations in 2014 and $78.4 million in 2015 – state funding for community colleges is not expected to return to previous levels.[59]

State aid to community colleges in Yavapai County declined more dramatically than in most other Arizona counties, as well. Only Maricopa County community colleges experienced a more dramatic drop in funding between 2011 and 2012 (see Figure 4.1).[60]

Figure 4.1: Changes in State Community College Appropriations, by County

COUNTY	FY2011 FUNDING (ACTUAL)	FY2012 FUNDING (ESTIMATED)	% CHANGE
Cochise	$7,488,700	$5,572,000	-25.6%
Coconino	$7,679,400	$1,836,000	-76.1%
Gila	$658,400	$428,100	-35.0%
Graham	$4,243,900	$2,260,000	-46.7%
Maricopa	$45,327,400	$6,891,200	-84.8%
Mohave	$3,682,900	$1,792,200	-51.3%
Navajo	$3,590,000	$1,730,100	-51.8%
Pima	$15,942,100	$7,146,400	-55.2%
Pinal	$4,935,100	$2,086,200	-57.7%
Yavapai	**$4,196,000**	**$899,200**	**-78.6%**
Yuma/La Paz	$4,812,900	$2,683,000	-44.3%

Source: Arizona state legislature

[58] The ten largest state budgets are: K-12 education, Arizona Health Care Cost Containment System, Corrections, Universities, Economic Security, Health Services, Judiciary, Community Colleges, School Facilities Board, and Public Safety.

[59] "FY 2013 Appropriations Report." Arizona State Legislature, June, 2012. pp.6-17. http://www.azleg.gov/jlbc/13AR/FY2013AppropRpt.pdf

[60] Ibid., p.44.

National Funding

The appropriations reductions in Arizona are more dramatic than elsewhere in the country, although appropriations declined by an average of 15 percent at community colleges across the country in 2010. According to American Institutes for Research (AIR), the severity of this decline in funding is unique to community colleges. AIR asserts that, compared to other types of higher education institutions, "community colleges suffered the deepest cuts in state and local appropriations per student in 2010." And as other types of higher education institutions introduced steep tuition increases to compensate for shrinking budgets, many community colleges strove to remain affordable for students by proposing below-average tuition increases. The result of increasing community college enrollment (driven by the economic recession), declining state funding, and small tuition increases was a dramatic reduction in the resources available on a per-student basis.

Higher education institutions of all types decreased spending – often for maintenance and operation – in the face of budget shortfalls, but community colleges executed spending cuts unparalleled by other types of higher education institutions. Between 2009 and 2010, community colleges decreased spending on instruction, research, student services, public service, academic support, institutional support, and operation and maintenance for an overall reduction in spending of 8.3 percent (see Figure 4.2). In contrast, public bachelor's-level institutions reduced overall spending by only 1.9 percent, and private bachelor's-level institutions reduced overall spending by only 2.3 percent.[61]

Figure 4.2: Changes in Higher Education Spending, 2009-2010, by Institution Type

Spending Category	Community College		Public Bachelor's		Private Bachelor's	
	2010 Spending per FTE student	Spending Change 2009-2010	2010 Spending per FTE student	Spending Change 2009-2010	2010 Spending per FTE student	Spending Change 2009-2010
Instruction	$4,805	-6.9%	$6,166	1.7%	$8,423	-2.0%
Research	$63	-13.8%	$455	18.7%	$456	3.2%
Student services	$1,184	-6.7%	$1,659	2.5%	$3,919	-1.9%
Public service	$323	-7.5%	$503	-2.1%	$615	-2.2%
Academic support	$919	-8.0%	$1,442	2.5%	$2,099	-2.1%
Institutional support	$1,684	-9.3%	$2,361	-2.1%	$5,024	-3.5%
Operation and maintenance	$1,042	-15.4%	$1,555	-20.5%	$2,095	-7.7%
Education and related	*$9,501*	*-8.3%*	*$12,740*	*-1.9%*	*$21,126*	*-2.3%*

Source: Delta Cost Project

[61] Desrocher, D.M., and R.J. Kirshstein. "College Spending in a Turbulent Decade: Findings From the Delta Cost Project." American Institutes for Research, 2012. pp.3-6. http://www.deltacostproject.org/pdfs/Delta-Cost-College-Spending-In-A-Turbulent-Decade.pdf

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