Growth, Innovation, and the Future of the Arizona Economy

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Arizona Gross Domestic Product, 2005-2016

Data: Bureau of Economic Analysis, Regional Economic Accounts. 2009 dollars
Arizona Economic Output by Metro and Sector, 2015

Data source: Bureau of Economic Analysis, Regional Economic Accounts
Per Capita GDP Relative to US Average, 1997-2015

Data: Bureau of Economic Analysis, Regional Economic Accounts
Per Capita Personal Income Relative to US Average, 1970-2015

Data source: Bureau of Economic Analysis, Regional Economic Accounts
Per Capita Personal Income Relative to US Average, 1970-2015

Data source: Bureau of Economic Analysis, Regional Economic Accounts
Bachelor’s Degree Attainment Rate of Population 25 Years and Over, 2005-2015

Data source: US Census Bureau, Table S1501
Bachelor’s Degree Attainment and GDP per Capita Relative to National Average, 2005-2015

Data source: Bureau of Economic Analysis, US Census Bureau
Per Capita State Support for Higher Education, FY16

Data: Grapevine Center, Illinois State University
Business and Higher Education Research Expenditures by State, 2013

Source: National Science Foundation, Science and Engineering State Profiles
Patents Granted by Metro, 2015

- San Jose: 17,644
- Los Angeles: 15,092
- New York: 13,538
- San Francisco: 12,316
- Boston: 8,947
- Seattle: 8,318
- Chicago: 8,240
- Minneapolis: 8,034
- Detroit: 6,501
- Houston: 6,303
- Dallas: 5,189
- Austin: 4,658
- Philadelphia: 4,545
- Washington, D.C.: 4,000
- Portland: 3,591
- Atlanta: 3,346
- Phoenix: 3,297
- Raleigh: 1,764

Raleigh is the 18th highest in patents granted by metro in 2015.
Percentage Change in Patents Granted to Western Metros Relative to 2000

-50%
0%
50%
100%
150%
200%
250%
300%
350%


Seattle
San Diego
Provo
San Francisco
San Jose
Las Vegas
Tucson
Portland
Denver
Salt Lake
Los Angeles
Phoenix
Riverside
Patents Issued to Top 20 Phoenix Metro Assignees, 2000-2015

Data: USPTO
Patents Issued to Top 20 Seattle Metro Assignees, 2000-2015

Data: USPTO
Patents Issued to Top 20 Minneapolis Metro Assignees, 2000-2015

Data: USPTO
Annual Change in Number of Arizona Firms, 2000-2014

Value of Venture Capital Deals by State, 2009-2015

Data: Thomson Reuters, National Science Foundation
Arizona Labor Market Churn, 1977-2014

Arizona Employment by Occupation, Minimum Education Required and Probability of Job Loss Due to Automation

No Formal Education

High School

Associate’s or Credential

Bachelor’s

Size reflects May 2015 employment in Arizona
Red color reflects high chance of job loss due to automation

Data: BLS and Frey and Osborne (2013)
## The Way Forward for Arizona

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<thead>
<tr>
<th></th>
<th>0-5 Years</th>
<th>5-15 Years</th>
<th>15-25 Years</th>
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<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Change mindset</td>
<td>Emerge as leading American economy</td>
<td>Emerge as leading global knowledge-driven economy</td>
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<tr>
<td><strong>Strategies</strong></td>
<td>Launch world-class engineering school</td>
<td>Deliver MIT/Stanford-level innovation ecosystem</td>
<td>Highest educated workforce in North America</td>
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<td><strong>Tactics</strong></td>
<td>Build investment strategy</td>
<td>TBD</td>
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<td>Change brand</td>
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<td>Unify business community</td>
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Broad Public Support for Human Capital-Based Economic Development

88% Favor elevating Arizona State University’s engineering school to be one of the top five programs in the country

68% Willing to pay one-quarter of one cent more on non-food products for a ten-year temporary sales tax to help fund new economic initiatives for the greater Phoenix region

Data: Public Opinion Strategies, Oct. 2014. MOE: 4.4%