

# Human Capital Highlights - DRAFT

*Human Capital Aligned with Job Pools:* The goal is not only high levels of human capital (workforce), but also linked, mutually reinforcing, human capital and job pools. Pools of workers and jobs/firms attract each other. Quality and deployment are keys to productivity and efficiency.

## Strength

- Large Working Age Population
- Young Population Base
- Large Bilingual Population

- With a working age population of over 2.68 million, Phoenix MSA ranks 3<sup>rd</sup> among peers and 12<sup>th</sup> nationwide by size (Brookings, 2011).
- Maricopa County's median age is only 34.6 years old, 2.6 years younger than the national average (Census, 2010).
- 28% of the population speaks a second language besides English (ACS, 2009)

## Weakness

- Low Ratio with at Least a Bachelor's Degree
- Low Per Student Expenditures for Primary & Secondary Education

- Phoenix MSA only 27.3% of workforce has a bachelor's degree or higher, ranking 10<sup>th</sup> among peers and 68<sup>th</sup> nationally. (Brookings, 2011)
- Arizona Ranks 48<sup>th</sup> in current expenditures per pupil for primary and secondary education (NCES, 2009).

## Opportunity

- Growing Working-Age Population
- Newer Integrated Initiatives on Education Hold Promise (e.g. GPL P-20 Initiative)

- Phoenix MSA's working age population grew 34.5% between 2000 and 2009, ranking 2<sup>nd</sup> amongst peers and 6<sup>th</sup> nationally (Brookings, 2011).

## Threat

- Immigrants with Lower Skill Ratio
- Recent Education Spending Cuts

- Immigrants account for 15.4% of the total population in Phoenix MSA, but less than 1/6<sup>th</sup> of those are considered high skilled, ranking the metro 9<sup>th</sup> among peers and 88<sup>th</sup> nationally for its immigrant skills ratio (Brookings, 2011).
- State education budget cut 16% from FY2007-FY2011 due to budget shortfall (Office of Governor Janice K. Brewer, 2011).

**Peer Metros:** Albuquerque, NM; Dallas-Fort Worth-Arlington, TX; Denver-Aurora, CO; Las Vegas-Paradise, NV; Los Angeles-Long Beach-Santa Ana, CA; Portland-Vancouver-Beaverton, OR-WA; Riverside-San Bernardino-Ontario, CA; Salt Lake City, UT; San Diego-Carlsbad-San Marcos, CA; San Jose-Sunnyvale-Santa Clara, CA; Seattle-Tacoma-Bellevue, WA.

**Figure 1**

**Arizona Reality Check**

- Two-thirds of the jobs of the future will require a college degree or advanced training.
- Arizona ranks 48<sup>th</sup> in per student investment in K-12 education.
- Nearly 30% of Arizona high school students do not graduate from high school.
- Only 28% of Arizona 4<sup>th</sup> graders demonstrate proficiency in math.
- Only 27% of Arizona 8<sup>th</sup> graders demonstrate proficiency in reading.
- For every 100 9th graders in Arizona, only 17 will graduate from college on time.
- Arizona is ranked 43rd in the nation for high school graduates who go directly to college.
- 42% of community college freshmen are placed in below college level math courses.
- Arizona Kindergarten teachers report that 60% of entering students do not have basic skills such as knowing their ABC's and 123's.

Source: ExpectMoreArizona.com, 2011

**Figure 2**

Programs with 12 or more MCCD Credits (2009)	Degrees Awarded	% of Total
Business, Management, & Marketing	1,194	23%
Education	905	17%
Multi/Interdisciplinary Studies	463	9%
Social Sciences	448	9%
Biological & Biomedical Sciences	418	8%
Psychology	409	8%
Communication & Journalism	364	7%
Health Professions & Related Clinical Sciences	361	7%
Visual & Performing Arts	325	6%
Engineering	297	6%
<b>Total Degrees</b>	<b>5,184</b>	<b>100%</b>

Source: Maricopa Community College District, 2009;

**Figure 3**

ASU: Degrees Awarded by Subject (2010)	BA/BS	Graduate
Liberal Arts and Social Sciences	4,572	918
Business & Law	2,166	1,221
Science, Tech, Engineering and Math (STEM)	2,043	973
Health	453	186
Education	995	1,187
Other	1,730	85
<b>Total</b>	<b>11,959</b>	<b>4,570</b>

Source: Arizona Board of Regents, 2010

**Figure 4**

**Arizona - Fastest-Growing Occupations 2008-2018 (Bachelor's Degree or Higher)**

Occupation	Employment 2008	Employment Growth 2008-2018	Percent Change
Postsecondary teachers	32,770	4,170	13%
Accountants and auditors	28,320	3,930	14%
Elementary school teachers, except special educator	22,840	2,740	12%
Physicians and surgeons	10,980	1,800	16%
Training and development specialists	6,300	1,120	18%
Computer software engineers, applications	7,240	1,100	15%
Sales managers	8,870	1,070	12%
Pharmacists	4,910	1,030	21%
Computer software engineers, systems software	6,940	1,000	14%
Medical and health services managers	6,670	960	15%
Employment, recruitment, and placement specialists	4,750	840	18%
Instructional coordinators	4,590	810	18%
Middle school teachers	6,700	770	12%
Market research analysts	4,610	750	16%
Personal financial advisors	3,440	700	20%
Physical therapists	2,940	680	23%
Medical and clinical laboratory technologists	3,990	680	17%
Educational, vocational, and school counselors	5,900	680	11%
Financial analysts	4,840	620	13%
Industrial engineers	4,230	580	14%

Source: BLS Employment Projections, 2011

**Figure 5**

**Greater Phoenix High-Potential Occupations (High Location Quotient, Above Avg. Wage, Low Metro-US Wage Ratio)**

Occupation Title	Location Quotient	Metro Mean Wage	US Mean Wage	% Wage Difference Metro to US
Real Estate Brokers	2.332	\$ 44,020	\$ 76,060	58%
Personal Financial Advisors	1.140	\$ 57,600	\$ 91,220	63%
Insurance Underwriters	1.370	\$ 50,040	\$ 65,220	77%
Financial Analysts	1.190	\$ 66,320	\$ 86,040	77%
Hydrologists	1.804	\$ 62,370	\$ 79,280	79%
Actuaries	1.242	\$ 78,160	\$ 98,620	79%
Financial Services Sales Agents	1.358	\$ 75,720	\$ 95,130	80%
Secondary School Teachers	1.746	\$ 44,620	\$ 55,990	80%
Insurance Sales Agents	1.203	\$ 50,040	\$ 62,520	80%
Aerospace Engineers	1.422	\$ 79,610	\$ 99,000	80%
Admin. Services Managers	1.261	\$ 68,370	\$ 84,390	81%
Trans., Store, & Dist. Managers	1.225	\$ 70,360	\$ 86,630	81%
PR & Fundraising Managers	1.029	\$ 85,090	\$ 104,390	82%
Training & Dev. Managers	1.309	\$ 78,710	\$ 95,800	82%
Educational & Voc. Counselors	1.003	\$ 46,190	\$ 55,970	83%
Instructional Coordinators	1.621	\$ 51,880	\$ 61,270	85%
Operations Research Analysts	1.128	\$ 65,460	\$ 76,980	85%
Cartographers & Photogrammetrists	1.503	\$ 51,900	\$ 60,970	85%
Human Resources Managers	1.098	\$ 93,270	\$ 108,600	86%
Accountants and Auditors	1.164	\$ 59,380	\$ 68,960	86%

Source: BLS Occupational Employment Statistics, 2011