Memorandum

To: Chair and Members of the Economic Development Committee

From: Martin Lyons, Assistant City Manager
       Paul Zalmezak, Senior Economic Development Coordinator

Subject: Code Evanston Proposal from BLUE 1647 founder Emile Cambry

Date: June 19, 2017

Discussion
In 2015, Economic Development Division and Community Services Division staff presented the Evanston Workforce Development Program Vision for 2016, summarizing Economic Development and Youth & Young Adult Division’s vision for strengthening Evanston’s workforce development initiatives. The vision, attached, focused on four key initiatives: 1) Evanston Small Business Workforce Development Program; 2) Evanston Pre-Apprentice Support Program; 3) Minority-led Entrepreneurship Training and Co-Working; 4) Code Evanston. Significant progress was made on three of the four areas with the coding initiative delayed while staff identified a vendor to assist in delivering the program.

Emile Cambry, founder of BLUE 1647, and recent Evanston resident, has proposed a private sector solution staff believes will have an impact on the number of Evanstonians who are prepared to enter information technology fields of work.

Summary
As summarized in the attached proposal, “BLUE|1647 is a network of entrepreneurship and innovation centers focused on business acceleration and economic development through technology education.” BLUE 1647 leads “over 100 innovative tech classes and workshops, annually, and fosters shared co-working services with access to resources and mentorship.” BLUE 1647 is committed to serving “youth, start-ups, veterans, and diverse individuals who seek to learn 21st century skills. Students who complete BLUE|1647 programs receive technology education as well as insight into the technology ecosystem.”

Staff has met with Mr. Cambry numerous times to discuss the coding initiative and have visited BLUE 1647 in Chicago, at both the original location and the newly formed arts and tech incubator “Blue Lacuna” located in the Lacuna artist lofts at 2150 S. Canalport.
Avenue in Chicago’s Pilsen neighborhood. The grand opening for the space is scheduled for July 13, 2017. Mr. Cambry recently relocated his residence to Evanston.

As highlighted in the November 2016 memo attached, the media has documented the talent shortage in web / tech fields. A quick google search reveals articles across the country focused on skill gaps and talent shortages. The Chicago Cook Workforce Partnership Quarter 1 (Jan-Mar) 2017 report lists IT as the third leading industry in Cook County with available job postings. (See attached) Also, in a recent Burning Glass International job market analytics report for the period July 1, 2014 – June 30, 2015, there were over 900 job postings for information technology jobs in Evanston. Skills in greatest demand included SQL, JavaScript, Microsoft C#, Microsoft Windows, and .NET Programming.

Chicago alone has over 18 boot camps, including several offered by universities, according to switchup.org. Northwestern University offers the Master of Science in Predictive Analytics (MSPA) program. Established in 2011, it is a fully online part-time graduate program, one of the first to offer dedicated training in data science. These programs are generally expensive. Coursereport.com reports the average cost of a web development boot camp is approximately $10,000 for a 10 week course.

Based on the high demand for skills, the low supply of trained individuals and the relative expensive cost of boot camps, staff is exploring an alternative web based training model with periodic “meet up” support group led by a local coding expert, or group of experts.

With this backdrop, staff challenged Mr. Cambry to create a solution suitable for Evanston. Attached is his proposal to deliver coding education to 100 Evanstonians annually. Furthermore, BLUE 1647 has offered a free license of the online BLUE Academy training for three additional Evanston residents. In essence, the BLUE 1647 relationship would serve 400 annually.

In addition to the complimentary licenses, Mr. Cambry envisions the relationship expanding to ultimately build up a technology development culture throughout Evanston, as follows:

1. Training for other organizational partners, such as Family Focus, that would be outside of the scope of this proposal.
2. Develop an interface with other opportunities like the Mayor’s Summer Youth Employment Program where students can build apps and websites for Evanston businesses, programs, and even for graduates of the Sunshine Enterprises program.
3. Leverage the graduates of the BLUE 1647 coding academy to be ambassadors at local schools to set up coding clubs throughout Evanston as well. In some cities, BLUE 1647 pays students stipends as interns to administer the program.

Mr. Cambry proposes an annual budget of $98,000 summarized as follows:
• 25 Students
• $88 per student per week
• $26,400 per Cohort
• Four Cohorts Annually
• Annual Cost = $105,600
• Discount = $7,000
• **Total Cost = $98,500**

The courses would be taught by two lead instructors and a teaching assistant.

**Funding Source:**
Staff has identified two potential sources of funds for the initiative: 1) Community Development Block Grant (CDBG) Economic Development Fund (revolving loan fund and entitlement), and/or 2) General Fund Economic Development Division (#100.15.5300.62662 Business Retention/Attraction).

**Livability Benefits:**
Economy & Jobs: retain and expand local businesses, expand job opportunities.

**Attachments:**
- BLUE 1647 Proposal
- Staff Workforce Development Memo to Economic Development Committee
Evanson Codes Program

Powered By: BLUE|1647
BLUE|1647 is a network of entrepreneurship and innovation centers focused on business acceleration and economic development through technology education. We spearhead over 100 innovative tech classes and workshops, annually, and foster shared coworking services with access to resources and mentorship.

BLUE|1647 proudly serves youth, start-ups, veterans, and diverse individuals who seek to learn 21st century skills. Students who complete BLUE|1647 programs receive technology education as well as insight to the technology ecosystem.

Why Blue|1647

BLUE|1647 provides expert instructors who transform thinkers into creators through education and opportunities in technology and design. Students learn how to:

- Take an idea and develop it from concept to completion.
- Familiarize oneself with the intricacies of the programming platform to foster inspirational thinking.
- Cultivate and encourage collaboration and group-based learning in relaxed teaching sessions.
- Develop and nurture multiple skill-sets in order to approach problems from numerous perspectives.
- Look beyond simple technical limitations to foster their unique “strategic vision.”
- Develop a strong understanding of logic, basic programming syntax, and structure.
Evanston Codes Program

Cohort Overview
Evanston Codes will be comprised of courses that teach web development, while creating, developing, and maintaining a personal online portfolio for each student. Students will understand the foundations of websites as well as build an online “resume.” We encourage all students to understand that there is no limit to creativity and skill development.

Cohort Description
Students begin the cohort with an introduction to world wide web from multiple lenses. In the process of developing sites, students are introduced to the various methods, assets, and processes of web development and maintenance. The skills will culminate to the development of a personal website that can be further expanded, creating an online portfolio of web development competency as well as confidence utilizing technology skills. Lastly, Blue|1647 strives to ensure students understand how these skills are applied to the 21st century workforce.

Evanston Responsibilities:

- If hosted at BLUE|1647, coordinate transportation to BLUE|1647
- Coordinate final showcase (e.g., marketing (members | patrons), attendance confirmation, refreshments).
- Grant full permission to BLUE|1647 to use and own data and metrics.
- Grant full permission to BLUE|1647 to use photos and/or video to chronicle experience.

Program Participants

- We will recruit all students
- Pro-bono Offerings: Additional workforce development software training to organizations such as Family Focus, YWCA Evanston, etc. This is in addition to the four cohorts fulfilled through this proposal
- For every student trained, we will offer a free license of the online BLUE Academy training for three students for Evanston Township residents.
### Course Deliverables:

#### Technical Skill Development
- Intro to Programming
- Codepen.io
- HTML/ CSS Concepts

#### Duration
- Cohorts: 4 Cohorts
- Dates: March 27th - 30th
- Times: 1:00pm - 4:00pm

#### Skill Development
- Critical Thinking
- Problem Solving
- Project Management
- Leadership
- Teamwork
- Design Processes
- Software Development Lifecycle
- Software Development Workflow

*NOTE: If under 13 years-of-age, parental consent needed*

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### BUDGET

#### INSTRUCTOR & BASIC SUPPLIES

<table>
<thead>
<tr>
<th>Four (4) Cohorts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td>25 x $88 per Student * 12 weeks = $26,400 * 4 Cohorts = $105,600</td>
</tr>
<tr>
<td><strong>2 Lead Instructors</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher's Assistant</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Discount</strong></td>
<td>(7,000)</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td><strong>$98,500</strong></td>
</tr>
</tbody>
</table>
Memorandum

To: Chair and Members of Economic Development Committee

From: Kevin Brown, Community Services Manager
Paul Zalmezak, Senior Economic Development Coordinator

Subject: Evanston Workforce Development Program Review

Date: November 11, 2016

Discussion

Approximately one year ago, Economic Development Division and Community Services Division staff presented the Evanston Workforce Development Program Vision for 2016, summarizing Economic Development and Youth & Young Adult Divisions vision for strengthening Evanston’s workforce development initiatives. The vision, attached, focused on four key initiatives: 1) Evanston Small Business Workforce Development Program; 2) Evanston Pre-Apprentice Support Program; 3) Minority-led Entrepreneurship Training and Co-Working; 4) Code Evanston.

With new members of the Economic Development Committee appointed in recent months and having experienced one year with the workforce development vision, staff is providing an update on progress and seeking additional direction as we further define the program vision.

Key Best Practice Element Components in the design and implementation of Workforce Training Programs:

- Identify and engage education, cross agency, and employer training Partners
- Identify target populations, entry points, and participant recruitment strategies
- Review, develop, or modify competency models with employers and develop and validate career ladders/lattices
- Analyze the regions education and training resource and response capacity
- Research and promote local work-based learning opportunities within business and industry
- Develop integrated, accelerated, contextualized learning strategies
- Provide flexible delivery methods
- Provide career services, case management, and comprehensive supportive services
- Provide employment assistance and retention services

Staff has initiated partnerships with the Youth Job Center of Evanston and the National Able Network, both workforce agency partners, and Oakton Community College. Staff has also begun partnership discussions with the 741 Collaborative, a network of community-based workforce agencies. These agencies assist the City in its efforts to provide residents with multiple entry and exit points to accommodate academic readiness and employment on-ramping and off-ramping when necessary. The intent of these workforce programs is to lead to industry-recognized credentials that lead to jobs that pay family-sustaining wages and offer occupational advancement opportunities.

A summary of 2016 activities is summarized in the table below.

### 2016 Review

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mayor's Summer Youth Employment Program</td>
<td>$300,000 from general fund Private partner contributions</td>
<td>600 participants during summer, additional 100 year round.</td>
</tr>
<tr>
<td>COE/Youth Job Center of Evanston Building Career Pathways to Sustainable Employment Program</td>
<td>$80,000 from general fund for job readiness training, supportive services, and paid on-the-job training for up to 20 participants.</td>
<td>2012 to 2015 – 61 participants completed the program and 53 participants secured permanent employment. 18 industry credentials were also obtained by participants.</td>
</tr>
<tr>
<td>Small Business Workforce Development Program</td>
<td>Up to $15,000 annual funding after job placement after completing &quot;earn and learn&quot; job training.</td>
<td>The program has not been utilized in 2016.</td>
</tr>
<tr>
<td>Northwestern University/COE Skilled Trades Program (Pre-Apprentice Training Program)</td>
<td>Northwestern in partnership with the City of Evanston hired twelve young adults from Evanston as part of a one-year skilled trades apprenticeship program in the University's Facilities Management Division in 2015 and 2016. In addition to the technical training, this program provides joint City of Evanston and Northwestern advising in order to best prepare them for full-time careers at the University.</td>
<td>To date the inaugural 6 participants all obtained full-time local employment in a skilled trade and 6 participants are currently pre-apprentices at Northwestern University.</td>
</tr>
<tr>
<td>Program</td>
<td>Description</td>
<td>Outcome</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Minority-led Entrepreneurship Training and Co-Working</td>
<td>Sunshine Enterprises has launched Community Business Academy in funding partnership with City of Evanston.</td>
<td>Sunshine has served 54 individuals since January 2016.</td>
</tr>
<tr>
<td>Code Evanston</td>
<td>Financial support for purchase or subsidy for cost of web based coding licenses and/or the cost of the local coding expert</td>
<td>Program on hold as staff reevaluates potential vendors.</td>
</tr>
<tr>
<td>Commercial Driver’s License (CDL) Training Program</td>
<td>In partnership with Oakton Community College, City of Evanston contributed $16,000 to truck driver licensing program.</td>
<td>Four individuals have obtained CDL</td>
</tr>
<tr>
<td>Forklift Operator Training</td>
<td>Oakton Community College proposing a partnership similar to CDL Training. Warehousing growing industry.</td>
<td>TBD, Anticipate proposal similar to CDL training program in early 2017</td>
</tr>
</tbody>
</table>

**Attachment**

Evanston Workforce Development Program Vision for 2016
Evanston Workforce Development Program Vision for 2016

The City of Evanston has established Workforce Development initiatives to educate and train individuals to meet the needs of current and future business and industry in order to maintain a sustainable competitive economic environment. These initiatives are driven by the goals contained within the local economic development plan.

In recent years, City divisions have overseen the implementation of the Mayor’s Summer Youth Employment Program (MSYEP), the Building Career Pathways to Sustainable Employment Program partnership with the Youth Job Center of Evanston (YJC), the Truck Driver Training and Certification Program with Oakton Community College, the Transportation Construction Apprenticeship Readiness Training Program with United Services of Chicago, Inc. and the Chicago Urban League, and the Curt’s Café life skills/job readiness program. General funds combined with federal (CDBG) and county grants (DHSEM) have funded these initiatives yearly at nearly $500,000. These initiatives have provided Evanstonians with permanent, part-time, and seasonal employment opportunities.

In addition, staff has worked closely with a number of workforce development partners including National Able Network, YJC, Moran Center, Evanston Community Foundation, Oakton Community College, and Northwestern University. These partnerships facilitate the development of strategies that cut across welfare, job training, education, human services and economic development systems to enhance the employment and quality of life prospects for disadvantaged workers. Working with these partners the City is able to create conditions for local citizens’ success in the workplace.

In 2014, Northwestern University and the City of Evanston launched a Workforce Development Program, a groundbreaking new partnership to help provide jobs for Evanston residents through the University’s construction and renovation projects. Northwestern has committed to spending at least $1 million a year with local businesses and will provide construction industry jobs on campus annually to 25 Evanston residents. The jobs are both employment and apprenticeship opportunities.

A final component of the City’s Workforce Development Programs is the Evanston Minority, Women and Evanston Business Enterprise Development Committee (M/W/EBE). It meets regularly to identify and assess the needs of the M/W/EBE community and to develop programs to address the established needs of the M/W/EBE community. Accomplishments include the increased placements of local citizens on local City construction based projects and increasing the penalty for contractor non-compliance. The committee has held meetings with local contractors to discuss changes to the Local Employment Program and provide step by step “how to comply” instructions for city bid documents. The committee has also hosted a Procurement 101 Workshop to increase the participation of underrepresented businesses that could compete for City contracts.
The City’s Workforce Development Programs and Partnerships are having an impact. Since 2012, summer employment for Evanston youth has increased from 160 jobs per summer to more than 550 jobs in 2015. More than 70 residents have participated in the Building Career Pathways to Sustainable Employment Program and 80% of them have obtained permanent employment. And Northwestern University is on target to meet its goal of hiring 25 residents. Residents have also completed the training requirements for the Curt’s Café, Truck Driver Training and Certification, and the Transportation Construction Apprenticeship Readiness Training Programs. In all more 650 residents are served each year. These programs support the core objective of economic growth by creating synergies across varied workforce development initiatives that are meeting individual and organizational needs.

Moving forward, staff believes that the City’s comprehensive approach to Workforce Development can be strengthened. There are a number of additional initiatives that can increase the City’s number of sector and place-based employer strategies. These initiatives will also enhance the short and long term training programs and create greater customization for individual job seekers and employers.

Funding sources for Evanston Workforce Development, including CDBG, General Fund, and Economic Development Fund should be explored to: 1) support local city businesses and agencies that increase skill and educational attainment for Evanstonians, 2) to find and retain employment, and 3) support local economic growth by helping to close local workforce skills gaps to meet the needs of growing in-demand industries.

Staff is recommending that funding focus on supporting “earn and learn” workforce development models in eight target areas that are based upon the Chicago Cook Workforce Partnership (Partnership) – “Where are the jobs in Cook County?” 2015 Report. These areas would form the foundation of a City of Evanston supported workforce development program. They are: 1) IT 2) Sales, 3) Business & Financial, 4) Healthcare, 5) Office & Administrative, 6) Transportation, 7) Food Service, and 8) Manufacturing.

Earn and learn strategies help employers to address skill shortages by training new workers in job specific skills and protocols while receiving partial reimbursement for employee wages. Employers are able to hire employees based upon fit and attitude, and employees are able to earn a wage as they train. This model benefits the public by investing tax dollars into local businesses and citizens.

According to the Partnership report, in the first quarter of 2015 there were nearly 180,000 job postings in the eight occupational groups. Also, listed among the top 20 Cook County employers were local employers Presence Health, Northwestern University, CVS Caremark, Whole Foods Market Inc., and Northshore University Health System.
To support these trends, staff would like to further explore potential funding and the launching of four new workforce development initiatives that have the potential to strengthen the City’s Workforce Development foundation and advance the work already highlighted above. The proposed initiatives are:

1. Evanston Small Business Workforce Development Program
2. Pre-Apprentice Support
3. Minority-led Entrepreneurship Training and Co-Working
4. Code Evanston

1. **Evanston Small Business Workforce Development Program**

Evanston-based small businesses of 20 or fewer employees in the Partnership’s eight targeted industry areas are eligible to apply for funding. The applicant would be eligible for one round of funding annually and capped at $15,000. This funding level would support up to five participants per business at $3,000 maximum per trainee. Business owners with multiple businesses or businesses with multiple locations would be eligible for the maximum of $15,000 to be allocated amongst multiple locations. The business is reimbursed once the training participant is placed in a job for at least 90 days. Applicants would propose their own “earn and learn” job training model which provides opportunities for grassroots creative approaches to training.

2. **Evanston Pre-Apprentice Support Program**

Construction jobs provide low-income adults opportunities to enter the middle class according to the Aspen Institute’s report: [A solid foundation: Key Capacities of Construction Pre-Apprenticeship Programs](#). However, the path to quality construction jobs, including apprenticeships, is often difficult for those unfamiliar with the industry. Construction pre-apprenticeship training programs, which train people for entry-level construction jobs, provide a way for contractors, unions and industry associations to improve the workforce to meet current demand.

In the Chicagoland labor market, pre-apprenticeship training is the only pathway to union membership for the most marginalized of the labor force – and the greatest opportunity to employ Evanstonians through contractors who are working on large scale projects such as Northwestern University and Chicago/Main. The proposed Evanston Pre-Apprentices Support Program would subsidize the wage of participants as they work in pre-apprentice status earning the skills necessary to become unionized. The City of Evanston would partner with interested trades contractors (i.e. carpentry, flooring, plumbing, etc.) to identify qualifying participants. Staff is in preliminary conversations with Power Construction to further define the program details. Next steps include defining a process for identifying qualified candidates and contractors, and defining the process for determining the level of wage subsidy and the method for distributing wages.
3. Minority-led Entrepreneurship Training and Co-Working

Bloomberg reports; “although minorities represent roughly 27% of the U.S. population, minority-owned outfits represent just 14% of U.S. businesses”. Entrepreneurship is a key pathway to economic growth and an alternative route for those who may not be a good fit for job placement in traditional corporate “9 to 5” or small business environments. Staff has identified an entrepreneurship training and coaching program that has the potential to launch Evanston-based startups founded by our targeted population.

Staff is researching a potential partnership with Sunshine Enterprise to launch an Evanston-based program with local Evanston participant program leaders and program participants. Sunshine has implemented a successful launch of the Rising Tide Capital program in Chicago’s Woodlawn Neighborhood. The program “supports women, minorities, immigrants and other traditionally marginalized populations to start and grow successful businesses by investing in the entrepreneurial spirit that already exists in distressed communities.”

In summary, the program is offered three times annually in ten week sessions to cohorts of up to 20 budding entrepreneurs. Those entrepreneurs who show promise and growth potential receive additional ongoing support beyond the ten weeks. Staff proposes Gibbs Morrison Cultural Center be the headquarters for the program. A co-working component (i.e. shared work space) within an existing small office in Gibbs Morrison could evolve as companies launch from this program and need support space to grow their business.

The program is in planning stages and is preliminary scheduled to launch in Evanston at the end of September. Staff proposes returning to Economic Development Committee on October 28th to introduce the Sunshine Enterprise and local service provider team. It will also be an opportunity to hear from the participants in the program who will have had a month of training and coaching. The estimated cost of each ten week cohort is approximately $50,000 depending upon the number of participants. The program has successfully launched in a number of cities with the support of public/private funding agreements.

4. Code Evanston

The media has documented the talent shortage in web / tech fields. A quick google search reveals articles all over the country focused on skill gaps and talent shortages. In a recent Burning Glass International job market analytics report for the period July 1, 2014 – June 30, 2015, there were over 900 job postings for information technology jobs in Evanston. Skills in greatest demand included SQL, JavaScript, Microsoft C#, Microsoft Windows, and .NET Programming.
A Summary of Online Job Postings in Cook County

WHERE ARE THE JOBS?

TOP 30 EMPLOYERS TO POST JOBS

(grouped by industry)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS &amp; FINANCIAL</td>
<td>Accenture, JP Morgan Chase, Deloitte, Bank of America, BMO Harris</td>
</tr>
<tr>
<td>HEALTHCARE</td>
<td>Advocate Health Care, Sinai Health System, Presence Health, North Shore University Health System, Alexian Brothers</td>
</tr>
<tr>
<td>HOSPITALITY</td>
<td>Marriott, Aramark, Hyatt</td>
</tr>
<tr>
<td>INSURANCE</td>
<td>Allstate, Anthem BlueCross, Aetna</td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td>Aryzta</td>
</tr>
<tr>
<td>REAL ESTATE</td>
<td>Berkshire Hathaway, Jones Lang LaSalle</td>
</tr>
<tr>
<td>RETAIL</td>
<td>Sears, CVS Caremark, Macy’s, BestBuy</td>
</tr>
<tr>
<td>SECURITY</td>
<td>AlliedBarton</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>CDW, Motorola, Oracle</td>
</tr>
<tr>
<td>UNIVERSITIES</td>
<td>University of Chicago, Northwestern University, University of Illinois (includes hospitals)</td>
</tr>
</tbody>
</table>

This report analyzes online job postings, not job openings. Jobs and employers who do not advertise online are underrepresented here.

Sales

- OCCUPATIONS
  - Sales representatives
  - Retail salespersons & cashiers
  - Retail supervisors
  - Sales agents (financial services, insurance, real estate, advertising)
  - Telemarketers

- CREDENTIALS
  - Real estate certification
  - Insurance licenses (life & health; property & casualty)
  - Financial licenses (see detail in business & financial)
  - Mortgage license
  - Project management certification (PMP)

- SKILLS
  - Sales & customer service
  - Microsoft Office
  - Business development
  - Sales management
  - Merchandising

Healthcare

- OCCUPATIONS
  - Registered nurses
  - Nursing assistants & medical assistants
  - Physicians & surgeons
  - Medical records & health information technicians
  - Speech language pathologists

- CREDENTIALS
  - Registered Nurse (RN)/Nurse Practitioner/Critical Care
  - First Aid/CPR/AED/ Cardiac Life Support (CLS/ACLS)
  - Certified nursing asst. (CNA) & Certified medical asst.
  - American Registry of Radiologic Technicians
  - Pharmacy Technician Certification Board

- SKILLS
  - Patient care & treatment planning
  - Rehabilitation
  - Case management
  - Patient & family education
  - Dialysis

For more information or to request a customized report, please contact The Chicago Cook Workforce Partnership at (312) 603-0200.
## OCCUPATIONS

**Food**
- Combined food prep & serving workers, incl. fast food
- Food service supervisors
- Cooks & chefs
- Waiters & waitresses
- Dishwashers

**CREDENTIALS**
- Certified info. systems security professional; systems auditor; security manager (CISSP/CISA/CISM)
- Project management certification (PMP)
- Cisco certified network professional; associate; internetwork expert (CCNP/CCNA/CCIE)
- Certified A+ technician

**SKILLS**
- Microsoft Office & productivity tools
- Accounting
- Budgets
- Project management
- Financial analysis & reporting

**Transportation** *

**OCCUPATIONS**
- Commercial driver’s license (CDL)
- Automotive service excellence (ASE)
- Forklift operator certification
- Air brake certified
- Hazmat certification

**CREDENTIALS**
- Certification for HVAC technicians (CFC Type 2; EPA 608)
- Airframe & power plant certification
- Welding certification
- Professional engineer

**SKILLS**
- Inspection & repair
- Labeling & packaging
- Scanners
- Cleaning
- Commercial driving

* Most of these jobs are in long distance truck-driving. With no permanent location, the same job is often advertised in locations across the country, and is not necessarily based in Cook County.

**Office & Admin**
- Customer service representatives
- Secretaries & administrative assistants
- Bookkeeping, accounting & auditing clerks
- Supervisors of administrative support workers
- Receptionists & information clerks

**CREDENTIALS**
- Project management certification (PMP)
- Certified payroll professional
- Social work license/licensed professional counselor
- Certified healthcare access associate
- Medical billing and coding

**SKILLS**
- Customer service
- Microsoft Office & productivity tools
- Administrative & clerical tasks (incl. scheduling)
- Data entry
- Customer billing

**Food**
- Combined food prep & serving workers, incl. fast food
- Food service supervisors
- Cooks & chefs
- Waiters & waitresses
- Dishwashers

**CREDENTIALS**
- Certified info. systems security professional; systems auditor; security manager (CISSP/CISA/CISM)
- Project management certification (PMP)
- Cisco certified network professional; associate; internetwork expert (CCNP/CCNA/CCIE)
- Certified A+ technician

**SKILLS**
- Microsoft Office & productivity tools
- Accounting
- Budgets
- Project management
- Financial analysis & reporting

**Manufacturing, Maintenance & Repair**
- Maintenance & repair workers
- Production supervisors; mechanic supervisors
- Bus & truck mechanics & diesel engine specialists
- Inspectors, testers, sorters & machinists
- Automotive specialty technicians

**CREDENTIALS**
- Automotive service excellence (ASE)
- Certification for HVAC technicians (CFC Type 2; EPA 608)
- Airframe & power plant certification
- Welding certification
- Professional engineer

**SKILLS**
- Maintenance, inspection & repair
- HVAC
- Plumbing
- Welding
- Occupational health & safety

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**Business & Financial**
- Accountants
- Human resources specialists
- Management analysts
- Market research analysts & marketing specialists
- Financial analysts & auditors

**CREDENTIALS**
- Certified public accountant (CPA)
- Securities licenses (Series 6, Series 7, Series 63)
- Real estate certification
- Certified financial planner
- Professional in human resources (PHR)

**SKILLS**
- Microsoft Office & productivity tools
- Accounting
- Budgets
- Project management
- Financial analysis & reporting

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**Office & Admin**
- Customer service representatives
- Secretaries & administrative assistants
- Bookkeeping, accounting & auditing clerks
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**CREDENTIALS**
- Project management certification (PMP)
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- Certified healthcare access associate
- Medical billing and coding

**SKILLS**
- Customer service
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- Administrative & clerical tasks (incl. scheduling)
- Data entry
- Customer billing

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**IT**
- Software developers, applications
- Computer systems engineers/architects
- Computer systems analysts
- IT project managers
- Web developers

**CREDENTIALS**
- Certified info. systems security professional; systems auditor; security manager (CISSP/CISA/CISM)
- Project management certification (PMP)
- Cisco certified network professional; associate; internetwork expert (CCNP/CCNA/CCIE)
- Certified A+ technician

**SKILLS**
- Programming skills (SQL, JAVA, JavaScript, C#, Python, jQuery, XML, C++)
- Operating systems (LINUX, UNIX)
- Database skills (Oracle, SQL Server)
- Software frameworks (.NET)

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**Transportation** *

**OCCUPATIONS**
- Truck drivers (tractor trailer & delivery)
- Laborers & freight/stock movers
- Automotive service attendants
- Forklift operators, packers, packagers
- Taxi drivers & chauffeurs (includes rideshare drivers)

**CREDENTIALS**
- Commercial driver’s license (CDL)
- Automotive service excellence (ASE)
- Forklift operator certification
- Air brake certified
- Hazmat certification

**SKILLS**
- Inspection & repair
- Labeling & packaging
- Scanners
- Cleaning
- Commercial driving

* Most of these jobs are in long distance truck-driving. With no permanent location, the same job is often advertised in locations across the country, and is not necessarily based in Cook County.

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**Manufacturing, Maintenance & Repair**
- Maintenance & repair workers
- Production supervisors; mechanic supervisors
- Bus & truck mechanics & diesel engine specialists
- Inspectors, testers, sorters & machinists
- Automotive specialty technicians

**CREDENTIALS**
- Automotive service excellence (ASE)
- Certification for HVAC technicians (CFC Type 2; EPA 608)
- Airframe & power plant certification
- Welding certification
- Professional engineer

**SKILLS**
- Maintenance, inspection & repair
- HVAC
- Plumbing
- Welding
- Occupational health & safety

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Where are the Jobs in Cook County Q1 2017 Source: Burning Glass Technologies Labor Insight
A number of web development/coding "boot camps" have emerged in recent years to provide intensive training to individuals with varying degrees of experience, or lack thereof. The media often features middle aged career changers who have successfully transitioned to the tech field in addition to young recent college grads who had difficulty finding jobs in traditional industries.

Chicago alone has over 18 boot camps, including several offered by universities, according to switchup.org. Northwestern University offers the Master of Science in Predictive Analytics (MSPA) program. Established in 2011, it is a fully online part-time graduate program, one of the first to offer dedicated training in data science. These programs are generally expensive. Coursereport.com reports the average cost of a web development boot camp is approximately $10,000 for a 10 week course.

Based on the high demand for skills, the low supply of trained individuals and the relative expensive cost of boot camps, staff is exploring an alternative web based training model with periodic "meet up" support group led by a local coding expert, or group of experts.

Staff is in preliminary conversations with Treehouse about a “Code Evanston” initiative designed to prepare recent Evanston high school or college graduates and career changers for job placement in tech fields. Through the economic development fund, the City of Evanston could support a “Code Evanston” initiative by purchasing or subsidizing the cost of web based coding licenses and/or the cost of the local coding expert. Treehouse has proposed donating one license to District 202 for every one purchased through the economic development fund.

The estimated cost of the program is $50,000 to $100,000 depending on the number of students served. Staff will continue to research other programs and determine the demand level for this type of service. Staff will further explore cost sharing partnerships with the Evanston’s business community who could directly benefit from the increased talent pool and/or retraining of existing employees.

**Conclusion**

Evanston has a solid Workforce Development foundation and strong community partners. Northwestern University’s role in Evanston workforce development has magnified with its recently announced construction pre-apprenticeship program partnership with the City. As the economy has improved in recent years, storefront vacancies have declined, and new development underway, this is a great opportunity to focus economic development efforts to further strengthen Evanston’s workforce through the comprehensive sector and place-based employer approach outlined in this report.