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Acknowledgements

Building Career Pathways to Success: Jersey City New Skills at Work is the product of a committed group of collaborators dedicated to supporting a strong workforce and a vibrant regional economy. The Office of the Mayor of Jersey City and the Jersey City Economic Development Corporation appreciate the work of all of their partners in producing this report.

We thank JPMorgan Chase & Co. for their generous support and, in particular, Jennie Sparandara, Vice President of Global Philanthropy and Michael Haberman, Managing Director, Head of Global Philanthropy for the Northeast Region, for having included our region in the New Skills at Work initiative that has provided funding to cities and regions across the globe to identify careers in high demand, middle-skill occupations, and the educational programs required to support them.

The New York City Labor Market Information Service (NYCLMIS) served as our expert research and report development team. Our appreciation goes to NYCLMIS’ director, Lesley Hirsch, and to its researchers, Yuemeng Zhang, Pamela Hoberman, and Ronnie Kauder, for joining us as engaged partners on this project. From the Office of the Mayor of Jersey City, this project was spearheaded by Vivian Brady-Phillips, Deputy Mayor and Natalie Brathwaite, Policy Advisor, with support from Jamie Ding, Americorps Vista Volunteer, Debra Dolgos, Americorps Vista Volunteer, Sarah Goldfarb, Director of Policy and Research, Jersey City Redevelopment Agency, and Zaire Simone, former Americorps Vista Volunteer.

Finally, Chairwoman Rosemary McFadden and Florence Brown, Development Officer of the Jersey City Economic Development Corporation, deserve credit and appreciation for their leadership and support.

This report is just the first step, however. At the New Skills at Work Summit, we will work with our partners to pursue next steps in using key findings and recommendations from this report as the foundation for future collaboration in support of preparing our workforce for middle-skill career opportunities.

At JPMorgan Chase, we believe we have a fundamental responsibility to help our clients and our communities navigate a complex global economy and address their economic and social challenges. We use our strength, global reach, expertise, relationships, and access to capital to make a positive impact in cities around the world. We are making long-term commitments to workforce readiness, growing small businesses, improving consumer financial health and supporting strong urban economies, because these efforts are good for our communities and for our company.

Since its incorporation in 1980, the Jersey City Economic Development Corporation (JCEDC) has pursued its singular mission to promote, encourage, and assist the industrial, commercial, and economic development of the City of Jersey City creating greater employment opportunities. The New Skills at Work initiative represents an outgrowth of this mission of partnering with business to build the economy while creating opportunities for our residents.

The New York City Labor Market Information Service (NYCLMIS) at the City University of New York Graduate Center is the go-to resource for action-oriented intelligence about the labor market. We provide timely and accurate information about the labor market to help educators, workforce professionals, economic development organizations, and philanthropies make data-driven decisions that will help their students, customers, and constituencies achieve success in the labor market. We are dedicated to academic-quality rigor, close collaboration with our clients, advancing the skills of the workforce, and contributing to a healthy economy.
Welcome

At JPMorgan Chase & Co. promoting economic inclusion and opportunity is one of our top priorities. However, every day we hear from our business clients—firms of all sizes, in every sector of the economy across the globe—about the challenges they face finding workers with the right skills for a range of jobs.

In particular, they are struggling to fill middle-skill jobs—jobs that require a high school diploma and some postsecondary education and training, but not a bachelor’s degree. In the U.S., these jobs in fields such as healthcare, technology, construction, and manufacturing make up close to half the jobs in the economy. Middle-skill jobs pay wages that make families economically self-sufficient and are the entry point for career pathways in growing economic sectors.

Our strategy is grounded in the recognition that building the bridge between jobs and training starts with data. To this end, we have released skills gap research in markets across the country. This report detailing the labor market of Jersey City and the surrounding communities of Hudson County, New Jersey, is an important addition to this body of work. It is only with a clearer picture of the jobs employers are struggling to fill that we can focus on solutions.

Jennie Sparandara
JPMorgan Chase Global Philanthropy

JPMorgan Chase & Co.
Dear Friends, Jersey City is experiencing an unprecedented renaissance in job growth and economic development. The city’s vibrancy and diversity is attracting businesses large and small as well as ongoing investment in commercial and residential development, which has led to a steady and significant decline in unemployment.

As our local economy continues to grow, it is vital for us to ensure that all residents have meaningful access to employment opportunities that meet the demands of the business community and offer residents career opportunities that provide pathways to advancement and financial security.

Since taking office, our administration has been committed to strengthening the workforce pipeline by pursuing policies that create jobs, invest in quality training programs, and provide access to employment. While much progress has been made in connecting local talent with the labor market, many residents—particularly those in the city’s underserved communities—continue to face barriers to meaningful participation in the workforce. Middle-skill jobs—those requiring more than a high school diploma but less than a bachelor degree—account for a significant number of employment opportunities in the region. More specifically, many middle-skill jobs can offer Jersey City residents access to well-paying positions with career mobility in high-demand occupational sectors.

In collaboration with the Jersey City Economic Development Corporation, key stakeholders in the business community, public sector, education, training and youth development, Jersey City’s New Skills at Work Initiative provides a strong foundation and framework to more closely align our economic and workforce development efforts and build a robust system that meets the needs of our business community and diverse workforce. This report offers important data-driven insights that identify the job skills needs of local employers and recommendations regarding how to improve our middle-skills pipeline.

We thank JPMorgan Chase & Co. for its vision, guidance, and the generous funding it has provided to make this report and our Middle Skills Workforce Summit possible. I also extend thanks to all of our partners in the education, non-profit and private sectors that contributed their insight to this project. Finally, this report would not have been possible without the dedicated work of the NYC Labor Market Information Service at CUNY, our research partner, who worked diligently towards ensuring that the process included a data-driven approach and reflected the diverse perspectives and expertise of our local stakeholders and experts.

This report will help with the consolidation of efforts to build the Jersey City workforce and contribute to the region’s continued prosperity. Together, we are uniquely positioned to build upon past and recent successes, and work towards building a strong, sustainable and skilled workforce. I look forward to seeing what we can accomplish together.

Sincerely,
Mayor Steven M. Fulop
Strengthening connections to middle-skill opportunities for Jersey City residents is vital to the city’s continued economic growth. In 2015, JPMorgan Chase & Co. awarded a grant under its New Skills at Work Global Initiative to the Jersey City Economic Development Corporation (JCEDC) to identify high-demand, middle-skill opportunities in the labor market and to apply findings from this research toward helping local residents gain the education and skills they need to access these opportunities and advance in their careers, and in so doing, contribute to the region’s continued prosperity.

The research reflected in this report—part of a larger effort led by the JCEDC in partnership with the Office of the Mayor in Jersey City—provides a supportive context for creating pathways for Jersey City’s residents and talent pipelines for the business community.

Why Middle-Skill Jobs?

In keeping with the overall objectives of JPMorgan Chase’s national initiative, Jersey City’s major goal was to create better connections for all residents to career-worthy jobs. The purpose of this report was to:

- Identify those well-paying, high-demand middle-skill occupational areas with career advancement opportunities for which there may not be—for whatever the reason—an adequate pipeline of qualified candidates.

Defining “Middle-Skill”
Middle-skill jobs typically require more than a high school diploma, but less than a bachelor’s degree. This additional training could be technical education, an apprenticeship, some college and no degree, or an associate degree. Middle-skill occupations typically pay more than occupations requiring a high school diploma or less. Good middle-skill jobs can often serve as a stepping-stone on a career path to higher-paying jobs with greater potential, including those that require a bachelor’s degree or more.

- Recommend ways that the region can enhance its capacity to prepare people for employment and advancement in these occupational areas.
- Facilitate collaboration among the region’s key stakeholders to shape the research and recommendations, and to implement an action plan.
Why Jersey City?¹

Jersey City is recognized by many as one of the most racially and ethnically diverse cities in the United States.

In Jersey City, there are substantial differences in the educational attainment of major racial and ethnic groups. More Black Jersey City residents have an associate degree or some college than any other racial or ethnic group in the city. A majority of White and Asian residents hold at least a bachelor’s degree compared to fewer than one in five of the Black and Hispanic populations.

More than two in five Jersey City residents were born outside of the U.S. While Jersey City is socioeconomically diverse, income disparities remain. For every household earning at least $150,000 annually, nearly two households earn less than $25,000.

¹ The results cited in this report are from the most currently available data as of November 2016.
Jersey City’s Labor Force and the Hudson County Labor Market

Jersey City has made considerable progress lowering its unemployment rate from its pre-recession high. At 4.8 percent as of November 2016, Jersey City is enjoying low unemployment that is converging with the statewide average.

Across the U.S., unemployment is more common among youth and young adults ages 16 to 24; this holds true in Jersey City as well. As of September 2016, 13 percent of youth ages 16 to 18 and 11 percent of young adults ages 18 to 24 are unemployed.

Together, Finance and Insurance, Health Care and Social Assistance, Retail Trade, and Transportation and Warehousing account for half of all jobs in Hudson County.

All but three sectors are projected to add jobs by 2022 with the greatest gains projected to occur in Professional, Technical, and Scientific Services.
Jersey City is experiencing unprecedented growth and development.

The waterfront along the Hudson River, occupied by rail yards and factories for much of the 19th and 20th centuries, has been transformed into the “Gold Coast,” one of the largest financial districts in the United States. Located at the crossroads of the New York City metropolitan area and with easy access to sea, air, rail, and road transportation, Jersey City has many attractive aspects: high-skilled, high-paying professional services and finance jobs along the waterfront, a growing health care industry and jobs in transportation, logistics, and distribution. But while many residents are highly educated, one in five residents lives under the poverty line.

This contrast presents an opportunity for education and workforce professionals and policy makers to help all residents better capitalize on Jersey City’s economic and cultural vitality. The Jersey City New Skills at Work Initiative is focused on addressing this challenge.

Promising Middle-Skill Fields
Transportation, Logistics, and Distribution (TLD)

- Employment growth in the industry has outpaced the county’s overall private sector growth six-fold.
- Average annual wages in TLD are higher and have increased faster than wages in the private sector overall.
- TLD is one of seven “Talent Networks” identified by the New Jersey Department of Labor and Workforce Development as an economic priority.
- Recent investments in degree and non-degree education and training programs can be
expanded upon to broaden opportunities for Jersey City residents to start and advance in TLD careers.

- Across the board, interviewed employers indicated a need to create a greater public awareness of the opportunities available in their industry.

While there are many job opportunities on the transportation and warehousing end of TLD, the most promising opportunities for advancement are in the industry's professional services firms. The four occupational areas selected as the focus of this report are:

- **Import and export agents/freight forwarders** who coordinate the transportation of cargo (by rail, truck, ocean, air) from the manufacturer or producer to a market, customer, or distribution center.

- **Customs brokers** who track the status of their clients' international shipments and ensure that they are cleared through the various regulatory requirements of international trade.

- **Customer service representatives (CSRs)** who serve as the primary contacts for customers within an organization.

- **Sales representatives** who are responsible for growing a company's sales by establishing new accounts, maintaining customer satisfaction, and selling additional services to existing customers.

**TLD Recommendations**

There have been several investments and inroads made by local institutions of higher education to connect continuing education and degree programs to the TLD industry. Until recently, these have focused on making connections to the operations segment of the industry. These offerings, while robust, should be supplemented with a more complete continuum of offerings that will help Jersey City residents to enter and advance within the sales and service career pathways described in this report. Our recommendations include:

1. **Strengthen partnerships and increase stakeholder engagement.**
   - Organize an industry partnership that includes representatives of professional services TLD firms and education and training institutions to raise the level of awareness of opportunities within the sector. The industry partnership should:
     - Put into place a pipeline of nondegree and degree offerings available to prepare students for entry and advancement in sales and service career pathways;
     - Work together to ensure that programs are aligned to industry demand; and
     - Connect to the State of New Jersey's “TLD" Talent Pipeline hosted by Union County College upon establishing the Jersey City/Hudson County industry partnership.

2. **Focus on aligning education and employer training programs to industry demand.**
   - Encourage firms in the sector to partner with K-12 schools and higher education institutions to provide work-based learning opportunities such as job shadowing, or paid internships or apprenticeships.
   - Develop paid summer externship opportunities for secondary and postsecondary business administration educators in TLD firms so that they can update their awareness and understanding of the industry.
   - Review national certifications and assess their value for providing their future workforce with the needed competencies.
   - Encourage industry investment in professional development for their existing workforce.
   - Consider offering a customs brokerage license examination preparation course at the NJCU Logistics Center.

**Business Support**

One of the largest areas of middle-skill employment in Jersey City and Hudson County involves occupations that support the growth and operation of businesses. We call these jobs “business support,” and they include workers who handle finances,
payroll, and human resources. The skills required are transferrable across multiple industries, leading to a greater scope of opportunities than may be found in more specialized occupations. Professional services and all three of the top economic sectors in Hudson County—finance and insurance, health care and social assistance, and retail trade—employ people in these occupations.

Based on an analysis of labor market demand, advice from local industry employers, and a review of existing training and education programs, the following fields were selected for focus:

- **Bookkeeping and accounting** workers help businesses and organizations keep track of their finances. Their job titles often represent the work they do, which includes accounts payable, payroll, accounts receivable, and bookkeeping.

- **Human resources** workers screen, recruit, interview, and place workers; compile personnel records; help their employers comply with

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**BUSINESS SUPPORT CAREER PATHS**

![Diagram of career paths](image)

Source: PayScale.com & Salary.com; salaries reflect Hudson County, NJ. Pay figures reflect median wages, which were supplied by PayScale.com, and represent self-reported earnings in Jersey City, New Jersey.
employment laws; and project future hiring needs. While some jobs such as human resources assistants are middle-skill jobs, advancement into management often hinges on obtaining a bachelor’s degree.

Business Support Recommendations
Jobs in bookkeeping and accounting are projected to grow as fast as or faster than the statewide average. While there are education and training programs that prepare people for bookkeeping and accounting occupations, the number of offerings and students enrolled is relatively modest in comparison to demand. To help students and job seekers take advantage of demand for these jobs, Jersey City and local stakeholders should:

1. **Target employers in all of the industries who advertise for these jobs, including staffing services.**
2. **Review relevant program offerings among local community colleges and universities to ensure that they align with employer demand.**
3. **The workforce providers and industry partners engaged in New Skills at Work action planning should actively work with Hudson County Community College to develop and roll out its five-year strategic plan.**
4. **Develop paid summer externship opportunities for secondary and postsecondary business administration educators in the firms that maintain the largest human resources and accounting workforce.**
5. **Encourage people in entry-level business support jobs and high school students interested in pursuing one of these fields to continue their education for an associate, and then a bachelor’s degree.**

**General Recommendations**

1. **Identify ways that students can gain earlier exposure to career opportunities in professional services industries through activities such as field trips, guest lectures, and job fairs.**
2. **Provide guidance to students on which courses will lead to career-worthy opportunities.**
3. **Provide professional development to guidance and career counselors in serving the needs of graduates that are not planning to continue their formal education in the near term.**
4. **Develop education and training programs that help youth, young adults, and dislocated workers reach higher levels of proficiency in math, spreadsheet and database applications, language and literacy, customer service, and general employability skills.**
5. **Map community assets, needs, and social supports that will help residents overcome barriers to enrolling or persisting in school.**
6. **Develop linkages between both Municipal and County Court Systems and education/training opportunities for court-involved youth and young adults.**
7. **Education and workforce providers should keep current with trends pertaining to key sectors of the local and regional economy.**
8. **Improve public awareness of the opportunities available to those seeking middle-skill careers.**
9. **Leverage federal policies, programs, and funding streams to improve opportunities for Jersey City residents in the knowledge economy.**
10. **Advocate in the New Jersey State Legislature to adopt evidence-based workforce policies like sector partnerships, career pathways, job-driven investments, data sharing, and education-workforce alignment initiatives.**
11. **Improve bilingual offerings and education to strengthen job skills for individuals.**
12. **Encourage policies and business practices that make it easier for adults, young and old, to continue their education even after they start working.**
Introduction

Jersey City is experiencing unprecedented growth and development. The waterfront along the Hudson River, occupied by rail yards and factories for much of the 19th and 20th centuries, has transformed into the “Gold Coast,” one of the largest financial districts in the United States. Jersey City capitalizes on its location at the crossroads of the New York City metropolitan area with easy access to sea, air, rail, and road transportation. Jersey City has an extraordinarily diverse population. It is a growing, thriving, multicultural city.

Jersey City has many distinctive aspects: high-skilled, high-paying jobs along the waterfront, a growing health care industry, and jobs in transportation, logistics, and distribution. However, while many residents are highly educated, one in five residents lives below the poverty line, and many could benefit from additional education and training. This contrast presents an opportunity for education and workforce professionals and policy makers to help all residents take better advantage of Jersey City’s economic and cultural vitality. The Jersey City New Skills at Work Initiative focuses on addressing this challenge. For many, the best first step is to secure the education and skills that will prepare them for jobs at the middle-skill level—jobs that demand more than a high school diploma, but less than a bachelor’s degree.

New Skills at Work

In 2015, JPMorgan Chase & Co. awarded a grant under its New Skills at Work Global Initiative to the Jersey City Economic Development Corporation (JCEDC) to identify high-demand middle-skill opportunities in the labor market, help local residents gain the education and skills they need to access these opportunities and advance in their careers, and in so doing, contribute to the region’s continued prosperity.

The research reflected in this report—which is part of a larger effort led by the Jersey City Economic Development Corporation (JCEDC) in partnership with the Jersey City Mayor’s Office—provides a supportive context for creating pathways for Jersey City’s residents and talent pipelines for local businesses. In keeping with the overall objectives of JPMorgan Chase’s Initiative, Jersey City’s goals were to:

- Identify well-paying, high-demand middle-skill occupational areas with career advancement opportunities.
- Recommend ways that the region can enhance its capacity to prepare people for employment and advancement in these occupational areas.
- Facilitate collaboration among the region’s key stakeholders to shape the research and recommendations and to implement an action plan.
To achieve these goals, this initiative was:

**Data-Driven.** In order to better understand the local labor market, the New York City Labor Market Information Service (NYCLMIS) at the City University of New York Graduate Center analyzed multiple sources of labor market and education data from the U.S. Department of Education, the New Jersey Department of Labor and Workforce Development, the U.S. Bureau of Labor Statistics, the U.S. Census Bureau, and Burning Glass Technologies’ Labor Insight™, a proprietary, online real-time labor market information tool.

**Informed by Local Experts.** Building on the data-driven labor market analysis, the NYCLMIS and project partners spoke with a wide range of local experts and organizations knowledgeable about either the overall economic conditions in Jersey City and Hudson County or the sectors that influence the local economy. The research team also spoke with education and training providers, including the Jersey City public school system, local institutions of higher education, and workforce development providers throughout the county.

**Identifying the Opportunities**

In order to provide a more detailed view and to inspire action, the **Jersey City New Skills at Work Initiative** focuses on two high-demand, middle-skill occupational areas that were determined through the following research approach:

- **Identifying occupations typically filled by someone with more than a high school diploma or its equivalent, but less than a bachelor’s degree.** There were 155 such occupations.

- **Narrowing the list to occupations that met or exceeded a minimum threshold of projected growth, median employment, and median annual openings; occupations that are projected to grow; and those with an entry-level wage greater than or equal to $15 per hour, or $31,200 per year.** The list of occupations for consideration narrowed to 37.

- **Identifying occupations for which preparation and career advancement are commonly supported by education and workforce programming.** Twenty-eight occupations remained.

- **Examining the nature and extent of education and workforce programs already available to meet employers’ needs.**

In the end, the two occupational areas selected for in-depth research were:

- **Transportation, Logistics, and Distribution—Sales and service occupations within the professional services segment.**

- **Business Support—Accounting and human resources titles across multiple sectors, including Finance and Insurance, Professional Services, and Health Care.**

The researchers further explored these occupational areas using multiple methods to answer the following questions:

- **What, if any, challenges do employers encounter in finding qualified candidates?**

- **What knowledge, skills, and abilities are needed to enter and be successful?**

- **What are the typical career pathways?**

**Jersey City’s Population**

Jersey City is the largest city and the county seat of Hudson County, the most densely populated county in the nation’s most densely populated state. With a population of approximately 264,290 in 2015, Jersey City makes up 39 percent of the county’s population. Over the past 10 years, Jersey City’s population has grown by 6.7 percent whereas the statewide population grew by just 1.9 percent. In fact, Jersey City is poised to become the largest city in the state.

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2 See Appendix A for a detailed methodology and list of data sources.

3 The results cited in this report are from the most currently available data as of November 2016.
Jersey City began welcoming immigrants long before the Statue of Liberty graced its waters. Moreover, Jersey City was one of the many northern destinations of the Great Migration of African-Americans from the South in the mid-20th Century. Reflecting this history, Jersey City is widely recognized as one of the most racially and ethnically diverse cities in the country.

Figure 2 illustrates the racial/ethnic distribution among the resident populations of Jersey City, the balance of Hudson County, and the balance of the State of New Jersey. Jersey City has a much larger proportion of Asian residents than the county or the state. The most common countries of origin for Jersey City’s Asian population are India, the Philippines, and China. Jersey City has one of the largest populations of Filipinos outside of the Philippines. Hispanics are the largest racial/ethnic group in Jersey City, but many surrounding communities in the region, including cities like Union City, West New York, and Guttenberg have even higher concentrations. See Appendix B: Supplemental Analyses for more detail about common countries of origin among residents.

The racial/ethnic composition of Jersey City has also changed in recent years. Between 2010 and 2015, the proportion of Hispanic, White, and Asian residents grew, while the share of the Black population decreased (Figure 3).

As shown in Figure 4, another distinguishing feature of Jersey City is the large proportion of residents in their prime working years (25 to 44). Among the factors drawing the younger population to Jersey City—and to Hoboken, its neighbor to the north—are its proximity to New York City that is easily accessible via public transportation, its comparatively affordable housing, and plentiful new residential construction.
Working age women in Jersey City are slightly less likely to be in the labor force than are women in the rest of the county and state. While 50 percent of Jersey City’s working age population is female, women make up just 44 percent of the city’s resident labor force. In Hudson County outside of Jersey City, 50 percent of the working age population and 47 percent of the resident labor force is female. In the remainder of New Jersey, 52 percent of the working age population and 48 percent of the labor force is female.

As Figure 5 illustrates, the major racial and ethnic groups in Jersey City have different educational profiles. More than two-thirds of the city’s Asian and Pacific Islander residents and slightly more than half of White residents hold at least a bachelor’s degree. In contrast, fewer than one in five of the city’s Black and Hispanic residents have attained this degree. More Black Jersey City residents have an associate degree or some college than any other racial or ethnic group in the city. A majority of both the Black and Hispanic populations has attained a high school diploma or less. While other groups are more likely than Black residents to have a high school education or less, an almost equal number of Black residents have bachelor’s degree or some college. Hispanic residents are more likely to have associate degree or some college than bachelor’s degree.

Across the U.S., higher educational attainment is associated with better labor market outcomes, such as lower rates of unemployment and higher pay. As Figure 6 shows, for Jersey City residents, more education increases the likelihood of employment. Clearly, without at least a middle-skill education, residents are less likely to obtain financially rewarding work or to advance in their careers.

**FIGURE 5: EDUCATIONAL ATTAINMENT OF JERSEY CITY RESIDENTS BY RACE/ETHNICITY, 2015.**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>HS or Less</th>
<th>Associate or some college</th>
<th>Bachelor’s or greater</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>30%</td>
<td>16%</td>
<td>55%</td>
</tr>
<tr>
<td>Black</td>
<td>55%</td>
<td>27%</td>
<td>18%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>63%</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Asian/PI</td>
<td>19%</td>
<td>10%</td>
<td>71%</td>
</tr>
</tbody>
</table>


English language skills are a prerequisite for most jobs in the labor market and those who can speak English and another language can enjoy an even greater advantage, especially in industries serving a diverse client base and those operating in international markets. Figure 7 shows that 60 percent of the City’s Hispanic population and 76 percent of the Asian/Pacific Islander population are bilingual.4 On the other hand, a lack of English language proficiency represents a barrier to labor market attachment and ultimate success. Across all racial and ethnic groups, less educated populations are less likely to have English language proficiency.

**FIGURE 6: LIKELIHOOD OF EMPLOYMENT FOR JERSEY CITY RESIDENTS* BY EDUCATION LEVEL, 2015.**

*Jersey City Residents aged 25 years or older


Note: All data calculated for persons 25 of age or older

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4 For the purpose of this analysis, people consider themselves bilingual if they speak a language other than English at home and can speak English well or very well.
Two in five residents in both Jersey City and the rest of Hudson County are foreign-born—nearly twice the share of foreign-born residents (20 percent) in the rest of New Jersey.

Although Jersey City is highly socioeconomically diverse, income disparities persist. For every household earning at least $150,000 annually, nearly two households earn under $25,000 annually. Statewide, the ratio of households earning in these two brackets is nearly one to one (Figure 8). In the middle, however, the percentage distribution of household income is about the same in Jersey City and New Jersey.

While many Jersey City residents are sharing in the region’s economic success, these data suggest that members of certain subgroups—people who have less education and those who lack English language proficiency—face distinct disadvantages in the labor market.

The Labor Force

Jersey City’s labor force—civilians ages 16 and over who are either employed or are unemployed and looking for work—stood at more than 139,500 in 2015. When compared to overall demographics, there are proportionately more 25 to 44 year-olds in the labor force than in the population (59%...
compared to 39%), and proportionately fewer residents with a high school diploma or less (33% compared to 41%).

Before the national recession from 2007 to 2009, the unemployment rate in Hudson County (including Jersey City) surpassed the State of New Jersey as a whole. Since 2010, both Jersey City and Hudson County have had a robust recovery. After 2010, unemployment rates declined across the board but somewhat faster in Jersey City. At 4.8 percent, Jersey City’s unemployment rate is now on par with the state’s (Figure 9).

Across the U.S., unemployment is more prevalent among the young, and this holds true in Jersey City. Figure 10 shows monthly unemployment rates in Jersey City by age group during the post-recession recovery years. From 2011 to 2014, while unemployment rates were decreasing for all other age groups 16 to 18, 19 to 24, 25 to 44, 45 to 54, New Jersey, the percentage of unemployed individuals aged 25 to 44 was consistently higher than the state average. The trend continued with a slight increase in unemployment rates for this age group in 2016.
Introduction

Out-Of-School Out-Of Work Youth
The term “out-of-school youth” applies to 16- to 24-year-olds who are not in school. This group disproportionately encounters one or more barriers to employment, such as homelessness, young parenthood, disabilities, or court-involvement.

age groups, youth and young adults ages 16 to 24 faced even greater levels of unemployment. Unemployment peaked in November 2012 at 17 percent for young adults ages 19 to 24 and in October 2013 at 30 percent for youth ages 16 to 18. Fortunately, this trend reversed and unemployment rates have decreased among these vulnerable populations ever since. As of September 2015, unemployment stood at 13.3 percent for youth and 11.1 percent for young adults, more than twice the 5.3 percent unemployment for the state as a whole.

Opportunities in Hudson County
In sum, residents with less education, who lack English language proficiency, and who are between the ages of 16 and 24, face the greatest disadvantages in the regional labor market. The goals of the Jersey City New Skills at Work Initiative are to identify high-demand middle-skill occupations that will provide career opportunities for these and other Jersey City residents and make recommendations to local education and training providers that will help these residents prepare for career-worthy opportunities. The following analysis of employment trends in Jersey City and the Hudson County begins to explore where these opportunities might exist and provides a broader context for this effort.

Figure 11 shows there are 243,021 jobs in Hudson County, 84 percent of which are in the private sector. Finance and Insurance is the biggest sector, comprising 15 percent of all jobs, followed by Health Care and Social Assistance (13 percent), Retail Trade (13 percent) and Transportation and Warehousing (10 percent). Together, these four sectors account for half of all jobs in Hudson County.

As shown in Figure 12, the New Jersey Department of Labor and Workforce Development projects that Finance and Insurance will add 2,500 new jobs by 2022, and that Transportation and Warehousing will likely grow during the same time period. In

FIGURE 11: HUDSON COUNTY EMPLOYMENT BY SECTOR, 2015.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance and Insurance</td>
<td>$$$$$$$$</td>
<td>15%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Accommodations and Food Services</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Professional and Technical Services</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>Information</td>
<td>i i i</td>
<td>4%</td>
</tr>
<tr>
<td>Other Services</td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Real Estate and Rental</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Educational Services</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td></td>
<td>1%</td>
</tr>
</tbody>
</table>

Source | NJLWD QCEW, 2015.
general, the employment outlook for the county is very positive, with seven percent projected job growth, and projected job gains in all sectors except Government (-1,500), Manufacturing (-1,050), and Information (-800).

**FIGURE 12: PROJECTED JOB GAINS AND LOSSES IN HUDSON COUNTY, 2012–2022.**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Projected Job Gains/Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance and Insurance</td>
<td>6.9%</td>
</tr>
<tr>
<td>Health care and Social Assistance</td>
<td>15.1%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>9.5%</td>
</tr>
<tr>
<td>Education</td>
<td>5.6%</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>3.6%</td>
</tr>
<tr>
<td>Government</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Professional and Technical Services</td>
<td>22.7%</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>16.3%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>7.3%</td>
</tr>
<tr>
<td>Administrative and Waste Services</td>
<td>8.6%</td>
</tr>
<tr>
<td>Other Services</td>
<td>4.9%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-13.1%</td>
</tr>
<tr>
<td>Information</td>
<td>-10.8%</td>
</tr>
<tr>
<td>Construction</td>
<td>39.3%</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>6.1%</td>
</tr>
<tr>
<td>Mgmt of Companies and Enterprises</td>
<td>7.5%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>9.4%</td>
</tr>
<tr>
<td>Utilities</td>
<td>11.8%</td>
</tr>
</tbody>
</table>


---

**Commuting Patterns**

**FIGURE 13: JERSEY CITY INFLOW-OUTFLOW MAP.**

Note: Arrows do not indicate directionality of worker flow into and out of Jersey City. Source | U.S. Census Bureau, OnTheMap.

Jersey City’s strategic location offers relatively easy access to employment locations along transit, rail/light rail, and bus lines. In fact, almost half of Jersey City’s employed residents rely on public transportation to get to work. About 38 percent of people in Jersey City’s employed residents rely on public transportation to get to work. About 38 percent of people in Jersey City commute into New York City and about one in four work in the county. As Figure 13 shows, slightly more people commute out of Jersey City than in. Four out of five people working in Jersey City commute from other locations—primarily from New York City, Bayonne, Newark, and Union City. Similarly, four out of five employed residents of Jersey City work outside of Jersey City. In addition to New York City, the most common places of work for Jersey City residents are Essex, Bergen, and Middlesex counties.
Sales and Service Opportunities in Transportation, Logistics and Distribution

What is TLD? As an economic sector, Transportation, Logistics, and Distribution (TLD) encompasses businesses that manage the flow of goods between production and final sale to customers and other businesses. TLD includes all types of transportation (air, sea, rail, and truck) and warehousing services, as well as professional services industries like freight forwarding, customs brokerages, and consulting firms that provide third-party logistics planning services to other businesses, known as 3PLs.

Why did we choose TLD?

TLD represents an important segment of Hudson County’s economy because of its strategic location within a densely populated metropolitan area and proximity to major ports, airports, highways, and rail lines. From the warehousing and distribution firms in Jersey City, Secaucus, Bayonne, and Kearny to 3PLs that are concentrated in Jersey City and Secaucus, TLD supports a wide range of local jobs. TLD was selected as a subject for this report because:

- Employment growth in the industry has outpaced the county’s overall private sector growth six-fold.
- Average annual wages in these industries are higher and have increased at more than three times the rate of the private sector overall.
- TLD is one of seven “Talent Networks” identified by the New Jersey Department of Labor and Workforce Development as an economic priority. Local education and workforce development providers have begun to form more robust partnerships with industry designed to improve pipeline development and employer-informed training. 6
- Recent investments in degree and non-degree education and training programs can be expanded upon to broaden opportunities for Jersey City residents to start and advance in TLD careers.
- Across the board, interviewed employers expressed a desire to raise greater public awareness of the opportunities available in this field.

What are the employment and wage trends in TLD?

Overall, the pace of employment growth in TLD in Hudson County exceeded that of the private sector:

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6 New Jersey’s Talent Networks are partnerships of industry experts, businesses, and workforce and educational institutions. One of their primary goals is to develop industry intelligence that better informs stakeholders about employers’ skill needs and to engage industry in the development of industry-valued education and training. They also form targeted industry partnerships across the state, focused wherever there is a concentration of employment in the given industry. The TLD Talent Network is led by the New Jersey Institute of Technology (NJIT) and Essex County College (ECC).
From 2005 to 2015 employment in TLD industries grew by 19 percent—from 1,802 in 2005 to 2,147 in 2015—more than six times faster than the private sector overall, which grew by three percent. Annual employment losses were between five and 10 percent during the recession of 2007 to 2009. Since then, the picture has been more positive with annual job growth between five and eight percent, with the exception of 2013.

Real annual average wages in TLD industries are higher and have grown at more than three times the rate of Hudson County’s private sector overall (19 percent compared to 5 percent). In 2005, real annual average wages were approximately $70,000 in Hudson County compared to about $79,000 for TLD industries. This wage differential grew and widened over 10 years; the 2015 average annual wage in Hudson County was about $72,000, as compared to $87,000 in TLD (Figure 15).

**What are the sales and service opportunities in TLD?**

While there are many job opportunities within the transportation and warehousing segment of TLD, the most promising opportunities for advancement are in the professional services firms within the industry. People in TLD sales positions market and sell transportation services to customers and manage client relationships. Service jobs that are unique to TLD include cargo freight agents, also known as import or export agents or freight forwarders, and customs brokers. The sales positions, customer service representatives, and sales representatives may be ubiquitous throughout the economy, but in

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**Overall, the pace of employment growth in TLD in Hudson County exceeded that of the private sector: From 2005 to 2015 employment in TLD industries grew by 19 percent, more than six times faster than the private sector overall.**
this field they require specialized knowledge in TLD firms.

- **Import and export agents/freight forwarders** coordinate the transportation of cargo—by rail, truck, ocean, air, or “intermodally”—from the manufacturer or producer to a market, customer, or distribution center. They arrange routes and schedules, confirm them with carriers, book cargo space in warehouses and on carriers, negotiate rates, and arrange for insurance. They calculate the volume, weight, and cost of goods; prepare quotes and invoices for customers; and keep customers informed on the progress of their shipments.

- **Customs brokers** track the status of their clients’ international shipments and ensure that they are cleared through the various regulatory requirements of international trade. Typical activities include tracking shipments, filing customs entries, and paying duties and fees. Recordkeeping is an essential function of this job; customs brokers must create, maintain, and securely store accurate and up-to-date documentation, such as detailed invoices, power of attorney forms to act on the clients’ behalf, and other special forms required by federal regulatory agencies, like inspection certificates.

- **Customer service representatives (CSRs)** are the primary contacts for customers within an organization. This job requires a high degree of interpersonal skills, problem-solving, patience, and professionalism. CSRs field customer inquiries and follow-up with customers when new information becomes available. They handle customer complaints and work with them to resolve issues as they arise. CSRs are typically expected to handle some clerical tasks, like intercepting orders, entering them into the company’s system, and checking data for accuracy. They may also be expected to perform analytic activities, like generating reports on customer service satisfaction.

- **Sales representatives** are responsible for growing a company’s sales by establishing new accounts, maintaining customer satisfaction, and selling additional services to existing customers. In order to sell customers freight forwarding or customs brokerage services, sales representatives must have a sound understanding of operations and regulations as well as some experience in the field.
Where are the jobs for TLD sales and service professionals?

3PLs are major employers of TLD sales and service professionals. Freight forwarders and customs brokers commonly work for 3PLs, and they may also find work in specialty freight forwarding firms and customs brokerage firms. In addition to 3PL firms, sales representatives and customer service representatives may also work for freight forwarding firms that own their own fleets like UPS and FedEx, or for companies that distribute their own goods, like Tropicana and Goya, all of which are in Hudson County.

Online job postings give an indication of employer demand. An analysis of online job ads for TLD sales and service jobs in Hudson County over the past five years is shown below in Table 2. Of these, Yusen Logistics, Kuehne + Nagel, and Panalpina advertise the most jobs.

**TABLE 2: HIGHEST VOLUME TLD JOB ADVERTISERS IN HUDSON COUNTY, NOVEMBER 2012 THROUGH OCTOBER 2016.**

<table>
<thead>
<tr>
<th>EMPLOYER</th>
<th>CITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Forwarders and Customs Brokers</td>
<td></td>
</tr>
<tr>
<td>Yusen Logistics</td>
<td>Secaucus</td>
</tr>
<tr>
<td>Kuehne + Nagel</td>
<td>Jersey City</td>
</tr>
<tr>
<td>Panalpina</td>
<td>Secaucus</td>
</tr>
<tr>
<td>Avanti</td>
<td>Jersey City</td>
</tr>
<tr>
<td>Cintas</td>
<td>Union City</td>
</tr>
<tr>
<td>Customer Service Representatives and Sales Representatives</td>
<td></td>
</tr>
<tr>
<td>Panalpina</td>
<td>Secaucus</td>
</tr>
<tr>
<td>Kuehne Nagel</td>
<td>Jersey City</td>
</tr>
<tr>
<td>Yusen Logistics</td>
<td>Secaucus</td>
</tr>
<tr>
<td>UPS</td>
<td>Jersey City</td>
</tr>
<tr>
<td>FedEx</td>
<td>Hoboken</td>
</tr>
</tbody>
</table>

What do employers want?

While there is variation among the specific companies and types of roles, there are certain general skills that are preferred for all of these jobs. These include:

- **Customer-focused orientation**
- **Organizational skills**
- **Problem-solving**
- **Personal integrity**
- **Work ethic**
- **Computer applications skills, especially proficiency in Microsoft Excel**
- **Knowledge of shipping procedures, including legal and regulatory compliance**

In addition, the requirements to work in this field continue to evolve as the nature of the business and the technology to support it change. Employers highly value relevant experience—including experience working in other similar firms, or experience with ocean or air cargo shipping—sometimes more so than educational credentials. Local training and educational capacity for this field is limited, and expertise in these areas can also be difficult for employers to find. Given the nature of the work and limited specific training courses, employers may seek out candidates with a combination of the right set of skills and traits that can lead to success in this field, even if their content knowledge is limited.

Some technical skills are essential in this field, like proficiency with spreadsheets and a strong foundation in math and geography. Because coordination is central to most TLD activities, interpersonal skill, such as good communication, customer service, professionalism, and an ability to problem-solve, are nearly as important as any of the technical skills that these jobs typically require. Similarly, passion, motivation, ambition, and professionalism will help less-experienced candidates gain entry into the field and facilitate advancement within it.

**Entry-level.** For candidates with little to no relevant experience, jobs in sales and customer service are a typical place to start. To land these jobs, candidates need at least a high school education, solid speaking and writing skills, and good customer service skills. Specifically, **CSRs** must know how to assess a client’s needs, meet quality standards for services, and evaluate customer satisfaction. Problem-solving skills are central to this role.
Entry-level sales jobs, like sales representatives, require a similar set of skills. It also helps to have familiarity with best practices to generate business, such as product demonstrations and other sales techniques. Many large employers in this industry cluster have their own sales guidelines.

Most people need no more than a high school diploma to become an import or export agent. Like other entry-level examples described in this section, these jobs also have a customer service component. To do their jobs well, import and export agents must also have specialized knowledge of multimodal transportation systems, including the costs and benefits of moving people or goods by air, rail, sea, or road. Because they are responsible for calculating rates and price versions as well as converting and verifying shipment weight and volume, strong foundational skills in math are a must. With some motivation, entry-level workers in this field can develop this expertise after a few years on the job.

People interested in pursuing a career as a customs broker can get their start as entry writers. Entry writers are responsible for ensuring that all of the proper documentation required to process international shipments on behalf of clients is complete and in order. Entry writers act as customer advocates and must have solid customer service skills. Precision and an attention to detail are crucial, as is basic knowledge of U.S. Customs regulations. These jobs also require a high school education.

> **Mid-level.** After gaining experience and demonstrating strong performance, TLD sales and service professionals may qualify for

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**TLD Sales and Service Career Paths**

![Career Path Diagram]

Source | PayScale.com & Salary.com; salaries reflect Hudson County, NJ
supervisory positions and/or more senior roles with greater responsibility and autonomy.

Supervisors may continue to perform some of the same functions or delegate these functions to a team of employees they oversee. These positions require leadership skills and business savvy. A sales supervisor could manage and develop sales representatives to promote customer retention, growth, and sales support. Customer service coordinators oversee CSRs, supporting staff with their daily activities and providing them with feedback and guidance. Import or export supervisors or team leads oversee import or export agents and ensure operations are cost-effective and meet customer needs.

Senior agents in sales and customer service handle strategic, high-priority customer accounts while senior import or export agents oversee complex, high-profile shipments. In these roles, senior agents must be highly knowledgeable within their areas, self-assured, and able to instill confidence in others—all qualities that can be developed on-the-job through direct experience and with some mentoring.

Although educational requirements for becoming a customs broker vary by employer, the skill and knowledge demands of the job often require additional education or training beyond high school. Because they help clients comply with import/export laws, customs brokers must be well-versed in them. They must also be able to think critically and creatively within these parameters in order to troubleshoot shipping issues as they arise. Strong communication skills are important because they interact with clients, customs officials, and other parties to international shipments. Meticulous record keeping is an important component to this job, which is why skills such as word processing and file management are recommended.

Middle-to-high level. These mostly include jobs in management. People who start out as customer service professionals may become client managers. They provide oversight, leadership, and direction over assigned account portfolios. Sales representatives follow a similar trajectory where they can become key account managers, overseeing higher-priority or larger accounts. Experienced customs brokers may eventually apply for a license from the U.S. Customs and Border Protection. Licensing requirements are detailed under the certifications heading in this section.

TLD sales and service certifications

The major industry-recognized credentials for entry-level, middle-skill, and middle-to-high TLD
professions are described below. With the exception of U.S. Customs Brokerage License, none of the employers interviewed for this study mentioned these credentials nor were familiar with them.

All companies who engage in the customs business, whether 3PLs or customs brokerage houses, must have at least one licensed officer in order to operate. According to U.S. Customs and Border Protection, Licensed Customs Brokers “must have expertise in the entry procedures, admissibility requirements, classification, valuation, and the rates of duty and applicable taxes and fees for imported merchandise.” To become licensed, customs brokers must first pass an open book, four-and-a-half hour examination. To sit for the exam, candidates must be U.S. citizens, at least 18 years of age, and pass a background investigation. Exam preparation courses are offered online and in the classroom by private firms and trade associations.

The Council of Supply Chain Management Professionals (CSCMP) offers certifications in eight specializations as part of its SCPro™ Fundamentals program. The two most related to the career pathways highlighted in this report are customer service operations and transportation operations. SCPro™ Fundamentals certifications are designed to be acquired quickly.

7 Source: https://www.cbp.gov/trade/programs-administration/customs-brokers/becoming-customs-broker
The National Customs Brokers and Forwarders Association (NCBFA) offers certified customs specialist and certified export specialist credentials to individuals with at least one year of professional experience in TLD. NCBFA also offers exam preparation classes for the customs broker licensing exam.

The Institute for Supply Chain management offers the Certified Professional in Supply Management (CPSM) credential for TLD professionals with three years of experience and a bachelor’s degree or five years experience without a bachelor’s degree.

The American Production and Inventory Control Society (APICS) offers certificates for professionals in inventory management (CPIM); supply chain operations (SCOR-P); logistics, transportation, and distribution (CLTD); and supply chain management (CSCP). The latter requires a bachelor’s degree or three years of experience.

TLD Sales and Service career paths

For Hudson County, there are four main functional areas for career development in TLD Sales and Service. In all of these, people can enter with a high school diploma. Advancement is based on developing freight forwarding knowledge and experience, customer service skills, and leadership. With the right set of skills and experience, workers can either be promoted within these same functional areas or move from one to another. Higher-level positions, including managers and directors, usually require a college degree in addition to several years of relevant experience.
Panalpina Seeks Jersey City Talent
Panalpina is a full-service, third party logistics (3PL) company based in Secaucus, New Jersey. During the interview, Panalpina expressed a strong interest in developing a robust network of recruiting entry or “desk” level middle-skill occupations in freight forwarding and customs brokerage. The greatest challenge the company faces in recruiting is a perceived lack of awareness about the industry and a relatively low degree of attractiveness to younger workforce. The company is looking for candidates who show some experience or indication of knowledge of the industry. They are eager to work with local institutions of higher education to find Jersey City candidates, including those who haven’t yet finished a four-year degree. Panalpina also covers up-front customs brokerage license costs. They provide books and training and pay exam and license fees. In addition, Panalpina has an Early Career Leadership Development Program and a Successor Program for internal management training.

LINCS Training Model in Supply Chain and Logistics
The Leveraging, Integrating, Networking, Coordinating Supplies (LINCS) in supply chain management is a program administered by Broward College in Fort Lauderdale through a TAACCCT consortium grant. It is a national consortium of nine colleges and three universities led by a national team from Broward College dedicated to the education and training of students for the supply chain and logistics professions. In partnership with the Council of Supply Chain Management Professionals (CSCMP), LINCS offers eight stackable certification tracks that are most relevant in supply chain functions, which include Supply Chain Management Principles, Customer Service Operations, Transportation Operations, Warehouse Operations, Demand Planning, Inventory Management, Manufacturing & Service Operations, and Supply Management & Procurement. LINCS also works closely with potential employers and supports and assists students who have completed the certifications to gain new jobs. Hudson County Community College Center for Business and Industry’s supply chain management program comes from this model and allows students to take the CSCMP certification exam for free and for multiple times until they can pass it.
Opportunities in Business Support

One of the largest areas of middle-skill employment in Jersey City and Hudson County involves the occupations that help businesses function and grow. This sphere of jobs, called “business support,” includes the people who keep track of finances, handle payroll and human resources, and offer general reception and administrative services.

The skills required to succeed in business support are directly and immediately transferrable across multiple industries, leading to a greater scope of opportunities than may be found in more specialized occupations. All three of the top economic sectors in Hudson County, including finance and insurance, health care and social assistance, and retail trade, employ people in these occupations.

In this field, there are ample opportunities for Jersey City residents at every level of education and experience. Many employers interviewed for this study expressed an interest in recruiting diverse and local talent as well as a desire to promote people from within to higher-level positions.

Hiring demand is strong and there is potential for education and training programs to better align their offerings with the skills required or preferred by employers in these fields.

Which types of business support jobs?

Based on an analysis of data on labor market demand, advice and guidance from local industry experts and employers, and a review of existing training and education programs, the following fields were selected for further attention:

- Bookkeeping and accounting
- Human resources

According to the New Jersey Department of Labor and Workforce Development (LWD), bookkeeping, accounting, and auditing clerks, and payroll and timekeeping clerks are projected to grow about as fast as or faster than the average for all occupations in New Jersey between 2012 and 2022. Together, they represent more than 54,000 jobs in Hudson County and are expected to add 4,500 more by 2022. While the Hudson County economy is expected to grow by eight percent, LWD also estimates that there will be 4,200 more bookkeeping, accounting, and auditing clerks by 2022, representing eight percent growth. LWD also estimates that payroll opportunities will grow by seven percent, adding 350 net new jobs by 2022.

People who work in bookkeeping and accounting help businesses and organizations keep track of their finances.

Accounting clerks carry out many tasks. Their job titles often represent the work they do:

- **Accounts payable clerks** make sure their companies pay their bills. These jobs are mostly entry-level and involve posting details of transactions, adding up accounts, analyzing invoices, and processing payments.
- **Payroll clerks** compile and record employee time and payroll data, which may also include production and commission data. Depending on the size and type of company in which they work, they may also compute wages and deductions and prepare paychecks.
- **Accounts receivable clerks** make sure their companies are paid. They maintain billing systems, generate and send invoices, resolve payment discrepancies, prepare deposits, and assist with financial reporting. This job involves a higher degree of responsibility and trust, since a company must get paid in order to stay in business.
### TABLE 3: HIGHEST VOLUME BUSINESS SUPPORT JOB ADVERTISERS IN HUDSON COUNTY.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employer</th>
<th>City</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>RWJBarnabas Health</td>
<td>Jersey City</td>
<td>Billing Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Human Resources Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Billing Coordinator/Patient Services Representative</td>
</tr>
<tr>
<td></td>
<td>Secura Home Health</td>
<td>West New York</td>
<td>Payroll Coordinator</td>
</tr>
<tr>
<td>Transportation, Logistics and</td>
<td>Yusen Logistics</td>
<td>Secaucus</td>
<td>Payroll Specialist</td>
</tr>
<tr>
<td>Distribution (TLD)</td>
<td>Kuehne + Nagel</td>
<td>Jersey City</td>
<td>Accounts Payable Specialist</td>
</tr>
<tr>
<td></td>
<td>Port Authority of NY &amp; NJ</td>
<td>Bayonne Union City</td>
<td>Senior Accounting Clerk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jersey City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COSCO Americas, Inc.</td>
<td>Secaucus</td>
<td>Accounts Payable Coordinator</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>Broadridge Financial Solutions, Inc.</td>
<td>Jersey City</td>
<td>Payroll Administrator</td>
</tr>
<tr>
<td></td>
<td>Deutsche Bank</td>
<td>Jersey City</td>
<td>Payroll Specialist</td>
</tr>
<tr>
<td>Professional Services</td>
<td>Verisk/ISO</td>
<td>Jersey City</td>
<td>Payroll Specialist Accounts Payable Associate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accounts Receivable Analyst</td>
</tr>
<tr>
<td></td>
<td>Canon Business Process Services</td>
<td>Jersey City</td>
<td>Accounts Payable Help Desk Coordinator</td>
</tr>
<tr>
<td>Retail/e-commerce</td>
<td>BRAM Auto Group</td>
<td>North Bergen</td>
<td>Payroll Associate</td>
</tr>
<tr>
<td></td>
<td>Jet.com</td>
<td>Hoboken</td>
<td>Accounts Payable Clerk</td>
</tr>
<tr>
<td></td>
<td>Target</td>
<td>Jersey City North Bergen</td>
<td>Human Resource Team Member</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Moog, Inc.</td>
<td>Jersey City</td>
<td>Payroll Administrator</td>
</tr>
<tr>
<td>Education</td>
<td>Hoboken Public Schools</td>
<td>Hoboken</td>
<td>Accounts Payable/Purchasing Specialist</td>
</tr>
<tr>
<td>Real Estate</td>
<td>CBRE</td>
<td>Jersey City</td>
<td>Accounting Clerk</td>
</tr>
<tr>
<td>Accommodation &amp; Food Service</td>
<td>Alliance Residential Company</td>
<td>Bayonne</td>
<td>Bookkeeper</td>
</tr>
<tr>
<td></td>
<td>Sheraton</td>
<td>Jersey City</td>
<td>Accounts Receivable Agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Account/Payroll Administrator</td>
</tr>
<tr>
<td></td>
<td>Aramark</td>
<td>North Bergen</td>
<td>Accounts Receivable/Collection Representative</td>
</tr>
<tr>
<td>Construction</td>
<td>Finishing Touches</td>
<td>Hoboken</td>
<td>Bookkeeper/Office Manager</td>
</tr>
<tr>
<td></td>
<td>China Construction America</td>
<td>Jersey City</td>
<td>Accounts Payable Coordinator</td>
</tr>
</tbody>
</table>

Source | NYCLMIS analysis with Burning Glass Technologies Labor Insight™ tool, job listings from November 1, 2015 to October 31, 2016.

**Bookkeepers** have a broader set of responsibilities. They are often responsible for some or all of an organization’s accounts, known as the general ledger. They record all transactions and post revenues and expenses. Bookkeepers prepare bank deposits by compiling data from cashiers; verifying receipts; and sending cash, checks, or other forms of payment to the bank. They prepare financial records for accountants to review and may handle payroll, make purchases, prepare invoices, and keep track of overdue accounts.

Table 3 shows examples of accounting clerk, payroll clerk/specialist, bookkeeper, and human resources assistant jobs listed online in Hudson County over the last 12 months. No single employer dominated online job listings, and there was a ride range of industries represented among employer listings.

People in accounting clerk and bookkeeping jobs can move into supervisory positions or office management. With additional schooling, they can become **professional accountants**. Within the last 12 months, there were 514 online job listings for bookkeeping and accounting clerks in Hudson
County and 148 online listings for payroll and timekeeping clerks (Table 3).

Staff in human resources screen, recruit, interview, and place workers. They compile and keep personnel records. They make sure their employers comply with employment laws and requirements. They prepare employment records and compile federal compliance reports. They project future hiring needs. While there are some jobs at the middle-skill level, such as human resources assistants and specialists, advancement into management often hinges on obtaining a bachelor's degree. Within the last 12 months, there were 76 online job listings for human resources assistants—also called human resources clerks and team members by employers—and 874 ads for the slightly more advanced human resources specialists. Other popular titles for this position include human resources coordinator, recruiter, or associate.

**Where are the business support jobs?**

These positions are found across a range of industries, including Finance and Insurance, Professional Services, Retail Trade, Transportation and Warehousing, Real Estate, Manufacturing, Education, Government, and Health Care and Social Assistance. Within the bookkeeping and accounting area, accounting clerks typically work for larger companies. They may also work for payroll companies or accounting firms. Bookkeepers may work for one or several small businesses, which tend to advertise online less frequently. Many employers use staffing services to fill these positions, often on a temporary-to-permanent basis. There are several large staffing firms, such as Accountemps-Robert Half, Aerotek/Allegis, Medix, and Randstad, that serve this segment of the labor market and advertise widely.

**What do employers want?**

While there is variation among the specific job-related skills needed in different industries and for the different types of business support jobs, there are certain general skills that are preferred for all of these jobs. These include:

- **A customer-focused orientation.** Whether working with internal customers or with vendors or clients, business support professionals need to focus on the needs of the person on the other end and be able to avoid or manage conflict.

**TABLE 4: BUSINESS SUPPORT JOBS.**

<table>
<thead>
<tr>
<th>Title</th>
<th>Education</th>
<th>Certification</th>
<th>Yrs Exp.</th>
<th>Median Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENTRY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable Clerk</td>
<td>HS + training</td>
<td>None</td>
<td>0–1</td>
<td>$37K</td>
</tr>
<tr>
<td>Accounts Receivable Clerk</td>
<td>HS + training</td>
<td>None</td>
<td>1–2</td>
<td>$38K</td>
</tr>
<tr>
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<td>HS + training</td>
<td>None</td>
<td>0–1</td>
<td>$39K</td>
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<td>Bookkeeper</td>
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<td>None</td>
<td>1–2</td>
<td>$41K</td>
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<tr>
<td><strong>MID</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR Assistant</td>
<td>HS, associate preferred</td>
<td>None</td>
<td>0–1</td>
<td>$40K</td>
</tr>
<tr>
<td>Full Charge Bookkeeper</td>
<td>Some college or associate</td>
<td>None</td>
<td>2–3</td>
<td>$44K</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Some college or associate</td>
<td>None</td>
<td>3–4</td>
<td>$48K</td>
</tr>
<tr>
<td><strong>MID–HIGH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Accountant</td>
<td>Bachelor’s</td>
<td>CPA preferred</td>
<td>2–3</td>
<td>$51K</td>
</tr>
<tr>
<td>HR Specialist/Generalist</td>
<td>Bachelor’s</td>
<td>SHRM CP/SCP or other HR certification</td>
<td>2–3</td>
<td>$53K</td>
</tr>
<tr>
<td>Senior Accountant</td>
<td>Bachelor’s</td>
<td>CPA</td>
<td>2–3</td>
<td>$64K</td>
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<td>Accounting Manager</td>
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<td>None</td>
<td>3–5</td>
<td>$68K</td>
</tr>
<tr>
<td>HR Manager</td>
<td>Bachelor’s or Master’s</td>
<td>SHRM CP/SCP or other HR certification</td>
<td>3–5</td>
<td>$71K</td>
</tr>
</tbody>
</table>
Excellent communication skills. Business support professionals must communicate clearly and effectively so as to avoid errors and misunderstandings.

Problem-solving and decision-making skills. Business support professionals need to be able to make decisions on their own and know when decisions must be brought to the attention of their supervisors.

Attention to detail. These roles require accuracy and consistently careful performance.

Organizational skills are essential for managing accounts and records.

Computer applications skills, especially proficiency in Excel. Business support professionals must have at least intermediate proficiency with software applications that manage data.

Learning agility/interest in gaining knowledge. Employers look for candidates that care about their jobs and show interest in learning more about the business.

Accountability and responsibility. Similar to the need for problem solving skills, employers look for individuals who take responsibility for their own work and who are able to recreate the processes they have used to arrive at conclusions.

For bookkeeping and accounting clerk jobs, employers typically seek an understanding of generally accepted accounting principles, an ability to analyze and reconcile general ledger accounts, and experience with popular accounting software, such as Oracle, QuickBooks, ADP Payroll, or other major accounting systems. They also seek good planning and organizational skills. Employers interviewed for this research said “accounts payable and accounts receivable are no longer the ‘paper-pushers,’” and that they “need emotional intelligence and critical thinking skills.”

Employers in the banking and financial industry stressed the importance of integrity and ethics, as they face high regulatory scrutiny. Some jobs require a criminal background check and drug screening.

Jobs in human resources (HR) are highly competitive and increasingly require higher education. Several companies gave examples of HR assistants that were promoted from within after starting in reception or clerical jobs. Employers look for prior experience using human resources information systems (HRIS), such as PeopleSoft. In order to progress to an HR specialist or generalist role, candidates who either have or are pursuing a bachelor’s degree are often preferred. From the interviews conducted for this study, however, it was not clear if the degree itself was required or if the degree served as a proxy signal for a set of technological and soft skills required for advancement.

Role of Technology

Because new technology systems have had the effect of reducing the number of administrative jobs in general, employers are looking for people with a greater level of sophistication who are highly able, skilled, and comfortable with technology. One employer interviewed noted that jobs that were once considered “entry-level” now require much higher-level problem solving and technological skills. Employers want people who are able to analyze data so that they can make sound decisions. In addition, the interviewed employers expressed a strong preference for individuals with customer service and excellent communication skills, since business support is seen as serving internal clients.

What is a Certified Public Accountant (CPA)?

This is an accountant who has passed the CPA licensing exam and earned the CPA license. Requirements to sit for the CPA exam vary by state, but usually require at least a bachelor’s degree, a specific sequence of courses, and at least one year of relevant accounting experience. With a CPA, accountants can qualify for positions of greater authority and responsibility.

Human Resources (HR) Certifications

Certification is not required to begin a career in HR, but is desirable in order to advance in the field. The Society for Human Resource Management (SHRM) offers Certified Professional (CP) and Senior Certified Professional (SCP) designations. The Human Resources Certification Institute (HRCI) offers a number of certifications, including the Professional
in Human Resources® (PHR®) and the Senior Professional in Human Resources® (SPHR®).

What are the career pathways in business support?

Career paths are based on good performance in the entry-level job, and, in many cases, additional education. According to the employers interviewed for this report, candidates who are eager and take initiative—i.e. who go beyond their scope of duty—have a better chance of advancing their careers.

Bookkeeping and Accounting

There are two clear paths for someone who begins work as an accounting clerk or bookkeeper. On the first path, with time and experience, they generally earn more in these positions and can become supervisors or office managers.

On the second path, bookkeepers or accounting clerks can complete their bachelor’s degrees and become professional accountants. The earnings on this path are significantly higher. Accountants

Source | PayScale.com & Salary.com; salaries reflect Hudson County, NJ
can go into different branches of accounting such as tax, audit, and management consulting or financial analysis. Alternatively, they can move into a specialty area related to accounting, such as financial forensics, business valuation, or personal financial planning. With additional education, they can become CPAs and qualify for positions of greater authority and responsibility.

**Human Resources**

Most medium-sized and larger companies employ human resources (HR) staff to assist with recruiting, training and retaining employees. Someone may enter the field in an administrative position such as receptionist or administrative assistant, and be promoted from within the company to a human resources assistant role. To advance to specialist positions and beyond, bachelor’s degrees are highly preferred. Specializations within HR include recruiting, compensation and benefits, learning and development, diversity and inclusion, strategic HR planning and employee/labor relations.

Specializations within HR include:

- Recruiting
- Compensation and benefits
- Learning and development
- Diversity and inclusion
- Strategic HR planning
- Employee/labor relations

**What education and training opportunities are currently available to prepare Jersey City residents for these careers in business support?**

Local capacity to prepare people for bookkeeping and accounting occupations exist, but is insufficient to meet local demand. There are more than 500 jobs advertised per year for accounting clerks, payroll clerks, and bookkeepers.

- **Hudson County Community College (HCCC)** offers both accounting AAS and AS degrees. However, collectively these programs graduated fewer than 50 students in 2014, the most recent year for which data are available. HCCC also has some non-credit offerings in QuickBooks, Excel, and Bookkeeping.

- **Saint Peter’s University** offers a bachelor’s level accountancy program and a certificate program that allows graduates to sit for the CPA exam. Twenty-six students graduated from this program in 2014.

- **Hudson County Schools of Technology** offers training to prepare students to be accounting and bookkeeping technicians. Eight students graduated from this program last year.

- **Other private proprietary schools**, such as Pro Data Inc., Chiron Training Center, and Campus Education Center, offer courses either in bookkeeping or computerized accounting, but have very few completions.

- There are a number of courses throughout Hudson County in basic office skills (MS Office, etc.), offered by both HCCC and a number of private providers. None appear to specialize in human resources, human resources information systems, nor intermediate to advanced functions of Excel.

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8 The figures on enrollment were found in the Hudson County Community College FACT BOOK for 2013-2014, found at www.hccc.edu. Completion data was provided by the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), nces.ed.gov/ipeds, and represent 2014 completions.

9 www.njtrainingsystems.org

10 Ibid.
Jersey City is booming. The economy is growing quickly, unprecedented numbers of young educated workers from all over the world are moving in, and its population remains diverse even as it expands. Situated at the crossroads of the New York-New Jersey metropolitan area, Jersey City is poised to continue increasing its prosperity and vibrancy. At the same time, as is the case in many urban centers throughout the nation, many Jersey City residents, particularly immigrants who lack English language proficiency, less educated adults, and Black and Hispanic youth, have not yet fully connected to the array of available opportunities.

Many of the largest and most profitable companies that have moved into Jersey City within the last 20 years are in what can be called the “knowledge economy.” The vast majority of the employees at these companies are highly educated and skilled, with many working in technology and data analytics roles. These companies recruit from top universities nationwide for the high-level talent they need. Because they consider the New York-New Jersey metropolitan area to be relatively expensive, many firms locate their auxiliary services in lower cost areas, whether elsewhere in New Jersey, in other states, or abroad. They have contributed in many ways to the vitality of Jersey City. They have attracted a younger, more educated population to live in Jersey City, and they have generated opportunities in the local economy beyond their core businesses.

The ultimate goal of the Jersey City New Skills at Work Initiative is to identify ways in which the education and training systems in the area can help more Jersey City residents fully take advantage of career-worthy opportunities in the growing regional economy. The recommendations here are intended to help fine-tune the alignment between industry demand and the capacity of qualified candidates. In making these recommendations, both the labor market demand and the supply of education and training were taken into consideration.

The recommendations in this section are of two types: occupation-specific and more general recommendations for the education, training, and workforce systems. The occupation-specific recommendations are intended to strengthen pipelines that help lower-skilled residents enter into promising middle-skill occupations in business support and transportation, logistics, and distribution sales and service. The longer-term, general recommendations are aimed at preparing youth and young adults in Jersey City for jobs in the local economy that require post-secondary education.

Occupation-Specific Recommendations
TLD Sales and Service

There have been several investments and inroads made by institutions of higher education to connect continuing education and degree programs to the TLD industries. Until recently, these have focused on making connections to the operations rather than
sales and service segment of the industry. These offerings, while robust, must be supplemented in order to form a more complete continuum of offerings that will help Jersey City residents to enter and advance within the sales and service career pathways described earlier in this report.

Our recommendations include:

1. **Organize an industry partnership that includes representatives of professional services TLD firms and education and training institutions.** On the community side, this should include representatives from HCCC’s Center for Business & Industry, NJCU’s Logistics Center and undergraduate Business Department, and the Jersey City Public Schools and County Vocational Schools. On the industry side, the companies interviewed for this report should be invited to participate.

2. **The primary goal of the partnership should be to put into place a pipeline of non-degree and degree offerings available to prepare students for entry and advancement in sales and service career pathways.** The partners should a) work together to align existing programs to current industry demand; and b) identify gaps along the pipeline to work toward completing the continuum from certification through four-year degree.

3. **Engage TLD firms to provide work-based learning opportunities such as job shadowing, paid internships, or apprenticeships.**

4. **Once the Jersey City/Hudson County industry partnership has been established, it should connect to the State of New Jersey’s Talent Pipeline hosted by Union County College and spotlight the sales and service segment of the TLD sector.**

5. **Raise awareness of the opportunities in the TLD sector encouraging employers to visit schools and work with them to develop career exploration materials.**

6. **Develop paid summer externship opportunities for secondary and postsecondary business administration educators in TLD firms so that they can increase their awareness and understanding of the industry.**

7. **Encourage industry investment in professional development for their existing workforce.** HCCC should showcase its LINCS SCPro™ certification program for the major logistics-consulting firms to assess its usefulness and applicability.

8. **Consider offering a customs brokerage license examination preparation course at the NJCU Logistics Center.**

**Business Support**

Jobs in bookkeeping and accounting are projected to grow as fast as or faster than the average for all occupations in New Jersey. These jobs, which help businesses function by keeping track of their finances, can be found across all industries. Middle-skill jobs in human resources, another function of business support, are stable and support most industries.

While there are education and training programs that prepare people for bookkeeping and accounting occupations, the number of offerings and the number of students enrolled are relatively modest in comparison with the demand. Based on this review of the supply of education and training, it
appears that there are opportunities for fine-tuning existing programming and developing additional programming in business support areas. To help students and job seekers take full advantage of demand for jobs, Jersey City and local stakeholders should:

1. **Target employers in all of the industries who advertise for these jobs.** These include Health Care, Retail, and Manufacturing. Also, approximately half of the online job ads are placed by staffing services, such as Accountemps-Robert Half, Randstad, and Accounting Principles, which specialize in business support. Working relationships could lead to opportunities for work-based learning such as internships or summer jobs.

2. **All of the local institutions of higher education should review relevant program offerings to ensure that they are completely aligned with employer demand.** These include an understanding of basic accounting principles, intermediate proficiency with electronic spreadsheets and popular accounting software, and good planning and organizational skills. Employers also want candidates with good people skills, and the abilities to analyze information and think critically. Many employers advertising online either prefer or require an associate degree for these positions.

3. **Industry and workforce and education providers who are engaged in Jersey City New Skills at Work action planning should actively work with local institutions of higher education as they develop and implement their strategic plans.** For example, HCCC is currently reviewing programs within its Business, Culinary Arts, and Hospitality Management Division, in which its business support courses are located. There are also opportunities to work with the college's Center for Business & Industry to identify additional non-credit career offerings.

4. **Develop paid summer externship opportunities for secondary and postsecondary business administration educators in the firms that maintain the largest human resources and accounting workforce, such as those listed in this report.**

5. **Encourage people in entry-level business support jobs to continue their education for an associate, and then a bachelor’s degree.** While it is possible to secure an entry-level business support job with a high school diploma and some technical training, advancement into higher-level positions, whether in human resources or accounting, will come only with more education. Solid career planning and financial aid counseling is needed to ensure that students continue on with their education. Employers that do not already do so should be encouraged to provide tuition reimbursement.

**Other Recommended Actions**

The research findings also suggest that actions be taken beyond those that prepare individuals for entry and advancement in the two career pathways highlighted in this report.

1. **Identify ways that students can gain earlier exposure to career opportunities in professional services industries.** The K-12 public education system should consider partnering with organizations with expertise in integrating industry engagement and career preparation into existing educational programming, including work-based learning.
2. **Proactively provide guidance to students—secondary and postsecondary—on which courses will help them connect with career-worthy opportunities.** Recent research suggests that “intrusive advisement” is effective in helping youth and young adults to select relevant courses and to graduate in greater numbers.\(^\text{i}\)  

3. **Provide professional development to secondary and postsecondary guidance and career counselors in serving the needs of graduates that are not planning to continue their formal education in the near term.**

4. **Develop education and training programs that help youth, young adults, and dislocated workers reach higher levels of proficiency in:**

   a. Math, including contextual learning related to industries located along the county’s Gold Coast.

   b. Spreadsheet software including database functions, statistical functions, pivot tables and data merging techniques.

   c. Language and literacy skills, preferably in a manner that integrates industry-specific skills with literacy instruction, like the nationally

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\(^\text{i}\) See, for example, “How Does the ASAP Model Align with Guided Pathways Implementation in Community Colleges?” MDRC, December 2016.
renowned I-BEST model, first implemented in Washington State.\textsuperscript{12}

d. Customer service as it relates to communicating with clients—internal and external—including active listening, empathy, and conflict management.

e. Employability, or soft skills such as the interpersonal and intrapersonal skills highlighted by the National Research Council in its report on 21st Century Skills.\textsuperscript{13, 14}

5. **Map out the community assets that exist to help people overcome challenges that keep them from enrolling or persisting in school.**

Such assets should include emergency housing support, transportation to work places that are not connected to the current system of public transportation, and low-cost legal representation and child care. When these assets are mapped, develop a plan to fill gaps and establish referral relationships among the service providers and between them and workforce and education organizations.

6. **Develop robust linkages between the Jersey City Municipal Court and Hudson County Superior Court Systems and education and training opportunities for court-involved youth and young adults.** Research emphasizes the need for a coordinated, comprehensive approach that includes services that address education and workforce needs of court-involved youth and young adults. For example, intensive programs such as Job Corps and YouthBuild have been found to be effective at reducing later criminal justice involvement and improving educational outcomes.\textsuperscript{15} The court system should secure resources to implement such programs and link court-involved youth with them.

In addition to the occupation specific and longer-term recommendations, there are a number of actions that Jersey City and the stakeholders should take to continue the research and effort undertaken in this Jersey City New Skills at Work Initiative. They should:

7. **Keep working together to strengthen the connection between unemployed and underemployed residents and the opportunities that Jersey City’s economic vitality has made available.** This effort identified just two of several possible avenues for Jersey City’s education and workforce organizations and agencies to improve opportunities for their residents. Other areas of potential interest include tech support, hospitality, and health care, especially roles that involve patient advocacy and community outreach.
components. No single institution can address these needs: it will take a concerted, coordinated effort to break down silos and forge effective solutions.

8. **Continue to keep up-to-date regarding industry trends and practices in the important sectors of Jersey City and Hudson County’s economy.** This includes continually updating the labor market information summarized in this report.

9. **Improve public awareness of the opportunities available to individuals seeking to move into middle-skill careers in high schools, workforce centers, and neighborhood gathering places, such as community-based organizations and places of worship.**

10. **Leverage federal policies and grant funding to improve opportunities for Jersey City residents to prepare for careers in the knowledge economy.** Some policies and incentives that can be leveraged include training vouchers made available through the Workforce Innovation and Opportunity Act (WIOA), Pell Grants, higher education tax credits, the Dream Act, and Perkins funding for Career and Technical Education. Examples of funding opportunities include the U.S. Department of Labor’s grant programs for America’s Promise, YouthBuild, Pathways to Justice, H1-B Ready to Work Partnership, Youth Career Connect, and the Trade Adjustment Assistance Community College Career Training (TAACCCT) program.

11. **Advocate in the State Legislature for adoption of evidence-based workforce policies such as the sector partnerships, career pathways, job-driven investments, data sharing, and education-workforce alignment initiatives highlighted in the National Skills Coalition’s 2015 and 2016 State Workforce Legislation Roundups.**

12. **Prepare bilingual staff for service industries.** In a number of large industries in the area, there is a growing need for bilingual personnel.

13. **Encourage policies and provide support to make it easier for adults, young and old, to continue their education even after they start working.** In most fields, advancing into higher-level positions is predicated on higher education. It should be convenient and affordable for working adults to continue their education.

**NPower’s Business Partnerships**

NPower is a nonprofit organization partnering with public and private funders to provide free training and paid internships to individuals interested in careers in Information Technology. NPower’s relatively new Jersey City office serves two populations: veterans (21 and older) and underserved young adults (18 to 24). A high school diploma or its equivalent is required for all participants. The program, known as the Technology Service Corps (TSC) is 22 week long. The first 15 weeks are spent in the classroom and computer lab and the last seven weeks are spent at a paid internship. The program prepares students for the CompTIA A+ certification, but also teaches all the soft skills needed to enter the corporate world. NPower partners’ employees volunteers to conduct mock interviews and instruct students on self-presentation. They also serve as guest speakers and host site visits of their data centers. Out of the first cohort, who graduated in June 2016, of the 23 participants enrolled, 15 (88%) were either employed or enrolled in higher education. Hourly wages earned by graduates ranged from $18 to $20. Major employers include TD Ameritrade, the City of Hoboken, Novofex, and Gem Office Technologies, to only mention a few. NPower has a rigorous recruiting process and offers comprehensive social support to ensure success. A Guidance Specialist is on board to help assess and address personal needs of the participants. Transportation subsidies are also provided.
Appendix A: Methodology

This report focuses on promising opportunities in sales and service career paths in the professional services segment of the transportation, logistics and distribution (TLD) sector, and cross-sectoral business support opportunities in human resources and accounting functions in Hudson County, New Jersey. These career pathways require at least a middle-skill education to begin, pay well, and are in-demand. At the same time, the current supply of the candidates may not be sufficient to meet local demand. In both fields, there are opportunities for career advancement over time.

This selection is the product of a careful, step-by-step research approach. The process began with the identification of high-demand occupations and industries, followed by an assessment of the supply of education and workforce programs that prepare candidates, and then a comparison of the demand- and supply-side findings. The process continued with in-depth, qualitative research activities that both validated and supplemented the findings. Below, is a detailed account of the methodology, including intermediate findings. All data sources are detailed in the footnotes.

Identifying high-demand occupations

There are more than 700 unique occupations in Hudson County. Measures of past, present, and projected demand; educational requirements; and pay were examined to determine which hold the most promise for middle-skill employment.

- Of the universe of occupations, 155 were identified as middle-skill. For these occupations, a middle-skill education is either the most commonly held among workers or typically required for entry.

- Of the 155 occupations, 145 were projected to grow from 2012 to 2022.

- Of the 145 projected to grow, 58 had an annual employment number higher or equal to the median.

- Of the 58 occupations, all had an annual average of 10 or more openings each year.

- Of the 58 projected to grow with at least 10 projected annual openings, 37 met or exceeded an entry wage of $15 per hour, or $31,200 per year.

Upon further examination of the 37 occupations, nine were determined to be unfit for this analysis and excluded for the following reasons: being not amenable to training, not workforce appropriate, and being public sector or civil service jobs, such as correctional officers and jailers. The remaining 28 occupations were further divided into six clusters spanning from Installation, Maintenance and Repair; Engineering Tech; Tech Support; Dental and Medical; Medical Technical; and Office Administration, TLD and non-TLD.

16 Occupations are based on the Standard Occupational Classification (SOC) system. Occupational data was gathered from New Jersey Department of Labor and Workforce Development’s (NJLWD) Occupational Employment Statistics. The geographic area selected was Hudson County, New Jersey.
17 U.S. Department of Labor, Bureau of Labor Statistics, Table 1.11 and 1.12, 2014.
Assessing the supply of qualified candidates

As a next step, the research team and its partners sought to better understand the existing supply of training and education for these select occupations. A critical component to the New Skills at Work Initiative involves identifying those high-demand, middle-skill occupations where regional training and educational capacity is in need of greater investment or refinement. To that end, the criteria for further narrowing these 28 occupations included demand as measured by job ad volume, the primary industry of employment for each occupation, existence of other training programs within the four-county area (Bergen, Essex, Union, and Hudson), career advancement opportunities, and the cost of initiating or modifying existing programs.

Using publically available data, the research team linked educational programs with occupations, and with this information, identified relevant offerings within the four-county area. Findings were supplemented by a review of course content offered by each training program and its appropriateness for preparing candidates of the designated occupation. Wherever available, program completion counts were used to assess training capacity and ratio of program completion count to occupational employment was also computed to gauge the sufficiency of supply.

Based on previous findings for labor market demand, each of the 28 in-demand occupations was scored using a three-by-three demand and supply matrix. Attention was given to high-demand and low-supply occupations. The occupations selected were:

- Payroll and timekeeping clerks
- Bookkeeping and accounting clerks
- Human resources assistants
- Cargo and freight agents
- Customs brokers

Validating findings through industry and regional expert interviews

Upon selecting these occupations, more than 30 industry, economic, and education experts based in Hudson County were interviewed for insights into employment challenges and opportunities. Their insights guided the research team to select the final two clusters of occupations for this study: sales and service jobs in Transportation, Logistics and Distribution and cross-sectoral business support jobs.

These respondents and their affiliations are listed in Appendix C.

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22 Burning Glass Technologies Labor Insight Tool, a proprietary real-time job posting analytics product. This software scrapes the web daily for online job postings, codes ad content into data elements, and stores this information in a database for analysis.
23 Staffing Patterns supplied by NJLWD, 2015.
24 Data sources included the United States Department of Education National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System customized data files (IPEDS) and New Jersey State Eligible Training Provider List (ETPL). IPEDS includes information from every college, university, and technical and vocational training institution that participates in the federal student financial aid program. The ETPL includes all job-training programs in New Jersey State eligible for supply by Workforce Innovation and Opportunity Act (WIOA) funds.
25 Classification of Instructional Programs/Standard Occupational Classification (CIP/SOC) crosswalk provided by NCES.
Appendix B. Supplemental Analyses

**FIGURE A:** PERCENT FOREIGN-BORN RESIDENTS, 2015.

Jersey City: 41% Foreign-born

Balance of County: 44% Foreign-born

Balance of State: 20% Foreign-born


**FIGURE B:** JERSEY CITY FOREIGN-BORN POPULATION BY PLACE OF BIRTH.

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<td>Algeria</td>
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FIGURE C: RESIDENT LABOR FORCE, 2015.

![Table showing resident labor force by age and location, 2015]


FIGURE D: RESIDENT LABOR FORCE BY RACE/ETHNICITY, 2015.

![Table showing resident labor force by race and age, 2015]

Appendix C: Regional Experts Consulted

Many experts were interviewed for this report and are listed below. Please excuse any omissions:

Jennifer Adams, Director, Community Relations, Fidelity Investments

Michael Armstrong, Human Resources Officer, Bergen Logistics

Videsh Bahadur, Assistant Director, Professional and Lifelong Learning, New Jersey City University

William Bajor, Ph.D., Director, Professional and Lifelong Learning, New Jersey City University

Gary Bierfriend, Managing Director, World Business Lenders

Jason Bing, Chief Academic Officer, Jersey City Public Schools

Sharita Brown, Manager, Hudson County One-Stop Career Center

Annie Burtoff, Deputy Director, Office of Innovation

John Byrne, Head of Capital Markets IT, RBC

Paul Calame, Business Unit Manager, Panalpina

Mary Cataudella, Vice President, Human Resources, RWJ Barnabas Health Jersey City Medical Center

Ana Chapman-McCausland, MA, Dean of Non-Traditional Programs, Hudson County Community College

Elaine Cook, Director/Deputy General Counsel, World Business Lenders

Anthony Costa, Logistics, Distribution, and Transportation Senior Manager, Distribution, Center Manager, Pepsico (Tropicana)

Steve Decicco, Chief Financial Officer, RBC

Eric M. Friedman, Ph.D., Senior Vice President of Academic Affairs, Hudson County Community College

John Fugazzie, Executive Director, Hudson County Workforce Development Board

Danielle Ginley, Human Resources Manager, Sysco

Laurie Lovett, Chief Human Resources Officer, Verisk

Marcia Lyles, Ed.D., Superintendent, Jersey City Public Schools

Rosemary McFadden, Chairwoman, Jersey City Economic Development Corporation

James McGreevey, Executive Director, Jersey City Employment & Training Program

Patrick McLaughlin, Senior Vice President, Corporate Social Responsibility, Verisk

Catherina Mirasol, Assistant Director, Center for Business & Industry, Hudson County Community College

Maria Nieves, President & CEO, Hudson County Chamber of Commerce

Rosemary Nwabueze, Director, Community Economic Development, Women Rising, Inc.

Kimberly Philpot, Business Unit Human Resources Manager, Panalpina

Brian Platt, Director, Office of Innovation
Steven Ramos, Career Specialist TSC Program, NPower

Michael Rasmussen, Program Manager, NPower

Ellen Ruane, Associate Superintendent, Secondary Division, Jersey City Public Schools

Brittany Schwemmer, Senior Regional HR Manager, National Spine & Pain Centers

Bea Tassot, NJ Regional Director, NPower

John Thurlow, US Chief Operating Officer, RBC

Lori-Ann Trezza, Managing Director, Human Resources, The Depository Trust & Clearing Corporation (DTCC)

Lourdes Valdes, Manager of Employment/Training and Development RWJ Barnabas Health Jersey City Medical Center

Marcos Vigil, Deputy Mayor, Economic Development, City of Jersey City