



**Philadelphia City Council Committee on Global Opportunities
and the Creative/Innovative Economy**

Pennsylvania Senate International Commerce Caucus

**A Hearing Findings and Recommendations on
Improving the Global Competitiveness of Philadelphia**

Presented by:

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Introduction

The 21st Century economy is marked by a greater flow of products and services worldwide. What makes this phenomenon more powerful today than just 20 years ago is the fast speed in which world markets are coming together. New technology and management expertise are driving this process of globalization. In this process, jobs readily move to lower-cost regions of the world ignoring geographical borders. Because U.S. labor costs are less competitive than in the past, the role of innovation becomes more important to business growth and job creation. At the same time, American companies have a greater access to world markets and investors. It is estimated that over 70% of the world's purchasing power is located outside of the U.S. Furthermore, the U.S. is attracting more foreign direct investment (FDI)¹. The total stock of FDI in the U.S. economy is valued at \$2.5 trillion supporting about 5.3 million jobs.

Thus, companies' abilities to reach international markets are vital to their success. More companies will have to compete in global markets and the City of Philadelphia and the Commonwealth of Pennsylvania must work towards policies that will strengthen key competitive resources and factors such as labor, capital, infrastructure, and regulations. Therefore, the government has an important role in improving the City's business environment and making it a competitive location for reaching new consumers and investors, and building innovative capacity that will lead to job and wealth creation.

To gain insights and recommendations on how Philadelphia can effectively compete on a global basis for jobs, investments, and talent, Councilman David Oh, Chairman of the City Council Committee on Global Opportunities and the Creative/Innovative Economy and State Senator Michael Brubaker, Chairman of the Pennsylvania Senate International Commerce Caucus convened a series of hearings in Philadelphia City Council Chambers.

The following is a report on the hearing findings and recommendations based on the oral and written testimony of 81 expert witnesses: government officials; business and industry leaders; university and education leaders; union representatives; and non-profit leaders of international business development programs. The expert testimony identified three policy priorities - a comprehensive international trade and investment attraction strategy, workforce development, and tax reforms – for making Philadelphia a more globally competitive city.

¹Aaron Brickman, Deputy Executive Director of SelectUSA, U.S. Department of Commerce, defines FDI as investments in communities by a foreign entity that create new businesses, provide capital for development projects, develop or expand production or manufacturing facilities or provide new ownership of an existing enterprise. (Source: "Strategies for Globally Competitive Cities: Local Roles in Foreign Direct Investment and International Trade," National League of Cities.)

Hearing Opening Statements By:

Michael Brubaker, Pennsylvania State Senator and Chairman of the PA Senate International Commerce Caucus

David Oh, Philadelphia City Councilman and Chairman of the Committee on Global Opportunities and the Creative/Innovative Economy

Senator Brubaker: “International commerce and international business and breaking down the walls of international relations are extremely important to me personally. I am thrilled with the infrastructure that the Commonwealth of Pennsylvania has in place today. And even though I believe we [the Commonwealth of Pennsylvania] are the best in the nation at reaching out to our international partners, I still believe we can do it better. We want to hear what we can do better. We want to identify the barriers that are in place, governmental and private-sector barriers, and attempt, the best we possibly can, to melt those barriers down so that this international business opportunity that all of us have continues to grow. The United States of America has only 4 percent of the world’s population, and many of our businesses want to do business and many of our investment communities want to make and receive investments internationally with the other 96 percent of the world’s population. This is very, very important in a shrinking world that we have today.”

Councilman Oh: “Today over half the world’s population lives in cities, and this population accounts for over 80 percent of the world’s GDP, or Gross Domestic Product. In this regard, cities are competing with each other for skilled and talented workforce, capital investments and other types of opportunities to grow both their economy and provide a good quality of life for the citizens that they attract. Philadelphia is America’s fifth largest city. We are also America’s sixth largest metropolitan statistical area. And we have a lot of great things going for us, but we also have challenges, and it is addressing these challenges that we’re holding these hearings. How will Philadelphia compete in a global economy, how will we improve the economy, what can we do to ensure that our City is not left behind but instead is a leader in our regional, national, and international economies.”

International Trade and Investment Attraction

- **The City lacks a comprehensive strategy for international trade and investment attraction**

A key barrier for Philadelphia's future as a global city is the lack of a comprehensive international business strategy. Without it, Philadelphia cannot fully assess business opportunities and leverage its competitive advantages for international success. Cities that are expanding international trade and attracting foreign direct investment are pursuing aggressive global marketing and outreach campaigns and developing incentives to attract overseas capital and talent. For example, Las Vegas and Dubai, less known for healthcare industry than Philadelphia, are attracting more international medical travel due its strategic marketing efforts; Miami and New York City have moved forward with infrastructure plans that will allow their seaports to take full advantage of the completion of the Panama Canal Expansion project that will shift global shipping routes toward East Coast Ports (See Exhibit 1).

- **A stronger City government leadership is needed for global outreach and promotion**

In order to take advantage of international opportunities and elevate the global profile of Philadelphia, the city needs to provide a system with a strong top-down leadership. Philadelphia must assume its role as a major city and establish an International Business System responsible for organizing and initiating foreign relations and business. A recurring suggestion of the hearing was to have key leaders of the City travel and establish connections with foreign companies. In particular, in trying to establish relations with foreign companies, leveraging the city's strength in energy and healthcare is important. For example, the testimony from the Philadelphia-Israel Chamber of Commerce claimed that foreign companies came to the region for investment opportunities in "life sciences, healthcare information technology, clean and efficient energy, software and internet." The administration needs to provide the leadership structure necessary to have public and private sector organizations communicate effectively and partner together.

- **Leverage Philadelphia's strategic location and infrastructure**

Philadelphia's location between Washington D.C. and New York City can be a strategic advantage, if leveraged properly. Philadelphia's connected highways, railways, seaport, and airport make it possible for the City to excel in imports and exports, as well as air traffic for business and leisure. However, significant challenges remain in using these facilities to their full potential. Significant investment is needed particularly for the airport and the seaport. Both have begun improvement processes that will take years and significant funding, but should

render Philadelphia a competitive city for these services. The deepening of the Delaware River to accommodate larger ships and expanding international air services, especially to Asia and South America, were referenced as top priorities. These links are critical for the region's economic development in the future.

- **Leverage Marcellus Shale natural gas to strengthen manufacturing and open new markets**

Natural gas is a growing industry with great economic potential. Though not centered in southeastern Pennsylvania, the Marcellus shale can still provide many opportunities for the City of Philadelphia. Refineries and ports in Philadelphia can make the region a global hub for petrochemicals. In addition to the direct impact of refining and shipping natural gas, the energy industry will also lead to other indirect impacts as well. According to the United Nations Conference on Trade and Development (UNCTAD) World Investment Report 2012, gas producing countries are emerging as major recipients of foreign direct investment. With multiple industrial uses, natural gas primes Philadelphia for international investment. City administration needs to take advantage of these energy opportunities and appeal to international companies. Doing this however will require investment. Additional pipe capacity, transportation systems, and new ports and infrastructure will be needed.

Case Study: "The Mariner East Project is allowing the rebirth of Sunoco's former refinery in Marcus Hook, PA. Braskem America, a Brazilian company purchased a portion of the refinery to produce polypropylene, a form of plastic used in water bottles and credit cards. Other parts of the facility will process Marcellus Shale ethane and propane for shipment, which will provide new construction and traffic through the Delaware River port. This project will require approximately \$200 million dollars in investment, 450 people for construction and upwards of 100 direct jobs created at the facility. The propane and butane will be shipped to Europe and other countries for use in petrochemical manufacturing. Furthermore, the Marcus Hook refinery will allow distribution to the Southeastern region of the U.S."

According to the data from the Select Greater Philadelphia, the 11-county region is home to 5,500 manufacturing companies. Among them, over 1,500 companies potentially have the capabilities to be involved in some aspect of support, supply, conversion, and/or utilization of shale natural gas. Below provides examples of potential projects for regional manufactures:

- Steel manufacturing
- Gas processing/fractionation plants

- Natural Gas and Natural Gas Liquids storage facilities
- Ethane cracking facilities
- Gas-to-liquids facilities
- Pipeline projects
- Rail projects
- Exporting and shipping projects

- **Philadelphia is positioned to excel in international exports**

According to the U.S. Department of Commerce, today, more than 70% of the world’s purchasing power is located outside the United States. In order for Philadelphia to prosper, it will have to take advantage of this global demand. Therefore, local firms must look outside of the U.S. and tap emerging markets and global consumption as a source of growth here at home. Peter Groverman, President and CEO of Grovera, spoke about the expanding middle class worldwide, with more than 1 billion new individuals in the last decade: “These consumers ... are using this newly created wealth to abundantly acquire higher quality products. Even in nations that disagree with our standards, “The Made In America” brand globally signifies to consumers an element of trust that the goods represent the highest of quality.”

Recognizing the importance of trade in supporting economic recovery and growth of the U.S. economy, President Obama announced the National Export Initiative with a goal of doubling U.S. exports by the end of 2015. In 2011, the Philadelphia Metropolitan Area was the 11th largest export market in the U.S., merchandise shipments totaling \$26.2 billion with a \$3.4 billion increase from 2010. Philadelphia’s largest exporting markets are to Canada, the United Kingdom, China, Mexico, and Germany.

Table 1: Top Export Destination Countries for Philadelphia-Camden-Wilmington MSA, 2011

Country	Value	Share
Canada	\$6.0 billion	22.9%
United Kingdom	\$4.8 billion	18.2%
China	\$1.8 billion	7.0%
Mexico	\$1.6 billion	6.3%
Germany	\$1.1 billion	4.2%

Source: U.S. Department of Commerce, International Trade Administration

There is much room for growth because as a whole, only approximately 1% of U.S. companies participate in export activity and 58% of these companies export to one market. For example, among the top destinations for Pennsylvania exports are Canada and Mexico, as well as Brazil, Argentina, Russia, India, Australia, Saudi Arabia, and China. Many African countries receive less

Pennsylvania exports and therefore represent opportunities for growth in emerging markets. Stanley Straugther, Principal at Bazilio Cobb Associates, recommended developing a strategy to promote exports to African markets to close the multi-billion dollar export gap: “The [Philadelphia] region receives \$18 billion in goods ... Unfortunately, the cargo ships that reach the ports of Philadelphia from Africa leave empty.”

It is projected that exports over the coming decade will account for \$16.8 trillion by 2020, amounting to 39.7% of real U.S. GDP growth. According to the U.S. International Trade Administration, 6,000 jobs in the U.S. are supported for every \$1 billion in exports. The U.S. Metropolitan areas are critical for driving export growth and therefore, the ability of the Philadelphia region to handle higher levels of trade is vital for Philadelphia to create jobs through increased trade.

An export strategy for Philadelphia is an avenue to help local companies become more competitive. According to the U.S. Commercial Service, “on average, [businesses’] sales grow faster, more jobs are created and employees typically earn 13–18 % more than in non-exporting firms. Companies that export are generally more resilient to economic fluctuations than those that do not.”

There are other important considerations for growing small and mid-sized firms (SMEs). More than 97% of U.S. exporters are SMEs, and they account for nearly a third of U.S. merchandise exports. Manufacturers who exported saw their revenues grow by 37% compared to non-exporters who saw their revenues decline by 7% in 2009². Comprising about 61% of U.S. exports, manufacturing industries produced three-quarters of the nation’s additional sales abroad between 2009 and 2010.³ In addition, U.S. exports of private services represented 14% of world exports of services, more than double the share of the second-ranking country service exporter—Germany.⁴

With competitive energy costs, Philadelphia is in a great position to support manufacturing as part of its export strategy including the expansion of chemicals manufacturing. As a major export metropolitan region, Philadelphia largely focuses on “Chemical Manufacturing” as defined by the North American Industrial Classification System (NAICS). Chemical Manufacturing makes up over forty percent of all exports from the Philadelphia metropolitan region. The substantial anchor of Philadelphia exports, this economic sector is over eight times larger than the next biggest exported sector, petroleum manufacturing. Chemical

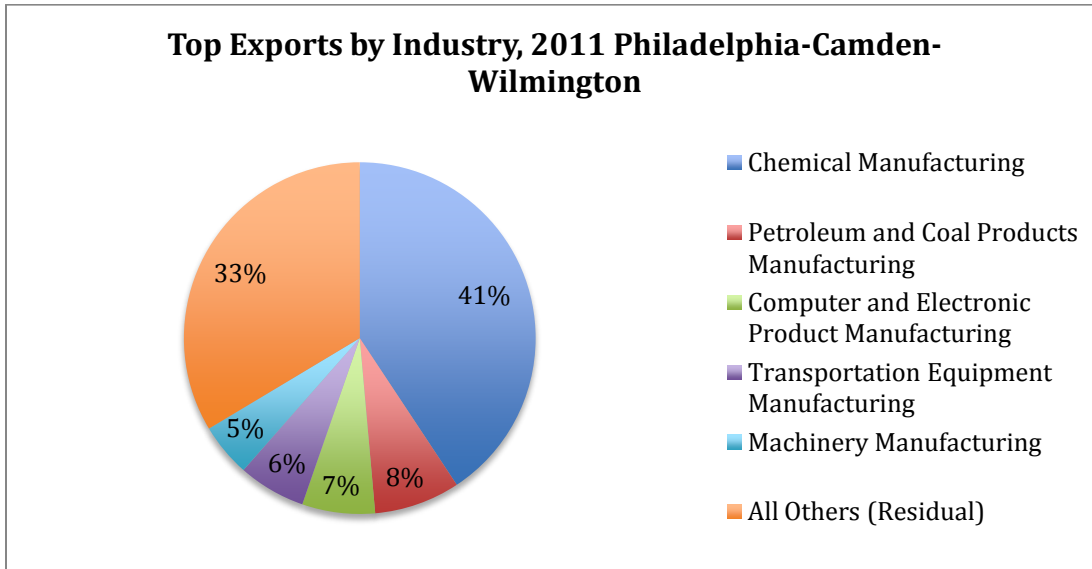
² Source: “Going Global: The Future of Metro Economies,” a speech given by Amy Liu on July 13, 2012 at the 56th Annual Sister Cities International Conference. The transcript is available at: <http://www.brookings.edu/research/speeches/2012/07/13-jacksonville-exports-liu>

³ Source: “Export Nation 2012: How U.S. Metropolitan Areas are Driving National Growth,” Brookings Institution, March 2012.

⁴ Ibid.

manufacturing must be recognized as an important component to Philadelphia’s connection to the global economy.

Figure 1: Top Exports by Industry, 2011 Philadelphia-Camden-Wilmington



Source: International Trade Administration, U.S. Department of Commerce

Table 2 below shows the value of all sales and revenues by sub-sector as well as the number of paid employees. The data shows that “Pharmaceutical and Medicine” manufacturing makes up nearly three fifths of the entire sector of Chemical Manufacturing.

Table 2

NAICS	Value of Sales, Shipments Receipts, Revenues, or Business Done (\$1000)		Paid Employees
All Chemical Manufacturing	\$28,218,348	100%	35,914
Basic	\$4,277,020	15%	5,077
Rubbers & Synthetic Fibers	\$2,319,132	8%	3,316
Agricultural	\$374,761	1%	677
Pharmaceutical and Medicine	\$16,362,737	58%	16,618
Paints and Adhesives	\$2,006,043	7%	3,370
Soaps and Cleaning Compounds	\$1,097,942	4%	3,134
Other	\$2,154,909	8%	3,722

Source: United States Bureau of Labor Statistics

It should be noted that the data presented in Table 2 does not represent exports only. The values presented represent all sales and revenues in entirety. However, the general trends are

still apparent. Pharmaceuticals make up nearly sixty percent of the economic sector that constitutes over forty percent of all Philadelphia exports.

An export strategy can leverage Philadelphia's economic specialization, and its infrastructure, especially the Philadelphia port and airport. In addition to the opportunity to expand the chemicals industry, the region and the state's biggest exporter, which includes plastics, medicine, and pharmaceuticals; increased exports can expand both the manufacturing and service industries of Philadelphia. As mentioned, manufacturing represents the largest share of U.S. exports, and manufactured goods currently account for 90% of Pennsylvania exports.

Service industries are also well-positioned to increase international sales. Joseph Hanley, Director of the Mid-Atlantic Region, U.S. Commercial Services, provided the following perspective: "The services sector remains an important and fast-growing sector of the U.S. economy and a leader among U.S. exports. The City of Philadelphia's economy is supported by exports of its services and has exceptional strengths to that effect, ranging from world-class colleges and universities to leading health care institutions, [and a] vibrant travel and tourism industry. Export service sectors also include architecture, construction and engineering services, financial services and transportation services, including those provided at the Philadelphia port."

- **Philadelphia has a relatively small share of foreign direct investment**

The U.S. Foreign Direct Investment (FDI) levels have been rapidly expanding just in the past few years. In 2010, U.S. communities received \$228 billion in FDI, representing a 50 % increase over 2009. According to the U.S. Department of Commerce, the total stock of FDI in the U.S. economy is valued at \$2.5 trillion, which is about 18% of total U.S. GDP. FDI in the U.S. supports about 5.3 million jobs, and U.S. affiliates of foreign firms generated approximately 21% of America's exports.

The below list provides top ranking sectors investing in North America, by estimated jobs:⁵

1. Transport Equipment
2. Industrial Machinery & Equipment
3. **Chemicals**
4. Electronics
5. Information & Communications Technology
6. Electrical Equipment
7. **Pharmaceuticals, Medial & Healthcare**

⁵ Source: "Strategies for Globally Competitive Cities: Local Roles in Foreign Direct Investment and International Trade," National League of Cities.

8. Business Services

9. Food, Beverages & Tobacco

10. Metals

*The competitive sectors of Philadelphia are highlighted above.

According to Select Greater Philadelphia (Select), the Greater Philadelphia region hosts 761 foreign owned companies employing 122,550 individuals. 179 companies are located in Philadelphia County employing 35,000 people. For clarification, Select defines this region as the area encompassing Philadelphia, Montgomery, Chester, Bucks, Delaware, New Caster (Delaware), Mercer (New Jersey), Camden (New Jersey), Gloucester (New Jersey), Burlington (New Jersey), and Salem (New Jersey) counties. As displayed in Table 3, the foreign ownership of these companies is mostly centered in Europe and other Western countries.

Table 3: Foreign-Owned Companies in Philadelphia County by Country of Global Parent, 2012

Foreign Country	Number of Firms
United Kingdom	38
France	24
Japan	18
Germany	13
Canada	11
Sweden	11
Netherlands	9
Denmark	7
Spain	7
Australia	6

Source: Select Greater Philadelphia

Ninety-four percent of firms are evenly split between three industrial clusters: manufacturing, wholesale and retail trade and transportation, and informational, financial, and professional services. The remaining six percent (about forty-five firms) are scattered across all other industries. Additionally, these three industrial clusters also account for ninety-six percent of employment in foreign-owned companies, with both manufacturing and informational, financial, professional services comprising of forty percent of employment each.

Breaking these industries down even further reveals additional insights. The following table shows the three six-code NAICS industries with the most firms and with the most employees. Six-code is the most specific industrial classification for NAICS and the United States Department of Commerce.

Table 4: Top 3 Foreign Owned Companies by Number of Firms and by Number Employed in the Philadelphia Metropolitan Region, 2012

Industry	Number of Firms	Number Employed
Pharmaceutical Preparation Manufacturing	28	14,380
Industrial Machinery Equipment Wholesalers	19	289
Custom Computer Programming Services	18	493
Commercial Banks	7	11,412
Surgical and Medical Instrument Manufacturing	7	8,560

Source: Select Greater Philadelphia

From Table 4, the dominance of “Pharmaceutical Preparation Manufacturing” is apparent. In terms of number of firms, it has nearly fifty percent more firms than the next largest industry. In terms of employment size, it is twenty-five percent larger than the next largest industry. Foreign employers are certainly concentrating on pharmaceuticals in Philadelphia investments.

Similar trends hold for Philadelphia but they are not nearly as stark as the metropolitan region as a whole. Table 5 outlines this information:

Table 5: Top 3 Foreign Owned Companies by Number of Firms and by Number Employed in the City of Philadelphia, 2012

Industry	Number of Firms	Number Employed
Custom Computer Programming Services	9	123
Engineering Services	7	111
Commercial Banks	5	10,119
Pharmaceutical Preparation Manufacturing	5	6,443

Source: Select Greater Philadelphia

The most obvious difference in isolating Philadelphia is that Pharmaceuticals are not in a category of their own. Though still a major presence in the City, the industry is neither the top employer nor the top presence (in terms of number of firms) for foreign ownership.

However, it is important to notice that the two industries with the largest number of foreign owned firms, only account for 234 employees. Combined these two industries only account for less than four percent of 'Pharmaceutical Preparation Manufacturing'.

Furthermore, in isolating 'Commercial Banks' as the top foreign owned employer in the City of Philadelphia, it must be noted that well over sixty percent of this industry is comprised of a sole employer- TD Bank. An international commercial banking chain, this company has a presence in many cities.

Chemical manufacturing, especially pharmaceutical manufacturing, is Philadelphia's largest export sector and biggest trade connection to other countries. The industry also is a significant part of the city's comparatively small foreign direct investment. Foreign owned companies operating in Philadelphia can provide the basis for attracting more direct investments from the countries and industries represented in this analysis.

In addition, opportunities to attract companies from other growing parts of the world should be strategically thought out and pursued by the City of Philadelphia. Countries in Asia, South America and Africa, have not only grown economically in recent decades, but have personal ties to Philadelphia because of international students, the City's cultural diversity, and the growing immigrant communities. Furthermore, international business and other relationships are cultivated everyday by higher educational institutions and organizations like the Consular Corp of Philadelphia, International Visitors Council that administers the City's Sister City program with seven countries, international Chambers of Commerce, and many other entities that have an international interest in their organizational mission. The City can harness these unique international ties to expand Philadelphia's share of foreign investment and improve the economic performance of the City and the broader region and the State of Pennsylvania.

Recommendations:

- **Develop and implement a comprehensive strategy for expanding exports and attracting foreign direct investment**
 - Develop the capacity to centralize and effectively coordinate existing resources across the federal, state, and local level
 - Strategically leverage Philadelphia's infrastructure for global trade opportunities, especially for commercial opportunities presented by the Panama Canal Expansion project and Marcellus natural gas development

- Expand exports from the services sectors – education, healthcare, and professional business services
 - Pursue export opportunities in emerging economies – Brazil, India, China, Russia and African countries
 - Conduct an assessment to identify companies in Philadelphia that are export ready and help them understand and navigate available resources – *eg.* technical, financial, and trade incentives
 - Form a Foreign Direct Investment advisory committee
 - Strategic marketing of Philadelphia
 - Develop a business retention and expansion program for the U.S. affiliates of foreign firms operating in Philadelphia
 - Leverage anchoring institutions such as universities and hospitals
 - Cultivate a welcoming environment for international visitors – *e.g.*, signage around the city in different languages
- **Establish an international business unit in the City’s Commerce Department**
 - Require the development of a comprehensive strategy for expanding trade and attracting foreign direct investment including performance measurement goals
 - Provide adequate appropriations to support the international business unit
 - Promote regional collaboration
- **Establish an entity for international affairs to provide for the City’s organizational structure to support and promote the cooperation of various City agencies, and economic development entities to effectively pursue global business opportunities**
 - Develop international protocol for Philadelphia
- **Assess and prioritize economic benefits presented by natural gas development**
 - Opportunities for Manufacturing
 - New Market Opportunities (International and Domestic)
 - Natural gas for electricity
 - Natural gas for exports
 - Natural gas for transportation

Workforce Profile

- **Enhancing education and workforces skills present the largest challenge for Philadelphia**

The availability of a skilled and ready workforce was identified as the single most important issue for the City. Education and training programs must develop the skills required by City employers. Presently, manufacturers and technology start-up companies have a hard time finding skilled workers.

Despite 68,000 people who are unemployed in the City, employers have difficulty finding qualified workers. The seriousness of the situation cannot be over-emphasized and the growth of the Philadelphia economy will depend on strengthening the City's workforce. Mark Edwards, President and CEO of Philadelphia Works Inc., provided an estimate of 550,000 Philadelphia residents, accounting for over 50% of adults, that have low literacy with difficulties following basic written instructions or completing a job application.

Dan Fitzpatrick, President of Citizens Bank, stated: "the skills gap is very real and needs to be worked on." Steve Jurash, President and CEO of the Manufacturing Alliance of Philadelphia, pointed out that there are approximately 500 manufacturing jobs in the City that cannot be filled due to a lack of skilled workers and a lack of work ethic or foundational skills required for entry-level employment. Jurash provided an example of a manufacturer in Port Richmond that must hire 100 individuals to maintain 10 employees at the end of the year. This condition costs the company well over \$250,000 each year and constricts both competitiveness and their ability to innovate.

There is a need to increase access to apprenticeship programs to address the skills gap. Jurash testified that there is a lack of training programs the residents can attend in the Philadelphia County. Pat Eiding, President of Philadelphia Council AFL-CIO, added that that the apprenticeship programs in Philadelphia are some of the finest in the country, but there need to be more programs made available with a realistic view of what training and education would make people work-ready to accommodate the needs of potential employers. Working with the community college system to offer vocational training to the City's neighborhoods would be an important step.

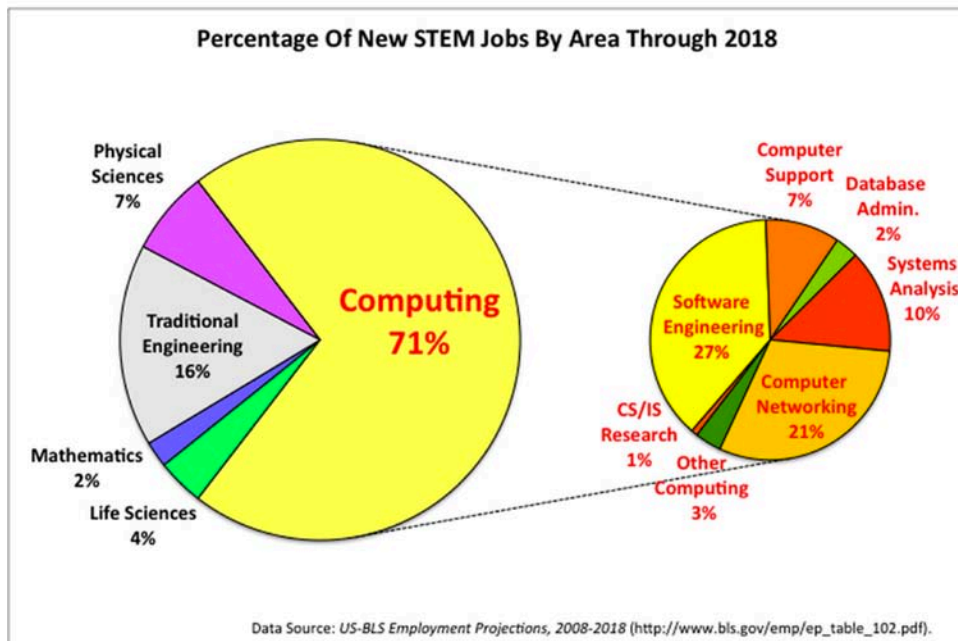
- **There is a need to build a technological talent pipeline**

Leaders of the technology start-up community pointed out a lack of technology talent in the City's workforce pool. Apu Gupta, CEO and Co-Founder of Curalate, who was named the Entrepreneur of the Year, emphasized the importance of talent attraction strategies for Philadelphia, stating that, "a big reason that these companies leave is talent. Without talent,

companies like mine can't grow. Communities that have robust startup ecosystems like the Silicon Valley, Austin, and New York are all places that young, smart, and creative folks flock to."

The subjects of science, technology, engineering, and math, or "STEM," comprise the fastest growing careers fields, necessitating a greater focus within the Philadelphia school system. Rayola Dougher, Senior Economic Advisor for the American Petroleum Institute testified that they are seeking a greater focus on STEM preparation within high schools, and that existing programs create a particularly educated workforce and provide a draw for industry growth.

John Swoyer, CEO of MaST Community Charter Schools testified on the school's STEM focus since its inception in 1999, and continual expansion through the use of integrated wireless technology, professional engineering software, and an interactive HD Studio. John remarked, "STEM jobs will eclipse all other sectors in the coming years and Philadelphia must not be caught unaware." MaST has also enhanced STEM to STREAM, adding arts and robotics to the focus. This expansion is in response to a broadening career field, attempting to prepare students for jobs yet to be generated. Ms. Bednar commended the inclusion of creative skills, noting the \$3.3 billion arts and culture community contributes annually to the local economy.



- **Employability of many entry-level workers is an issue**

Witnesses offered a common theme of concern regarding the basic work ethic of the entry-level workforce. Issues of attendance, punctuality, and productivity all presented issues for basic training and retention. More broadly, Mr. Edwards noted that awareness regarding access to state and federal funding for job training and placement is also crucial.

Andy Hyer, Marketing and Business Development Profession for Hyundai Rotem USA Corporation expressed difficulty filling entry-level positions, unable to successfully combat problems with work ethic and poor attendance. This is of particular concern because the corporation is seeking long-term investment in its employees, retraining existing personnel to fit the changing needs of their business.

Dave Filano, Manager of Talent Acquisition & Strategy Development for Wawa Inc. testified that while the quantity of applicants for entry level positions is abundant, there have been challenges finding candidates who display strong social and customer service skills, reliability, and responsibility. Candidates for corporate positions are also lacking information technology backgrounds and other necessary professional skills.

Lorraine Webb, Vice President of Human Resources for Philadelphia Gas Works noted that high school graduates struggle with basic work requirements, unable to complete the initial training periods because of issues with timeliness, preparation, or overall engagement. PGW has actively sought to educate employees, offering leadership and career training services to promote professional growth within the organization.

Ms. Webb has found success with internship programs, even using simple steps of issuing uniforms to students in order to develop the fundamentals of a working environment. Dr. Hite confirmed that even unpaid internships for high school students provide an important opportunity to develop experience, saying, “there are a whole lot of students that would also benefit from just having to show up some place on time or to understand what it means to dress and communicate in a professional work environment.”

- **More efforts are needed to improve awareness of currently available positions**

In addition to providing education for students, a commonly identified issue in the testimonies was a lack of awareness regarding career opportunities. 2.7 million manufacturing employees will likely retire during the next 10 years, yet only an estimated 750,000 young adults are enrolling in educational programs in 2011 – degreed and skilled – to fill the pipeline. That number further plunges to 350,000 by 2025.

A primary concern for Stephen Jurash, President and CEO of the Manufacturing Alliance of Philadelphia, is the misperception by young people of manufacturing jobs as “dirty and dead-end,” rather than recognizing they are the core of high-tech fields like medical technology, bioscience, semiconductors, and alternative energy. Mr. Jurash believes that informing students about the careers, and the potential to start with family-sustaining wages immediately out of high school, will greatly improve the field for manufacturing employers. Ms. Dougher also encourages teachers and school staff to inform students of the workforce opportunities available in the field of oil and natural gas.

Hospitals have works with the Pennsylvania Center for Health Careers, highlighting career opportunities through school partnerships, offering students at local high schools insight into the health care industry and opportunities for classroom experience. Brian Eury, Regional Director of the Delaware Valley Healthcare Council highlighted the training opportunities made available to students, ranging from CPR Certification, specialized high school courses, and college courses at medical facilities.

Ms. Webb noted Philadelphia Gas Works’ success with high school and college internship programs engaging student interest in the field, leading to full time employment with the company after graduation. PGW also visits schools to discuss career opportunities, host interview skills workshops, and meet with administrators in the district.

Recommendations:

- Fix the City’s public education system
 - Develop education reforms based on the most effective public education systems throughout the world to adapt globally recognized best practices
 - Address the structure of governance to return to a locally controlled school board
 - Address lack of accountability and financial mismanagement

- Facilitate effective public-private partnerships for vocational and apprenticeship programs
 - Explore the option of vocational and education training tax credits for private entities investing in specialized training to develop a pipeline of employees with electrical and mechanical skills
 - Provide early exposure to work opportunities through summer jobs and internships for high school students

- Build a technical talent pipeline by:
 - Utilizing Philadelphia's already robust university system from which to draw science and engineering talent
 - Increasing science, technology, engineering, and math (STEM), and science, technology, robotics, engineering, arts, and math (STREAM) focus in schools
 - Improve Philadelphia's role as a magnet for global talent
 - Encourage immigration reform and better foreign access to visas at the federal level
 - Develop tax incentives for Philadelphia-based companies hiring and retaining graduates from local colleges and universities

A Comprehensive Tax Reform

- **Tax reforms are necessary to make Philadelphia a competitive location for businesses**

Witnesses were critical of the gross receipts tax and wage tax, arguing that they deter companies from locating in Philadelphia. The City needs to re-evaluate its tax policies given the fact that taxes should result in services and benefits for those that pay them. Wharton professor and tax expert, Robert Inman stated: “the biggest concern that I have is perhaps most of all the gross receipts and the commuter tax. Those are the two that, from our analysis seem to have the biggest impact on decisions for firms to locate. Both of these taxes are going to be a burden for just, I think, the kind of firms we’re hoping to attract; namely, idea firms. They tend to be labor intensive firms ... high labor skill activities are going to be the ones that are most sensitive to the tax structure.”

Philadelphia has much higher business and income taxes in comparison to similar cities. In a March 2013 Wall Street Journal article “The 10 U.S. Cities With the Highest Taxes”, Philadelphia was identified as having the second highest tax burden for its citizens. The study, in which taxes for families earning \$25,000 and \$150,000 were analyzed, revealed Philadelphia’s comparatively high tax burden at all levels of income. New York and Baltimore were also listed in the top ten as having the seventh and tenth highest tax burdens respectively.

Tax rates and changes made to them are the most concrete way that the City can present itself as “business-friendly” or not. The City’s high business tax burden relative to other localities have been a major problem for the City to be effective in supporting a favorable business climate. Michael Pearson, President and CEO of Union Packaging, testified on his business decision to leave Philadelphia to locate his successful international company just 90 yards outside of the City limits. Pearson stated: “business and business leadership is not looking for the City to do special deals. That’s not sustainable. What we’re looking for is a thoughtful and simple competitive tax rate in an overall positive business climate. Those are the things that are going to help us grow.”

Shifting tax policy from mobile assets, such as people and businesses, to fixed assets, such as real estate was recommended as the right course of action for comprehensive tax reform. Bob Moul, President of Philly Startup Leaders and CEO of appRenaissance, made the case for tax reform to retain successful technology start-up companies in Philadelphia. Moul offered the following comparative tax structure of other cities: “Roughly 66% of Philadelphia’s revenues come from wage and businesses taxes. It is half that amount in New York City and Washington D.C., and it’s actually zero in Austin, Texas, which just happens to be a thriving tech hub.”

Table 1: Revenues by Tax Type as a Percent of General Fund Revenue (in \$millions) FY 08 or 09

	Baltimore	Washington, DC	Philadelphia	New York City	Boston	Average
Property Tax	\$681	\$1,885	\$403	\$14,357	\$1,392	\$3,744
% of revenue	51%	33%	11%	62%	59%	43.2%
Earnings Tax	\$262	\$1,308	\$1,206	\$6,944	\$0	\$1,944
% of revenue	19%	23%	32%	12%	0%	17.2%
Business Tax	\$0	\$433	\$400	\$4,619	\$0	\$1,090
% of revenue	0%	7%	11%	20%	0%	7.6%

Source: Dean Kaplan, Public Financial Management with additional cities added by Mayor's Tax Force on Tax Policy & Economic Competitiveness.

Philadelphia relies much more heavily on a wage tax than other cities. About a third of Philadelphia's general fund comes from earnings taxes. As a comparison, New York City's earning tax as a percentage of total revenue is only twelve percent and Boston does not have an earnings tax. Instead, other cities are choosing to rely more on property taxes. Property taxes only account for eleven percent of Philadelphia's general fund revenue, while the average with these five cities is well over forty percent.

Recommendations:

- Use tax reform as one of the core business growth strategies for the City by:
 - Adapting the City's tax structure for the current highly mobile serviced-based economy
 - Reducing the rate of the Wage and Net Profit Tax to incentivize business growth and broaden the tax base
 - Adopting a phase out schedule for the Business Income and Receipts Tax as recommended by the Mayor's Task Force on Tax Policy & Economic Competitiveness by locking in a long-term tax adjustment schedule

Technology Start-up Environment/Innovation

- **The City needs a strategy to attract and retain successful technology start-up companies**

The Philadelphia technology start-up scene has grown in recent years, but certain obstacles have led to the exit of many start-ups in the region for other cities. In order to compete with places such as Silicon Valley, New York, Austin, and Boston, more support must be given to the City's start up scene. Little access to early seed capital, a negative perception of Philadelphia by outsiders, a lack of government and big company involvement, a workforce pool lacking technological skills, and high taxes are viewed as impediments to the City's development as a strong technology start-up location. Thomas Morr, President and CEO of Select Greater Philadelphia noted: "This region is seeking a significant acceleration of the creation of young, innovative companies. Their founders and employers would prefer to be in the core of the region, but they have little margin for error between success and failure. For example, a start-up company with no profits is heavily impacted by a tax on gross receipts." Brad Denenberg, Founder of Seed Philly, who engaged in an extensive entrepreneurial support environment research project stated: "The City needs to form a committee to write a business plan to strengthen the [entrepreneurial] ecosystem with defined metrics for success. The Committee should include entrepreneurs and investors to work closely with City and government officials."

Recommendations:

- Use tax reform to improve the start-up environment
 - Address the negative impact of the gross receipts tax
- Increase access to early-stage capital
 - Explore tax incentives for early stage investment firms
- Improve communications, strengthen public-private partnerships, and centralize various efforts within the City
- Eliminate the barriers for small companies to compete for city projects and work with city government
- Facilitate more industry involvement in Philadelphia start-ups
- Devote more effort to strategic marketing of Philadelphia
- Create technology talent pipeline (see section on Workforce Profile)

Strategic Marketing of Philadelphia

- **Philadelphia must overcome a branding challenge at home and abroad**

The City’s efforts around international tourism and marketing have contributed positively to reaching international visitors. Alan Greenberger, Deputy Mayor of Economic Development and Commerce Director for the City, and Jack Ferguson, President and CEO of Philadelphia Visitors and Convention Bureau, highlighted the successes in international tourism and marketing initiatives. International visitation stands at 613,000 in 2011, which is an increase from 347,000 ten years ago.

Wilfred Muskens, Deputy Secretary for International Business Development at the Pennsylvania Department of Community and Economic Development, testified that Philadelphia does not have a negative image internationally. The challenge is that the City is not known internationally and more can be done to leverage unique assets of Philadelphia to reach international markets. Developing a global brand can contribute to this effort.

Domestically, witnesses from the business entrepreneurial community stressed the negative perception of Philadelphia from outsiders that is a major barrier to attracting talent. Gupta, who emphasized the need for talent attraction shared his perspective by stating:

“Philadelphia . . . is a difficult market to attract talent to. Philadelphia continues to have a branding challenge. People often perceive Philly to be a gritty place. The fact is, talent has a choice in where it wants to be, and wants to feel safe. We need to fix this perception.”

According to Ferguson, the City’s negative image comes from poor perceptions regarding business environment, safety, cleanliness and contributions to the world. These aspects influence the global appeal. Ferguson further added: “International tourism to the United States is forecasted to grow by 23% by 2016 . . . This is a critical time to increase investment of Philadelphia’s global sales and marketing initiatives to do it in a collaborated, strategic fashion.” Below Table shows overseas visitors to select United States cities in 2010

Table 1: Select U.S. Cities by Number of Overseas Visitors, 2010

Rank	Destination	Market Share	Visitation (thousands)
1	New York City	32.1%	8,462
2	Los Angeles	12.7%	3,348
5	San Francisco	10.0%	2,636
7	Washington, DC	6.6%	1,740
9	Boston	4.5%	1,186
10	Chicago	4.3%	1,134
13	Philadelphia	2.4%	633

Source: U.S. Department of Commerce, Office of Travel and Tourism Industries

Philadelphia has the thirteenth highest level of visitation of major cities in the United States. But while in 2010 the City attracted over 630,000 international visitors, Philadelphia has trouble competing with other cities along the East Coast. Boston attracts nearly twice as many visitors; Washington, DC under three times as many; and New York City about eight times as many.

Euromonitor International in 2011 issued a ranking of international cities by number of international visitors per year. Of the top 100 cities listed, New York, the top US city, was ranked at 9. Philadelphia didn't even make the list. The lowest ranked US city was Washington, DC at number 91. Many of the top cities were concentrated in East Asia. Three Chinese cities, including Hong Kong, were not only ranked in the top ten, but also ranked above New York. Philadelphia's international tourism numbers will have to improve significantly to be competitive with any of the elite US seven cities ranked in the top 100. Thus, while Philadelphia has a definitive tourism industry, it has much potential to become top destination city.

Recommendations:

- Include the strategic marketing of Philadelphia in its comprehensive international business strategy
- Adequately fund efforts to rebrand Philadelphia

Quality of Life

- **Quality of life is an important aspect of a successful business location**

Philadelphia offers a unique and attractive urban quality of life: arts and leisure opportunities, cultural diversity, reasonable cost of living, and access to public transportation. These high quality of life factors foster a positive image and add vibrancy to the City that attracts talent and businesses. However, Philadelphia’s high crime and poverty rates negatively affect Philadelphia’s public image and its global appeal. As has been the case in the last several years, Philadelphia had the highest homicide rate among the nation’s ten biggest cities and its poverty rate is highest among all major U.S. cities. These alarming conditions constrict opportunities for Philadelphia and its economic viability for the future. Tom Morr, President of Select Greater, who markets the Philadelphia region internationally, summed up the interests of his clients by stating: “[companies] want a safe place, a strong market, talented people, excellent schools, a good quality of life ...”

Table 1: Quality of Life Factors for Select Cities, 2007-2011

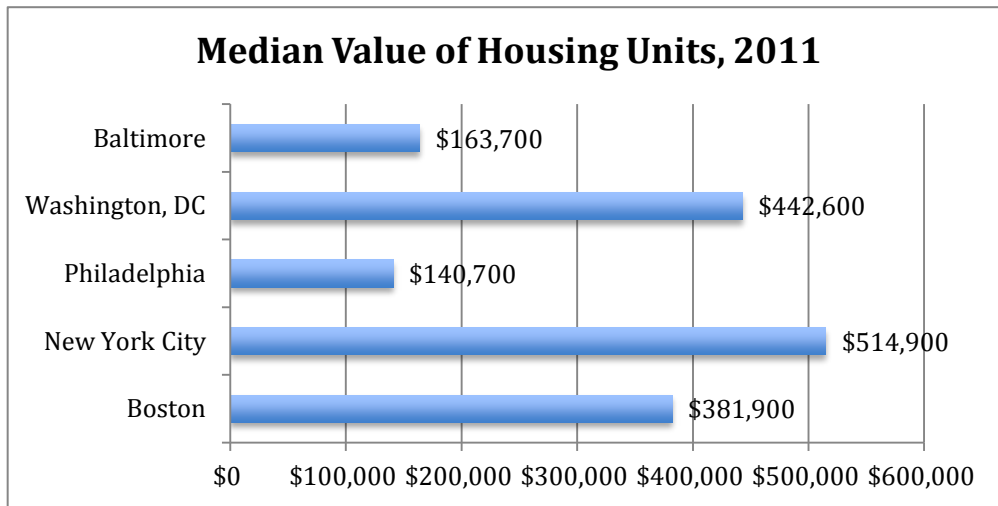
	Philadelphia	NYC	Boston	Chicago	Baltimore	Washington
Poverty Rate	25.6%	19.4%	21.4%	21.4%	22.4%	18.2%
% HS Diploma	80%	79.3%	84.2%	80.2%	78.5%	87.1%
% Bachelor’s Degree or Higher	22.6%	33.7%	42.8%	32.9%	25.8%	50.5%
Median Income	\$36,957	\$51,270	\$51,739	\$47,371	\$40,100	\$61,835

Source: U.S. Census, 2007-2011

Philadelphia is the only city represented in the table with over a quarter of the population in poverty. The city’s poverty rate is over seven percent higher than in Washington, DC and over six percent higher than in New York City. Philadelphia is also behind other cities in higher education levels. Of all five cities, Philadelphia has the smallest percentage of citizens with Bachelor’s, Master’s, Professional, and Doctoral degrees. While a respectable percentage of the Philadelphia population has received a high school diploma, the city is severely lagging behind other cities in terms of college education.

Philadelphia also has a poorer population than other cities. The median income level in both New York and Boston are approximately forty percent higher than in Philadelphia. That level in Washington, DC is sixty-seven percent higher than in Philadelphia. Even Baltimore’s median income level is just over \$3,000 higher. Philadelphia citizens in general have much less disposable income than citizens of other cities.

Figure 1: Median Value of Housing Units, 2011



Source: U.S. Census Facts at a Glance

Similar to income levels, housing values in Philadelphia are much lower than in other cities. Comparable, but still smaller than values in Baltimore, Philadelphia's housing values are severely lagging behind Washington, DC, New York City, and Boston. Specifically, the median housing value in New York is over three and a half times the value in Philadelphia.

- **Further develop global connections for the rich arts and cultural assets**

Philadelphia has a thriving arts and cultural scene. It was recently recognized by the Travel & Leisure Magazine as the number one City in the United States for arts and culture. In addition to its direct positive effects on the economy and job creation, it also plays a vital role in attracting tourists, enriching quality of life in the City, and serving as an important marketing factor.

Philadelphia is developing as an attractive destination for the emerging creative/innovative economy that includes: entertainment, arts and culture, technology, pharmaceutical and life sciences, academics, and energy. Recognizing the opportunity to leverage these unique assets to build global connections, the witnesses noted that Philadelphia has the foundations for emerging as a world-class cultural and creative center.

However, arts and cultural organizations are currently struggling, facing funding cuts and reduced budgets. Tom Kaiden, President of Philadelphia Cultural Alliance, pointed out the 50% reduction of Philadelphia's Cultural Fund since 2009. Sharon Pinkenson, Executive Director of the Greater Philadelphia Film Office, informed the panel about the significant economic impact of the Pennsylvania film tax credit that became law in 2004. The economic impact to the Philadelphia region from film production between 1992 and 2003 was \$683 million and since

the State tax credit, the economic impact has been \$2.5 billion. Offering these examples, the witnesses stressed the development of a sustainable funding sources and more cooperation at the metropolitan and state levels that could lead to more effective policies and stronger support for arts in the area.

Recommendations:

- Fight poverty through education reforms (see section on Workforce Profile)
- Fight crime by targeted policing
- Promote an International Business Zone
- Promote Philadelphia's cultural resources as a draw to the creative, innovative class

Conclusion

Economic activities have become more globally integrated in this century. Therefore, the international business component of the City's commerce activities must be strategically aligned with the City's broad economic goals. In order for Philadelphia to fully capitalize on global opportunities to improve its trade flows, attract new businesses, and promote innovation, it will need to develop and implement a comprehensive international business strategy. The key components of the strategy should be to strengthen the City's international leadership and organizational capacity, and to improve the overall business environment by lowering business and wage taxes, strengthening the workforce through enhanced education and training programs, and overcoming the branding challenge at home and abroad through strategic marketing of Philadelphia. These are all vital aspects of improving Philadelphia's global competitiveness and making it a successful player of the 21st Century global economy.

Next Step

The recommendations contained in the report will be further researched and developed in preparation to introduce appropriate legislation before City Council.

EXHIBIT ONE: EXPANSION OF THE PHILADELPHIA PORT

I. Expansion of the Panama Canal

The Panama Canal expansion project will more than double the maximum size for vessels, increasing cargo capacity from 5000 containers (TEUs) to 12,000. With plans for completion by April 2015, the expansion will include deepening and widening portions of the canal, as well as construction of larger locks for entrance into the canal. Currently, these cargo ships have been restricted to routes between Asia and the U.S. West Coast, where Los Angeles, Long Beach, Oakland, and Seattle are already equipped to handle their larger hulls and width.

The opening of the canal to larger ships will create an opportunity for U.S. East Coast, South American, and European ports to expand existing trade routes, but requires initial adjustments in order to be capable of receiving the larger ships. The term “Post-Panamax,” refers to a port’s ability to receive the new capacity of ships, and involves a number of adjustments to the port and its equipment. The incoming channel depth must reach 50 feet or deeper, larger cranes capable of handling the larger ships must be installed, and the docks must be reinforced to handle the larger cranes. In addition, the capacity of local highways and railways to receive increasing shipments will play an important role in the ability to expand East Coast port traffic.⁶ Norfolk and Baltimore have achieved this status, with New York and Miami planning to reach Post-Panamax status by 2015.

Any ports unable to accept the larger ships runs the risk of being left out of these new trade route developments. The U.S. Army Corp of Engineers expects post-Panamax ships with compose 62% of container ship capacity by 2030.⁷ The expansion arrives at a critical time, where concerns over slowing European economies threaten the productivity of U.S. ports. East coast ports surpassed the west in container traffic growth for the first time since World War II, and this expansion provides an source of continued growth.⁸ Additionally, Northeastern ports, including Philadelphia, face direct competition from Southeastern and Coastal ports, which are more strategically located to receive ships through the Panama Canal.

II. The Philadelphia Port Project

The current expansion project for the Port of Philadelphia dredged the river an additional 5 feet, to a total of 45 feet. The project will cost \$400 million, and is funded in part by \$50.8 million from the Commonwealth and \$30 million from the federal government. While the depth does not meet Post-Panamax status, it will allow for 8,000-10,000 TEU ships now afforded access through the Panama Canal. In addition, Pennsylvania has delegated an additional \$120 million for improvements to facilities, and

⁶ Timothy Cama, *Trucking Reading for Panama Canal Expansion But Cities Infrastructure Concerns*, TRANSPORT TOPICS (April 11, 2013), available at <http://www.ttnews.com/articles/basetemplate.aspx?storyid=31727&t=Trucking-Ready-for-Panama-Canal-Expansion-but-Cites-Infrastructure-Concerns>.

⁷ K.C. Conway, *North American Port Analysis: Preparing for the First Post-Panamax Decade*, COLLIERIES INTERNATIONAL (2012), 2, http://www.colliers.com/en-us/~media/files/marketresearch/unitedstates/colliers_portreport_2012q2_final.ashx.

⁸ *Id.*

infrastructure improvement. Plans include a new marine terminal, which will cost \$500 million, in addition to several smaller improvement projects. These developments improve the Port of Philadelphia's ability to attract new trade sources, as well as handle the products with increased efficiency.

[Questions for the Port]

1. Does the port have plans for the dredging to the 50 feet post-Panamax level?
2. How large of ships are the port's cranes capable of unloading?
3. What is the timetable for dredging completion?
4. What is the complete breakdown of public and private funding for the current projects?