2014 WORLD CLASS INDEX

TRACKING GREATER PHILADELPHIA'S PROGRESS ON GROWTH AND OPPORTUNITY
THE WORLD CLASS INDEX AIMS TO HELP GREATER PHILADELPHIA’S BUSINESS AND CIVIC LEADERS TRACK PROGRESS AROUND A SHARED AGENDA FOR REGIONAL GROWTH AND OPPORTUNITY.

WHY A WORLD CLASS INDEX?

› To establish shared indicators for regional leaders

› To provide clear-eyed analysis of metro trends

› To highlight collaborations leading to impact

› To point to where immediate action is needed

For more about our region’s progress toward priority education and talent, business growth, and infrastructure goals, as well as collaborative efforts to advance the World Class agenda, visit worldclassgreaterphila.org
MESSAGE FROM THE ECONOMY LEAGUE & UNITED WAY

We have always been strong believers that you can’t improve what you don’t measure. This conviction has been at the heart of dozens of Economy League and United Way initiatives over the years—and it lies at the core of our World Class Greater Philadelphia effort.

Over the past several years, we have engaged hundreds of business and civic leaders to establish a shared set of World Class education, business growth, and infrastructure goals for our region—and priority strategies to achieve them—over the long haul. And we’re proud to say that this shared playbook has already begun to catalyze action among regional organizations and leaders that are finding new ways to tackle complex challenges together—from the Pre-K for PA campaign to ensure that every 3- and 4-year-old in Pennsylvania has access to high-quality pre-k to an emerging effort to expand our regional economy through significant export growth.

With this inaugural World Class Index, we begin a crucial new chapter of the World Class Greater Philadelphia effort—tracking progress around the World Class agenda. With input from some of the top data experts in our region, the Economy League has identified a set of key indicators associated with the World Class agenda that we will monitor and assess on an ongoing basis. Through this annual benchmarking report as well as online content released throughout the year, we will explore what’s driving progress for our region and what’s holding us back. Alongside this analysis, we will provide a closer look at some of the innovative collaborations that are helping to improve these metrics.

In keeping with today’s hyper-digital age, this print summary includes only a portion of the Index content and analysis that we’re developing as part of our ongoing effort to monitor progress toward the World Class goals. For the full and evolving story, be sure to visit worldclassgreaterphila.org. We encourage you to explore and tell us what you think.

Our ultimate aim with this Index is to drive conversation among leaders about where we should focus limited resources—and where we might need to rethink our approach—to spur regional improvement. Wherever we end up, it needs to start with a shared understanding of where we are.

ROBERT J. MCNEILL
Managing Partner—Greater Philadelphia Region, Deloitte, LLP
Chair, Economy League of Greater Philadelphia Board of Directors

LON R. GREENBERG
Chairman,
UGI Corporation/AmeriGas
Chair, United Way of Greater Philadelphia and Southern New Jersey Board of Directors
About World Class Greater Philadelphia

World Class Greater Philadelphia is a business- and civic-led initiative to advance a shared agenda for regional growth and opportunity in the Philadelphia area. Facilitated by the Economy League of Greater Philadelphia, the World Class initiative brings together the region’s business, nonprofit, and government leaders to collaborate for lasting impact in three priority areas: education and talent development, business growth, and infrastructure.

Since the initiative’s launch in 2009, more than 1,700 cross-sector leaders have contributed to the development of World Class Global Positioning Strategies (GPSes) for talent, business growth, and infrastructure. These GPSes, released in 2013, lay out aspirational goals and priority strategies for improving education and talent outcomes in our region, boosting business growth, and making our infrastructure more effective and reliable.

The World Class GPSes were developed in partnership with leading regional civic organizations, including the United Way of Greater Philadelphia and Southern New Jersey for education and talent development; the CEO Council for Growth for business growth; and Urban Land Institute-Philadelphia for infrastructure.

Together with these partners, the Economy League convened strategy teams during 2012 made up of business executives, civic leaders, and issue experts to identify the most promising short- and long-term strategies to make progress toward World Class goals. The recommendations of these strategy teams served as the basis for the World Class GPSes.

This World Class Index not only establishes a framework for measuring progress toward these shared goals, but identifies where collaborative action will be necessary to improve outcomes. Toward this end, the Economy League also facilitates World Class campaigns around priority GPS strategies. The Economy League’s 2014 World Class campaigns focus on improving access to high-quality early learning, increasing regional exports, and getting the most out of new transportation resources in Pennsylvania.
THE WORLD CLASS AGENDA

BUSINESS GROWTH
VISION: New and growing businesses fuel a dynamic regional economy that builds on Greater Philadelphia’s industry and research strengths and connects to global opportunities.

- STARTING & GROWING BUSINESSES
- INNOVATION
- SELLING TO THE WORLD

EDUCATION & TALENT DEVELOPMENT
VISION: Greater Philadelphia has a talented workforce where every resident has the skills needed to compete in the global economy.

- EARLY LEARNING
- K-12 EDUCATION
- POSTSECONDARY CREDENTIALS
- WORKFORCE READINESS

INFRASTRUCTURE
VISION: Greater Philadelphia has convenient connections to regional, national, and global destinations and efficiently provides the key infrastructure necessary for business success and high quality of life.

- GLOBAL & NATIONAL CONNECTIONS
- REGIONAL MOBILITY
- SUSTAINABLE SYSTEMS

FOCUS AREAS

DESTINATIONS

All of the region’s children are prepared to start school.

All of the region’s children graduate from high school college- and work-ready.

Greater Philadelphia is a national leader in postsecondary credential attainment.

The region’s workforce skills adapt and match industry needs and support family-sustaining wages.

Greater Philadelphia is a place where entrepreneurs can successfully create and grow businesses to scale.

Greater Philadelphia is a leader in bringing innovative ideas and technologies to the marketplace.

Greater Philadelphia’s businesses capitalize on global export and investment opportunities.

Greater Philadelphia connects with the largest and fastest-growing metropolitan areas in the world.

The region’s transit and road networks provide convenient and efficient connections to communities and employment centers.

Modernized energy and water systems and open space networks enhance business performance and quality of life.
The shared strategies and goals that comprise the World Class agenda are ultimately focused on improving economic growth and expanding opportunity for all of our region’s residents. Here is a top-level view of how Greater Philadelphia fares on these measures:

**GROWTH**
Since hitting a recession-induced employment low in February 2010, Greater Philadelphia has added 77,000 jobs, or 2.9% of total regional employment. However, this rate is the slowest of the 10 largest US metros during this period.

**OPPORTUNITY**
While regional measures of income inequality in Greater Philadelphia are in line with the national average, our area experienced the second-largest rise in income inequality among the 10 largest US metros between 2008 and 2012.

**EDUCATION & TALENT DEVELOPMENT**

**PRE-K ACCESS**
In Greater Philadelphia, only 34% of children in low- and moderate-income families are enrolled in publicly funded pre-k programs.

**ON-TIME GRADUATION**
On average, 83% of Greater Philadelphia’s students graduate on time (above the national average of approximately 80%); however, there is wide variation across counties in the region.

**EDUCATIONAL ATTAINMENT**
Greater Philadelphia’s postsecondary attainment rate is currently 6th among the 10 largest metros, though our region has seen the third-highest growth over the last five years (from 38% to 40%).
**TECHNOLOGY TRANSFER**

Compared with peer metros, Greater Philadelphia had the third-largest number of technology transfer licenses issued between 2008 and 2012. However, the region ranked 5th in licensing revenues.

**EXPORTS**

In 2012, exports represented 9.0% of our region’s economic output, ranking Greater Philadelphia as the 7th most export-intensive metro among the 10 largest US regions.

**SMALL BUSINESS EMPLOYMENT**

Greater Philadelphia’s 2.7% decrease in small business employment between 2008 and 2012 places our region near the bottom of the pack compared with peer metros.

**PASSENGER AIR CONNECTIONS**

While overall passenger volume at Philadelphia International Airport has remained stable since 2006, the number of international passengers has grown by 12%.

**INTERCITY RAIL RIDERSHIP**

Between 2011 and 2013, annual Amtrak ridership in Greater Philadelphia grew 6.5% to just under 5.4 million passengers—the third-highest regional total in the United States.

**STATE OF GOOD REPAIR**

In 2012, 973 bridges in the region were assessed as structurally deficient—a 7.1% improvement over the 2010 total but still short of state-of-good-repair goals.
EDUCATION & TALENT DEVELOPMENT INDICATORS

VISION: Greater Philadelphia has a talented workforce where every resident has the skills needed to compete in the global economy.

SCHOOL READINESS | Standardized kindergarten readiness assessments are used to improve early learning and help close achievement gaps. The three states in our region are on the path to adopting standardized assessments.

1) PROGRESS TOWARD IMPLEMENTING STANDARDIZED KINDERGARTEN READINESS ASSESSMENTS (2014)

<table>
<thead>
<tr>
<th></th>
<th>DE</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run a pilot assessment</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Adopt an implementation plan</td>
<td>✔️</td>
<td>✗</td>
<td>✔️</td>
</tr>
<tr>
<td>Ensure all schools participate</td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

PRE-K ACCESS | Public programs provide access to pre-k for children in low- and moderate-income families who cannot afford it. In Greater Philadelphia, 34% of the children in these families are enrolled in these programs.

2) PERCENTAGE OF 3- AND 4-YEAR-OLDS BELOW 300% OF POVERTY ENROLLED IN PUBLICLY FUNDED PRE-K

EARLY LITERACY | Third-grade reading proficiency is the first consistent outcome measure of early learning; on average, the counties in our region currently lag behind their respective states.

3) PERCENTAGE OF STUDENTS PROFICIENT OR ADVANCED IN GRADE 3 READING

ON-TIME GRADUATION | On average, 83% of Greater Philadelphia's students graduate on time (above the national average of approximately 80%); however, there is wide variation across counties in the region.

4) STUDENTS GRADUATING IN FOUR YEARS BY COUNTY

*Data presented for most recent year available: PA, 2011–2012; DE and NJ, 2012–2013


GRADUATION RATES BY COUNTY

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery</td>
<td>93.3%</td>
</tr>
<tr>
<td>Bucks</td>
<td>93.1%</td>
</tr>
<tr>
<td>Chester</td>
<td>92.9%</td>
</tr>
<tr>
<td>Burlington</td>
<td>91.8%</td>
</tr>
<tr>
<td>Gloucester</td>
<td>90.8%</td>
</tr>
<tr>
<td>Salem</td>
<td>87.3%</td>
</tr>
<tr>
<td>Delaware</td>
<td>85.4%</td>
</tr>
<tr>
<td>Camden</td>
<td>84.6%</td>
</tr>
<tr>
<td>Mercer</td>
<td>83.0%</td>
</tr>
<tr>
<td>New Castle</td>
<td>80.8%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>65.7%</td>
</tr>
</tbody>
</table>

**DISCONNECTED YOUTH** | Compared with other large metros, a relatively small share of Greater Philadelphia’s youth is not in school and not working; however, percentages within the region range from 6.4% (Chester County) to 18% (Philadelphia County).

5) **PERCENTAGE OF YOUTH NOT ENROLLED IN SCHOOL AND NOT WORKING, AGES 16–24, BY METRO AREA (2010)**

**DEGREES & CERTIFICATES AWARDED** | Institutions in our region awarded approximately 11,000 more degrees and certificates in 2012 than in 2008—an increase of 15%.

7) **NUMBER OF DEGREES AWARDED BY REGIONAL INSTITUTIONS & CERTIFICATES AWARDED BY PUBLIC COMMUNITY COLLEGES (2008–2012)**

**EDUCATIONAL ATTAINMENT** | While Greater Philadelphia’s degree attainment rate currently ranks 6th among the 10 largest metros, we’ve seen the third-highest growth over the last five years (from 38% to 40%).

8) **PERCENTAGE OF POPULATION WITH AN ASSOCIATE, BACHELOR’S OR ADVANCED DEGREE (25 AND OLDER) BY METRO AREA (2012)**

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**COLLEGE & CAREER READINESS** | Students’ reading and math scores are on par with the state averages in both states for which data are available.

8b) **PERCENTAGE OF 11TH GRADERS PROFICIENT OR ADVANCED IN READING AND MATH**

*Data presented for most recent year available: PA, 2011–2012; NJ, 2012–2013*
While Greater Philadelphia’s poverty rate is relatively low compared with other large metros, there are vast disparities within the region. The city of Philadelphia’s poverty rate remains one of the highest among major cities.

**POVERTY RATE**

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage in Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>27.3%</td>
</tr>
<tr>
<td>Camden</td>
<td>12.9%</td>
</tr>
<tr>
<td>Salem</td>
<td>12.3%</td>
</tr>
<tr>
<td>Mercer</td>
<td>11.7%</td>
</tr>
<tr>
<td>New Castle</td>
<td>11.3%</td>
</tr>
<tr>
<td>Delaware</td>
<td>10.4%</td>
</tr>
<tr>
<td>Gloucester</td>
<td>7.8%</td>
</tr>
<tr>
<td>Chester</td>
<td>6.9%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>6.3%</td>
</tr>
<tr>
<td>Bucks</td>
<td>5.8%</td>
</tr>
<tr>
<td>Burlington</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

**MEDIAN INCOME**

While the recession has caused real incomes to decline in our region and across the US, Greater Philadelphia’s median household income has remained relatively stable compared with peer metros in recent years.

**LABOR FORCE PARTICIPATION**

In 2012, nearly 78% of working-age adults in Greater Philadelphia were engaged in the labor force, placing our region in line with the national average and in the middle of the pack compared with peer metros.
THE WORLD CLASS EDUCATION & TALENT DEVELOPMENT AGENDA

FOCUS AREAS

EARLY LEARNING

PRIORITY STRATEGIES

Increase the number and accessibility of high-quality early learning slots

K-12 EDUCATION

Improve K-12 teacher effectiveness and school leadership

Strengthen connections between education and career opportunities

POSTSECONDARY CREDENTIALS

Improve postsecondary access and completion rates

WORKFORCE READINESS

Expand employer-led workforce efforts

“Working with the Economy League to establish these World Class indicators has helped us align our Impact efforts across counties. We hope more social investors will join with us in using these indicators to inform strategic funding decisions.”

KEVIN DOW
Senior Vice President, Impact and Innovation, United Way of Greater Philadelphia & Southern New Jersey
Persistent disparities in educational achievement represent a major obstacle to growth and opportunity in Greater Philadelphia. This achievement gap starts early—studies have found vocabulary differences between poor and higher-income children as early as 18 months. Increasing access to pre-k programs that are high-quality—meaning they have well-trained teachers, comprehensive curricula, and small class sizes—represents one of the most promising options to close this gap.

Unfortunately, the high cost of pre-k in our region means many families can’t enroll their child in a quality program that puts them on a path to success. In fact, the median annual cost of pre-k—at around $9,800—is almost as much as tuition at one of our public universities. To address this issue, all three states in our region have state-funded quality pre-k for low- and moderate-income children.

In Pennsylvania, the Pre-K Counts program has proven effective: following participation in the program, the share of children who were school-ready increased from 22% to 82%. Unfortunately, a lack of funding has limited the reach of public programs, which today accommodate only 30% of low- and moderate-income 3- and 4-year-olds in southeastern Pennsylvania, leaving 36,000 children unserved.

In New Jersey, 9,500 children are enrolled in public pre-k, representing 48% of 3- and 4-year-olds in low- and moderate-income families—better than southeastern Pennsylvania’s rate, but still leaving more than 10,000 children unserved.

Delaware limits enrollment in its state pre-k program to children in very low-income families. Around 1,700 children in New Castle County, or 24% of 3- and 4-year-olds in low- and moderate-income families, are enrolled in public pre-k programs.

Looking ahead, there is movement toward increased access and quality in all three states. In Pennsylvania, the statewide Pre-K for PA campaign is focused on dramatically expanding access. New Jersey has set a goal of expanding pre-k for all at-risk 3- and 4-year-olds. Delaware has received federal funds to continue improving the quality of state pre-k.

[Read more at worldclassgreaterphila.org]
THE QUALITY OF PUBLIC PRE-K IN GREATER PHILADELPHIA | Based on widely accepted program quality standards set by the National Institute for Early Education Research, public programs in each of the three states in our region are high quality.

<table>
<thead>
<tr>
<th>QUALITY BENCHMARK</th>
<th>PA: PRE-K COUNTS</th>
<th>NJ: ABBOTT PRESCHOOL PROGRAM</th>
<th>DE: EARLY CHILDHOOD ASSISTANCE PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses comprehensive early learning curricula</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lead teacher has BA</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Lead teacher has early education certification</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assistant teacher has early education certification</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Teachers participate in 15 hours of training annually</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Class size is 20 children or fewer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Staff-child ratio is 1:10 or lower</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Offers health screenings and referrals</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Provides meal and/or snack</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Program monitoring includes site visits</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**TOTAL BENCHMARKS MET**

- **PA: PRE-K COUNTS**: 7
- **NJ: ABBOTT PRESCHOOL PROGRAM**: 9
- **DE: EARLY CHILDHOOD ASSISTANCE PROGRAM**: 8

*Includes physical, social, and emotional development; approaches toward learning; language development; cognition; and general knowledge.
Source: State of Preschool 2013, National Institute for Early Education Research

LOW- & MODERATE-INCOME CHILDREN ENROLLED IN PUBLIC PRE-K | There is a sizable gap in each of the states in our region between the number of children served by public pre-k programs and the number who need access to them.

**PERCENTAGE OF 3- AND 4-YEAR-OLDS BELOW 300% OF POVERTY ENROLLED IN PUBLICLY FUNDED PRE-K, BY STATE**

**SOUTHEASTERN PENNSYLVANIA**
- Enrolled: 30.5%
- Not Enrolled: 70.5%

**SOUTHERN NEW JERSEY**
- Enrolled: 48.1%
- Not Enrolled: 51.9%

**NORTHERN DELAWARE**
- Enrolled: 24.4%
- Not Enrolled: 75.6%

*Data presented for most recent year available: NJ, 2012; PA and DE, 2013
Source: American Community Survey, 5-Year Estimates; DE, Department of Education, Head Start; NJ, Department of Education, Head Start; PA, Pennsylvania Partnerships for Children
**VISION:** New and growing businesses fuel a dynamic regional economy that builds on Greater Philadelphia’s industry and research strengths and connects to global opportunities.

**NEW BUSINESSES** | While Greater Philadelphia has lagged behind peer metros in new business creation, the number of establishments in the city of Philadelphia grew by 16% between 2008 and 2012.

1) **CHANGE IN NUMBER OF BUSINESSES BY COUNTY (2008–2012)**

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>+15.8%</td>
</tr>
<tr>
<td>Delaware</td>
<td>+1.3%</td>
</tr>
<tr>
<td>Chester</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Bucks</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Mercer</td>
<td>-6.0%</td>
</tr>
<tr>
<td>Gloucester</td>
<td>-6.0%</td>
</tr>
<tr>
<td>Burlington</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Camden</td>
<td>-8.6%</td>
</tr>
<tr>
<td>Salem</td>
<td>-9.3%</td>
</tr>
<tr>
<td>New Castle</td>
<td>-9.6%</td>
</tr>
</tbody>
</table>

**VENTURE CAPITAL** | In recent years, Greater Philadelphia has seen an increase in both the number of venture capital deals and the amount of venture capital invested per year. However, the value of the average deal in our region today is less than half the average deal nationwide.

2) **AVERAGE VALUE OF VENTURE CAPITAL DEALS (2004–2013)**

![Graph showing average venture capital deals](image-url)
ENTREPRENEURSHIP: While Greater Philadelphia has the fewest entrepreneurs per 100,000 residents of the 10 largest US metros, our region has seen the second-highest average annual growth for this measure over the last five years.

SMALL BUSINESS EMPLOYMENT: Greater Philadelphia’s 2.7% decrease in small business employment between 2008 and 2012 places our region near the bottom of the pack compared with peer metros. Within the region, Philadelphia was the only county to see small business employment growth during this period.

FEDERAL R&D FUNDING: Between 2008 to 2012, Greater Philadelphia received the fifth-largest amount of federal R&D funding ($4.8 billion) among the 10 largest US metros.

TECHNOLOGY TRANSFER: Although Greater Philadelphia had the third-largest number of technology transfer licenses issued between 2008 and 2012, the region ranked 5th in licensing revenues.
**EXPORTS** | In 2012, exports represented 9.0% of our region’s economic output, ranking Greater Philadelphia as the 7th most export-intensive metro among the 10 largest US regions.

**INTERNATIONAL VISITORS** | Despite a slight decline in recent years, international visitation to Greater Philadelphia has grown sharply since 2006. On average, approximately half of overseas visitors come to the region from Western Europe.
Any successful business knows that choosing and tracking the right set of metrics reinforces long-run goals and points to necessary strategy adjustments. The same holds for our region’s efforts to foster World Class business growth.

— CLAUDIA TIMBO
CEO & President, CompanyVoice
Driving Technology Transfer in Greater Philadelphia

In today’s innovation economy, regions that are able to translate research discoveries into viable products and services are poised to capture significant growth. With Greater Philadelphia’s world class academic and medical research institutions, converting promising ideas and technologies to the marketplace—a process known as technology transfer—is a crucial pathway for growing jobs and wealth in our region.

Between 2008 and 2012, area institutions took in almost $595 million in licensing revenues for technologies that achieved marketplace success as a result of license agreements with businesses, ranking 5th among all US metros. Given that Greater Philadelphia ranked 8th in total federal R&D funding over the same period, this suggests that our region is holding its own compared to other metros in capitalizing on research resources for commercial success.

Looking ahead, there is reason to be bullish on commercialization activity within the region, due in part to collaborative efforts aided by a 2007 Economy League analysis that laid out priorities for accelerating technology transfer in Greater Philadelphia. The University City Science Center has taken on two priority strategies to support and connect area researchers, entrepreneurs, and investors by creating the QED proof-of-concept fund and the Quorum clubhouse space. There also has been an increase in research institutions and economic development stakeholders coming together to compete for major research prizes, resulting in collaborative commercialization efforts such as the Consortium for Building Energy Innovation and The Nanotechnology Institute.

Yet the greatest impact may be coming from academic institutions in the region that are expanding their approach to tech transfer and working to build an institutional culture that supports entrepreneurship. For example, in recent years, both Penn and Drexel have increased resources devoted to their technology transfer offices, made it easier for faculty to pursue business ventures, and elevated tech transfer’s importance within the university’s core mission.

This sustained attention to tech transfer has contributed to a spike in licensing activity in the area. The number of license agreements executed annually within Greater Philadelphia almost doubled from 83 in 2008 to 161 in 2012—the largest growth rate among top R&D regions. Similar growth has occurred over the same period at area research institutions for invention disclosures (from 682 to 860), patents awarded (from 78 to 167), and spinout companies formed (from 6 to 25).

How can the region build on this momentum? Experts point to the need for more proof-of-concept, seed and early-stage funding; increased connectivity between academia and industry; and diversification beyond current life sciences strengths as keys to further expanding the region’s innovation ecosystem.

› Read more at worldclassgreaterphila.org
More than 70% of Greater Philadelphia’s $1.1 billion in federal R&D funding received in 2012 was devoted to life sciences research. These funds set the stage for future commercialization success as new drugs come to market, such as the rotavirus vaccine developed by CHOP and Wistar Institute researchers that now saves the lives of thousands of children in developing nations annually.

The number of technology transfer license and option agreements executed annually by area research institutions to facilitate commercialization of promising ideas and technologies almost doubled between 2008 and 2012 from 111 to 216. Other key licensing activity indicators also grew significantly over this period.
**VISION:** Greater Philadelphia has convenient connections to regional, national, and global destinations and efficiently provides the key infrastructure necessary for business success and high quality of life.

**GLOBAL & NATIONAL CONNECTIONS**

**PASSENGER AIR CONNECTIONS**
PHL provides nonstop international service to 25 countries whose combined GDP accounts for 25% of world economic output. By this measure, Greater Philadelphia ranks last among the 10 largest US metros.

1) **COMBINED GDP OF COUNTRIES SERVED BY NONSTOP PASSENGER AIR SERVICE BY METRO AREA (2014)**

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>GDP % of World GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York (EWR, JFK, LGA)</td>
<td>24.8%</td>
</tr>
<tr>
<td>Los Angeles (LAX)</td>
<td>20.0%</td>
</tr>
<tr>
<td>Chicago (ORD)</td>
<td>18.1%</td>
</tr>
<tr>
<td>Washington, DC (IAD)</td>
<td>17.9%</td>
</tr>
<tr>
<td>Houston (IAH)</td>
<td>15.1%</td>
</tr>
<tr>
<td>Dallas-Ft. Worth (DFW)</td>
<td>15.1%</td>
</tr>
<tr>
<td>Boston (BOS)</td>
<td>14.6%</td>
</tr>
<tr>
<td>Atlanta (ATL)</td>
<td>13.8%</td>
</tr>
<tr>
<td>Miami (MIA)</td>
<td>12.6%</td>
</tr>
<tr>
<td>Philadelphia (PHL)</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

2) **INTERCITY RAIL RIDERSHIP**
Between 2011 and 2013, annual Amtrak ridership in Greater Philadelphia grew 6.5% to just under 5.4 million passengers—the third-highest regional total in the United States.

2A) **AMTRAK RIDERSHIP GROWTH BY METRO AREA (2011–2013)**

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Ridership Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC</td>
<td>+5.4%</td>
</tr>
<tr>
<td>WAS</td>
<td>0%</td>
</tr>
<tr>
<td>PHL</td>
<td>-0.5%</td>
</tr>
<tr>
<td>CHI</td>
<td>-10%</td>
</tr>
<tr>
<td>LAX</td>
<td>-15%</td>
</tr>
<tr>
<td>BOS</td>
<td>-20%</td>
</tr>
<tr>
<td>MIA</td>
<td>-25%</td>
</tr>
<tr>
<td>ATL</td>
<td>-30%</td>
</tr>
<tr>
<td>DFW</td>
<td>-35%</td>
</tr>
<tr>
<td>HOU</td>
<td>-40%</td>
</tr>
<tr>
<td>MIA</td>
<td>-45%</td>
</tr>
<tr>
<td>LAX</td>
<td>-50%</td>
</tr>
<tr>
<td>CHI</td>
<td>-55%</td>
</tr>
<tr>
<td>PHL</td>
<td>-60%</td>
</tr>
<tr>
<td>NYC</td>
<td>-65%</td>
</tr>
</tbody>
</table>

**GLOBAL PORT CONNECTIONS**
Greater Philadelphia ranks 4th among peer metros for volume of both imports and exports at its seaports. While imports to the region outweigh exports considerably, the latter grew by 28% between 2008 and 2013.

3) **SEAPORT TRADE BY WORLD REGION OF ORIGIN AND DESTINATION BY METRO AREA (2013)**

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>-57.6%</td>
<td>+106.6%</td>
</tr>
<tr>
<td>Asia</td>
<td>-28.3%</td>
<td>-38.9%</td>
</tr>
<tr>
<td>Australia &amp; Oceania</td>
<td>-19.2%</td>
<td>+36.1%</td>
</tr>
<tr>
<td>Europe</td>
<td>-18.7%</td>
<td>+56.3%</td>
</tr>
<tr>
<td>North America</td>
<td>-50.5%</td>
<td>-51.2%</td>
</tr>
<tr>
<td>South &amp; Central America</td>
<td>-40.4%</td>
<td>+23.3%</td>
</tr>
</tbody>
</table>

**CHANGE IN TRADE ACTIVITY AT GREATER PHILADELPHIA PORTS (2008–2013)**

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>
TRANSIT RIDERSHIP | In 2012, the average Greater Philadelphia took 75 trips on public transit, placing our region 5th among the 10 largest US regions. While ridership fell in many peer metros between 2008 and 2012, our region saw modest growth.

4) TRANSIT RIDERSHIP GROWTH BY URBANIZED AREA (2008-2012)

TRANSPORTATION STATE OF GOOD REPAIR | In 2012, 973 bridges in the region were assessed as structurally deficient—a 7.1% improvement over the 2010 total but still short of state-of-good-repair goals.

6A) CONDITION OF BRIDGES IN GREATER PHILADELPHIA

6B) PAVEMENT CONDITION OF STATE-MAINTAINED ROADS

TRANSPORTATION CHOICE | 24% of regional jobs are located in communities with multi-modal access. By this measure, Greater Philadelphia ranks 5th among peer metros.

5) MULTI-MODAL EMPLOYMENT CENTERS IN GREATER PHILADELPHIA

**METRO AREA** | **SHARE OF JOBS IN MULTI-MODAL COMMUNITIES**
---|---
New York | 57.8%
Washington, DC | 33.7%
Boston | 32.1%
Chicago | 27.6%
Greater Philadelphia | 23.6%
Los Angeles | 14.9%
Miami | 3.9%
Atlanta | 3.8%
Houston | 0.8%
Dallas-Ft. Worth | 0.5%

*Multi-modal communities are census tracts in which 18% or greater of workers arrive to work by means other than automobile.
In aggregate, the distribution efficiency of Greater Philadelphia’s drinking water utilities is in line with that of other large providers around the US, though systems in many of the region’s older communities face substantial leakage challenges due to aging infrastructure.

7) DRINKING WATER SYSTEM INFRASTRUCTURE LEAKAGE INDEX (2012)

Excluding disruptions caused by major weather events, the duration of the average power interruption for all four electric utilities in our region remained relatively constant between 2008 and 2012. This measure is a key indicator of everyday system reliability.

8) AVERAGE DURATION OF POWER INTERRUPTION BY ELECTRIC PROVIDER (2008–2012)

Between 2004 and 2011, the amount of protected open space in Greater Philadelphia grew by 29%. Protected acres now account for 23% of total land area in the region.

9) ACRES OF PROTECTED OPEN SPACE (2004–2011)
Tracking the performance of regional infrastructure provides a strong basis for sound investment decisions. The alignment between the World Class Infrastructure agenda and our own efforts helps broaden engagement and elevate awareness of the critical issues facing Greater Philadelphia’s transportation, energy, water, and open space networks.

“THE WORLD CLASS INFRASTRUCTURE AGENDA

FOCUS AREAS

GLOBAL & NATIONAL CONNECTIONS
- Develop Philadelphia International Airport as a world class facility
- Improve intercity rail connections with key metros
- Enhance capacity on the region’s freight rail networks

REGIONAL MOBILITY
- Bring the region’s transit systems up to a state of good repair
- Upgrade aging roads and bridges
- Strengthen connections between the region’s economic hubs

SUSTAINABLE SYSTEMS
- Modernize and protect the region’s existing water infrastructure
- Enhance regional energy infrastructure
- Preserve and expand the region’s networks of parks and open space

BARRY SEYMOUR
Executive Director, Delaware Valley Regional Planning Commission
SPOTLIGHT ON PROGRESS

Enhancing Greater Philadelphia’s Global Reach

As more businesses require access to routes of international trade and travel, convenient and reliable connections to established and emerging markets will greatly influence Greater Philadelphia’s economic competitiveness. The quality of our region’s international connections depends in no small part on the performance of Philadelphia International Airport (PHL).

In recent years, international traffic at PHL has grown, though the airport’s global reach remains considerably smaller than that of international airports in peer metros. Philadelphia is the largest US metro without nonstop service to Asia, and the region lacks a nonstop connection to South America.

Despite concerted efforts by airport officials, airline executives, and regional leaders, the direct connection to Asia has proven elusive. New flights to the Middle East, however—Including US Airways’ nonstop service to Tel Aviv and Qatar Airways’ route to Doha—have pushed PHL’s global reach eastward.

Efforts to establish a connection to South America are ongoing, though progress has been turbulent. In 2013, the US Department of Transportation denied US Airways’ bid to begin service between PHL and Sao Paolo, so PHL will have to wait until at least 2015 to get its first nonstop connection to the Southern Hemisphere.

Nevertheless, airport officials are bullish on PHL’s potential to grow as an international hub, due in no small part to the US Airways–American Airlines merger. Though not guaranteed, the merger’s upside for PHL is significant. With an expanded fleet of long-haul aircraft, the merged airline will be in better position to offer flights to Asia and South America from East Coast hubs like PHL. Direct access to the new airline’s expanded domestic network should also make PHL more attractive to foreign carriers, which take the volume and geographic spread of a facility’s connecting traffic into account when identifying international gateways. So far, the merger’s impact on PHL’s domestic connections has been positive, with routes to six new US cities added in the months since the deal was approved.

Successfully accommodating sustained growth in service, however, will require addressing facility constraints for both travelers and carriers. Airport executives have been working for more than a decade to advance a comprehensive $6.4 billion master plan that includes the expansion of PHL’s airfield and gate capacity and modernization of terminals. This effort reached a major milestone in May 2014, with a settlement between the airport and neighboring Tinicum Township over the scope and impact of the plan.

Hurdles remain before the full plan is realized, but with more than $1 billion invested in capital improvements in the past 15 years, international passenger traffic on the rise, and the potential for the merger to expand overseas service from PHL, Greater Philadelphia’s access to the global economy appears poised to grow stronger.

› Read more at worldclassgreaterphila.org
**NONSTOP INTERNATIONAL DESTINATIONS FROM PHL** | PHL provides nonstop service to 40 international destinations in 25 countries whose combined GDP of $18 trillion accounts for 25% of world economic output.

**INTERNATIONAL PASSENGER TRAFFIC FROM PHL** | International passenger traffic through PHL has grown steadily since 2009—in 2013, PHL served a record 4.5 million international passengers, representing nearly 15% of total passengers at the airport. This growth has occurred despite little growth in overall traffic at PHL.

**ANNUAL PASSENGER TRAFFIC AT PHL (2004–2013)**

**INTERNATIONAL PASSENGERS AS SHARE OF ALL PASSENGERS AT PHL (2004–2013)**

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Source: Aviation Activity Reports, Philadelphia International Airport

Source: Official Airline Guide schedules, January–October 2014
The shared work to boost business growth, improve education and talent development outcomes, and make our region’s infrastructure more effective and reliable is ongoing. Here is a selection of current campaigns and partnership efforts helping to drive progress around the World Class agenda.

**PRE-K FOR PA**

In partnership with local and statewide organizations, the Economy League is working to increase access to high-quality pre-k. In January 2014, the Economy League and statewide partners launched the Pre-K for PA campaign—with the goal of ensuring that every 3- and 4-year-old has access to high-quality pre-k. This broad-based campaign includes business leaders, school district superintendents, law enforcement officials, and even retired military leaders making the case for investment in high-quality pre-k in Pennsylvania.

To learn more and get involved, check out [prekforpa.org](http://prekforpa.org) or contact Jon Grabelle Herrmann, southeast campaign director, Pre-K for PA, at jon@prekforpa.org.

**KINDERGARTEN READINESS**

The Economy League and local partners are also working to build broad support for implementation of common kindergarten readiness assessments that will enable data collection on school preparedness and drive improvements in pre-k learning. This work contributed to Pennsylvania’s successful Race to the Top Early Learning Challenge grant awarded in late 2013, which will support making the state’s standardized assessment available to all schools on a voluntary basis and require lower-performing schools to use the tool.

To learn more and get involved, contact Jennifer Egmont, director of initiatives and knowledge management, Economy League of Greater Philadelphia, at jegmont@economyleague.org.

**POSTSECONDARY ATTAINMENT**

Convened by the CEO Council for Growth, Talent Greater Philly is a group of more than 20 local organizations who came together four years ago to compete against 56 other regions for the Lumina and Kresge foundations’ $1 million Talent Dividend Prize. The prize will be awarded to the region with the largest increase in the number of postsecondary degrees granted over a three-year period. Win or lose, the collaborative work of the Talent Greater Philly coalition is continuing on through a recently announced $200,000 grant from the Lumina Foundation to support the development of postsecondary attainment strategies for the region, with a particular focus on strengthening college completion outcomes.

To learn more and get involved, check out [talentgreaterphilly.org](http://talentgreaterphilly.org) or contact Dana D’Orazio, project manager, The Graduate! Network, at dana.dorazio@graduate-network.org.
BUILDING WORLD CLASS NETWORKS

To maintain focus around the World Class agenda and strategic opportunities for regional impact, the Economy League is working with leading regional organizations to establish ongoing leadership networks focused on the three World Class priority areas. With leadership from United Way, a Regional Education & Talent Network has already launched, and similar initiatives are planned for business growth and infrastructure.

To learn more, contact Josh Sevin, the Economy League’s managing director for regional engagement, at jsevin@economyleague.org

REGIONAL EXPORTS

Sustained state investments and significant regional assets have contributed to recent export gains for Greater Philadelphia. Recognizing the opportunity to take the region’s export outcomes to the next level, the Economy League and the World Trade Center of Greater Philadelphia are preparing to launch a collaborative regional export analysis and strategy initiative that will provide an in-depth, data-driven assessment of regional export growth opportunities and convene cross-sector stakeholders to develop a shared strategy to achieve specified metro export goals.

To learn more and get involved, check out wtcphila.org or contact Dino Ramos, senior vice president, World Trade Center of Greater Philadelphia, at dramos@wtcphila.org

FEDERAL POLICY FOR REGIONAL COMPETITIVENESS

Drawing upon the priorities identified in the World Class Business Growth GPS, the CEO Council for Growth has defined and advocated for a federal policy agenda focused on innovation, entrepreneurship, and technology-based economic development. The CEO Council’s current federal advocacy priorities aligned with the World Class business growth agenda include increasing federal research funding, advocating for high-skilled immigration reform, and pursuing the establishment of new regional centers of excellence that foster public-private partnerships between academia and industry.

To learn more and get involved, check out ceocouncilforgrowth.com or contact Claire Greenwood, director, CEO Council for Growth, at cgreenwood@ceocouncilforgrowth.com

TRANSPORTATION FUNDING IN PENNSYLVANIA

The 2013 passage of major transportation funding legislation in Pennsylvania marked a watershed moment for infrastructure in the Commonwealth. The tireless efforts of a broad statewide coalition of transportation experts and advocates, including many organizations and individuals involved in the World Class initiative, were critical to the creation of the state’s Act 89. The Act provides unprecedented levels of dedicated funding for deteriorating transit systems, roads and bridges. With funding now in hand, leaders are focused on making the most of these new resources.

To learn more and get involved, contact Nick Frontino, managing director of strategy and operations, Economy League of Greater Philadelphia, at nfrontino@economyleague.org
WORLD CLASS
GREATER
PHILADELPHIA
INVESTORS

AmeriHealth Caritas
Aramark
Bank of America
Deloitte LLP
Dow Chemical Company
Ernest Bock & Sons, Inc.
Eventus Strategic Partners
Haefele Flanagan
Holy Redeemer Health System
IBM
Mercator Advisors LLC
Montgomery Early Learning Centers
MRA Realty, Inc.
ParenteBeard
PECO Energy Company
Philadelphia Convention & Visitors Bureau
Radian Guaranty
SEI
TD Bank
The Philadelphia Foundation
United Way of Greater Philadelphia and Southern New Jersey
University City Science Center
Widener University
Wolfe Scott Builders & Construction Managers

(as of 6/13/14)
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Page 29: B. Krist for GPTMC

In partnership with:
United Way of Greater Philadelphia and Southern New Jersey

LIVE UNITED
World Class Greater Philadelphia is a business- and civic-led initiative to develop and advance a shared agenda for regional growth and opportunity in the Philadelphia area. Facilitated by the Economy League of Greater Philadelphia, the World Class initiative leverages the collective power of the region’s business, nonprofit, government, labor, and community leaders for lasting regional impact in three primary areas: education & talent development, business growth, and infrastructure.

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@EconomyLeague