

CHAPTER 5

**THE IMPORTANCE OF MAINTAINING A COMPETITIVE
BUSINESS CLIMATE**

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Policy-makers may disagree on the role of government, taxing policies or spending priorities, but well-crafted public policy can improve the standard of living for Arizona residents and help further economic growth. Although a complex array of factors will affect the state's future, public policy is especially important in attracting the quality investments and job opportunities needed to propel Arizona forward as a major player in the emerging knowledge economy of the 21st century. All states are competing in the quest for higher living standards in the dynamic, technological, knowledge-driven, and global economy of the 21st century.

Private sector investment decisions will determine the winners and losers in this 21st century competition, and the relative attractiveness of Arizona's overall business climate will be a critical factor in determining the state's future. Arizona's government policies can have an important influence on business climate, either fostering or retarding the state's development as a major player in this new economy. The stakes are large, and Arizona must recognize that its competitors are not found just in the West, not just in the Sun Belt, and not just in North America. Clearly, capital and workers are more mobile than ever before, so the competition for quality capital and workers is fierce. Thus, capital location decisions, which importantly depend on the availability of quality workers, largely will determine the leading states and cities of the 21st century (Kotkin and DeVol 2002):

“In reality, place matters more now than ever before. If people, companies or industries can truly live anywhere, or at least choose from a multiplicity of geographic locations, the question of where to locate becomes increasingly contingent on the peculiar attributes of any given location. Geographically, where information industries and the skilled professionals who operate them choose to locate will increasingly shape the geographic importance of future cities and communities.”

Policy-makers have an important role to play in the competition. Essential ingredients for success include the competitive tax structure and the strategic investments in infrastructure needed for a competitive

business environment. Without such an environment, Arizona may not become one of the leading economies in the 21st century. With a competitive business environment, together with its natural advantages, Arizona can be a major force in the new economy of the 21st century.

ECONOMIC GROWTH EXPLAINED

Economic growth is fundamental to maintaining high and improving standards of living. Economists traditionally measure standards of living as **Real Gross Domestic Product (GDP) per person**. For comparisons between Arizona and other states, **Gross State Product per person** is a comparable measure for states.

High productivity growth, rather than just population or job growth, is paramount to increasing per capita output and thus in attaining improved living standards. In fact, population and job growth, absent productivity growth, adds nothing to or may even decrease living standards. This is an important for Arizona, which historically records rapid population and job growth rates. Productivity growth and growth of quality jobs — not just population and job growth — are the key determinants of living standards maintained around the world and across the United States.

Table 5.1 documents living standards (measured by GDP per person) for 13 countries over a period of approximately 100 years. Minor differences in average annual growth rates can have a huge, cumulative impact on growth that occurs across countries through time. These growth differences translate into key differences in standards of living. Table 5.2 focuses exclusively on examples from Asia and North America respectively. According to the *CIA World Fact Book 2002*, Japan is “the second most technologically powerful economy in the world” whereas in the same region, “about a quarter of India’s population is too poor to be able to afford an adequate diet.” Turning to the two neighbors of the United States, Canada boasts “an affluent, high-tech industrial society,” whereas Mexico struggles with “a mixture of modern and outmoded industry and agriculture.”

TABLE 5.1
CROSS-COUNTRY REAL GDP PER CAPITA COMPARISONS

<i>Country</i>	<i>Period</i>	<i>Real GDP Per Person at Beginning of Period</i>	<i>Real GDP Per Person at End of Period</i>	<i>GDP Growth Rate</i>	<i>Population Growth Rate</i>
Japan	1890-1990	\$842	\$16,144	3.00%	1.22%
Brazil	1900-1987	436	3,417	2.39	2.40
Canada	1870-1990	1,330	17,070	2.15	1.65
West Germany	1870-1990	1,223	14,288	2.07	0.56
United States	1870-1990	2,244	18,258	1.76	1.54
China	1900-1987	401	1,748	1.71	1.82
Mexico	1900-1987	649	2,667	1.64	2.07
United Kingdom	1870-1990	2,693	13,589	1.36	0.66
Argentina	1900-1987	1,284	3,302	1.09	2.25
Indonesia	1900-1987	499	1,200	1.01	1.62
Pakistan	1900-1987	413	885	0.88	1.91
India	1900-1987	378	662	0.65	1.23
Bangladesh	1900-1987	349	375	0.08	1.44

Source: Robert J. Barro and Xavier Sala-i-Martin, *Economic Growth* (New York: McGraw-Hill, 1995)

TABLE 5.2
**CROSS COUNTRY COMPARISON OF ECONOMIC CONDITIONS
AND QUALITY OF LIFE**

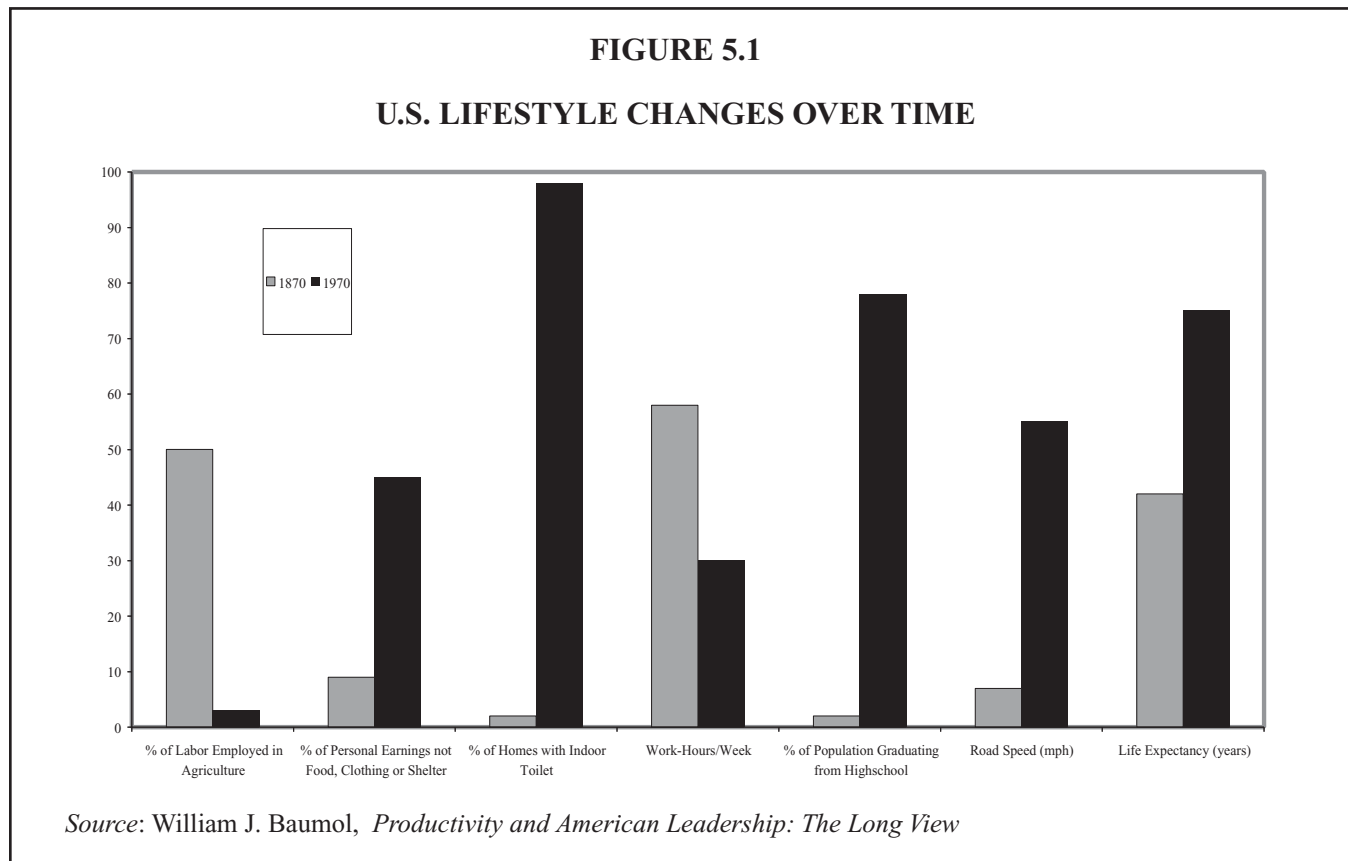
	<i>Japan</i>	<i>India</i>	<i>Canada</i>	<i>Mexico</i>
Population (in millions)	126.9	1,045.8	31.9	103.4
Growth rate*	0.15%	1.51%	0.96%	1.47%
Infant Mortality Rate (deaths per 1000 live births)	3.84	61.47	4.95	24.52
Life Expectancy	80.91	63.23	79.69	72.03
Literacy Rate	99%	52%	97%	89.6%
Labor Force (in millions)	67.7	406	16.4	39.8
% of Labor Force in:				
Services	70%	23%	74%	56%
Industry	25%	17%	20%	24%
Agriculture	5%	60%	3%	20%
Televisions (per 100 people)	68	6	67	25
Internet Users (as a % of total population)	44%	1%	53%	3%

* Population Growth is an estimate for the year 2002.

Source: CIA World Factbook 2002

Tables 5.1 and 5.2 reveal that those countries with the attractive health statistics, and more modern conveniences are those with the highest GDP per capita. Interestingly, population growth in Mexico exceeded that of Canada over the period and Mexico currently reports a 3 percent urban unemployment rate while Canada reported a 7.6 percent unemployment rate in this time frame so the number of persons employed and job/population growth rates are not the key factors in determining high standards of living. What matters is the quality of employment and growth in quality jobs.

The impact of rapidly improving productivity also is illustrated in Figure 5.1, which depicts the dramatic lifestyle changes the United States has enjoyed over the past century, commensurate with its high Real Per Capita GDP growth. In other words, Real Per Capita GDP growth is important because it changes the way people live.



Countries or states that have not experienced growth in GDP or GSP per capita remain static societies with standards of living that do not improve for long stretches of time. Indeed, many countries today have GDP per capita figures that are at or below levels attained in the United States a century ago.

Cross-country comparisons accentuate the difference that real economic growth can have on standards of living. The degree of difference in growth across states in the United States are not as distinct,

because all states share common systems of property rights and labor and capital are quite mobile throughout the nation. But, those states that exhibit high rates of real growth relative to the size of their populations will have higher real incomes per capita and per household. There are clear positive payoffs to those economies that maintain business climates conducive to growth in per capita income levels since that normally translates into higher standards of living.

The Keys to Growth

So what determines the pace of growth and, more importantly, what explains differential growth rates across countries, regions, and states? Conventional growth theory shows that the overall output in any economy (**GDP** for countries) depends on three basic factors — **Capital Stock, Labor Input, and Total Factor Productivity** (which reflects the technology or economic efficiency with which capital and labor work within an economy).¹

The average annual growth rate for real GDP throughout most of the 20th century totaled 2.8 percent, with 0.6 percent emanating from capital growth, 0.9 percent from labor, and 1.3 percent from total factor productivity (Denison 1985). Since actual population growth averaged 1.4 percent per annum over the period, real GDP per capita averaged about 1.4 percent per year as well (2.8–1.4 percent). To underscore the importance of capital and productivity in the determination of real GDP per capita, assume that neither capital nor total factor productivity had grown over the period. From Denison's estimates, average annual growth in GDP would have only occurred due to labor's contribution of 0.9 percent. Average annual growth in output per person would have been -0.5 percent (0.9–1.4 percent). Without growth in capital and total factor productivity, growth in labor alone can actually be associated with lower standards of living. Negative or stagnate GDP per capita growth characterizes those regions or economies where labor force growth has simply outpaced the expansion of capital investment or the pace of productivity enhancing technological innovation.

Factors That Influence Capital Investment Decisions

Capital accumulation is one of the essential ingredients for generating growth that will improve living standards. The main source of capital investments in our economy is the private sector, although the government also has some key investment responsibilities and plays a key role in providing a business

climate conducive to private capital formation.

There is wide agreement among economists and economic development experts about the factors that matter for business location and expansion plans, especially in terms of attracting those quality jobs that are required for improving living standards.² These factors vary depending on the specific type of business, but the important factors that lead a business to locate in Arizona rather than in another state or country include the following:

- Proximity to markets
- The cost of doing business (including the cost of development, land etc.)
- Quality of overall educational system
- Access to quality universities and research partnerships
- Local infrastructure and overall attractiveness for capital development (stable climate to insure healthy and stable returns on investment)
- Quality transportation system
- Tax structure and costs (including economic incentives and tax relief)
- Labor issues (including skill/quality level, training available, cost and availability)
- Commercial infrastructure and logistics
- Political and cultural environment, cohesiveness of community leadership
- Quality of life, including climate

In sum, an attractive business climate depends on a host of factors, with tax structure being one of these factors. Indeed, tax structure receives considerable attention in this arena because it is directly and immediately within the control of policy-makers. But ultimately, businesses seek to maximize their return on investment at minimal risk. Potential businesses assess a potential locale's competitiveness on these criteria by gathering information from businesses (suppliers or direct customers) already in the area. In this light, quality capital attracts quality capital, so investments by state and local governments on the above factors can pay off exponentially. To succeed in the 21st century, a state must leverage its competitive advantage. Just as businesses compete for market shares, states are in a competition for their "market share" of quality capital and jobs. States are in a race to reach what might be referred to as the "tipping point" for high quality jobs and capital investment. Once a critical mass of such capital and employment is reached, the state reaches such a tipping point — meaning that a critical mass is key in attracting an

accelerating rate of investment and opportunities. For example, San Francisco leveraged its proximity to universities, Silicon Valley, and overall desirability of its climate and quality of life to become a textbook example of a booming economy in the Information Age. During the 1980s, San Francisco's infrastructure already in place (warehouse and manufacturing buildings) attracted new innovative firms and, in some areas, former slums became prosperous homes to Information Age workers. In fact, rents in some parts of the metro area doubled from 1996 to 1999, chasing away the last remnants of the old industrial, blue-collar San Francisco and welcoming in high-tech firms and high quality jobs (Kotkin and DeVol 2002).

In order to accumulate the capital necessary to generate economic growth and improve the standard of living, locales must compete, as did San Francisco, based on the factors above. Government can affect some of these factors in a relatively short time frame through direct actions. The next section examines Arizona's tax structure and other factors affected by public policy to assess the progress the state has made toward creating a business climate conducive to capital formation.

HOW COMPETITIVE IS ARIZONA?

A CROSS-STATE COMPARISON OF FACTORS AFFECTED BY PUBLIC INVESTMENTS

Businesses consider a mixture of factors when considering capital investment in a particular region, with no single factor dominating the decision. In some cases, idiosyncratic factors — such as strategically valuable natural resources or locations — can be responsible for site location decisions and large differences in GSP growth rates. But many factors remain within the control of policy-makers. For example, Arizona's overall infrastructure investment and its tax structure may indeed be correlated with its ability to attract and quality capital.

What Has Arizona Done to Foster Economic Growth?

Chapter 1 outlines the fiscal landscape, suggesting that Arizona is generally a low-tax state characterized by relatively low spending on government services, notwithstanding its rapid population and job growth in recent decades. But, some key government infrastructure investments have clearly benefited Arizonans and played a role in crafting the business climate of the state. Three of the more important of these investments are detailed in Table 5.3.

TABLE 5.3**HISTORY OF ARIZONA'S MAJOR INFRASTRUCTURE INVESTMENTS**

The Salt River Project	Central Arizona Project	Metro Phoenix Highways
<p>In 1903, landowners in the area that was to become Arizona pledged 200,000 acres as collateral for a government loan to build a water storage and delivery system to support agricultural growth and development. Today, SRP is the third largest public power utility and provides power to 2,900 square miles of central Arizona.</p>	<p>The origins of CAP date back to negotiations between Colorado River Basin states in the early 1900s and the signing of the Colorado River Compact in 1944. Arizonans invested in the infrastructure necessary to supply water to its agricultural economy and lobbied until President Johnson signed a bill approving CAP in 1968. Today, CAP is manager of the largest renewable water supply and includes 336 miles of aqueducts, tunnels, pumping plants and pipelines.</p>	<p>In 1985, Maricopa County voters passed an initiative approving a half-cent transaction privilege tax hike to support investment in the transportation infrastructure necessary to handle the metropolitan area's explosive growth. Today, 95 miles of highway have been added for Metro Phoenix and by 2007, the county will have added 147 miles since 1985.</p>

Source: "Investing in Arizona's Future" Office of Public Affairs & Office of University Initiatives, Arizona State University.

Investments such as those listed above have helped Arizona convert from a largely agrarian economy dominated by the "Three Cs" (Copper, Cattle, and Citrus) to a highly diversified economy that draws its strength from a wide spectrum of industries and service-rendering businesses. Recently, Arizona has greatly increased its focus on fostering and attracting major high-technology opportunities through its investments in the Translational Genomics Consortium (T-Gen) and its commitments to strategic research expansions in the state's universities.

Taxes

Taxes are one of the factors identified as important in business relocation decisions, and Arizona does not compare favorably to its competition on some aspects of its tax structure. According to a report published by ASU's Center for Business Research (Hill 2000), Arizona is a high-business-tax state, with one of the highest effective tax rates among the western states. Most onerous are taxes levied on com-

mercial and industrial property. In fact, the business share of Arizona's taxes ranks in the top 15 among all U.S. states, and in the top 10 among states that do not rely heavily on severance taxes.³ On the other hand, Arizona imposes a relatively light tax burden on households. In fact, the report noted that Arizona's low residential tax burden is actually overstated when normalized either by population or personal income because Arizona exports a significant amount of its non-corporate taxes to tourists and seasonal residents. A detailed review of relative tax burdens borne by businesses and residents in Arizona undertaken by the Phoenix Chamber of Commerce and scheduled for release in fall 2003 will update this work.

In order to correct for imbalances in business taxes and to compete with other states for business investments, state and local governments can introduce tax incentives. Although these incentives do not have the public policy advantage of transparency that would result from a major overhaul of the tax system, they may be more politically palatable, and, if granted to highly mobile capital, tax incentives can limit capital migration. For example, many states provide tax incentives through enterprise zone credits and research/development credits. The use of these incentives in Arizona began in 1989. Two of the more commonly claimed and influential credits are the Enterprise Zone and Research and Development Credits.

Enterprise Zone Credit: A nonrefundable credit equal to a portion of taxable wages paid to a qualifying employee is available to businesses within an enterprise zone that show a net increase in the employment of Arizona residents. Since its inception in 1989, 159 taxpayers have claimed this credit and 17,108 jobs have been claimed for a total credit amount of \$38.6 million.

Research and Development Credit: A nonrefundable credit to offset research and development expenses was enacted in 1992. The original cap was \$500,000 per year, but the formula changed in 2001 with a net effect of increasing the total credit amount. Thus far, there have been 254 claimants and \$2.8 billion worth of R&D expenditure claimed for an average of \$11 million per claim. The total credit earned is approximately \$9 million.

Source: Arizona Department of Revenue

Although Arizona provides some selected tax credits to business firms, evidence suggests that its overall business tax burden is relatively high, inhibiting capital accumulation. Certainly, reducing the tax burden on those quality employers with highly mobile capital would improve the business climate in Arizona. But, revision of the business tax code alone will not address other factors important to site relocation decisions.

Education

While the tax burden on businesses in Arizona is higher than in primary competitor states, high taxes may not be a deterrent to capital formation if they are accompanied by high service levels that increase the productivity of a firm's factors of production. Indeed, not all firms have chosen to locate in states with the lowest tax rates.

Providing public education is one of the primary expenditures state governments face, and the quality of public education reflects on the quality of the work force, which is a key decision factor for business capital relocation choices. A better educated local labor force means firms will need to invest less in training and human capital development. Arizona's educational expenditures may be compared with those of peer states to draw inferences about the quality of Arizona's labor force, and thus Arizona's attractiveness to capital investment. Since Arizona must compete directly with other states to attract quality capital, jobs, and workers, cross-state comparisons are especially useful to assess Arizona's competitiveness. The 16 states used in the comparisons either have been designated as "Competitor States" by the Phoenix Chamber of Commerce and/or are states that the Milken Institute has named "Knowledge Economy States" (states considered to be best positioned for the industry composition that will dominate the 21st century).

Figures 5.2 and 5.3 display FY1972 and FY2000 education spending on a real per capita basis for Arizona and its peer states. In fiscal year 1972, Arizona allocated more dollars per capita to total education spending (K12 and higher education expenditures are combined) than every one of its peer states except Minnesota. In fact, on a real per capita basis, Arizona spent \$118.29 more than the average education expenditure of these states. By fiscal year 2000, however, Arizona spent more than only Florida and Nevada, and Arizona's real per capita education expenditures were \$341.12 *less* than the average amount spent by these 16 peer states. Note that this per capita difference between Arizona and these other states translates into huge (annual) total state spending of over \$1.76 billion to close the gap on spending on education, relative to the average spending on education by our state peers as of FY 2000! The average annual growth rates in Arizona's total education expenditures over the 32-year-period, when normalizing by personal income and Gross State Product, are -1.07 percent and -0.69 percent respectively. In terms of education expenditure growth with respect to personal income, Arizona's average annual expenditure growth was slower than 14 out of the 16 peer states. In short, Arizona once was near the top of per capita spending on education among our peer states, but now has fallen far behind.

FIGURE 5.2

ARIZONA PER CAPITA EDUCATION SPENDING VS. PEER STATES, FY 1972

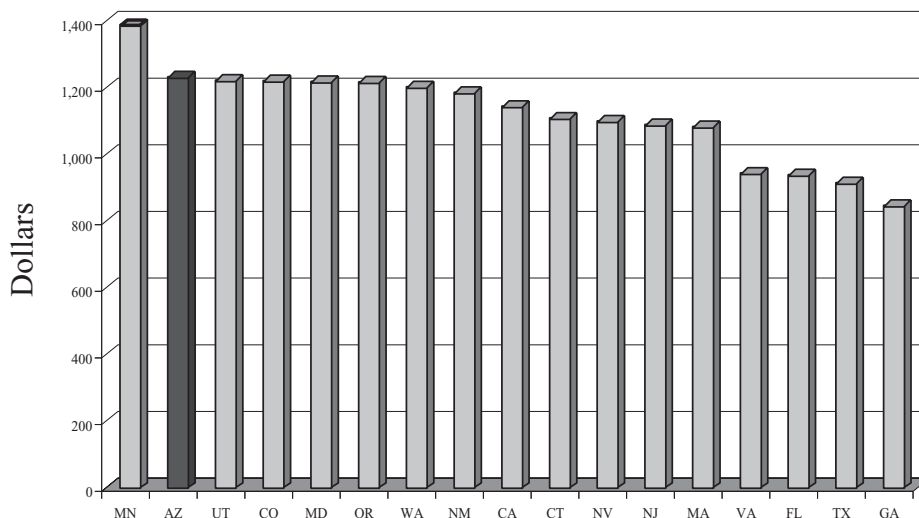
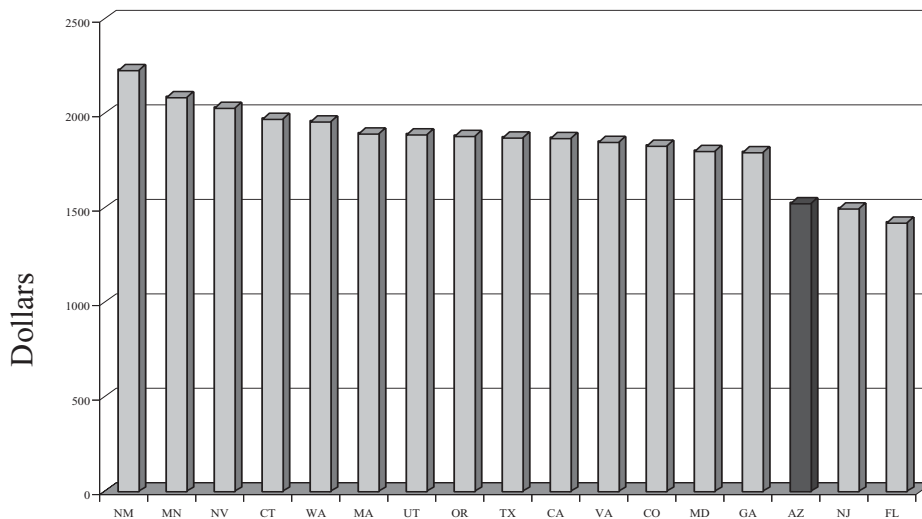


FIGURE 5.3

ARIZONA PER CAPITA EDUCATION SPENDING VS. PEER STATES FY 2000⁴



Source: US Census Bureau Compendium of Government Finances, assorted tables assorted years

Further, Arizona lags behind most states — not just our peer states — in spending on education. According to the most current U.S. Census Bureau data, out of the 50 states plus the District of Columbia, Arizona ranks 47th in overall state and local education spending per capita; 30th in higher education spending; and 48th in state and local spending on K12 education.⁵ Figures 5.2 and 5.3 suggest that Arizona has not invested as much in education as the peer states or the rest of the nation. Interestingly, the trend toward lower spending has been established over the last 30 years. In 1972, real state and local education spending per capita ranked eighth in the nation, slipping to 24th in both 1982 and 1992, and then slipping again to 47th on a real per capita basis in 2000.

Arguably, less spending on education may not translate into a less educated work force, if Arizona were able to generate much more educational output per dollar of spending. But, the data for 2001 in Table 5.4 suggest that Arizona has a lower high school graduation rate than 13 of the peer states. What should Arizona spend on education? For comparison, California is generally regarded as a high-spending state. Yet, California ranks ninth (lower than Arizona) in terms of the percentage of population with less than a high school diploma. It is interesting to note that California ranks first in the nation for the percentage of its population speaking a language other than English. And yet, in 2001, California had a higher high school graduation rate (ranked 36th nationally) than Arizona. The numbers suggest that some states may have more challenges to educating their population than other states. The policy question is then, should the states with more impediments to an educated work force invest more in education? They may indeed be required to do so, if they wish to be competitive in attracting the quality jobs that will drive living standards in the 21st century.

TABLE 5.4
EDUCATION DEMOGRAPHICS OF THE PEER STATES

<i>Average (Rank out of 51)</i>	<i>2001 high school graduation rate</i>	<i>% of population over 25 with less than high school diploma</i>	<i>% of population over 25 with bachelor's degree or higher</i>
Arizona	59% (47th)	19.6% (14th)	23.3% (30th)
California	68% (37th)	21.8% (9th)	28.2% (12th)
Colorado	68% (36th)	13.2% (39th)	33.8% (3rd)
Connecticut	75% (22nd)	14.5% (32nd)	32.8% (4th)
Florida	59% (49th)	17.7% (20th)	23.9% (26th)
Georgia	54% (51st)	19.9% (12th)	24.7% (24th)
Maryland	75% (19th)	14.8% (42nd)	32.8% (4th)
Massachusetts	75% (20th)	12.5% (42nd)	35.6% (2nd)
Minnesota	82% (7th)	10.9% (49th)	28.3% (11th)
Nevada	58% (50th)	17.3% (21st)	18.7% (48th)
New Jersey	75% (18th)	15.2% (27th)	31.8% (6th)
New Mexico	65% (41st)	19.0% (17th)	23.7% (27th)
Oregon	67% (39th)	13.1% (40th)	25.4% (19th)
Texas	67% (40th)	23.0% (4th)	24.2% (25th)
Utah	81% (10th)	10.7% (50th)	25.3% (20th)
Virginia	74% (24th)	16.8% (24th)	31.3% (7th)
Washington	70% (33rd)	11.4% (47th)	29.5% (9th)
National Average	73%	17.9%	25.5%

Source: U.S. Census Bureau and Jay P. Greene, "High School Graduation Rates in the United States," The Manhattan Institute for Policy Research

Other Infrastructure Issues

While education/quality of work force is generally ranked as one of the key factors, many other infrastructure and quality of life factors also influence business location or investment decisions. Several recent studies have rated the states with respect to their competitiveness in terms of its ability to attract new businesses and to provide an environment that is conducive to the success of existing firms. These analyses have used a variety of methodologies, but the results are reasonably consistent. Arizona usually receives good scores for economic performance, entrepreneurial energy, and its pro-business environment.

However, it generally earns lower grades with respect to several important public infrastructure and quality of life factors.

For example, Arizona ranked 41st in *The State Competitiveness Report 2001*, compiled by Suffolk University's Beacon Hill Institute. Among the rating categories, the state received its highest rank, 17th, for "Openness" — measuring how connected firms in the state are with the rest of the world. It ranked 25th with respect to "Infrastructure," 40th for "Environmental Policy," and 44th for "Institutions"⁶

Arizona also did not receive passing grades with respect to several infrastructure and quality of life factors in the most recent *Development Report Card for the States* (Center for Enterprise Development 2002). The Report Card did not give an overall grade, but provided rankings for 71 individual measures and graded each state with respect to three primary dimensions: Arizona received a "B" for "Business Vitality," a "C" for "Performance," but only a "D" for "Development Capacity." With respect to several of the infrastructure/quality of life/social institutions-related measures, Arizona was ranked at or near the bottom: Crime rate, 50th; highway deficiency, 49th; uninsured low-income children, 49th; teen pregnancies, 48th; toxic release inventory, 47th; K–12 educational expenditures, 47th; air quality, 46th; employer health insurance, 41st.

Arizona garnered better marks in the *2002 New Economy Index* (Progressive Policy Institute), which evaluated the states' competitiveness in factors specifically related to attracting and nurturing "new economy" firms. The state was rated particularly highly for factors relating to "Economic Dynamism," but still received low scores in areas relating to its public institutions and infrastructure: work force education, 42nd; digital government, 38th; technology in the schools, 32nd and online population, 32nd.

While some may question whether the ratings truly measure competitiveness, business leaders and economic professionals frequently utilize the results of these ranking studies as part of their evaluation process. States that rank highly in these studies are those whose decision-makers have invested in public infrastructure — education (both K–12 and post-secondary), good roads and transportation infrastructure, research and development — and have been concerned with the health and safety of its citizens. Arizona's low scores in several of these areas typically relegate the state to the "middle of the pack" — or worse — in these rankings. More importantly, the results of the ranking studies provide a road map for making the state competitive to Arizona's policy-makers.

Recent Assessments of Arizona's Performance

While it is relatively easy to measure how much the state has spent or to document the programs put in place to craft a competitive business climate, it is more challenging to measure whether particular initiatives have paid off, or can be expected to reap dividends in the future. A simple broad measure of success can be obtained by returning to the concept of GDP per capita introduced at the beginning of this chapter. For states, we use the measure of Gross State Product (GSP) tabulated by the Department of Commerce. Table 5.5 documents levels and growth of real GSP per capita over the last 28 years (1972–2000).

TABLE 5.5
PEER STATE REAL GROSS STATE PRODUCT PER CAPITA COMPARISON
(FY 1972 – FY 2000)

<i>State</i>	<i>Real GSP per person at beginning of period</i>	<i>Real GSP per person at end of period</i>	<i>Real per person average annual growth rate</i>
Arizona	\$19,744	\$29,711	1.0%
California	22,993	39,117	1.9
Colorado	21,641	28,585	2.1
Connecticut	19,789	47,485	3.2
Florida	18,204	29,376	1.7
Georgia	17,669	35,910	2.6
Massachusetts	17,780	44,528	3.3
Maryland	17,953	34,843	2.4
Minnesota	19,349	37,739	2.4
New Jersey	18,781	42,407	3.0
New Mexico	19,921	28,876	1.3
Nevada	28,279	37,416	1.0
Oregon	20,976	35,395	1.9
Texas	23,086	35,245	1.5
Utah	18,964	30,527	1.7
Virginia	18,819	36,716	2.4
Washington	21,525	36,912	1.9

Source: U. S. Bureau of Economic Analysis

Arizona's GSP per capita ranked ninth lowest among its peer states in 1972 and slipped to fourth from the bottom in 2000. Growth in real GSP per capita over the 28-year period eclipsed that of only two states, Nevada and New Mexico.

So what does the future hold for the state? Is Arizona currently positioned to grow more rapidly than it has in recent years? Will standards of living and commensurate household income grow rapidly and eliminate the disparity with comparison states? Two recent studies provide some evidence. *Business Facilities* magazine, a monthly news and resource information for more than 40,000 corporate executives responsible for the expansion or relocation of their companies, recently published a list of top locations for high-tech businesses. The list appears in Table 5.6 .

TABLE 5.6

***BUSINESS FACILITIES* 2003 TOP LOCATIONS FOR HIGH-TECH COMPANIES**

1 San Jose, CA	11 Charlotte, NC
2 Boston, MA	12 New York, NY
3 Austin, TX	13 Dublin, Ireland
4 Raleigh-Durham, NC	14 Chicago, IL
5 Atlanta, GA	15 Portland, OR
6 San Diego, CA	16 Salt Lake City, UT
7 San Francisco, CA	17 Phoenix, AZ
8 Dallas, TX	18 Santa Clara, CA
9 Denver, CO	19 San Juan, PR
10 Seattle, WA	20 Washington, DC/Northern Virginia

Phoenix is listed in the 17th position among 20 worldwide sites, and referred to directly in the article if a business is interested in “stepping off the beaten path and choosing somewhere a little more remote — perhaps a secondary market like Phoenix, AZ or San Juan, PR — that doesn’t command the caché of San Francisco, CA or Boston, MA.” *Employment Review* targets readers who are mobile employees in examining the best places to live and work in 2003, noting a host of factors that range from cost of living, to education opportunities, health care availability, proximity to amenities such as parks, entertainment venues, etc. The survey results are depicted in Table 5.7. Here, Tucson is ranked at No. 16 and Phoenix does not appear.

TABLE 5.7***EMPLOYMENT REVIEW: BEST PLACES TO LIVE AND WORK, 2003***

1 Raleigh-Durham, NC	11 Columbus, OH
2 Madison, WI	12 Tampa, FL
3 Austin, TX	13 Cambridge, MA
4 Huntsville, AL	14 Louisville, KY
5 Atlanta, GA	15 Overland Park, KS
6 Nashville, TN	16 Tucson, AZ
7 Fargo, ND	17 Bellvue, WA
8 Minneapolis, MN	18 Omaha, NE
9 San Diego, CA	19 Charlottesville, VA
10 Salt Lake City, UT	20 Boulder, CO

The assessments of these trade publications capture a common theme that is reflected in the decision factors identified earlier in this chapter. The best places to locate a business or to seek employment are clearly not always determined by those municipalities with the lowest tax rates or smallest role for government. Interestingly, both lists are dominated by cities in close proximity to major research universities. In some of these locales, the cost of living and the cost of doing business is relatively high, but there are commensurate benefits. Careful inspection of the cities on these lists would suggest that they have crafted very different business climates that have aspects that attract particular firms.

WHAT ARIZONA SHOULD DO NOW:

CONSIDERATIONS FOR A COMPETITIVE 21ST CENTURY ECONOMY

The data presented throughout this chapter indicate that population or job growth alone simply does not create the rapidly rising living standards to which Arizona aspires. Arizona has been a marvelous job growth machine for years. But job growth has not resulted in improvement in Arizona's living standards nearly as rapidly as has been the case in many other states, as seen in the peer state comparisons. Some of the public policy issues and public investment areas that most directly affect business relocation decision factors have been discussed in this chapter.

Arizona's current business climate is not conducive to optimal growth. First, the current tax structure puts too high a burden on businesses, relative to the burdens they face in other states. The historical

tendency for Arizona policy-makers to place relatively disproportionate tax burdens on businesses creates an environment of uncertainty for firms considering a move to Arizona. Will the state continue to rely on businesses for a large share of revenue to support the growing needs of the public sector? Is there political will to establish more balance between tax burdens borne by residents and businesses throughout the state? Second, Arizona does not fund education at levels comparable to the states with which it competes for capital, and Arizona's educational outcome measures lag behind the peer states and the nation as a whole. Potential investors may not view Arizona favorably because the overall quality of the educational system and work force are subpar, or, more businesses looking for relatively cheap labor will turn to Arizona.

Regardless, overall standards of living are retarded as a result. Arizona has not invested heavily in health and welfare programs in comparison with other states. The state has simply not created a business climate that fosters high growth in GSP per capita. Arizona is not at the top of recent lists of places for firms to relocate quality jobs or for quality workers to seek employment. Firms and workers in the 21st century will have more flexibility in making location decisions than ever before. More and more, it is becoming apparent that firms no longer have to locate around ports, roads, rail lines, or raw materials. Rather, the knowledge economy has made other site factor decisions far more important. New technological advancements have greatly decreased the costs of transportation, telecommunications, and computer-related technology, thereby increasing the global flow of information. The ability of a particular location to provide and command intangible assets will determine its relative position in a global New Economy. Leveraging the human capital, technology and characteristics of place to provide concepts, competence, and connections are the core assets of a given location. Since a firm can locate virtually anywhere, there is intense competition among states and cities to attract new firms.

It is true that government spending alone, even in strategic areas to attract investment, need not necessarily translate into intended results, either because of inefficiencies or because extraneous factors may intervene. Nor is there a uniform or "optimal" level of spending that can be applied to all states. For example, Arizona has a relatively high number of non-English-speaking residents that arguably adds to its educational costs, relative to states with mostly English speakers. Naturally, an important policy questions arise: Should Arizona and other states with more challenges in education (or more need for social services or transportation services) spend more to deal with those challenges? Should states with rapid population growth, like Arizona

and Nevada, spend more to compensate for the infrastructure needs of their growing populations?

These are crucial questions for policy-makers. In the end, businesses do not consider what impediments were overcome to achieve a highly educated, skilled work force and a strong infrastructure that supports investment and growth. Their concern is the bottom line — how competitive is the state, relative to other locations? Success in the 21st century will require policy-makers to balance the objectives of a competitive tax structure with incentives for quality businesses, while funding the public sector infrastructure investments needed to attract capital and provide the environment conducive to high returns on investment. States that can accomplish this balancing act will be positioned to prosper in the 21st century.

END NOTES

¹ Empirically: $Y = A * F(K, L)$ where Y is GDP, A is Total Factor Productivity, K is Capital Stock and L is Labor Input. Dynamically: $\% \Delta Y = a\% \Delta K + (1 - a)\% \Delta L + \% \Delta A$ or 0.6% + 0.9% + 1.3% from Denison's estimates of the U.S. over most of the 20th century. Note that Denison estimates a at 1/3, which is reflected in the estimates of the factor contributions.

² This list of factors is drawn from generally accepted academic theory, Milken Institute reports, a Georgia economic development survey of the heads of the Chamber of Commerce and Development Authorities, and the COO of Jabil Inc. (Jabil is a contract circuit boards manufacturer who supplies major electronics firms such as Cisco and Dell and has engaged in a large number of international and domestic expansions over the 1990's.)

³ Business taxes are defined as any fee that decreases business net incomes without a change in price. Among these business taxes are corporate profit and franchise taxes, severance taxes, real and personal property taxes on business assets, and sales and gross receipts taxes on a firm's purchase of equipment, services, and materials.

⁴ When normalized by personal income, in 2000 Arizona spent \$0.67 less per \$1000 of personal income than the average spending of the peer states and spent more than nine out of the 16 peer states. When normalized by GSP, Arizona spent \$0.01 more per \$1000 GSP than the average spending of the peer states and spent less than 8 of the states.

⁵ For education spending per \$1000 of personal income, Arizona ranked 36th nationally for overall education spending, 27th for higher education spending and 29th for K12 education spending. In terms of education spending per \$1000 GSP, Arizona ranked 35th for overall education, 24th for higher education and 40th for K12 education.

⁶ The "Infrastructure" subindex included measures of ease of commuting, telephone and internet access, adequacy of the road/highway system, access to airline travel, and housing costs. The "Environmental Policy" subindex was based on information relating to toxic releases, the stringency of pollution regulation, and the effectiveness/costs of compliance with environmental standards. The "Institutions" subindex evaluates the legal system, trust in public officials, regulatory burden, and crime levels.