Pennsylvania Scorecard

Fall 2014 Summary & Analysis

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Pennsylvania Business Council Foundation

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Seeking an objective, fair and comprehensive appraisal of Pennsylvania's competitive position

As leaders, we have a keen interest in defining long-term public policy strategies and solutions to make Pennsylvania more competitive for private sector economic growth. A critical element to gauge Pennsylvania's competitiveness includes the development of measurement tools. Through identifying the most critical elements of a competitive marketplace and having a means to gauge incremental changes resulting from state public policy, we can guide government leaders and play an influential role in shaping the future. Our intent is to focus on solutions, not fault.

In order to encourage data driven public policy, and more objectively monitor the economic prosperity of the Commonwealth, it is of strategic importance to provide a visually appealing and publicly accessible repository of data sources related to Pennsylvania's economy.

The primary goals of the Pennsylvania Scorecard include:

- Provide an accessible central location of relevant and timely data
- Select indicators that are primary inputs to economic development
- Identify broad-based metrics, with a focus on those influenced by state policy
- Display Pennsylvania's absolute and relative position consistently over time.

Metrics Defined

Fifty-one (51) measures of economic competitiveness were chosen from economic literature about factors that contribute to the growth of Gross State Product and from criteria used by site selection professionals. These metrics were validated by survey research with Pennsylvania business leaders. Those metrics were grouped in the following eight categories for analysis and monitoring:

- Budget and Government Spending
- Education and Workforce
- Energy and Natural Resources
- Healthcare
- Infrastructure
- Labor, Legal and Regulatory Climate
- Quality of Life
- Taxes

For Additional Information on the Pennsylvania Scorecard

Please see http://www.pascorecard.com/

Contact the Pennsylvania Business Council Foundation
http://www.pabusinesscouncil.org/
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Budget and Government Spending

Budgets and their related phenomenon, expenditures, are important indicators for the size and cost of government. The "Budget" category includes measures of the commonwealth's bond rating, expenditure of state funds as a percentage of the state's gross product (GSP), expenditures of state funds per capita, and the total state debt outstanding as a percentage of state gross product. New measures include state General Funds budget as a percent of gross state product and state General Funds expenditures per capita.

In the budget and expenditures category, Pennsylvania tends to be ranked around the middle on most measures. For the bond ratings of the 50 states, provided by Standard and Poor's, Pennsylvania also is placed about in the middle at 29th among the states. The commonwealth is ranked 17th in the ratio of state expenditures to state gross domestic product, ranked from lowest to highest percentage; and 18th in state expenditures per capita. Pennsylvania ranked 26th for the ratio of the total state debt outstanding to state gross domestic product.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
Standard and Poor's bond rating (2013)	AA	AA	AA	29	NA
State expenditures of state funds as a percent of GSP (2012)	-0.67%	6.89%	7.53%	17	+3
State expenditures of state funds per capita (2012)	No change	$3,240	$3,730	18	+3
State government debt as a percent of GSP (2011)	+0.03%	7.79%	7.79%	26	No change

Education and Workforce

Pennsylvania does well overall in the education and workforce category, with good schools and a well-educated workforce. Out of ten measures included in the education and workforce category, three measures are in the top 10 of all 50 states. Pennsylvania is among the forty-five states that have adopted the common core educational standards, a set of college- and career-ready standards for kindergarten through 12th grade in English language arts and mathematics that were developed by state education secretaries and governors.

The Commonwealth excels in K-12 education as well as advanced education. In K-12 education, Pennsylvania ranks 7th in both 8th grade reading and math scores and has improved high school graduation rates, moving from 81% in 2009 to 84% in 2012. Pennsylvania's performance is average for bachelor's degree attainment, ranking 24th, but above average (ranking 17th) for advanced degree attainment. The commonwealth's cost for public higher education is relatively high, ranking 45th for college affordability for public four-year institutions in the 2011-12 academic year. Pennsylvania improved from 30th in 2012 to 28th in 2013 in the national rankings of students taking the Advanced Placement exams. In terms of patents per capita, Pennsylvania is about average, with a ranking of 25.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
School quality: 4th grade reading proficiency (2013)	+3.49%	40.11%	35.17%	10	No Change
School quality: 4th grade math proficiency (2013)	-1.03%	44.48%	42.31%	23	-15
School quality: 8th grade reading proficiency (2013)	+1.93%	42.03%	35.81%	7	-2
School quality: 8th grade math proficiency (2013)	+2.03%	41.88%	36.08%	7	+3
High school graduation rates (2012)	+3.0%	84%	81%	16	-2
Bachelor's degree attainment (2011)	+0.6%	27.0%	26.8%	24	+2
Advanced degree attainment (2012)	+0.7%	10.9%	9.9%	17	+1
College affordability (2011-12)	+$2,833	$20,980	$15,783	45	+1
Advanced Placement Exam Scores (2013)	0.011	.1590	.1625	28	+2
Patents per capita (2013)	9.79	34.12	33.55	25	-1

Energy and Natural Resources

The "energy and natural resources" category contains six measures related to the consumption, production and cost of energy and water, two key business inputs.

The industrial retail price of electricity has declined in Pennsylvania and across the nation since 2009. The commonwealth's average price of 6.94 cents per kilowatt hour (kWh) compared to the 50-state average of 6.57/kwh leads to its rank of 31st among the states, indicating that it has higher than average electricity costs. Pennsylvania ranks 44th for its average natural gas industrial price of $9.58, measured in dollars per thousand cubic feet. Pennsylvania is near the top of the country in energy production, ranking 4th among the states for total energy production in 2011. Pennsylvania's energy consumption rate has remained stable and is ranked 32nd nationally in total energy consumption per capita, where 1st indicates the highest per capita energy use and 50th indicates the lowest use per capita.

High production volume and steady consumption levels would suggest lower prices. The disconnect in Pennsylvania's experience stems from at least two factors: long-term energy contracts at historically higher prices were still in effect for the period covered by this data 2009 through 2012; and the slow build-out of transmission lines to get Marcellus Shale Gas to commercial markets limited consumer supply through 2012. Lower prices are expected to be reflected in 2013 and 2014 data when they become available.

In terms of water and sewer service, Pennsylvania has the fourth-highest number of sewage treatment facilities in the United States. Approximately 84% of the commonwealth's population is served by community water systems, which ranks it 34th among the states.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
Total energy consumption (2011)	+5 million btu	292 million btu	312 million btu	32	+1
Total energy production (2011)	+1,184 trillion btu	3,858 trillion btu	668 trillion btu	4	+2
Average Industrial price of electricity (in cents) (2013)	-0.02/kwh	6.94/kwh	6.57/kwh	31	-1
Average Industrial price of natural gas (2012)	$0.39/1000 cu ft	$9.58/1000 cu ft	$5.78/1000 cu ft	44	-8
Number of sewage treatment facilities (2011)	-3	42	10	4	No Change
Population served by public water systems (2011)	-0.37%	84%	89%	34	-5

Healthcare

Health Care is an issue that routinely appears among the top concerns of both employees and employers and is an issue upon which state policies can have significant impact. This category contains seven measures: the proportion of the state's population currently covered by health insurance, the number of state health insurance mandates, the state's average health insurance premium, the number of hospitals per 100,000 population, the number of hospital beds per 1,000 population, the number of physicians per 100,000 population, and the number of medical carriers competing in the state's health insurance exchange.

Pennsylvania saw the percentage of population without health care coverage increase from 10.6% in 2009 to 12.0% in 2012. The state's rank fell from 9th in 2009 to 13th in 2012. On the other hand, Pennsylvania ranks near the bottom at 38th for the number of mandates it requires for health insurance providers, which means it has more mandates than average. Perhaps as a result, the average insurance cost in the commonwealth for "total single premium per enrolled employee" is higher than average, positioning Pennsylvania at 29th among the states. The increase in premiums in Pennsylvania has been at a slower rate, however, than the 50-state average, so the commonwealth has moved from a ranking of 34th in 2009 to 29th in 2012, with rates $18 higher than the 50-state median.

The number of community hospitals has remained fairly consistent from 2009 to 2012, with a slight downward trend in both the median and Pennsylvania's number of hospitals per 100,000 population. This trend is primarily driven by increases in population rather than decreases in the number of hospitals. Pennsylvania's ranking of 34th may reveal more about the size or composition of Pennsylvania's hospitals, especially since the number of community hospital staffed beds per 1,000 population shows a more robust resource than observed in the simple count of community hospitals. Pennsylvania ranks 14th on this metric, with a resource level of 3.1 staffed beds per 1,000 population, compared to a median of 2.6 staffed community hospital beds per 1,000 population in the same year. Pennsylvania ranks 8th among the states in the number of physicians, an indication of a high overall level of physicians, with 302.1 physicians per 100,000 compared to a median of 250.0 physicians per 100,000. As with most resources, the overall availability may mask underserved areas and populations.

Finally, Pennsylvania compares well with other states, ranking 11th in the number of medical carriers competing in individual states' individual health insurance exchange markets, with eight medical carriers compared to a median of four medical carriers. No trend information is available for this metric since the state health insurance exchanges are new.

Healthcare

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
People without health insurance coverage (2012)	1.40%	12.00%	13.80%	13	-4
Health insurance mandates (2012)	4	56	45	38	-1
Health insurance premiums (average single) (2012)	$636	$5,385	$5,367	29	+5
Community hospitals per 100,000 population (2011)	-0.02	1.52	1.70	34	-1
Community hospital staffed beds per 1,000 population (2011)	No Change	3.10	2.60	14	+2
Doctors per 100,000 population (2012)*	-0.3	302.1	250	8	+1
State health insurance exchange market competition (2014)	N/A	8	4	11	N/A

*First column reflects 2010 to most recent change.

Infrastructure

The category of "Infrastructure" contains a mix of measures involving both transportation and broadband internet access and deployment. There are a couple of bright spots for Pennsylvania in the infrastructure category. Specifically, the commonwealth ranks 17th nationally for the percentage of the residential population with access to high-speed internet services and Pennsylvania ranks 8th with 5.3% of workers using public transportation to commute to work, compared to a median value of 1.5%, and 12th in the nation in the number of plane trips. However, Pennsylvania ranks 35th in the number of freight miles per 1,000 people and 41st in commute time to work. Distressingly, Pennsylvania continues to rank 47th in the nation for the proportion of structurally deficient bridges, however, progress has been made, with the percentage of structurally deficient bridges in the commonwealth reduced 4.61% since 2009.

Tonnage is a well-established and almost universal measure of cargo port activity, is used frequently as a measure to calculate port fees for merchant ships, and is therefore quite universal and accurate. It is used here as a measure of both activity and capacity of Pennsylvania ports, compared to those in other states. The largest port in terms of tonnage is Texas, with 529,966,533 tons shipped, while the smallest port is 36th-ranked Arkansas, with 1,979,821 tons shipped and 14 states do not have ports. Pennsylvania remains in among the top 10 states although the commonwealth's rank fell, along with a decrease in total tonnage, between 2009 and 2012, while New Jersey, Virginia, and Washington moved up in rank.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
Percentage of bridges structurally deficient or functionally obsolete (2013)	-4.61%	42.19%	24.37%	47	+1
Commute time (2011)	-0.45	24.93 minutes	22.85 minutes	41	-3
Percentage of workers who commute via public transportation (2011)	No Change	5.30%	1.55%	8	No Change
Freight miles per 1,000 people (2011)	-0.14	0.40 miles	0.53 miles	35	-3
Residential access to high speed internet (2013)	+8%	74%	69%	17	-6
Emplanements – Airport Activity (number of plane trips) (2011)	+134,914	20,597,962	5,962,055	12	No Change
State Ports by Total Cargo Tonnage	-19,756,680	72,258,774	36,976,581	8	-3

Labor, Legal and Regulatory Climate

Several legal and regulatory reforms have long been recognized by business as helpful in spurring growth and economic activity. In this category, Pennsylvania joins forty states that have modified or abolished the rule of "joint and several" liability. On the other hand, the commonwealth is **not** among the 22 states that have modified the rules for awarding noneconomic damages. Nor is Pennsylvania among the 11 states that have enacted venue reform or the 24 states that have adopted "Right to Work" statutes. Pennsylvania is among the states with the largest portion of unionization in the workforce: overall, 13.7% of the state's workforce is unionized, compared to the 50-state median of 11.0%. The percentage of the Pennsylvania's workforce that is unionized has decreased by 2.5% between 2009 and 2013, and Pennsylvania's rank has moved up from 35th in 2012 to 34th in 2013.

Pennsylvania tends to be among the more expensive states for both Unemployment Compensation and for Workers' Compensation. As a function of pay, Pennsylvania is among the ten most-expensive states, ranking 41st for the cost of Unemployment Compensation (UC) relative to wages, where the 1st ranked state has the lowest UC cost and the 50th state has the highest UC cost. Costs are high, but closer to the median for Workers' Compensation, with the commonwealth ranking 39th.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent 50-State Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
Right to work state (2014)	N/A	No	24 states have	N/A	N/A
Percent of employees represented by unions (2013)	-2.50%	13.70%	11.00%	34	+2
Unemployment compensation (average tax rate on total wages) (2014)	+0.37%	1.32%	0.88%	41	+4
Workers' compensation premium per $100 of payroll (2012)	-$0.17	$2.15	$1.89	39	-2
Forum and venue reform (2014)	N/A	No	11 states have	N/A	N/A
Joint and several liability (2014)	No to Yes	Yes	40 states have	N/A	N/A
Noneconomic damage reform (2014)	N/A	No	22 states have	N/A	N/A

Quality of Life

Pennsylvania's results for the "Quality of Life" measures are mixed. The commonwealth ranked 17th nationally for net increase in population (including domestic and international migration), growing by roughly 105,000 people from 2010 to 2012, however, this pales by comparison to the growth in excess of half a million people in both Florida and Texas. The commonwealth does not compare as favorably on the domestic migration measure, ranking 44th among the states, and showing a significant imbalance in the flow of population to other states. Both of these metrics show Pennsylvania losing ground in the rankings compared to other states, dropping from a rank of 8th in 2009 to 44th in 2012 in domestic migration and from 9th to 17th in net migration.

Pennsylvania's housing affordability index ranking is 17th among the states for affordability of single-family housing. The metric below is based on the Purchase-Only index, which reflects average price changes in repeat sales or refinancings on the same properties. Data represents the seasonally adjusted annual percentage change in home values in the 1st quarter of each year.

In measures of safety, Pennsylvania ranked 27th in its crime rate where a rank of 1 is the state with the lowest number of violent crimes per 100,000 population and the 50th rank has the highest number.

Metric	2009 to Most Recent	Most Recent PA Raw Score	Most Recent National Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
State to State domestic migration (2012)*	-47,426	-21,656	3,233	44	-36
Net migration (2012)*	-42,086	33,438	18,226	17	-8
Housing affordability: single-family house price index (2013)	-2.52	189.29	202.32	17	-2
Safety : violent crimes per 100,000 population (2012)	-33.60	348.70	333.75	27	No Change

Taxes

The mix, in both type and rate, of taxes a state chooses to employ has been associated with economic growth. Further, within states, many functions and their associated taxes may be shifted between state and local government "layers". This makes it difficult to accurately estimate the impact of taxes on statewide economic performance, as tax rates may vary between regions within the same state as well as between states, but we have selected six tax metrics that have a high degree of similarity between states and encompass a large proportion of most state revenue collections. We include in the "Taxes" category the following six measures: highest marginal corporate income tax rate, highest marginal individual income tax rate, local tax collections per capita, sales tax rate, gasoline tax rate, and property taxes as a percent of home value. Taken together, these taxes provide a view of the major revenue devices employed in most states.

Most notably, Pennsylvania continues to have one of the highest corporate income tax rates, with a rate of 9.99% (compared to the median of 6.63%) and a ranking of 49th among the states. On the bright side, the commonwealth's individual income tax rate, at 3.07% compared to the median rate of 5.75%, is among the top 10 states, with a ranking of 8th. Local tax collections per capita and the sales tax rate are ranked in the middle, at 29th for local tax collections per capita and 26th for the sales tax rate. It should be noted that Pennsylvania's sales tax rate of 6%, which is near the national median of 5.98%, includes exemptions for most food and clothing, which is not true of all the other states. The state gasoline tax rate is higher than the median, ranking 46th with a tax of 41.8 cents in 2014, compared to a median of 26.75 cents. Pennsylvania's property taxes as a percent of home value are higher than those in most states, with a rate of 1.49% in Pennsylvania, compared to a median of 1.05%, and a ranking of 38th.

Metric	2009 to Most Recent Change	Most Recent PA Raw Score	Most Recent National Median	Most Recent PA Rank	2009 to Most Recent Change in Rank
Highest marginal corporate income tax rate (2014)	No change	9.99%	6.63%	49	No change
Highest marginal individual income tax rate (2014)	No change	3.07%	5.75%	8	+1
Local tax collections per capita (2011)	+$158	$2,658	$2,548	29	-3
Sales tax rate (2014)	No change	6%	5.98%	26	+1
State gasoline tax rate (2014)	9.5¢	41.8¢	26.75¢	46	-5
Property taxes as a percent of home value (2012)	+0.14%	1.49%	1.05%	38	No change